

JACKSON

THE MURPHY GULCH PROPERTY

* An Overview *

Presented to

MURPHY GULCH MINING COMPANY
806 S.E. Pine Street
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by

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INTRODUCTION

The Murphy Gulch property, (Fig. 11) located near Wimer, Oregon comprises 155 acres of private ground. The property is adjacent to two old gold mines (Fig. 12) and has the potential for both plant leaching and placer mining operations.

A registered geologist has conducted preliminary investigations in the form of a 100' x 200' soil sampling grid, covering 3.95 acres of a topographic high on the eastern edge of the property. Initial results show encouraging gold and silver values through both fire assay analysis and subsequent leach tests (Fig. 10).

Initial test holes dug to 22 feet deep in a few locations over the remaining 140 - 150 acres of placer ground are reported to have shown disseminated gold values in the 20 feet of overburden as well as free gold values in the ancient river gravels beneath the overburden.

Recommendations are made for additional testing and evaluation.

LOCATION AND ACCESS

The Murphy Gulch area is located approximately three miles east of Wimer, Oregon in Section 7 and 8, Township 34 South, Range 3 West. Access is via I-5 south to the Rouge River exit, which is approximately 10 miles south of Grants Pass, Oregon, then 7.3 miles north on East Evans Creek Road to Wimer, Oregon, then approximately 3 miles East from Wimer on East Evans Creek Road to the Murphy Gulch entrance.

Since the ground is privately owned, access is restricted to entry by permission only. Murphy Gulch Mining Company must be contacted to obtain such permission.

PHYSIOGRAPHY

The Wimer, Oregon, area has a moderate climate, warm and dry in summer and fall, cool and wet in winter and spring. Average annual rainfall is approximately 32 inches.

The topography of the area is typical of the generally rugged mountainous terrain in the Klamath Mountains geomorphic province of which Jackson County is a part. Moderate to steeply incised valleys (Fig. 3) are found in the uplands surrounding the valley floors. Elevations in the property area

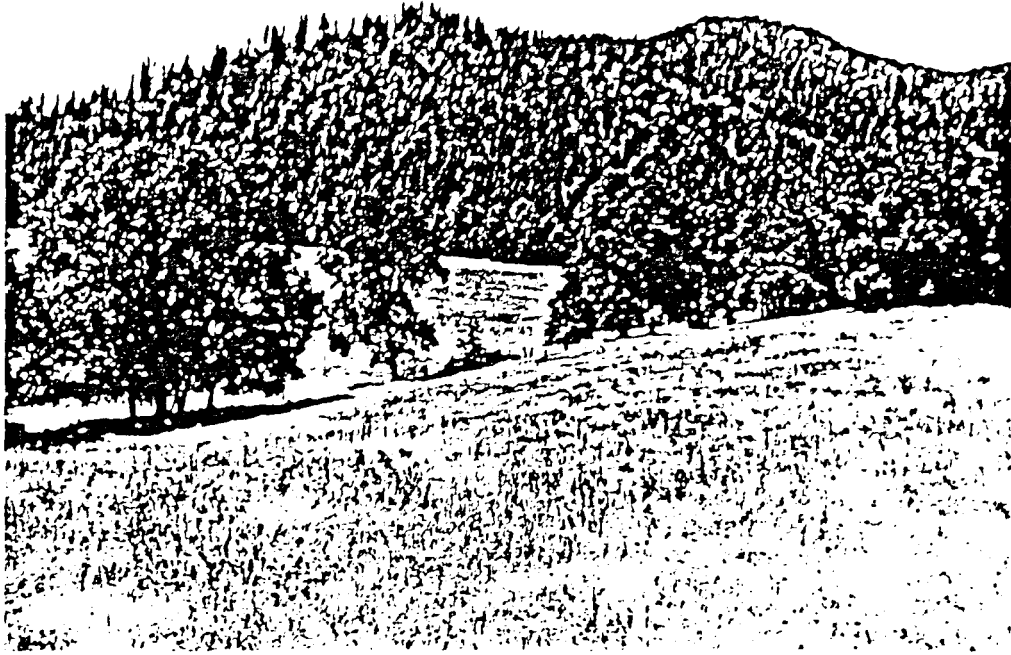


Figure 3 - Moderate to steeply incised valleys in the Murphy Gulch area.

range from 1,200 feet at Wimer to 3,300 feet at Hillis Peak, one and one-half miles southeast of the property.

The area is largely flat open pasture land lying between 1,200 and 1,300 feet elevation (Fig. 4). The northwest-southeast trending ridge on the eastern

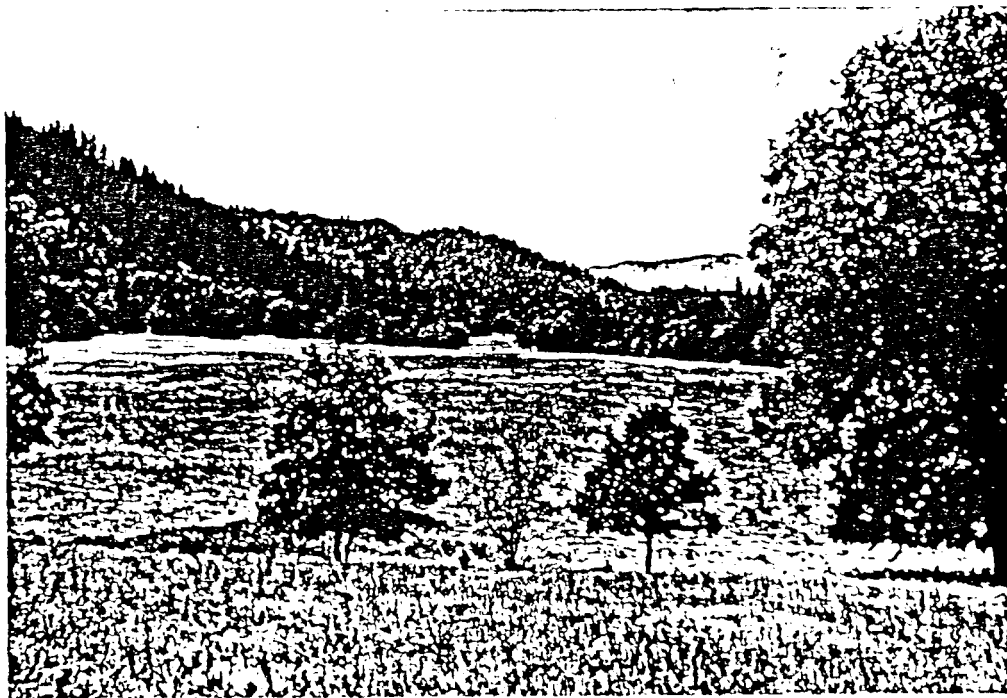


Figure 4 - View from east looking west across Murphy Gulch property open pasture land.

edge of the property appears to be the consolidated detritus of an ancient landslide (mudflow ?) that originated from the cone shaped valley immediately

south of the ridge. On the upper reaches of this ridge are found moderate to heavily forested areas of fir, pine, cedar and madrone, plus several varieties of scrub brush and ferns which make up the underbrush areas on the property (Fig. 5).



Figure 5 - Collecting drill cuttings at MGDH-1.
(Note typical underbrush in background)

The property is bordered on the north by Evans Creek, a small stream that flows all twelve months of the year. The water table in late July, 1982 appeared to be 10' below the surface level of the open ground.

PREVIOUS WORK

Previous work in Southwest Oregon is detailed by Ramp and Peterson (1979) and is partially described as follows:

J. S. Diller was the first geologist to study Southwest Oregon in detail. His earliest studies, begun before the turn of the century were concerned both with geology and with mineral resources. In 1902, he discussed the topographic development of the Klamath Mountains; later, he and G. F. Kay described the mines and mineral resources of the Riddle Quadrangle (1908) and Grants Pass and its bordering area

(1909). In 1914, Diller examined the mineral resources of Southwestern Oregon and in 1921, with others, the chromite deposits. Diller and Kay's geologic map of the Riddle Quadrangle was published in 1924.

The bibliography of Ramp and Peterson (1979) includes a comprehensive list of publications pertaining to Southwestern Oregon. The reader is referred to this source as a complete review of all previous work which is beyond the scope of this report.

One of the property owners reported that the Guggenheim Foundation dug 20 or more shafts to bedrock in 1924 and were favorably enough impressed with placer values that they were considering bringing in a large dredge to work the ground. However, at that time they could not acquire enough contiguous property outside the 155 acres to justify the expense of a dredge capable of digging 30 feet to bedrock.

This writer was shown some of the caved shafts and has no reason to doubt the presence of the Guggenheim Foundation in 1924.

The property owner also reported that seismic work was done on the property in recent years and that an ancient river course and a fault line were pinpointed, both trending east southeast across the property and eventually intersecting one another in the western one-third of the property. This information has not yet been made available to this writer and therefore no opinion can be expressed regarding this work.

Two test holes dug approximately 22 feet deep by a backhoe (Fig. 6) were



Figure 6 - Test hole approximately 22' deep.

shown to this writer and were verified as reaching through the overburden and just starting into river sand and gravel. A grab sample of the sand and gravel was panned and two small colors were found. Water level was noted at 10 feet below the surface in one hole.

REGIONAL GEOLOGY

The regional geology of the Wimer, Oregon area is similar to the description of Josephine County regional geology by Ramp and Peterson (1979) and provides a brief background to better understand the potential for mineralization in the Wimer area.

This region lies in the northwestern part of the Klamath Mountains geomorphic province of southwestern Oregon and northern California. The structural pattern of the Klamath Mountains province as described by Irwin (1966) and Hotz (1971a) consists of four northtrending arcuate belts of rocks which are convex to the west. The oldest belt to the east and the successively younger belts to the west are each bounded by east-dipping thrust faults along which older rocks have overridden younger rocks.

The two western belts, called the Western Paleozoic and Triassic Belt and the Western Jurassic Belt, go through this region. The Western Paleozoic and Triassic Belt includes the Applegate Group and associated ultramafic rocks as well as younger intrusive rocks. The Western Jurassic Belts include the Rogue and Galice Formations and associated intrusive rocks. The western margin of this belt is also a major east-dipping thrust fault that is the eastern boundary of the Upper Jurassic Dothan Formation.

All of the layered volcanic and sedimentary rocks in the county conform to the regional trend of the Klamath Mountains province, striking north to northeast and generally dipping steeply to the east. Most of the rocks are tightly folded, with axial planes that also dip to the east.

The area which today makes up Jackson County is considered to have once been part of the continental margin along which an oceanic plate was subducted. Most of the rock formations are interpreted to have been portions of an ophiolite suite (ancient sea floor rocks) or island-arc volcanic deposits.

For a general discussion of plate tectonics and related features in Oregon, see Allen and Beaulieu (1976).

LOCAL GEOLOGY

A preliminary geological reconnaissance map of the Wimer quadrangle has been

published by Page and others (1977) and is reproduced in part as Figure 7. Sections 7 and 8 have been mapped primarily as Pzs (schist and quartzite) with creek bank areas adjacent to Evans Creek being mapped as Qal (alluvial and terrace gravel deposits).

The two abandoned properties at the head of Murphy Gulch, the Gold Plate Mine and the Carbonate Mine, as described by Brooks and Ramp, occur in two different rock types:

Carbonate Mine:

Geology - tapering fissure vein from knife edge to as much as 4 feet thick, average 1 foot, in diorite strikes N. 20° W., dips 80° NE. Ore reportedly assays \$20 to the ton. Country rock is altered diorite.

Gold Plate Mine:

Geology - the country rocks are metasediments of the Applegate Group. Ore occurred in the N. 60° W.-striking, 72° E.-dipping Gold Plate fissure vein in marble. The chief ore minerals are pyrite and gold. Stopped ore is said to have averaged \$50.

These mineralized areas are thought to be some of the source rocks for the placer values present today.

The property owner reports the existence of an E-W fault line traversing the property with a 10' - 12' drop in bedrock on the north side of the fault. It is assumed by the owner that, prior to the present overburden placement, the source rocks upstream were sufficiently eroded and washed over the drop in bedrock (presumed to be an ancient waterfall) to deposit vast quantities of coarse gold in the resultant plunge basin formed at the base of the waterfall. The owner also reports an ancient river channel traversing the property NE-SW in such a manner to intersect the fault line in the SW corner of the property. Both of these theories would be tested during Phase I excavation activities.

CURRENT STATUS

This writer visited the Murphy Gulch Property on July 21 and 22, 1982. During that time a comprehensive review of previous work done and a detailed reconnaissance of the property was performed in the company of the property owner.

After the reconnaissance was completed, a 100' x 200' soil sampling grid of 12 sample points was laid out over 3.95 acres of the centerline of the ridge



Figure 7

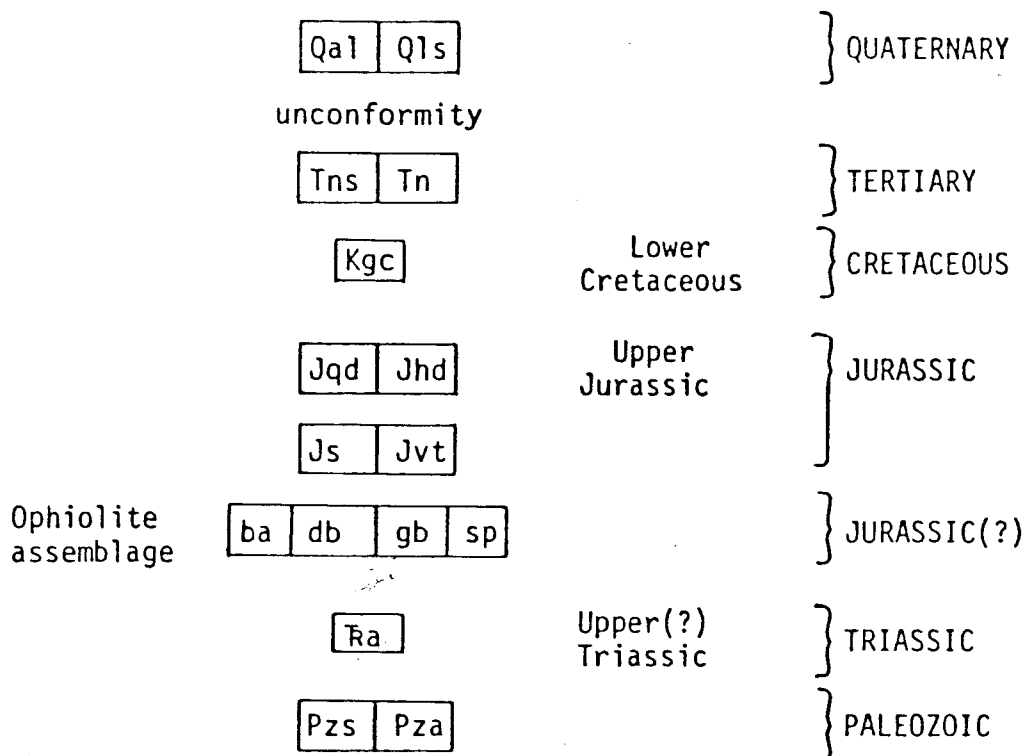
REGIONAL GEOLOGY

Murphy Gulch Property - Wimer, Oregon Area

Jackson County, Oregon

(Part of Geologic Map of Wimer Quadrangle - Page 2 of 10, 1977)

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qa1
ALLUVIAL AND TERRACE GRAVEL DEPOSITS--Unconsolidated sand, gravel, and silt in channels, and flood plains of present streams; includes some older terrace gravels.
- [Symbol]
QUARTZ DIORITE--Equigranular to inequigranular, locally porphyritic quartz, plagioclase, biotite, muscovite quartz diorite; deeply weathered, landslides common; muscovite from White Rock Mountain area dated by K-Ar as 138 m.y. (Hotz, 1971).
- [Symbol]
HORNBLENDE DIORITE--Equigranular to inequigranular, dark hornblende-rich rock; intrusive into layered amphibolite.
- [Symbol]
NONMARINE SEDIMENTARY ROCKS--Massive, buff-colored, tuffaceous sandstone, shale, and conglomerate; formerly assigned to the Umpqua Formation in the Medford area (Wells, 1956). Considered late Eocene by Wells and Peck (1961).
- [Symbol]
SERPENTINITE--Serpentinized peridotite and dunite with local concentrations of chromite; includes some gabbro, metagabbro, diabase dikes, and amphibolite derived from diabase dikes.
- [Symbol]
SCHIST AND QUARTZITE--Schistose and locally gneissose rocks composed of combinations of quartz, K-feldspar, plagioclase, calcite, garnet, biotite, muscovite, hornblende, epidote group minerals, zircon, and apatite; K-feldspar appears to be diagenetic of unit and occurs in lenses and layers in schists.
- [Symbol]
LAYERED AMPHIBOLITE--foliated amphibole rich rocks containing amphibole, quartz, plagioclase, garnet, and biotite; isoclinally folded; parent rocks probably andesitic to basaltic volcanic rocks with relatively thin interlayered fine-grained sedimentary rocks; porphyritic textures locally preserved in the volcanic units.

along the eastern edge of the property (Fig. 10). A Case 580B backhoe equipped with a 24" bucket was used to dig holes 2' x 5' x 10' deep (Fig. 8). The wall of the hole was then channel sampled from top to bottom and a 100 - 125 lb. composite sample of the spoil pile was taken from each sample point.

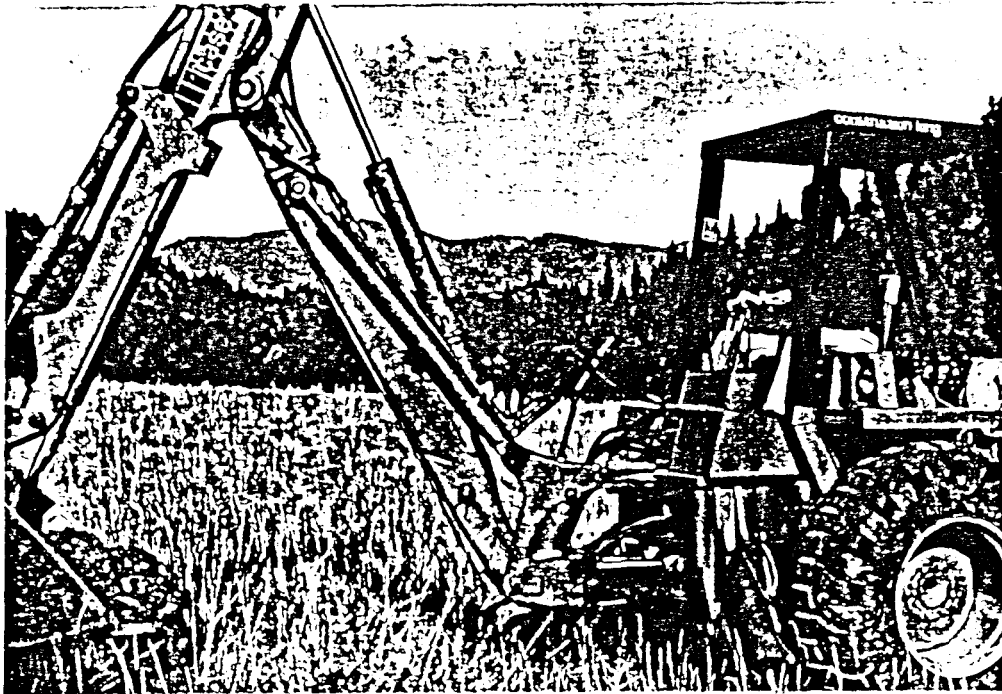


Figure 8 - Case 580B backhoe digging grid test hole.

The overburden material was consistent to a depth of ten feet and was composed of brown to reddish silty clay and soil admixed with schist and quartz fragments to 12" in size. Minor pyrite was noted in some schist fragments.

A drilling contractor was contacted and interviewed on site and agreed to provide a 3" rotary drill rig to drill several holes to bedrock (Fig. 9). After drilling one hole to 36' in depth in the extreme southeast corner of the property, (MGDH-1), an attempt was made to dry drill through the overburden of the ridge. Unfortunately, the slightly moist high clay fraction of the overburden packed around the drill stem and prevented collection of samples on 10' intervals. Since no arrangement had been made for wet drilling, the driller was stopped and any further drilling was postponed contingent upon assay results of the samples taken.

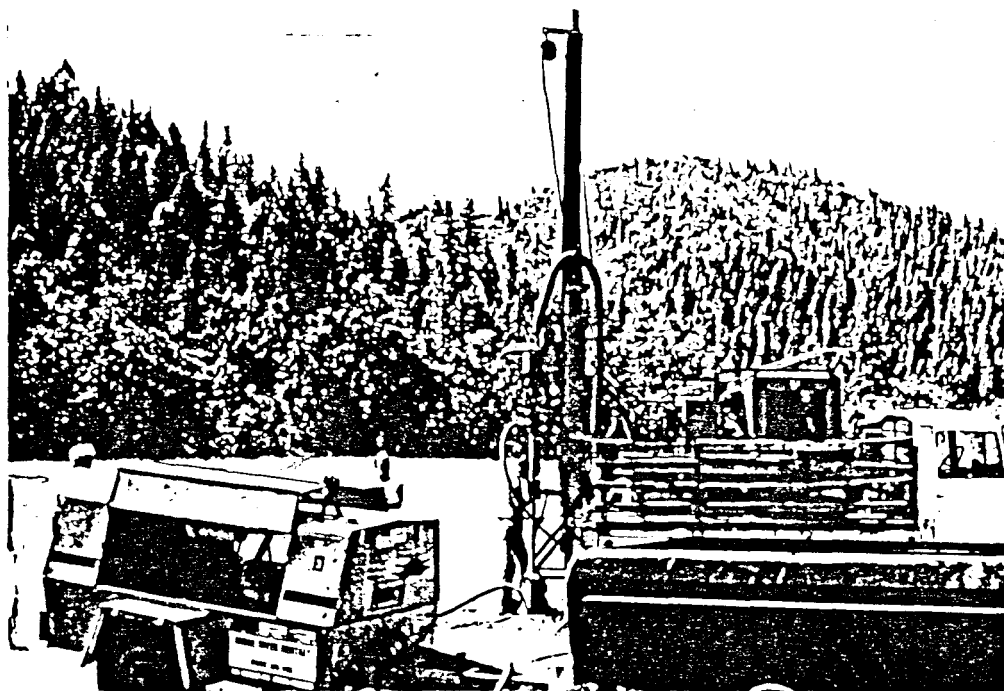


Figure 9 - Attempting to drill ridge overburden.

ASSAYING

The 12 channel samples and a composite sample of the 36' drill hole were submitted to C & J Research Lab in Portland, Oregon for fire assay analysis. In addition, the four samples from the center of the grid (MGH-2, 5, 8, & 11) were leached to determine if gold and silver values could be increased. The assay results expressed in troy ounce per ton are as follows:

<u>Sample No.</u>	<u>Fire Assay</u>		<u>Leach</u>	
	<u>Gold</u>	<u>Silver</u>	<u>Gold</u>	<u>Silver</u>
MGH - 1	Tr	7.90		
MGH - 2	.10	.09	.17	.09
MGH - 3	.12	7.64		
MGH - 4	Tr	8.06		
MGH - 5	Tr	14.52	.21	.08

<u>Sample No.</u>	<u>Fire Assay, cont.</u>		<u>Leach, cont.</u>	
	<u>Gold</u>	<u>Silver</u>	<u>Gold</u>	<u>Silver</u>
MGH - 6	.14	8.08		
MGH - 7	.16	20.80		
MGH - 8	Tr	.12	.08	.10
MGH - 9	.25	.20	.18	
MGH - 10	Tr	.17		
MGH - 11	Tr	.13	.22	.18
MGH - 12	Tr	.17		
MGDH - 1	.08	.32		

	<u>Fire Assay</u>		<u>Leach</u>	
	<u>Gold</u>	<u>Silver</u>	<u>Gold</u>	<u>Silver</u>
Average Values	.065 oz./ton	5.25 oz./ton	.17 oz./ton	.11 oz./ton

Fire assay reruns were requested on MGH 7 and 9 and leach reruns were requested on MGH 5 and 11. The results of these tests are:

<u>Sample No.</u>	<u>Fire Assay</u> (First Run)		<u>Fire Assay</u> (Rerun)	
	<u>Gold</u>	<u>Silver</u>	<u>Gold</u>	<u>Silver</u>
MGH - 7	.16	20.80	Tr	8.16
MGH - 9	.25	.20	Tr	8.46

<u>Sample No.</u>	<u>Leach</u> (First Run)		<u>Leach</u> (Rerun)	
	<u>Gold</u>	<u>Silver</u>	<u>Gold</u>	<u>Silver</u>
MGH - 5	.21	.08	.20	3.80
MGH - 11	.22	.18	.17	.22

The fire assay rerun results were disappointing but allowances have to be made for the "nugget" or "nodule" effect in sampling non-uniform strata such as that represented by the landslide detritus of the ridge. In an attempt to gain a more comprehensive look at the gold and silver potential of the sampled area, a 50 lb. composite sample made up of equal amounts of each of the 12 spoil piles was submitted for leaching. The results of this test show.

	<u>Leach Test</u>	
	<u>Gold</u>	<u>Silver</u>
50 lb. Composite Grid Sample	.1043	.1663

A composite sample of the cuttings from the drill hole (MGDH-1) were also fire assayed. The results were:

	<u>Gold</u>	<u>Silver</u>
MGDH - 1	.08 oz/ton	.32 oz/ton

CONCLUSION

The testing done thus far on 9 acres of the 155 acre Murphy Gulch property has shown encouraging gold and silver values via both fire assay and laboratory leaching methods.

Although C & J Lab personnel reported filtration problems, due to the high clay fraction in the sample, the 50 lb. composite sample leach results indicate that additional testing should be done to determine if the leaching operation can be scaled up from laboratory tests to an economically viable gold extraction process.

Insufficient testing has been done on the estimated 20-25 feet of overburden covering the inferred placer deposits on the remainder of the property. Additional testing will be necessary to properly evaluate the precious metal potential of the remainder of the property and recommendations for such testing are set forth below.

RECOMMENDATIONS

Additional testing of the Murphy Gulch property should take place on three levels:

1. Excavation, delineation, extraction and evaluation of precious metal values in the inferred placer deposits.
2. Comprehensive sampling and metallurgical testing of the overburden material.
3. Continued metallurgical testing of the MGH 1-12 sample material to determine commercial precious metal extraction feasibility.

These tests are independent of each other and therefore can be conducted separately or simultaneously. A phased testing program could be implemented as follows:

Phase I

1. Excavate trenches across and along inferred fault lines and ancient channel gravels on a grid basis.
2. Sample overburden material on 5' intervals and submit same for fire assay and leaching tests.
3. Dig trenches to bedrock and process all sand and gravel material through a gold concentration and extraction trommel processor (i.e.: A Brothers Manufacturing Reverse Spiral Concentrator).
4. Continue metallurgical evaluation and testing of MGH 1-12 sample material.
5. Combine all evaluation information into an interim geological report to determine preliminary precious metal property potential.
6. Decision Point - continue property testing and development through design, development and set-up of pilot plant operations or abandon property.

Phase II

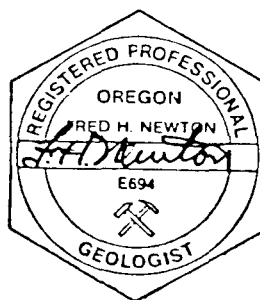
1. Set up pilot plant operations to determine the economic feasibility of precious metal extraction of the overburden material and the material from the MGH 1-12 grid area.
2. Determine if overburden material should be trommelled, leached or stripped and stacked for later placement over placer tailings.
3. Develop mining plan for stripping and stacking overburden material and processing of placer gravels.

4. Consolidate all property evaluation information into comprehensive report outlining economic feasibility of pursuing production mining plans thus far developed.
5. Decision Point - Internally finance and initiate full scale production operations, joint venture with major company or qualified individuals, issue limited partnership or consider public offering.

Phase III

1. Full scale mining of property as dictated by Phase II information and decisions.

Respectfully submitted,



F. H. Newton, PG

CERTIFICATE

I, Fred H. Newton, DO HEREBY CERTIFY:

- (1) That I am an independent Consulting Geologist with business office at 7755 S.W. Florence Lane, Portland, Oregon 97223.
- (2) That I am a graduate in Geology of Oregon State University (B. Sc.-1968).
- (3) That I am a Registered Professional Engineering Geologist with the State of Oregon Department of Commerce Board of Geologist Examiners (Registration No. - E694).
- (4) That I am a member in good standing of the American Institute of Mining, Metallurgical and Petroleum Engineers (Member No. - 2363630).
- (5) That I have practised my profession as a geologist for the past twelve years.
- (6) That the information, opinions and recommendations in the attached report are based on personal observations, sampling and reconnaissance of the Murphy Gulch property on July 21 & 22, 1982, on personal research of published and private maps and reports on this area and on conversations with property owners Harold Anderson and Ray and Pearl Supran. That information on assaying techniques and results are based on conversations with, and personal observations of, C & J Research Lab personnel at their Portland, Oregon laboratory.
- (7) That I own no interest in the subject property nor in the shares or securities of Murphy Gulch Mining Company nor do I expect to receive any such interest.



Dated at Portland, Oregon this 26th day of August, 1982.

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APPENDIX

Gold Plate mine

Gold Hill-Applegate-Waldo Area, 2

- Location: Jackson County, sec. 17, T. 35 S., R. 3 W., at head of Murphy Gulch.
- Development: Total of about 500 feet in two adits, including stopes.
- Geology: The country rocks are metasediments of the Applegate Group. Ore occurred in the N. 60° W. -striking, 72° E. -dipping Gold Plate fissure vein in marble. The chief ore minerals are pyrite and gold. Stopped ore is said to have averaged \$50.
- Production: Claims were located in 1930. Estimated production to 1945 was about \$20,000 from Gold Plate vein and \$8000 from Iron Cube vein.
- Reference: Department mine file report, 1945.

Carbonate mine

Gold Hill-Applegate-Waldo Area, 3

- Location: Jackson County, W $\frac{1}{2}$ sec. 17, T. 35 S., R. 3 W., about 2100 feet in Murphy Gulch.
- Development: About 250 feet in two tunnels which are now caved.
- Geology: Tapering fissure vein from knife edge to as much as 4 feet thick, average 1 foot, in diorite strikes N. 20° W., dips 80° NE. Ore reportedly assays \$20 to the ton. Country rock is altered diorite.
- Production: Discovered in 1930, it was operated intermittently until about 1940. Was equipped with three-stamp mill using both amalgamation and cyanidation. Production not reported but believed small.
- References: Department Bulletin 14-C (Jackson), 1943:58-59; Department mine file report and map, 1938.

Figure 13 - DOGAMI bulletin 61 information on Gold Plate and Carbonate Mines.

10
1870

\$84.00

Wayne R. Jensen

12025	Murphy Gulch Property	MGH #3	Rejects
12026	" " "	MGH #6	"
12027	" " "	MGH #6	Pit run sample
12028	" " "	MGH #7	Rejects