

*Ashland District
S. L. ...*

THE BARRON MINE

The Barron Mine is situated about ten miles north of the Oregon-California boundary, in Jackson County, and about eight miles southeast from the town of Ashland, a station on the Southern Pacific Railroad, having a population of 4,450. It is three and one-half miles from the Ashland-Klamath Falls highway with a well gravelled road, steep in places, but smooth, connecting the mine with the highway. The power line of the California-Oregon Power Company passes within about two miles of the property.

The property is located in the S.W. $\frac{1}{4}$ of the N.E. $\frac{1}{4}$ of Section 23, Township 39 S., Range 2 E., on deeded land. The title to the property, which also includes the N.W. $\frac{1}{4}$ of the N.E. $\frac{1}{4}$, the S.E. $\frac{1}{4}$ of the N.W. $\frac{1}{4}$ and the S.E. $\frac{1}{4}$ of the N.E. $\frac{1}{4}$ of said Section 23, 160 acres in all, is held by Mrs. Elizabeth Barron and is in escrow at the Fruit Growers' Bank in Medford, Oregon, subject to a purchase contract with William H. Lydiard and F. V. Marsh.

The mine is at an elevation of 3,500 feet, about 1,550 feet higher than the town of Ashland, which has an elevation of 1,950 feet. The climate is mild throughout the year and snow rarely lies on the ground for more than a day or two at a time. The maximum temperature at Ashland is 79.47° Fahrenheit and the mean minimum temperature is 47.25°. The highest mean maximum, in August, is 86.36° and the lowest mean minimum, in January, is 29.35°. These figures represent the average over the ten year period from 1921 to 1930. The normal rainfall taken for the same period is 19.89 inches, the highest in January being 3.06 and the lowest, in August, being .41 inches.

HISTORY

The Barron Mine was discovered in 1896 by John H. "Harve" Shepherd on land belonging to George W. Barron, a pioneer rancher of the Ashland district. Shepherd, who was a rancher as well as a prospector, owning adjacent land, was given an interest in the mine. Ten tons of ore were hauled to the mill of the Ashland Mine in Ashland, and yielded \$28.00 per ton in gold (\$47.25 present price) recovered by amalgamation only. It is reported that 100 tons more were hauled later on to the Ashland mill which yielded \$8.00 per ton (\$13.58 present price). This ore was taken from an open cut across about thirty-six feet of the vein at the surface.

In April, 1899, Mr. Byron White, a mining man of considerable experience, took an interest in the mine with Mr. Barron, according to report acquiring the interest of Harve Shepherd. The Alta Mining Company was incorporated with J. Hoyt Smith, J.W. Dadman and James L. Norman as incorporators. This company took over the operation of the mine. A capital of \$10,000.00 was subscribed for development. Mr. Charles Culver, an experienced mining superintendant was put in charge of the work.

A tunnel was driven at the base of the hill, west of the point of discovery, 300 feet, cutting the vein 175 feet below the surface. A drift on the vein 110 feet to the N.W. and 173 feet to the S.E. was made, and about 15 feet N.W. from where the tunnel struck the vein a raise was made 136 feet to connect with the workings on the surface. This raise, which is 6 x 8 feet is divided to make an ore chute from the top to the drift on the tunnel level. A crosscut, which was an extension of the tunnel, was driven 100 feet further in the same direction as the tunnel. A winze 40 feet deep was sunk on the vein about ten feet to the S.E. from the point where the tunnel cut the vein. This winze has since been enlarged to an 8 x 12 shaft and sunk to a depth of 100 feet.

There are no records available showing any ore milled or shipped during the period that this development work was being done. Some 53 sample assays made at the assay office of the Ashland mine at that time show (after taking out 6 of exceptional value) an average of .2537 ounces in gold and 2.623 in silver, which would be \$10.58 per ton at present prices of gold and silver. Six sample assays averaged (at present prices) \$291.70 per ton.

A considerable body of good ore was cut where the tunnel first contacted the vein, about 14 feet thick. An assay across 76 inches of this ore where the tunnel extends across the drift gave \$33.13 per ton (current price) as stated in the report of Leroy A. Palmer, in January, 1934. This ore body continued in the N.W. drift to the end, some 110 feet from the tunnel, narrowing down to 5 or 6 feet in width but seemed to terminate in the S.E. drift at a point about 80 feet beyond the tunnel.

The 53 sample assays, according to the records, were taken as the work was done from time to time without regard to whether they were or were not in ore, which might account for the low average of \$10.58 per ton.

When the \$10,000.00 had been expended the development work of the Alta Mining Company stopped and nothing further was done with the property until 1917. There is reported to have been a lack of harmony between Mr. White and Mr. Barron which prevented them from carrying out any further program of operation.

In 1917 the mine was leased to Mr. Harry J. Sallee, who shipped 207.91 tons of ore to the smelter of the Mammoth Copper Company at Kennett, California. The smelter returns on this ore (at current prices) was \$45.18 per ton. Sallee did no development work whatever but proceeded to take out what ore had been exposed, stopping above the station in the main drift and in the "glory hole" where the first discovery was made at the surface. Mr. Barron was very much dissatisfied with Sallee's performance and stopped his operations.

In 1923 a lease was made to Bob Hathaway and E. T. Salsbury, who installed the present ten-stamp mill. They began operations in

March and continued until June when, according to report, they were forced to close down on account of shortage of water. There are no records of their operation available. It is reported that they had considerable difficulty with their treatment of the ore and that their extraction was very unsatisfactory. They failed to meet the payments required in their lease contract, quarreled with each other and finally abandoned the property, forfeiting the mill to Mr. Barron, who had meanwhile acquired the interest of Mr. White (in January, 1918).

George Barron did nothing further with the property. He held it at a high price and refused several offers to lease. He had other extensive interests, was well along in years and in poor health and badly discouraged with his experiments in mining. He died on March 21, 1930, leaving the mine to his widow, Mrs. Elizabeth Barron.

In 1931 Mrs. Elizabeth Barron leased the property to Mr. Harry Currie, who formed the "Gold Mound Mining Company" and is reported to have raised some \$40,000.00 through sale of stock. Mr. Stanley G. Kramer was president of the corporation and one of the principal stockholders was a Mr. Fredericks, who had been connected for many years with the U. S. Mint in San Francisco.

The records of Mr. Currie's operations are not available. He is reported to have spent money very freely without showing any substantial results. There are many rumors of extravagance, erratic management, mysterious shipments of high-grade ore, etc.

Currie sank the 40-foot winze in the S.E. drift to 100 feet, making a double compartment shaft, well timbered. He built a mess-house, bunkhouses, office, garage and storehouse, a power house and assay office. Installed a complete assaying equipment, a compressor and considerable other equipment. He graded and gravelled the road from the mine to the Klamath Falls-Ashland highway and laid 7,000 feet of two-inch pipe to bring water from a spring on the mountain above the mine.

For reasons unknown to the writer Mr. Currie seems to have operated the mill only occasionally. According to statement of Mr. Omar Willey, who was in charge of the mill, he made some "very profitable clean-ups". He stoped considerable ore from above the station in the S.E. drift and above the N.W. drift and took a lot of high-grade ore from the 65 foot level of the 100 foot shaft, where he drifted and stoped some 50 feet to the S.E. He is reported to have found some ore that ran as high as \$1,200.00 per ton.

The stockholders finally became suspicious of Currie and undertook to oust him from the management. Considerable litigation ensued which resulted in the ruin of the company. Currie was indicted and convicted for selling stock without a proper permit in California. Mr. Gus Newberry, Currie's attorney, finally acquired his interest in the property and Mr. Lydiard in order to protect his claim for money advanced

to Currie, acquired the Newberry interest, also purchased the real property on which the mine is located (160 acres) from Mrs. Barron, on an installment contract. Title to the property was cleared by a friendly suit instigated by Mr. Lydiard.

During the latter part of the Currie regime, in April, 1934, two carloads of ore were shipped to the Tacoma Smelter, one yielding a gross return of \$13.25 and the other of \$11.33 per ton. Another carload shipped to the Selby Smelter ran \$16.37 per ton gross. All three of these cars were mined from the "glory hole" near the surface, according to Mr. Lydiard, and were cut from the N.W. face of the open cut across some thirty feet and scooped up from the bottom of the excavation, some 20 or 30 feet below the surface. Why this ore was shipped to smelters instead of being milled on the premises is one of the mysteries of the Currie regime which has not been explained. It might be that the litigation interfered with the operation of the mill at that time. Mr. Lydiard reports an assay of \$18.00 per ton from a sample taken across some 20 feet of the walls of the "glory hold" prior to making these shipments to the smelter.

During June and July, 1935, after Mr. Lydiard had acquired the property, he undertook to operate the mill.

Very few assays were taken and no exact records kept of these operations. The operation seems not to have been very successful and he was forced to close down about the first of August on account of a shortage of water. The concentrates from this operation are still in the mill, about six tons.

GEOLOGY

The Barron Mine is situated in the southwesterly limits of the Cascade Mountains near the point where the Siskiyou Mountains, running east and west across from the Coast range, meet the Cascades. From this point of union the Cascades extend to the north as also do the Siskiyous, leaving the Bear Creek Valley as the dividing line between the two ranges.

The general course of the vein of the Barron Mine, which is about the N. 43° W., runs almost parallel with the Bear Creek Valley. It is interesting to note that the vein is therefore near to and parallels the line of contact between the Cascade Mountains and that portion of the Siskiyous which extends northerly from the Oregon-California border.

The Siskiyou range is of an earlier geologic period and is formed largely of plutonic igneous rocks, that is, those that consolidated from fusion at considerable depth. In this region these rocks were raised above sea level long before the birth of the Cascade range. The Cascade Mountains are largely volcanic in origin and are of relatively recent date.

Bear Creek has its sources near the volcanic neck known as Pilot Knob (elevation 6,100 feet) and flows northwest through a fertile valley

to a junction with Rogue River. The basin of the Rogue River Valley and the Bear Creek Valley has been made by erosion of the relatively soft sediments of Tertiary age; isolated remnants of the former fillings of this basin from two high, flat-top hills north of Central Point known as Upper and Lower Table Rock. These two hills furnish convincing evidence that hundreds of feet of sediments have been removed from the basin. These hills are capped by several horizontal lava flows, having a thickness of 200 feet, which must have formed a continuous sheet of lava over the whole basin when they were first poured out from a neighboring volcano.

The northeast slope of Bear Creek Valley and the whole Rogue River Valley northwest from Medford are occupied by feldspathic and slightly conglomeratic sandstones with some beds of coal and some of shale, all of which are referred provisionally to the Eocene by paleontologists of the U. S. Geological Survey. These beds have a thickness of at least 500 feet on Bear Creek, forming cliffs on the northeast side. These beds strike northwestward and dip at an angle of 10% to 30% northwestward beneath the lavas of the Cascade range.

These Cretaceous conglomerates are believed to be shore deposits, indicating the existence of an Island in the Cretaceous ocean in the region now occupied by the Siskiyou Mountains.

Fossil leaves found in the coal and in the adjoining rocks show that these deposits were formed in the Tertiary period. At the close of this period the sedimentary beds were somewhat tilted by the elevation of the Siskiyou range or depression of the Cascade Mountains so that they dipped at an angle of 10% to 25% toward the northeast. At about the same time the great lava flows from the volcanic vents of the Cascade range covered the sediments which then filled the present site of Bear Creek Valley, and flowed westward to the slopes of the Siskiyou Mountains.

These Lavas are commonly called basalts, but for the most part they are auganites, andesites, and rhyolites, that is, they contain more silica and alkalies and less iron and magnesia and lime than do the basalts.

After the cessation of volcanic activity there followed a long period of erosion during which the lava flows were slowly worn away. Along the margin of the flows they were somewhat less compact, and were therefore removed a little more rapidly. Thus Bear Creek Valley originated and was gradually deepened and widened to its present size not only cutting through the lavas but also through about a thousand feet of the underlying sedimentary rocks.

Some of the flows forming the mass of Grizzly Mountain and the hills northeast of Bear Creek are basalt. A sample from the southwest slope of Grizzly Mountain contained abundant phenocrysts of labradorite and some of olivine altered to serpentine with a few of augite in a felditic ground mass of the same materials.

The footwall of the Barron Mine is probably auganite in which the augite is altered so as to leave only a skeleton of magnetite. The

lava flows on top of Grizzly Mountain are largely auganite containing phenocrysts of labrodite or of augite in a felsitic ground mass of the materials. Pilot Knob itself (according to analysis made by A. N. Winchell) consists in part of auganite.

The Barron Mine lies about half way between Grizzly Peak and Pilot Knob a little east of a straight line drawn from one peak to the other, and on the northeasterly slope of Bear Creek Valley.

CHARACTER OF THE VEIN

The vein of the Barron Mine is a fissure through basalt and andesite flows and is distinctly traceable for a distance of five or six miles. Where it crosses the Dead Indian road five miles N.W. from the mine the structure is clearly defined. There are several prospects at this point where, according to report, assays of \$20.00 per ton and better have been obtained. There is a prospect about one mile southeast from the mine, belonging to a Mr. Dyer, a nephew of the original discoverer, Harve Shepherd, which assays, according to Mr. Dyer's statement to the writer, \$12.00 per ton across four feet.

At a distance of 1,100 feet, N. 35° 30' W. from the point where the tunnel of the Barron Mine cuts the vein and on the same bearing as the N.W. drift in the mine, there is a prospect hole showing several feet of ore identical to that in the Barron Mine drift, which assays \$10.86 across two feet. About 150 feet from this prospect, on the opposite side of the dyke or vein is another prospect showing streaks of high grade silver - antimony ore from which assays are reported of from \$10.00 to \$45.00 per ton.

On the surface at the original point of discovery of the Barron Mine, the vein appears to be about 45 feet wide, with a fairly well defined hanging wall and a rather indefinite footwall, whereas, at a depth of 175 feet where the tunnel cuts the vein, the footwall is well defined and the hanging wall is indefinite.

There is a definite ore body five or six feet thick on the hanging wall side of the main ledge at the surface with the hanging wall well defined, and this part of the vein seems to go on down vertically the northwest side of this narrower vein becoming the foot wall at the point where the tunnel cuts the ledge 175 feet below the surface.

The raise from the drift on the tunnel level is very nearly vertical and follows a definite wall on the footwal side all the way up to where it meets the trench, or stops, which was sunk from the surface on the hanging wall side of the ledge.

Taking the southwest limit of the "glory hole" as a footwall and projecting a line to the footwall where the tunnel cuts the vein 175 ft. below, the ledge would have a dip of approximately 84% to the northeast; but, taking the southwest wall of the stope, or trench, at the surface, and projecting a line to where the tunnel cuts the vein 175 feet below, the ledge would be practically vertical. Since the

100 foot shaft below the tunnel level is sunk vertically and is practically in line with the raise and follows the footwall of the ledge to the bottom, this would seem to confirm the opinion that the ledge is approximately vertical throughout the depth of 275 feet. For illustration of this point see Plate No. 3.

Beyond this well defined six-foot vein of ore next to the hanging wall of the main ledge at the surface, and constituting the additional forty feet more or less of the vein, is a mass of porphyritic character, carrying substantial values in gold and silver, and merging into the adjacent structure on the footwall side of the main ledge without any clearly defined limit or wall. This mass extends down some 40 feet, as far as it has been excavated in the "glory hole" and to the point where the raise meets it from below. There have been no crosscuts from the raise anywhere below this forty foot excavation to show whether this porphyritic mass continues to greater depth and forms definitely a part of the ledge. The indications are that it is a surface enrichment of the adjacent disintegrated wall material or a portion of the ledge that has toppled over from above. It contains streaks and particles of quartz, but is of a different texture and character from the ore proper within the definite walls and which is found throughout the deeper workings. This material is in an oxidized state and is free milling, most of the values being recoverable on the plates. There is nothing to indicate that this mass of porphyry does not extend along the ledge to the northwest or southwest as no prospect holes deep enough to determine such extension have been dug beyond the limits of the "glory hole" which is about 30 x 40 feet across at the surface.

In the lower drift the footwall is solid andesite, or auganite, but no definite wall appears on the hanging wall side. There is only a fine grained grayish body of gangue appearing matter merging into the ore, containing here and there streaks of reddish texture following the course of the vein. The 100 foot cross-cut which is a continuation of the tunnel, passes through this gangue, mudlike, but hard mass, clear through to the end without cutting any ore beyond the principal vein which is cut by the tunnel. At a distance of 51 feet from the main vein it cuts a reddish oxidized streak of porphyry like material at right angles.

The crosscut from the northwest drift just beyond the raise and about 25 feet from the tunnel cuts a two-foot vein of ore at about 25 ft. from the main drift. There is a drift on this vein for some 30 ft. to the northwest, thus showing its parallel course.

The following description of the ore in the Barron Mine is given by Mr. Winchell in his report on the mines of Jackson County, published in the "Mineral Resources of Oregon", August 1914, Vol I, No. 5: "The Vein contains much quartz, fault gouge, talc, sulphides of iron, zinc, sulphur, copper and occasional stibnite and realgar. There are also present in the ore calcite, sphalerite, pyrite, galena, chalcopryrite, malachite, gypsum and antimony."

The ore proper is a bluish gray quartz, shading into a whitish gray at intervals, with small glistening crystals and specks of sulphides, hard and brittle. But in places where exposed to air and moisture it tends to soften and disintegrate.

There are no available assays showing the amount or value of other minerals besides gold and silver, nor do the smelter returns account for them. Evidently no effort has so far been made to determine or recover these values, which would seem from the character of the ore to be considerable.

A complete analysis of all assays and smelter returns of record 111 in all, show the following proportion of gold and silver as an average:

Percentage of gold in ounces.....	.04883%
Percentage of silver in ounces....	<u>.95117%</u>
	100%
Value in gold at \$35 per ounce...	\$0.7359
Value in silver at \$0.645 oz.....	<u>.2641</u>
	\$1.0000

The following is a summary of the above mentioned assays, copied from statements, assay and smelter certificates furnished by Mr. Lydiard: (Reduced to gold at \$35.00 and silver at \$0.645)

1898-9 Ashland As. Of. — 47 assays at average of ...	\$ 10.58 per T
" " " " 6 " " " " " ...	291.70 " "
1917-8 Smelter at Kennett, Cal. 209.9 tons	7 " " " " ... 45.18 " "
1934 Selby Smelter Cal.	1 " " " " ... 16.37 " "
" Tacoma Smelter Car	1 " " " " ... 13.25 " "
" " " " 1 " " " " ...	11.33 " "

The general average value of the 94 assays of unexceptional value included in the above is calculated as follows (7 of exceptional value being omitted):

47 Ashland Assay Office	at \$10.58	\$497.26
47 assays by Ashland Office	at \$10.58	\$497.26
15 " " various assayers		
	1934-5	\$24.99
32 " " Leroy A. Palmer, 1934	\$13.53	\$432.96

94 assays at an average of \$13.87

The general average of the smelter shipments is calculated as follows:

Mammoth Copper Co.,				
Kennett, Cal.	207.9	tons at	\$45.18 \$9393.35
Selby Smelter	40.	" "	16.37 654.80
Tacoma Smelter	45.	" "	13.25 596.52
" "	40.	" "	11.33 453.47

332.9 tons at \$33.33 \$11098.14

The ore at the point where the tunnel cuts the vein is about 14 feet thick and continues at this thickness for some 30 feet towards the southeast, where it narrows down gradually to where it does not show in the ceiling of the drift beyond 80 feet from the tunnel cross-cut. It continues in the northwest drift some 70 feet from the tunnel to where the drift is caved, not permitting examination beyond that point: but, according to statements of miners (Taylor and Lowd) who worked in the drift, the ore extends to the end of the drift a distance of 110 feet. However, the ore vein narrows down to 5 or 6 feet immediately to the northwest of the raise.

This ore has been stoped out to the southeast of the raise and above the "Station" to a height of about 60 feet above the drift, and for a distance of about 70 feet to the southeast from the raise and to the northwest from the raise it has been stoped to a height of about 30 feet for a distance of 40 feet. This is illustrated in Plate 2, attached hereto.

Ore appears in the ceilings of these stopes and there is every reason to believe that it continues to the surface and to the lower workings of the "glory hole". Evidence of its continuation exists in the D. level which are in ore 25 feet to the southeast and some 10 feet to the northwest. Assay taken by Leroy Palmer across the face of this drift to the northwest gives \$59.05 per ton. The ore has been taken out below the northwest drift to a depth of 8 feet and for a distance of 30 feet from the tunnel. Palmer assays show \$20.31 across 48 inches and \$15.00 across 60 inches in the bottom of this trench. Two assays by Palmer taken, one on the ceiling of the northwest drift at point of cave-in 70 feet from the tunnel, across 74 inches, gives \$30.16, and another from the caved material in the middle of the drift across 28 inches, gives \$37.56.

At the time this examination was made the 100 foot shaft below the tunnel level was partly filled with water, making it impossible to examine. Mr. Tom Taylor, who worked in this shaft for Mr. Currie states that he cut a sample across the bottom of the shaft for Currie which assayed \$3.90 (\$6.82 new price of gold and silver), but, that at the 65 foot level a large body of ore was encountered which ran \$50.00 per ton and better. This ore was partly stoped out from a drift at the 65 foot level to the southeast.

CONDITION OF THE WORKINGS

The main tunnel is timbered for the first 100 feet, but not beyond that point as it passes through solid rock and does not require timbering. The drifts are not timbered except at the station over a

distance of some 40 feet, which is very substantially done and sealed with heavy lumber. The 100 foot shaft is very substantially timbered from top to bottom. The southeast drift is solid and does not require timbering. The northwest drift, beginning about 60 feet from the tunnel has caved from water seepage and some 20 feet have been timbered and caved material removed.

The raise (136 feet) is fairly well timbered with hewed timbers and split lagging, but has been in place for more than 35 years and should be carefully examined and repaired where timbers have rotted. The workings in the "glory hole" are poorly and insufficiently timbered and therefore liable to cave at any time, especially the exit from the crosscut at the head of the raise to the surface.

The slope from the surface on the hanging wall side which extends down some 40 feet is held with stulls only and liable to cave at any time.

PLANT AND EQUIPMENT

The plant of the Barron Mine consists of a ten-stamp mill, two 5-stamp batteries, with a 12 inch crusher, 2 amalgamation plates, each 9'-3" x 5'-10", driven by a 25 horse-power Fairbanks Morse Diesel engine. There are two Diester concentrators slimers 9'-10" x 7' and one Wilfley concentrating table 5'-2" x 14'-10".

The plant is housed in a building 23 feet by 61 feet, very substantially built of Oregon pine lumber and roofed with galvanized iron.

It stands on the steep slope of the hill so that the tramway from the mine enters the plant at the top floor (4th), where the ore is dumped over a grizzly, the fines falling to a bin on the 3rd floor and the coarse on a platform in front of the crusher, which also discharges into the bins on the 3rd floor. On the 3rd floor, besides the ore bins, is the framework supporting the stamp mill, and on the 2nd floor are the stamps and battery boxes and the plates. On the 1st or ground floor, are the slimers and concentration table. All is arranged so that the ore comes in at the top floor and descends by gravity flow for each successive process until the tailings go to the dump in the canyon below the mill.

The mill is situated about 300 feet south from the entrance to the tunnel. To the right of the tunnel entrance is the blacksmith shop and assay office, each a small building 12' x 15'. The assay office is fully equipped with furnace, power pulverizing, two sets of gold scales, and all the required laboratory appliances and materials for assaying. The blacksmith shop is also fully equipped with forge and tools.

Below the tramway in front of the tunnel entrance is the power house. Here is a double cylinder Delavergne Diesel Type 15 horse-power engine, a "Giant" compressor, a Westinghouse 125 volt electric

generator. The Diesel engine drives the compressor and power for the generator is furnished from a "Star" automobile engine. The pump in the 100 foot shaft and the hoist are run by current from the generator. The Mine, mill and all buildings used for living quarters are wired for electric light. Water and air lines run into the mine along the floor of the tunnel.

There is a cookhouse and mess hall, bunkhouse, garage and warehouse, also office and several cabins, all constructed of lumber with shingle roofs and substantially finished inside (except woodshed and garage) with wallboard. Bunkhouse is equipped with iron bedsteads and mattresses, stove, etc. Messhouse and kitchen has steel range, dishes, cooking utensils and furniture.

There is a very complete assortment of mining and machine tools, including electric drill press, taps and dies, 2 jackhammers, 1 stoper, large dumpcar for bringing ore from mine to mill and tramway from mill to ends of both drifts on the tunnel level.

The mining plant and equipment are in general good repair and in condition for immediate operation with the following exceptions:

1. The dies on the stamps are badly worn and should be replaced.
2. The Delavergne Diesel engine in the powerhouse needs overhauling and repair. Some new parts, etc.
3. The compressor needs new valves, packing, etc.
4. The jackhammers and stoper are badly worn and should be sent to a shop for complete overhauling.
5. An additional engine should be provided in the mill for running the crusher as the 25 H.P. Diesel gives only sufficient power to run the ten stamps.

WATER SITUATION

Water for the Barron Mine is supplied in part from a spring about 150 feet northwest from the tunnel entrance, a small amount is pumped from the 100 foot shaft in the mine and some is obtained from a spring about one mile north of the mine, brought to the mill through a 2 inch pipeline.

Beginning about the first of February the spring near the tunnel entrance would supply sufficient water for the operation of the mill at full capacity for about sixty days, or until the first of April. From that time on for another sixty days the water from the spring, supplemented by that from the shaft and the spring on the mountain would be sufficient. By June first, from all sources there would be only enough water to operate the mill for an eight hour shift, using only five stamps. By August first the shortage of water would probably necessitate the suspension of operations entirely.

The spring near the mine is only a seepage and dries up almost entirely by June first and remains dry until the next January, or

February. It could not be made in any way to supply an increased amount of water. The spring on the mountain above the mine gives a very uniform supply of water throughout the year, but not sufficient for the operation of the mill. Anyway, these springs belong to the Ed. Barron interests and they have disconnected the pipeline and served notice that they will not permit further use of the water for mining purposes as they need it all for their stock.

The shortage of water seems to have been the principal cause of the failures in the operation of the mine in the past and presents the most urgent problem to be considered in planning future operations.

While it is possible that a sufficient supply of water could be obtained by sinking the shaft 100 ft. deeper, this would take considerable time and would be very uncertain. No serious program of operations could be undertaken pending the outcome of this experiment. The same conditions would hold in the drilling of a well. A 500 ft. 8 inch well could be drilled at a cost of about \$2.50 per foot. This would take less time than the sinking of the shaft, but would still be uncertain and would hold up plans for operation of the property pending the outcome. If sufficient water were found, a pumping plant would be required and there would then be a fixed operating and maintenance expense.

The best plan would seem to be to lay a pipeline to Sampson Creek at a point where the elevation would be about 3,700 ft., or 200 feet above the elevation of the Barron Mine. The distance would be approximately 9,240 feet. This would bring the water by gravity flow and dispense with a pumping plant. There would be only the first cost which would not exceed the cost of drilling a well and installing a pumping plant. The 7,000 feet of pipe which at the present time brings water from the spring on the mountain could be taken up and laid to Sampson Creek. Only 2,240 feet of new pipe would have to be supplied to complete the new line.

This would be a simple, inexpensive and certain solution of the water problem. The entire cost should not exceed \$1,500.00. If this plan were accepted a general program for operations could be inaugurated without delay.

OBSERVATIONS

The record of repeated failures in the operation of this property from the time of its discovery thirty eight years ago would indicate the existence of serious problems which the various operators have been unable to solve.

The failure of George Barron and Byron White to continue their development work was due, according to report, to irreconcilable differences and disagreements between the two which made any further operation by them impossible. Evidently they did not suspend development because of failure to find ore as Sallee's shipments to smelter of 207.9 tons shows that they were in good ore when they stopped work.

Sallee's lease was cancelled because Mr. Barron did not care to have him ship ore already developed without doing anything to improve the mine. Sallee evidently operated at a profit and would have continued shipping ore had he not been stopped.

Salsbury and Hathway must have found considerable ore in the mine to have invested their own money in a plant, something which, according to report, they did. Both were reputed to be experienced miners. They seem to have failed for two reasons: one, because of difficulty encountered in treatment of the ore; the other was shortage of water. Either would explain their failure since they were operating with limited capital, without reflecting upon the merit or possibilities of the mine. Both these problems could have been solved with sufficient capital and mining intelligence. However, their difficulty in extraction would indicate a defect in the milling plant and the existence of a serious problem of ore treatment, which must be solved before successful operation could be carried on. Mr. Currie's failure was clearly due to mismanagement and dishonesty, resulting in litigation and final prosecution. He evidently made a very serious mistake in laying 7,000 feet of pipe to the spring on the mountain, which involved considerable expense and did not solve his water problem. He seems to have made no serious effort to operate the mill or develop the mine, but was intent upon exploiting his stockholders and squandering the money. His record of operations proves him to have been incapable and entirely lacking in business and mining ability.

Mr. Lydiard, the present owner, was obliged to take over the property to avoid the loss of money loaned to Mr. Currie on the plant. He is not a mining man. He is engaged in the grocery business in Medford on a very extensive scale and has no time for mining. He merely operated the mine for a short period (about 2 months) in 1935, when it was left on his hands by Mr. Currie. The shortage of water forced him to close down before he had time to fully organize his work and find out what was to be done.

From what reports and records are available of previous operations it would not seem to be safe to count upon an extraction of better than 80% from the milling process at present installed. A competent mill man should be able to bring this up considerably by proper adjustment of the tables, selection of suitable screen and the solution of the sliming problem. The oxidized ore from near the surface could probably be treated without serious difficulty. The unoxidized ore from the lower levels would present a problem.

A laboratory test of the ore should be made prior to commencing operations in order to determine the possibility of extraction by amalgamation and table concentration.

It should be possible to determine very closely the amount of ore and the average value thereof which has been blocked out by the development work already done, by a thorough sampling of the present workings. Samples should be taken at close and uniform intervals. To do this properly would require about 150 samples.

Prospect holes should be sunk from the surface to show the extension of the ore in each direction from the "glory hole", at least 100 feet to the N.W. and a similar distance to the S.E. corresponding to the extension of the drifts on the A level. This would complete the "blocking out" on three sides of all the ore between the drifts on the A level, and the surface. The following estimate is made to show the possibility of available ore:

From A level — N.W. drift
 on N.W. side of Raise
 to the surface.
 85' x 175' x 6' 89,250 cu. ft. 6,865 tons

From top of stope above
 S.E. drift on S.E. side
 of Raise to the workings
 in the "glory hole".
 100' x 80' x 6' 48,000 cu. ft. 3,692 tons

From drift at 65 foot
 level in shaft to A level.
 50' x 65' x 6' 19,500 cu. ft. 1,500 tons

This would be a total of approximately 12,000 tons of ore practically blocked out on three sides. Taking the general average value of the sample assays of record from the present workings, which is \$13.87 per ton, the following ore value would result.

12,000 tons of ore at \$13.87	\$166,440.00	
		\$166,440.00
Less 10% loss in extraction	16,644.00	
Less 10% royalty to owner.....	14,979.60	
Less mining and milling cost \$4.00	48,000.00	<u>79,623.60</u>
Estimated net profit		\$ 86,816.40

For the above estimate the width of the vein is taken as 6 ft. This is the average width shown in report of Leroy A. Palmer who reported on the Barron Mine in January, 1934, taking 32 samples throughout the workings and giving actual measurement of the vein where each sample was taken. The ore body in the "glory hole" is about 40' thick to a depth of about 40 feet. If this body of ore extends beyond the glory hole along the ledge, the amount of ore above estimated would be more than doubled.

ESTIMATE OF REQUIRED INVESTMENT

The following is an estimate of the expenditure that would be required to install the pipeline to Sampson Creek, put the mill in condition for operation, and provide necessary additional equipment:

WATER SUPPLY

Taking up 7000' of 2 inch pipe:
4 men at \$3.00 per day - 18 days \$216.00
Moving 350 sections to new line 70.00
Purchasing 2240' of new pipe at .20 448.00
Laying of 9240' of pipe
4 men 24 days at \$3.00 per day 288.00
New sections and incidentals 178.00

\$1200.00

REPAIRS TO PLANT

10 new dies for stamps 85.00
Parts for Delavergne Engine 25.00
Valves, etc. for Compressor 15.00
Repairs to Jackhammers 40.00
Belting, Fittings, etc. 100.00
Labor, 1 mechanic, 2 helpers, 2 workers 135.00

\$400.00

ADDITIONAL EQUIPMENT

Engine for Crusher \$150.00
1-ton pickup truck 250.00
Miscellaneous Equipment 100.00

\$500.00

MISCELLANEOUS EXPENSES

Fire Insurance on Plant \$200.00
Printing, Stationery, Account Books 25.00
Escrow fee for option contract 25.00
Travelling expenses 100.00
150 assays 150.00

\$500.00

ESTIMATE OF OPERATING COSTS AND
PRODUCTION FOR FIRST TWO MONTHS.

First Month

(Operating at 1/2 capacity — running 5 stamps - milling 15
tons of ore in 24 hours.)

PAYROLL (1 - 8 hour shift)

2 drillers at \$4.50	\$9.00	
2 muckers at \$3.50	7.00	
1 mechanic at \$4.50	4.50	
3 shifts, 2 mill helpers at \$3 ...	6.00	
	<u>\$26.50</u>	26 days \$689.00
Mill superintendent at	150.00	
Assayer	100.00	250.00
Indemnity Insurance on payroll at \$8.00 per C.		67.12

OTHER EXPENSES

Fuel oil, gasoline and lubricating oil	150.00
Timber for mine	100.00
Powder	75.00
Steel, incidentals, repairs, etc.	<u>150.00</u>

Total monthly exp.\$1481.12

20% loss on extraction \$2.70 per ton 390 tons	1053.00
10% royalty on net value extracted	421.20
Smelter charges on 40 tons concentrates at \$5.00	200.00
Freight on concentrates	<u>200.00</u>

Total Costs\$3355.32

VALUE OF ORE TREATED. 390 tons at \$13.50	\$5265.00
Less costs	<u>3355.32</u>
Net Profit	\$1909.68

SECOND MONTH

(Operating at capacity of 30 tons in 24 hrs. 10 stamps)

PAYROLL - 2 - 8 hour shifts

Same as above, 2 shifts, 26 days	\$1378.00
Mill superintendent	150.00
Assayer	100.00
Bookkeeper	100.00
Indemnity Insurance	122.24

OTHER EXPENSES

Fuel oil, gasoline, lubricating oil	300.00
Timber for mine	200.00
Powder	150.00
Incidentals and repairs	<u>200.00</u>

Total monthly expenses \$2600.24

20% loss on extraction : 780 tons at \$2.70	2106.00
10% royalty on net value extracted	842.40
Smelter and freight charges on 78 tons concentrates	<u>780.00</u>

Total costs \$6328.64

VALUE OF ORE TREATED: 780 tons at \$13.50 \$10530.00
 Less total costs 6328.64

Net Profit 4201.36

Taking the above estimates as a basis for calculation an investment of \$5,000.00 would be sufficient to make the necessary improvements and repairs, purchase the needed additional equipment, pay the operation costs for the first month and leave a surplus of cash on hand of approximately \$900.00 as shown in the following statement.

Investment	\$5000.00	
Expenditures:		
Water Supply	\$1200.00	
Repairs to Plant .	400.00	
Add. Equipment ...	500.00	
Mis. Exp.	<u>500.00</u>	\$2600.00
Operating costs for first month		1481.12
BALANCE		<u>918.88</u>
	\$5000.00	5000.00
 SURPLUS		 \$918.88

Should the thorough sampling and prospecting of the mine result in confirming the estimated ore value and extension, and the laboratory test of the ore indicate the possibility of obtaining a satisfactory recovery with the present milling process, the investment of \$5000.00 should be sufficient for placing the property on a profitable basis. But, in consideration of the possibility of the need of adding a flotation unit and making other changes in the mill it would be well to provide for the investment of an additional \$5000.00, to be available if needed.

Respectfully submitted,

Ashland Dist Jackson Co

9-21-38
Jackson County.

Barron Mine (Gold etc.) *Ashland Dist*

Owner: Mrs. W. H. Lydiard, 16 Geneva, Medford, Oregon.

I have been informed that there has been no change since 1931 or as described in Bulletin 893, Page 134, U. S. G. S. Also see page 25 of the 1916 Report. Suggest you write to her for confirmation.

*Area: 3 40 acre tracts in Sec 23 T39S, R2E
Patented*

*History;
General Information
Equipment;
Geology
Development*

See page 134-136. B 893 40 3A

Quartz

also known as the Alton Mine

GEORGE H. MACDONALD

ENGINEERING GEOLOGIST

MINING ENGINEER

LOCATION:

The property is situated in section 23, T. 29 S.,
R. 2 E., Willamette Meridian, Jackson County,
Oregon. About 14 miles from Ashland, Oregon, a
divisional point of the Southern Pacific Railway,
and three miles north from Soda Springs on a
branch of Sampson Creek, a tributary of Emigrant
Creek.

See Map appended hereto.

DEVELOPMENT:

The property has been developed, and prospected by "glory-hole", and opened up by a crosscut entry extending N. 50 degrees E. about 210 feet to the vein on which tunnels are driven both ways, that to the eastward for about 250 feet, and that to the westward about 300 feet, the material is about 18 feet thick where it is cut by the crosscut, which extends beyond for about 100 feet, thus exposing exceedingly fine ore.

See Map appended hereto.

GEOLOGICAL FEATURES:

Oregon is similar in many ways to its sister coast states. Cutting across it from north to south are the two main ranges of mountains, the Cascades and the Coast Range, both of which continue into Washington on the north and California to the south.

The Cascade mountains form the "backbone" of the State, dividing it into two parts, commonly referred to as the Eastern or Central Oregon, and Western Oregon.

The portion east of the Cascades is about twice as large as that of the west, the Coast range of mountains parallels the coast line very closely for its entire length.

Lying against the California border is the great Siskiyou uplift, which again, connects the Cascades and the Coast ranges and separates Oregon territory from the Shasta region and may be considered as the northern extension of the gold-belt of California.

MINERAL DEPOSIT:

The Barron mining property is an epithermal deposit and is richly mineralized with gold and silver.

The rocks consist mainly of andesite flows of late Tertiary eruptions, the igneous rocks appear as lava flows, tuffs, and volcanic necks and have intersected Cretaceous sediments, the veins are as much as 18 feet in thickness.

The surrounding rocks, particularly the andesite has suffered extensive propylitization.

The stratification is S. 55 degrees E., and its dip is 80 degrees N. E., there are two parallel ^{veins} and both pitch steeply to the S.E.

Rich oxidized ore is encountered at the surface of this deposit. Rich oxidized ores are often encountered in these deposits at the surface and down to water level. Whether the primary ore is greatly enriched in this zone depends more on the texture and composition of the ore than on its original tenor.

In veins of hard-grained quartz often fails to produce an ore of higher grade, there are many districts - Cripple Creek and Tonopah, for instance, in which the oxidized ores are better, if any, richer than those below the oxidized zone.

The largest and richest masses of ore are often found just below the oxidized zone and, in general, contain sulphides, sulphantimonides, and sulpharsenides. It will suffice to call attention to the great silver bonanzas of Guanaxtote and Pachuca, Mexico; to the Comstock, Nevada, where in one month silver-gold ores valued at \$ 6,000,000 were extracted, to Tonopah, Nevada, where in three months ore yielding over \$3,000,000 was extracted, to the Caledonian mine at Thames, New Zealand, where in one year from a small ore-shoot produced \$ 6,000,000 in gold, to Cripple Creek, Colorado, where in one year from a small area \$ 18,000,000 in gold was produced, to Goldfield, Nevada, where during a single year over \$ 10,000,000 in gold was recovered from one property, the ore averaging \$ 38.50 per ton, and where, of the phenomenally rich ore shipped in 1907, one car-load of 47 tons yielded \$ 600,000 in gold. Most of these high yields proved ephemeral and were in part formed by primary (hypogene) deposition and owe their origin to sulphide concentration by descending (supergene) waters charged with precious metals from the upper parts of the veins.

GOLD QUARTZ VEINS IN ANDESITE: ,

A production of about \$ 30,000,000 is recorded from the Thames district, New Zealand. The veins are contained in broad belts of andesite and dip 40 degrees

and more. Great masses of low-grade quartz occur down to a depth of 400 to 600 feet below the surface, the veins have been followed from a height of 1500 feet above the sea-level to 640 feet below it, but owing to intervening faults the real vertical extent is only 1,200 feet,- it has been stated that the veins do not continue into the underlying Jurassic shale and that they are thus limited to the thickness of the lava flows in which they occur.

The rich ore shoots occur mainly where the veins are intersected by small stringers or "leaders".

Opinions differ widely as to whether this concentration is due to descending waters or not.

In all probability, however, it was one of the latest phases of the primary mineralization.

The principle ore mineral is gold alloyed with 30 to 40 per cent silver, pyrite, chalcopyrite, sphal-
erite, galena, stibnite, pyrargyrite, arsenopyrite, and native arsenic occur.

See page 11.

GENESIS:

There is strong evidence connecting the class of deposit herein discussed with igneous action and ascending hot waters, the best proof that the ores were not formed by the ordinary circulation of surface waters is the fact that deposition has not proceeded uniformly, but that the vein-forming epochs were of brief duration and followed closely after each considerable eruption. At Jarbridge, Nevada, the veins are contained in the early rhyolite, while the later rhyolite is barren. At Whihi, New Zealand, the rich ores or veins are sharply truncated by erosion and capped by a later rhyolite.

The occurrence of these deposits in lavas counts for but little; there are vast areas of lava flows absolutely barren of mineral deposits. Several eminent geologists have pointed out that the veins are confined mainly to the vicinity of volcanic necks or centers of eruption. These veins do not ^{disappear} ~~appear~~ in depth, the gangue minerals continue as far as followed but the ore becomes low-grade, therefore the exploitation stops. The deposits have nothing to do with the superficial volcanic phenomena, though some seem to think so. The solutions were truly of deepseated origin but their load was precipitated within about 3,000 feet of the surface.

The question naturally arises; Why should not the veins gradually assume the aspect of deeper zones? Indeed there is some scant evidence from the San Juan region in Colorado that they do so occasionally, but this is not the final answer. It would seem logical to suggest that the epithermal veins were formed from hot solutions which had their origin in the deep reservoirs where the magma was differentiated into the various types of flow rocks, and not, like most mesothermal and hypothermal deposits, in batholithic intrusions nearer to the surface.

Why the ores should not have been precipitated before they reached the epithermal region still remains an open question. There has been introduced the apt term of "telescoped" veins, which I should interpret to mean; (1) That the ascending cooling solutions encountered precipitating influences near the surface causing rapid deposition of their content within a short vertical distance; or (2) that the same happened in a vein previously formed at a higher temperature; or (3) that several ore zones were deposited rapidly covering each other owing to the solutions gradually becoming hotter, an exceptional condition which, however, might locally obtain.

IMPROVEMENTS:

The improvements (see photos) comprise the following;

Superintendents Quarters.

Assay Office, equipped.

Boarding House ,Fully equipped.

Six Bunk Houses, Fully equipped.

Compressor House. Equipped.

Blacksmith Shop. Equipped.

10 Stamp mill, and concentrators.

Mill water fully developed.

Water for domestic purposes fully developed.

GEORGE H. MACDONALD

ENGINEERING GEOLOGIST

MINING ENGINEER

CONCLUSIONS:

In mining, the opportunities and possibilities of the State of Oregon are unsurpassed anywhere and with the necessary courage and capital to reopen and develop this mining property it may develop into one of the large producers, I have no hesitancy in recommending the property as a good mining investment.

Respectfully,


Geo H. Mac Donald.

Copied from

Volume 2 Number 6 December, 1916 Page 25
Mineral Resources of Oregon
Handbook of the Mining Industry of Oregon
Oregon Bureau of Mines and Geology Publication.

Barron Mine (gold etc) Ashland District Jackson County

The only important deep mine in the Ashland district which is which is not chiefly valuable for its gold is the Alton or Barron mine, which contains much zinc and some lead, copper and silver. This mine is situated about 3 miles north of Soda Springs on a branch of Emigrant Creek locally known as Sampson creek. It is opened by a crosscut entry. The vein material is about 16 feet thick. The vein contains much quartz, fault gouge and sulphides of iron with occasional stibnite and realgar. It occupies a fault with a series of volcanic flows of the northeast side and a massive igneous rock on the southwest or footwall side it is said to contain stibnite along the footwall and realgar along the hanging wall. A selected sample of ore from this mine is reported to have yielded 44 per cent zinc, 29 per cent sulphur, 14 per cent copper, 1.4 per cent iron, 1 per cent alumina, 0.6 per cent manganese, 268 ounces silver, 14.20 ounces gold, and a trace of antimony. But 60 tons of ore sold for about \$ 530.00. The minerals observed in this ore include quartz, calcite, galena, sphalerite, pyrite, chalcopyrite, stibnite, realgar, malachite, native gold, wire silver, gypsum, and probably pyrargyrite.

D. TANK. 1. 1911.



VIEW OF CUTTING AND TOP OF (MOUNT BOND).



ANOTHER VIEW OF CUTTING AND (MOUNT BOND).

SECTION OF ORANGE JUNCTION.



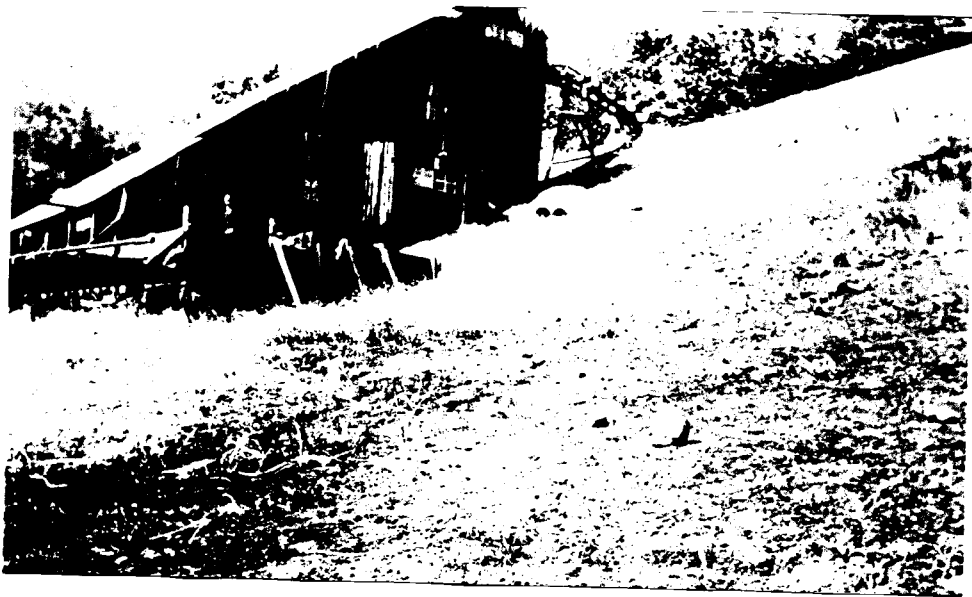
SECTION OF ORANGE JUNCTION.



SECTION OF ORANGE JUNCTION.



LA VILLA - CIVIL ENGINEERING - 1944



BARRON MINE - widths and assay values of 32 samples by Leroy A. Palmer,
January 14, 15, 20 and 21, 1954.

SAMPLE	WIDTH	GOLD	SILVER	TOTAL
1	68 IN.	\$ 5.94	\$ 4.76	\$ 10.70
2	126	14.00	3.04	17.04
3	92	1.05	0.36	1.41
4	168	0.36	0.44	0.80
5	96	0.36	0.47	0.83
6	72	2.44	2.29	4.73
7	72	0.69	1.31	2.00
8	58	0.69	0.93	1.62
9	44	0.69	0.37	1.06
10	180	2.44	0.90	3.34
11	54	6.69	0.96	7.65
12	15	2.10	2.38	4.48
13	108	0.69	0.42	1.11
14	48	15.40	4.91	20.31
15	84	2.44	0.23	2.67
16	57	1.75	0.66	2.41
17	96	3.86	1.03	4.89
18	70	1.39	0.98	2.37
19	72	2.80	1.19	3.99
20	72	0.69	1.73	2.42
21	14	5.25	9.84	15.09
22	76	17.18	12.95	30.13
23	58	0.36	1.02	1.38
24	56	23.79	10.67	34.46
25	30	1.05	0.45	1.50
26	68	15.40	12.91	28.31
27	74	18.90	11.26	30.16
28	28	20.26	17.30	37.56
29	72	12.94	9.86	22.80
30	120	47.80	11.25	59.05
31	40	31.82	8.20	40.02
32	84	26.60	8.94	35.54

32 Samples average \$13.49

18 Samples average \$29.32

Gold @ \$35.00

Silver @ 64¢

TACOMA SMELTER * TACOMA, WASHINGTON

Bought of Harry Currie, Ashland, Oregon, ore, Smelter Lot 752, April 20, 1934

Wet weight 95,720, H2O 5.88, Dry weight 90,092, Au. .29, Ag. 4.80,

	Gold ozs. 13.063 - Silver ozs. 216	
Less $\frac{1}{2}$ oz.	<u>13.063</u>	<u>23</u> 193

Gold realized price	\$ 34.9125	
Mint	20.6718	
Excess	<u>14.20407</u>	

90% of excess	\$12.8166	
Add contract price	19.00	
13.063 ounces at	<u>31.8166</u>	\$ 415.62

Silver at 44.75		<u>86.37</u>
		501.99

Treatment \$4.00 ton	\$ 180.18	
Freight 5.50	<u>263.23</u>	
		<u>443.41</u> 58.58

TACOMA SMELTER, Lot #384

Wet weight 83,980, H2O 4.28, Dry weight 80,386, Au. .26, Ag. 3.39

	Gold ozs. 10.450 - Silver ozs. 136	
Less $\frac{1}{2}$ oz.	<u>10.450</u>	<u>20</u> 116

Gold realized price	\$ 34.9125	
Mint	20.6718	
Excess	<u>14.2407</u>	

90% of Excess	\$ 12.8166	
Add contract price	19.00	
10.450 ozs. at	<u>31.8166</u>	\$ 332.48

Silver 116 ozs. at 62 5/8¢		<u>72.65</u>
		405.13

Base charge \$4.00	\$160.77	
Freight 5.50	<u>230.95</u>	
		<u>391.72</u> \$ 13.41

TACOMA SMELTER - TACOMA, WASHINGTON

Bought of Harry Currie, Ashland, Oregon, ore, Smelter lot 438, March 20, 1934

~~Approximate~~

Net weight 110,780, H₂O 5.13, Dry weight 105,097, Au. .30, Ag. 4.29, Gold ozs. 15.765
Silver ozs. 225, less $\frac{1}{2}$ oz. Ag. 26 - Gold ozs. 15.765, Silver ozs. 199

Gold realized price \$34.9125

Mint	20.6718
Excess	14.2407

90% of excess	\$12.8166	
add contract price	19.00	
15.765 ozs at	<u>31.8166</u>	\$501.59

Silver 199 ozs. at 62 5/8		<u>124.62</u>
		626.21

Case charge \$4.00	\$210.19	
Freight 5.50	304.65	514.84
	<u>\$514.84</u>	<u>\$ 111.37</u>

Affidavit of Miner, State of Oregon, County of Jackson, ss- The undersigned, being duly sworn, deposes and says: That he is the Manager of The Barron Mine, the owner of a mine known as The Barron Mine and situated 13 miles north east of Ashland, Oregon. That the said Harry Currie has delivered to American Smelting and Refining Company on the 2nd day of March, 1934, at its smelting plant known as American Smelting and Refining Company, Tacoma, situated in the County of Pierce, State of Washington, 225 fine ounces of silver which was mined subsequent to December 21, 1933, from natural deposits at the said mine so located.. Subscribed and sworn to before me this 17th days of March, 1934 G. W. Gury, Notary Public. My Commissions Expires June 8, 1936. (Smelter reference #438)

ASSAY CERTIFICATE E. W. LILJEGREN - EDFORD, OREGON

Submitted by W. H. Hydeard, May 4, 1935 - Gold \$55.00 - Silver 77.57¢

\$6920 Gold and Silver, .075 oz. gold value \$2.62 - Silver none, total value \$2.62

From slide in north drift on crosscut.

MECO ASSAY CERTIFICATE, MECO ASSAYERS, LOS ANGELES, CALIFORNIA.

Samples submitted by F. V. Marsh, August 24, 1934 - Gold @ \$35.00 - Silver @ .64¢

No. 2780, sample No. 1, Gold 1.02 oz. per ton \$35.70 - Silver 10.8 oz. - \$6.98 per ton
 Total value per ton \$42.68 - Harry's Hill
 0.06

No. 2781, Sample No. 2, Gold 2.22 oz. per ton \$2.10 - Silver 1.2 oz. - \$0.77 per ton
 Total value \$2.87 - The Boy's Hill

ASSAY CERTIFICATE * E. W. LILJEGREN * MEDFORD, OREGON

Samples submitted by W. H. Lydeard, March 9, 1934 - Gold @ \$35.00 - Silver @ 64¢

No. 5531, Gold and Silver, 1.10 ozs gold, value \$38.50 - Silver 565.6 ozs - \$361.98 per ton
 Total value \$400.48 per ton of 2000 pounds.

ASSAY CERTIFICATE * E. W. LILJEGREN * MEDFORD, OREGON

Sample submitted by F. E. Wall, September 6, 1934 - Gold @ \$35.00 - Silver @ 45¢

No. 5934, Gold and Silver, 1.95 oz. gold, value \$68.25 - Silver 31.99 ozs, \$14.34 per ton
 Total value \$82.59 per ton of 2000 pounds.

THE COLORADO ASSAYING COMPANY, DENVER, COLORADO

Submitted by W. H. Lydeard, July 17, 1934 - Gold @ \$35.00 - Silver @ 64¢

No. 1, Ore in bin, Gold .44 oz. value \$15.40 - Silver 13.80 oz. value \$8.70 per ton
 No. 2, Piece of ore, 1.00 35.00 - Silver 17.80 11.38

COLORADO ASSAYING COMPANY * DENVER, COLORADO

Submitted by E. W. Lydeard, May 7, 1934 - Gold @ \$35.00 - Silver @ 64¢

No. 1, Gold .12 oz. value \$4.20 - Silver 3.70 oz. Value \$2.57 per ton
2 .50 10.50 4.80 2.75
3 .50 10.50 4.80 3.07
4 .60 21.00 9.70 6.21

COLORADO ASSAYING COMPANY * DENVER, COLORADO

Submitted by W. H. Lydeard, August 15, 1934 - Gold @ \$35.00 - Silver @ 64¢

No. 3, Gold .08 oz. value \$2.80 - Silver .60 oz. value \$.38
4 .84 29.40 9.00 5.76

COLORADO ASSAYING COMPANY * DENVER, COLORADO

Submitted by W. H. Lydeard, Sept. 10, 1934 - Gold @ \$35.00 - Silver @ 64¢

No. 1, Gold .88 oz. value \$30.80 - Silver 4.80 oz. value \$3.07
2 42.40 1484.00 23.80 14.91
3 1.34 46.90 18.30 11.71
4 .14 4.90 5.10 3.26

No. 1, Average of ear shipped to Selby.

No. 2, Last sample taken off tables, Currie \$1365.00 Gold and Silver

No. 3, Curries general average concentrates made August 25, 19 oz. Silver, 1.8 oz. Gold

No. 4, Big sample picked up in drift by

July 18, 1935 - D. J. DWYER, sample by Mr. Lydeard - Gold @ \$35.00

Crude ore sample .09 oz gold, value \$3.25

(samples taken by Frank and me about 15 feet from hanging wall on 65 foot level in sh

May 14, 1935 - D. J. DWYER, sample by Mr. Lydeard, Gold @ \$35.00

Sample No. 1 Heads .08 oz. gold, value \$2.80

2 Tails .02 .70

3 Conc.1 1.08 37.80

Special 4 Conc.2

29.62

\$ 1056.70

June 29, 1935 - D. J. DWYER, sample by Mr. Lydeard, Gold @ \$35.00 - Silver 77¢

#1 Tails .02 oz. gold, value \$0.70

2 Crude .06 2.10 - Silver .50 oz. value \$.39

(six feet from face)

June 24, 1935 - D. J. DWYER - sample by Mr. Lydeard, Gold @ \$35.00 - Silver @ 77¢

(First sample on face)

Sample of 5 feet S. E. face, 65 foot level.

.04 oz. gold, value \$1.40 - Silver .48 oz. value \$0.37 - Total value \$1.77

Copy of Smelter return Mammoth Copper Mining Company, Kennett, Calif.
Bought of Harvey J. Sallee, Whitehouse, Calif., November 8, 1917.
Assay No. 650 - 3.49 oss. gold per ton; 44.20 oss. silver per ton.
15.5425 dry tons of ore; value per ton gold 66.31, silver \$34.11, total \$100.42

December 12, 1917. Assay #851, lot #2
.79 oss gold per ton; 26.46 oss. silver per ton; 10.8% Alumina
52.4535 dry tons of ore; value per ton gold \$15.01, silver \$20.11, total \$35.12

December 16, 1917. Assay #852, lot #3
.29 oss gold per ton; 8.71 oss. silver per ton; 10.3% Alumina
39.6615 dry tons of ore; value per ton gold \$5.81, silver \$6.66, total \$12.17

December 15, 1917. Assay #852 $\frac{1}{2}$, lot #4
2.17 oss. gold per ton; 56.0 oss. silver per ton
9.567 dry tons of ore; value per ton gold \$41.23, silver \$42.80, total \$84.03

January 5, 1918. Assay #980, lot #5
.41 oss. gold per ton; 16.8 oss. silver per ton
44.0255 dry tons of ore; value per ton gold \$7.79, silver \$13.08, total \$20.87

January 12, 1918. Assay #1009, lot #6
.62 oss. gold per ton; 17.48 oss. silver per ton
43.9375 dry tons of ore; value per ton gold \$11.78, silver \$13.64, total \$25.42

January 15, 1918. Assay #1010, lot #7
3.02 oss. gold per ton; 88.6 oss. silver per ton
2.9555 dry tons of ore; value per ton gold \$57.38, silver \$69.11, total \$126.49

Copy of Assay certificate Oregon Gold Extraction Co., Ashland, Oregon
July 9, 1898. Sample #2. Sample submitted by Mr. Barren
Gold ass. .16 per ton; silver ass. .2 per ton;

Copies of Assay certificate Ashland Assay Office, Ashland, Oregon.
Ore submitted by Alta Mining Co.

Sample #1, south drift, gold ass. Trace; silver ass. .1
" #2, " " " trace; " trace.

November 7, 1899

Sample #1, winse, gold ass. .8; silver ass. 13.4
" #2, upraise, gold ass. .15; silver ass. 2.6

November 11, 1899

Sample #1, winse, gold ass. .55; silver ass. 14.55

December 4, 1899

Sample #3, upraise, gold ass. .15; silver ass. 2.75
" #4, winse, " 1/40; " 1.2

November 18, 1899

Sample #1, across 5 feet, gold ass. .45; silver ass. 1.3

November 15, 1899

Sample #1, gold ass. 1/20; silver ass. 1.1

October 25, 1899

Sample #1, south winse, gold ass. 24.8; silver ass. 169.5
" 2, north drift, " trace; " 1.7

January 25, 1900

Sample #1, gold ass. 1/20; silver 1.0 ass.

October 17, 1899

Sample #1, north drift, gold ass. .2; silver ass. 17.95
" 2, " " .1; " 1.2
" 3, " " trace " trace

October 16, 1898

Sample #1, north drift, gold ass. .108; silver ass. 8.64
2, " " .025; " 3.5

September 22, 1899

Sample #1, north drift, gold ass. .15; silver ass. 2.95
2, " " .35; " 3.25

September 21, 1899

Sample #1, north drift, gold ass. .3; silver ass. 1.0

September 15, 1899

Sample #1, north drift, gold ass. .05; silver ass. 5.7
2, south drift, 1/40; trace

Sheet #2

September 12, 1899

Sample #1 north drift, gold ozs. .8; silver ozs. 7.3
2 Thirty Quarts, gold ozs. .1; silver ozs. 1.9

September 6, 1899

Sample #1, north drift, gold ozs. .2; silver ozs. 1.8
2, south drift, trace .2

August 27, 1899

Sample #1, south drift, gold ozs. .3; silver ozs. 4.2
2, trace; .3
3, .2; 6.3
4, north drift .5; 1.3

August 26, 1899

Sample #1, gold ozs. .15; silver ozs. 2.05

August 23, 1899

Sample #1, 2 ft. south drift, gold ozs. .35; silver ozs. 2.85
2, .2; .1
3, 5 Ft. N.D. Breast, .1; 1.0

October 20, 1898

Sample #1, south drift, gold ozs. .25; silver ozs. 102.75

August 18, 1899

Sample #1, East side south drift, gold ozs. 1.5; silver ozs. 195.8

August 14, 1899

Sample #1, 2 ft. S.D. foot, gold ozs. .2; silver ozs. 3.7
2, 3 " trace; 1.25
3, 2 ft. N.D. foot trace trace
4, 3 .1; 1.15
5, sorted ore 2.89 138.53

December 28, 1899

Sample #5, upraise, gold ozs. 2.45; silver ozs. 52.75
6, winze, trace; 1.9

February 11, 1900

Sample #10, 90 ft. upraise, gold ozs. .45; silver ozs. .75
11, 22 ft. S.L. drift, 1.6 1.35

January 30, 1900

Sample #9, 7 ft. in south lower drift, gold ozs. .25; silver ozs. 1.55

January 15, 1900

Sample #7, upraise, gold ozs. .1; silver ozs. 10.1

November 21, 1899

Sample #1, upraise, gold ozs. .225; silver ozs. 7.57

Sheet #3

October 30, 1899

Sample #1, north drift C.C.,	gold ass. trace;	silver ass. .75
2 south drift winze,	6.25 ;	61.95
3 south winze	1.4 ;	6.5

Assay office of Wm. H. Stowell & Co., Spokane, Washington
June 24th, 1899 - assay made for R. M. White

Sample #1, 15 inches foot wall,	gold ass. .01;	silver ass .5
2, 24 inches vein foot wall side,	gold ass. 0.25; silver ass. 8.8	
	gold ass. 1.0;	silver ass. 8.8

Barron Mine

Owner Mrs. W. H. Lydiard, 16 Geneva, Medford, Oreg.

Mine has not been operated for years. Only main level is open and safe. D. A. Snyder + Gene Hopper of Oakland, Oreg. were up there this winter, interested in the mine as a gold property. They submitted one sample to our assay lab: -

B.G. 200 - Mar. 3, 1941

- aw = 0.1 oz.
- ag = 13.2 oz.
- Pb = 14.1 %
- zn = 9.4 %

sample cut somewhere between 30-50 feet of probably main tunnel. Other samples assayed by Snyder for gold only. Snyder + Hopper brot out a number of sacks of concentrates to Gordon Gold Recovery at Gold Hill. They know nothing of zinc minerals in the mine.

Mrs. Lydiard loaned me a report by a H.L. (?) Applegate, made about 5 yrs. ago + a sort of assay map. She knows nothing about the zinc. Equipment largely has been removed.

Barron Mine

Gold Silver Zinc Lead Copper

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

39 South

2 East

25

T

R

S

Jackson

COUNTY

Ashland

AREA

3500 feet

ELEVATION

15 miles highway 3 miles mt. road

ROAD OR HIGHWAY

18 miles S.W. of Ashland

DISTANCE TO SHIPPING POINT

PUBLISHED REFERENCES

Callaghan and Buddington 38:134-135

Park & Swartley 16:25

Ore. M. M. Hbk. Vol. II Sec.2

MISCELLANEOUS RECORDS

Report and map in file at Grants Pass office.

PRESENT LEGAL OWNER (S)

Mrs. W. H. Lydiard

Address

16 Geneva, Medford, Oregon

OPERATOR

Name of claims

Area

Pat.

Unpat.

120 acres of patented land

Name of claims

Area

Pat.

Unpat.

EQUIPMENT ON PROPERTY

5 stamp mill and buildings on property

Name Barron Mine ~~Barron~~ Owner:
Ownership ? Joe Dauenhauer, 1971

Location The property consists of three 40-acre tracts in Sec. 23, T. 39 S., R. 2 E., Jackson County, and is about 8 mi. east-southeast of Ashland. It is reached by way of U.S. Highway 66 and a mountain road to the mine about 4 mi. in length.

Area 120 acres

History The property is reported to have been patented on grazing rights in 1883. The Barron family acquired it in 1885. It is reported that the production, principally since 1917, has been about 9000.

Topography The area is mountainous with the mine at an elevation of about 3400 feet. Drainage is to Emigrant Creek, 1200 feet lower in elevation.

Geology The country rocks are chiefly andesitic breccias with flows and dikes of labradorite andesite, some basalt and some rhyolite. There is ^{an exposure of a} dike of dacite porphyry over a mile south of the mine — Sampson Creek. The vein lies in a belt of foliated rock which strikes N 38 W and has an average dip of 80° N.E. It consists of a series of intersecting faultlets with fillings of gouge, fragments of altered rock some of which are cemented by cherty quartz and contain sulphides. The vein is over 1-foot wide. The vein varies in width from 1-foot

to over 10 feet. Sulphides occur in small stringers and consist chiefly of sphalerite with a little galena, chalcocite, pyrite, and arsenopyrite. Other metallic minerals reported are stibnite, realgar, malachite, native gold and wire silver, with, probably, pyrrhotite. Gangue minerals include quartz, calcite and a little barite. Most of the gold has been obtained from the iron-stained leached zone according to an engineers report, in the upper workings assaying range from \$6.42 to \$13.77 the ton - gold and silver over widths of from 3 1/2 to 12 ft. A sample from the south side of the slope over the main drift assayed \$20.34 the ton for a width of 7 ft. A sample from the base of the south drift assayed \$0.92 the ton across 4 ft. These values are all with gold valued at \$20.67 an ounce.

The value of smelter shipments - made - 1917-18 are given in the following table

Ore (tons)	Gold		Silver ozs.	Value per Ton	Value of Shipment
	ozs.	Value			
52	0.73	\$ 15.01	20.11	31.12	1,618.24
15	3.20	66.31	34.11	100.42	1,526.30
39	.25	5.31	6.66	11.97	466.83
9	1.99	41.23	42.80	84.03	752.27
44	.36	7.79	13.08	20.87	918.28
43	.57	11.78	13.64	25.42	1,093.06
3	2.76	57.38	69.11	126.49	379.47
Tals 205					6,738.45

Barron

Development A cross cut tunnel 390 ft long
 cuts the vein at 300 ft from the portal
 and 150 ft vertically below the surface.
 Drifts on the vein are reported to be 285 ft
 long easterly and 270 feet westerly. Also
 a winze 35 ft deep with a drift at
 the bottom 20 ft long are reported.
 A raise 25 ft north west of the cross cut
 was driven the surface. There are
 three short drifts from the raise and
 two slopes south of the raise.

Source of Information

USGS Bull. 893
 Handbook of Mines of the
 Oregon Bureau of Mines and
 Geology.

9-21-38
Jackson County.

Barron Mine (Gold etc.)

Owner: Mrs. W. H. Lydiard, 16 Geneva, Medford, Oregon.

I have been informed that there has been no change since 1931 or as described in Bulletin 893, Page 134, U. S. G. S. Also see page 25 of the 1916 Report. Suggest you write to her for confirmation.

REPORT ON
THE
BARRON MINE
Sec. 23, T39S R. 2E W.M.
Jackson County, Oregon

for

GENEX RESOURCES INC.
801 - 700 West Pender Street
Vancouver, B.C.

by

GENEX RESOURCES INC.
1515-625 Howe Street
Vancouver, B.C. V6C 2T6

U.S. Correspondence Mail To:
P.O. Box 2051 Blaine, Wash 98230

J.P. ELWELL ENGINEERING LTD.
1026 - 510 West Hastings Street
Vancouver, B.C.

October 12th, 1982

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REPORT ON THE BARRON MINE
JACKSON COUNTY, OREGON

SUMMARY

The Barron Mine is located in Sec. 23, T. 39S, R2E W.M. in Jackson County, Oregon, and is within a large area of privately owned land which includes the mineral rights. Access from the town of Ashland is by way of about 10 miles of road, all but the last two miles being paved or gravelled.

The mine has had an intermittent production history by several operators since it's discovery in 1898 until 1935, after which there is no record of activity. Total recorded shipments during this period are less than 1000 tons, the mine run grade, according to assay data and smelter returns, being in the range of 0.25 - 0.35 oz/ton Au, with a silver to gold ratio of 10:1 or better.

Geologically the property consists of a strong quartz fissure vein in volcanics which has been traced by prospecting for at least 5000 feet, but all activity has been centered on the original discovery where the vein is about 45 feet wide and which has been developed by a cross cut adit 175 feet below the surface, and about 250 feet of drifting with a raise to the surface. At the adit level the vein is reported to be from 4 to 14 feet wide, and a winze has shown the vein to continue below the level.

All recorded production has come from three small stopes and a glory hole on the discovery outcrop, and a consultants report written in 1934 indicates 12000 tons of ore in place accessible from the existing workings with an average grade of 0.26 oz/ton Au and 6.98 oz/ton Ag.

The previously worked part of the vein system represents only 4% of the known strike length, so there is ample room for the development of a very substantial tonnage, which from a geological standpoint, could have similar characteristics and grade to the known section.

A phased program of exploration is recommended, the initial work consisting of a geochemical survey and mapping program. Phase II would consist of trenching, drilling, and sampling of mineral zones indicated by the geochem. program.

Phase I is estimated to cost \$20,000 and Phase II \$150,000. A third phase of further drilling etc., leading to a feasibility study has been provisionally estimated at \$150,000.

INTRODUCTION

The Barron Mine, located in Jackson County, Oregon, near the town of Ashland, is an old gold-silver producer with a record of small scale, intermittent production between 1898 and 1935. Although the underground workings are now inaccessible, there are a number of reports and other data on the property which are believed reliable, and written when the mine was active, which provide a fairly good account of the geological structure, mineralization, and possible ore potential of the property.

This report consists of a summary of the available data, and an evaluation of the potential of the property based on this, and observations by the writer during a reconnaissance examination on September 28th, 1982, with recommendations for the initial stages of exploration work required to establish the mineral potential and economic importance of the property.

The report was prepared for Genex Resources Inc., 801 - 700 West Pender Street, Vancouver, B.C.

LOCATION AND ACCESS

The Barron Mine is located in Jackson County, Oregon, about ten miles southeast of the town of Ashland in Section 23, Township 39S, Range 2E (W.M.), which is part of a block of about 13000 acres of deeded land owned by Mr. J. Dauenhauer who also owns the mineral right underlying the land.

Access to the mine from Ashland is by way of the Klamath Falls Highway for about eight miles, and then northeast for 3.5 miles over a ranch road, the first two miles of which is in good condition, with the remainder requiring some culverts and grading to make it passable to automobiles and trucks. A location map accompanies this report.

TOPOGRAPHY, WATER, ETC.

The area in which the mine is located is one of rounded, eroded mountains with few outcrops appearing through the residual overburden. The average elevation of the mine would be between 3200 and 3600 feet, with minor creeks, usually dry in the summer, draining to the Bear Creek Valley to the south. Vegetation consists of grass with clumps of black oak, but there is very little underbrush.

Limited water for exploration purposes can be obtained from a spring or the creek below the mine, but the nearest permanent water supply would be Sampson Creek, about two miles from the mine site.

PROPERTY

As the mine is entirely within privately owned land, there are no mineral claims as such, but it is understood that an option agreement with the landowner would include rights to explore for any minerals, other than hydrocarbons, within the private lands.

EARLY HISTORY

The following history of the Barron Mine has been summarized from several accounts which are believed to be reliable.

The mine was discovered in 1896 by John H. Shephard on ranch land owned by George W. Barron, and the two men opened up the discovery, and it is reported that 10 tons of ore was milled at Ashland yielded \$28.00 per ton in gold (approximately 1.4 oz/ton Au). Later, a 100 ton shipment to the mill yielded \$8.00 per ton (0.40 oz per ton Au).

In 1899 the Alta Mining Co. was incorporated with a capital of \$10,000. A cross cut tunnel was driven from the base of the hill 175 feet below the outcrop, and cut the vein at a distance of 300 feet. The vein was drifted on for 100 feet to the northwest and 173 feet to the southeast, and a raise was driven 136 feet to connect to the surface workings. A 40 foot winze was sunk near the vein from the drift level.

There are no reports of ore shipments during this development work, but the average of 53 samples, presumed to represent mine run development material from the vein, was 0.253 oz/ton Au, and 2.62 oz/ton Ag.

On completion of the above development, the mine was closed, reportedly due to lack of money and a disagreement between Mr. Barron and the operators.

There was no further activity until 1917, when the mine was leased to Harry J. Sallee, who shipped 207.91 tons of ore to the smelter at Kennett, California. This shipment is said to have run 1.29 oz gold equivalent per ton. Sallee's operation consisted of mining out the accessible high grade ore above the drift without doing any mine development, which led to the cancellation of his lease.

In 1923 the mine was leased to Hathaway and Salsbury who installed a 10 stamp mill with gravity concentrating tables. The operation only lasted about 5 months when it closed down due to shortage of water and poor gold recovery from the mill.

Quarrels, and default on the lease payments resulted in the abandonment of the property, which reverted to Mr. Barron.

Mr. Barron refused further offers to lease the property, and there was no further activity until after his death, when, in 1931, his widow leased the property to Harry Currie, who formed the Gold Mound Mining Co. It is reported that \$40,000 was raised, and a large sum was spent on building surface facilities and rehabilitating the underground workings, including deepening the winze to 100 feet. Production records for this period of operation are scant, but in 1934, two carloads of 45 and 40 tons yielded smelter returns of approximately 0.38 and 0.32 oz/ton Au equivalent respectively.

The company appears to have been rife with mismanagement and questionable practices which resulted in litigation and the collapse of the company, and eventually the assets of the company and the property on which the mine was located on, was acquired by a Mr. Lydiard, who made some minor attempts to run the mill during June and July, 1935.

From this date to the present, there appears to have been no activity on the property except for a reconnaissance soil sampling program conducted in 1971 for the present owner, Mr. J. Dauenhauer.

PLANT AND EQUIPMENT

Parts of the old ten stamp mill are still on the property, but the only usable installation is a concrete water tank which appears to be in good condition.

GENERAL AND ECONOMIC GEOLOGY

The Barron Mine is located in the southwesterly limit of the Cascade Mountains near the contact with the Siskiyou Mountains, the contact itself running northwest-southeast along the Bear Creek Valley. The rocks of the Cascades

in this area are mainly volcanic flows of Tertiary age and consist of lavas and tuffs varying in composition from andesite to basalt, with the former type prevalent.

The Barron Mine structure consists of a fissure vein cutting the lavas at about N53°W with a dip of about 85°NE to vertical. It has been traced by prospect pits to the northwest of the discovery pit for about 1420 feet, and there are reports of other outcrops and showings directly on strike of the known vein for a distance of about 5000 feet. Also there are reports of parallel zones of altered rock with indications of gold-silver mineralization.

Vein Character and Mineralization

At the discovery point on the surface, the vein is about 45 feet wide, consisting of 5 to 6 feet of well defined vein on the northeast side and about 40 feet of porphyry which carries gold and silver values. At the tunnel level, 175 feet below the surface, the vein is reported to be about 14 feet wide, narrowing to about 6 feet at the end of the northwest drift. The porphyry mineralization exposed in the surface discovery is known to extend to a depth of about 40 feet where it has been mined by a glory hole operation, but there has been no exploration between this point and the drift level to determine its ultimate depth, and it has only been explored along strike for about 40 feet, which is the limit of the glory hole.

Apart from the main vein structure, there is reported to be a parallel vein about 2 feet wide, 25 feet to the east of the main vein. This has been opened up by a cross cut and 30 feet of drift and is reported to have ore grade mineralization, although no assay values are quoted.

The mineralization of the vein is described by Winchell, in "Mineral Resources of Oregon", August 1914, as consisting of quartz with fault gouge and talc, and containing pyrite, arsenopyrite, sphalerite stibnite, galena, chalcopryrite, and realgar along with gold and silver values. The association of the gold and silver with the base metals has not been established, but some petrographic studies might be an aid in determining the relationship of the different minerals.

SOIL SAMPLING

In 1971, Ronald C. Bartley, Consulting Geologist, conducted a reconnaissance soil sampling program across the structure from the glory hole to the northwest for about 1600 feet, with samples run for As, Sb, Hg, Cu, Zn, and Mo. No significant values were noted in copper or molybdenum, but high zinc and arsenic values were recorded over the known ore zone near the glory hole, and high arsenic, antimony, and mercury values were encountered at the northwest end of the survey. Bartley suggests that zinc is an indicator of gold values, but as none of his samples were run for gold or silver, this is not conclusive.

A soil sample map, based on Bartley's sketches, accompanies this report.

EXAMINATION OF THE PROPERTY

There is very little to be seen on the surface of the mine area, as overburden of residual soil covers the entire area except for a small outcrop near the original discovery on which the glory hole was developed. The mouth of the cross cut adit is completely caved, but it is possible that it could be re-opened with a back hoe as the country rock is reported to be hard and competent.

The glory hole is also partly caved, but part of the quartz vein structure is still visible on one wall, and the strike seemed to conform with that indicated in the old reports. The mineralization exposed was silicious, with some clay and gouge, and had a porphyritic texture as mentioned in the early reports.

Four grab samples were taken from the mine, two from the glory hole and two from the dump above the old mill. These were character samples only, and were not intended to indicate probable ore grade. The results are posted below:

<u>Sample No.</u>	<u>Au oz/ton</u>	<u>Ag oz/ton</u>	<u>Description</u>
22901	0.003	0.40	glory hole, porphyry
22902	0.660	7.88	glory hole, porphyry
22903	0.020	0.84	adit dump, quartz with minor arseno pyrite
22904	0.200	3.82	adit dump, quartz with minor stibnite.

ORE RESERVES

In 1934, during the last period of mining activity, Leroy A. Palmer, Reg. M.E., mapped and sampled the underground workings. A total of 32 drift, raise, and stope samples were taken, the average value of which is reported as \$ U.S. 13.87 per ton (1934 prices), this would represent approximately \$ C. 199.00/ton * at current metal prices.

Palmer calculated approximately 12000 tons in three blocks with an average vein width of 6 feet, and all of which could be mined from the existing workings without further development. These blocks are shown on the section map accompanying this report and are listed below:

Block A - 85'x 175'x 6'	= 89,250 Cu Ft.	= 6865 tons
Block B - 100'x 80'x 6'	= 48,000 Cu Ft.	= 3692 tons
Block C - 50'x 65'x 6'	= 19,500 Cu Ft.	= <u>1500</u> tons
	Total	12057 tons (12000)tons

At \$C. 199.00/ton, the gross metal value would be :
\$C. 2,388,000

* Au \$C. 500.00/oz Ag \$C. 10.00/oz

EVALUATION OF THE PROPERTY

The known geological and mineralogical data on the Barron Mine indicate that there is a quartz vein structure which has been traced by a few superficial prospect pits for at least 5000 feet along strike, with a width at the discovery point which happened to be one of the few places where the vein outcrops, of about 45 feet.

Underground exploration and mine development has indicated a well defined quartz vein from 4 to 14 feet in width over a strike length of about 185 feet and open to the northwest, and continuing up to the surface 175 feet above the drift level. A prospect winze below the drift indicates the vein continues to depth.

Gold and silver values in this ore shoot, based on an average of 32 drift and stope samples taken by Palmer amount to 0.26 oz/ton Au, and 6.98 oz/ton Ag.

This ore shoot, with a length of about 200 feet, only represents about 4% of the known strike length, and while the vein characteristics beyond the discovery area are practically unknown due to overburden cover and lack of exploration, there appears to be no geological reason for a change in the vein potential or mineralization.

As it stands now, the property appears to have good possibilities for the development of a medium sized underground operation. However, if the indicated width of porphyry mineralization persists with the same width for any distance along strike, then there would appear to be opportunities for developing an open pit mine in the initial stages of production which could be worked while underground development was being carried out. As an example, a surface block

40 feet x 40 feet x 1000 feet would represent about 120,000 tons or enough to operate a 200 ton/day mill for about 2 years.

The previous history of this mine has been one of intermittent, small scale "gyppo" mining to get a quick recovery from accessible high grade ore, with very little money spent on exploration or development. The property, however, has all the characteristics of a fairly major mineral zone and deserves a systematic, staged program of exploration to determine its ultimate potential before renewed production is contemplated. The recommended initial stages of work are outlined below.

RECOMMENDATIONS

Phase I

1. One mile of the strike zone, extending both southeast and northwest of the discovery, should be covered by a geochemical survey, the lines spaced at 400 feet intervals and extending 1000 feet each side of the vein strike. Sample spacing would be 50 feet, with analysis for Au, As, Sb, and Zn.
2. Concurrently with the above, geological mapping should be carried out, and any vein outcropping sampled.

Phase II

Subject to an analysis of the geochem results being favorable, an enlarged program of exploration would be initiated as follows:

1. The last two miles of access road should be repaired, with culverts in the minor creeks as necessary.
2. Anomalous metal values indicated by the geochem survey should be explored by backhoe trenches to bedrock, with the vein exposure blasted if necessary to obtain good sections for sampling.

3. A determined effort should be made to open up the cross cut adit and rehabilitate the underground workings sufficiently to allow detailed mapping and sampling of the vein exposures.

4. Based on the results of the trench sampling, a series of widely spaced diamond drill holes should be put down to provide sections of the vein for mapping and assay, and to probe the mineralization at depth. This would be followed by more closely spaced percussion drill holes in order to average out the assay grade of the vein.

Phase III

This would be contingent upon the results of Phase II, but would probably involve further drilling, underground exploration, etc., to obtain sufficient data to initiate a production feasibility study.

ESTIMATE OF COSTS *

Phase I

1. Geochem survey, including mapping and sampling	\$10,000
2. Assays	10,000
3. Engineering and administration	2,000
4. Contingencies	<u>3,000</u>
Total Phase I	\$25,000

Phase II

1. Road Repairs	5,000
2. Back how trenching allow 200 hrs @ \$30.00/hr.	6,000
3. Rehabilitation of adit, allow	5,000
4. Mapping, sampling and assaying	5,000
5. Diamond drilling - allow 2500 ft @ \$30.00/ft. -- all inclusive	75,000
6. Percussion drilling - allow 5000 ft. @ \$10.00/ft.	50,000
7. Engineering, administration, etc.	<u>4,000</u>
Total Phase II	\$150,000

Phase III

Provisional budget for Phase III work	<u>\$150,000</u>
Total, Phase I, II, & III	\$325,000

* Canadian Dollars

October 12th, 1982

J.P. ELWELL ENGINEERING LTD.



REFERENCES

1. Reconnaissance Geochemical Survey,
Barron Mine Area - R.C. Bartley
Consulting Geologist - July, 1971.
2. The Barron Mine - Leroy A. Palmer, M.E.
Consulting Engineer, 1934.
3. Mineral Resource of Jackson County, Oregon,
Vol. 1, No. 5, Aug. 1914 - A.N. Wichell.
4. Copies of smelter returns and mine assays.

CERTIFICATE

I, James Paul Elwell, of 4744 Caulfield Drive, West Vancouver, B.C., do hereby certify that:

1. I am a Consulting Mining Engineer residing at 4744 Caulfield Drive, West Vancouver, B.C., and with an office at 1026 - 510 West Hastings Street, Vancouver, B.C. V6b 1L8.
2. I am a graduate in Mining Engineering from the University of Alberta in 1940, and am a Registered Professional Engineer in the Province of British Columbia.
3. I have no personal interest, directly or indirectly in the properties examined or in Genex Resources Inc. securities, nor do I expect to receive directly or indirectly any interest in such property or securities.
4. The findings in the report are derived from data acknowledged under "References", and a personal examination of the property on September 29th, 1982.
5. The full text of the report and accompanying maps may be reproduced in the Company's Prospectus or Statement of Material Facts.

DATED at VANCOUVER, B.C. this 12th day of October, 1982.


J.R. ELWELL, P. Eng.

Barron Mine
S. 33, R. 2E., T. 38S

Gold, silver, lead & zinc

Ashland

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

ASSAY REPORT

Grants Pass, Oregon

~~Baker, Oregon~~

March 12

19 41

Sample submitted by D. A. Snyder, Rt. 2, Box 392, Ashland, Oregon

Sample description: Gray quartz containing a noticeable amount of galena and sphalerite with a small amount of chalcopyrite. 1½ lbs. ¼ inch and smaller.

The assay results recorded below are made without charge as provided by Chapter 176, Section 10, Oregon Laws 1937, the sender having complied with the provisions thereof.

NOTICE: The assay results recorded below are from a sample furnished by the above named person. This Department had no part in the taking of the sample and assumes no responsibility, other than the accuracy of the assay of the material as furnished it by the sender.

Sample Number	GOLD		SILVER		Lead		Zinc		Total Value
	Ounces per ton	Value	Ounces per ton	Value	Percent	Value	Percent	Value	
	0.10	\$3.50	13.2	\$9.24	14.1		9.4		

Market Quotations:

Gold \$35.00 per oz.
Silver \$ 0.70 per oz.
\$ per lb.
\$ per lb.

STATE ASSAY LABORATORY

Assayer

Barron Mine
 Jackson Co., Ashland Area
 Sec. 23, T. 39 S., R. 2 E.

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

ASSAY REPORT

Office Number BC94

Grants Pass, Oregon

~~Baker, Oregon~~

~~February 7,~~ 19³ ~~41~~

Sample submitted by D. A. Snyder, Route 2, Box 392, Ashland, Oregon

Sample description Fine pyrite.

The assay results given below are made without charge as provided by Chapter 176, Section 10, Oregon Laws 1937, the sender having complied with the provisions thereof.

NOTICE: The assay results given below are from a sample furnished by the above named person. This department had no part in the taking of the sample and assumes no responsibility, other than the accuracy of the assay of the material as furnished it by the sender.

Sample Number	GOLD		SILVER		Percent	Value	Percent	Value	Total Value
	Ounces per ton	Value	Ounces per ton	Value					
	0.68	23.30	6.6	4.62					\$28.42

Market Quotations:

Gold \$ 35.00 per oz.
 Silver 0.70 per oz.
 per oz.
 per oz.

STATE ASSAY LABORATORY

 Assayer

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
PROJECT SAMPLE RECORD

AGG-16, 17, 18, 19. Au, Ag

SAMPLES SUBMITTED BY: N.V. Peterson

ADDRESS: DOGAMI - P.O. Box 417 G.P.

DATE: July 3, 1972

<u>Sample No.</u>	<u>Mine or Prospect</u>	<u>Type</u>	<u>District</u>	<u>S.</u>	<u>T.</u>	<u>R.</u>	<u>Assay For</u>
AGG-16	Barron Mine	25' chip	Ashland	23	39 S	2 E	Au, Ag
AGG-17	" "	12' chip	"	"	"	"	" "
AGG-18	" "	20' chip	"	"	"	"	" "
AGG-19	" "	Composite chip	"	"	"	"	" "

Descriptions:

- AGG-16 25 foot chip west side of vein, northwall of glory hole - leached iron-stained gouge of andesite.
- AGG-17 12 foot chip center south wall of glory hole - same as above.
- AGG-18 20 foot chip southeast rim of glory hole Barron Mine - east side of vein. - Same as above.
- AGG-19 Composite chip of outcrop near spring & water trough about 600' southeast of glory hole. Bleached iron-stained andesite.

Results:

		<u>Gold /oz/ton</u>	<u>Silver oz/ton</u>
P-38098	AGG-16*	0.04	1.16
	AGG-17*		
P-38099	AGG-18	0.02	1.48
P-38100	AGG-19	Nil	Trace

* Sample sacks were broken. The two sacks were combined as Norm suggested. /s/ Robert C. Sauve

State of Oregon Department of Geology and Mineral Industries
 1069 State Office Building, Portland, Oregon 97201

REQUEST FOR SAMPLE INFORMATION

Date: July 19, 1972 Sec. 23 Twp. 39S R. 2E ^{Dist.} County: Ashland
 (For your records)

Please print name and address in space below

DOGAMI
 N. V. Peterson
 P. O. Box 417
 Grants Pass, Oregon

A copy of the law governing this service is printed on the back of this sheet. Please fill out this form in triplicate and submit with your sample and analysis fee. One copy will be returned with the results entered in the space below.

Customer's Sample No.	Assay for	(for your records, if desired)		
		Grab	Channel (length)	Source of Sample
AGG-16	Au, Ag			
AGG-17	" "			
AGG-18	" "			
AGG-19	" "			

Samples should weigh at least one pound and be dry. Fee for analysis must accompany sample.
 Date Rec'd: _____ Amount Rec'd: _____ Analysis Mailed: July 24, 1972

Lab. No.	Cust. No.	Gold oz/ton	Silver oz/ton			
P-38098	AGG-16*	0.04	1.16			
	AGG-17*					
P-38099	AGG-18	0.02	1.48			
P-38100	AGG-19	Nil	Trace			

NOTE: The Department assumes responsibility only for the analytical results and not for the validity of any samples submitted.

* Sample sacks were broken. The two sacks were combined as Norm suggested.

Analyzed by Robert C. Sauve

REQUEST FOR SAMPLE INFORMATION

The State law governing free analysis of samples sent to State Assay Laboratories requires that certain information be furnished the laboratory regarding samples sent for assay or identification. A copy of the law will be found on the back of this blank. Please fill in the information requested completely, and submit it along with your sample. Keep a copy of the information on each sample for your own reference.

Date sample is sent:

October 12, 1971

N.V. Peterson

P.O. Box 417

Grants Pass, Oregon 97526

Name of claim sampled:

Please print your name and address in space above

Name of property owners _____

Are you hiring labor? _____

Are you milling or shipping ore? _____

Location of property or source of sample. (If legal description is not known, give location with reference to known geographical point.)

County Jackson

Mining district Ashland

Deed Indian Land

Township 38 S

Range 2 E

Section 30

Quarter section SW

How far from passable road and name of road _____

Channel (length)

Grab

Assay for

Description

Sample No. 1 _____

X

Au,Ag

Sample No. 2 _____

(Samples for assay should be at least 1 lb. in weight; clay samples for ceramic testing at least 5 lbs.) **IMPORTANT:** A vein sample should be taken in an even channel across the vein from wall to wall. Location of sample in the workings, together with the width measured, should be recorded.

(Signed) /s/ N.V. Peterson

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Description

AFG-103

Andesite breccia with common opal and iron and Mn oxides.

Sample Number	GOLD		SILVER				
	oz./T.	Value	oz./T.	Value			
P-36972	nil	---	0.20	---			

CURRENT WORK PLAN

1984: UPGRADING OF THE ROADBED TO THE MINE SITE HAS STARTED, AND DRILL SITES ARE BEING PREPARED. (GCNL 11/2/84)

EXPLORATION AND CAPITAL COSTS

THE 1984 BUDGET FOR A DD PROGRAM WAS \$150,000. (GCNL 9/20/84)

TRANSACTION REPORT 1

TRANSACTION DATE: 1984
TRANSACTION TYPE: EARN-IN

PARTY#1: GENEX RESOURCES INC
DESIGNATION 1: OPTIONOR
ORIGINAL INT 1: 100
POTENTIAL INT 1: 40

PARTY#2: AMAZON PETROLEUM CORP
DESIGNATION 2: OPTIONEE
ORIGINAL INT 2: 0
POTENTIAL INT 2: 60

AMAZON MAY EARN A 60% INTEREST IN THE PROPERTY BY SPENDING \$180,000 ON THE PROPERTY OVER A TWO-YEAR PERIOD. (P&D 11-12/84)

COMPANY INFORMATION

AMAZON PETROLEUM CORP
801-700 W PENDER ST
VANCOUVER, BC V6C 1G8
(604) 681-1127

GENEX RESOURCES INC
1515-625 HOWE ST
VANCOUVER, BC V6C 2T6
(604) 681-2655

BIBLIOGRAPHY

KELLOGG WARDNER NEWS 2/17/83
GEORGE CROSS NEWSLETTER 9/20/84 P.2
PERSONAL CONVERSATION 2/85
INTERNATIONAL PROSPECTOR & DEVELOPER 11-12/84



RECORD IDENTIFICATION

RECORD NO..... M061176
RECORD TYPE..... XIM
COUNTRY/ORGANIZATION. USGS
MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.
UPDATED..... 80 12
BY..... FERNS, MARK L.; (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... BARRON MINE
SYNONYM NAME..... ALTON

MINING DISTRICT/AREA/SUBDIST. ASHLAND

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... JACKSON
LAND CLASSIFICATION..... 01

QUAD SCALE QUAD NO OR NAME
1: 62500 ASHLAND

LATITUDE LONGITUDE
42-09-58N 122-33-06W

UTM NORTHING UTM EASTING UTM ZONE NO
4668109.6 537039.2 +10

TWP..... 39S
RANGE.... 02E
SECTION.. 23
MERIDIAN. W.M.

LOCATION COMMENTS: N 1/2

COMMODITY INFORMATION

COMMODITIES PRESENT..... AU AG ZN PB CU SB AS

PRODUCER(PAST OR PRESENT):
MAJOR PRODUCTS.. AJ AG

ORE MATERIALS (MINERALS, ROCKS, ETC.):
SPHALERITE, A LITTLE GALENA, CHALCOPYRITE, PYRITE & ARSENOFYRITE, GOLD, WIRE SILVER, STIBNITE, MALACHITE,
REALGAR, & PYRRARGYRITE

COMMODITY SUBTYPES OR USE CATEGORIES:
0.161 AU:AG

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 6
PROPERTY IS INACTIVE
YEAR OF DISCOVERY..... PRE 1883
PRESENT/LAST OWNER..... JOE JAVENHAUER (1971)

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
VEIN *
FORM/SHAPE OF DEPOSIT: BRANCHING & INTERSECTING

SIZE/DIRECTIONAL DATA
DEPTH TO BOTTOM..... 6 FT.
MAX LENGTH..... 45 FT.
MAX WIDTH..... 10 FT.
STRIKE OF DREBODY.... N38W
DIP OF DREBODY..... 80NE

DESCRIPTION OF WORKINGS
SURFACE AND UNDERGROUND

COMMENTS (DESCRIP. OF WORKINGS):
ADIT, WINZE 50, WKGS 1000

PRODUCTION
YES
SMALL PRODUCTION

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OREBURD.)

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE, REMARKS
1 ORE SML		.705	TONS		
2 AU SML		.074	OZ	.048	OZ/T
3 AG SML		.455	OZ	.645	OZ/T
23 ORE, EST	.710		TONS	1917-1923	0.05AU, 0.65 AG

PRODUCTION YEARS..... 1917-1919 ; 1923

SOURCE OF INFORMATION (PRODUCTION).. CALLAGHAN & BUDDINGTON, 1938; USBM

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION

RECORD NO..... M013805
RECORD TYPE..... X1M
COUNTRY/ORGANIZATION. USGS
FILE LINK ID..... CONSV
MAP CODE NO. OF REC..

REPORTER

NAME..... LEE, W
DATE..... 74 01

NAME AND LOCATION

DEPOSIT NAME..... BARRON

MINING DISTRICT/AREA/SUBDIST. OTHER AREAS, WESTERN CASCADES, 3

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... JACKSON

QUAD SCALE QUAD NO OR NAME
1: LAKECREEK

LATITUDE LONGITUDE
42-15-22N 122-33-16W

UTM NDRTHING UTM EASTING UTM ZONE NO
467B100. 536750. +10

TWP..... 385
RANGE..... 02E
SECTION.. 23
MERIDIAN. W.M.

ALTITUDE.. 3450'

POSITION FROM NEAREST PROMINENT LOCALITY: N1/2, AT 3450 FEET ELEVATION.

COMMODITY INFORMATION