

Idaho-Maryland Mine Project

Asbestos Sampling Memo

Prepared for:

Rise Grass Valley, Inc.

PO Box 271

Grass Valley, CA 95945

Prepared by:

Richard Lippoth

Vergence Geo Services Inc.

Reno, NV

June 16 2020

1 Summary

Forty-two (42) samples, mainly from diamond drill core from various lithologies at the Idaho-Maryland Mine Project, were submitted for asbestos testing. Samples were collected by geologist Mr. Richard Lippoth, Reg. SME, in August and September 2019 for Rise Grass Valley Inc. ("Rise"). Samples were analyzed by Asbestos TEM Laboratories Inc. located in Berkeley California. Forty (40) samples were analyzed by Polarized Light Microscopy (PLM) in accordance with the California Air Resources Board (CARB) Method 435 for the determination of asbestos. Two (2) samples were analyzed using Transmission Electron Microscopy (TEM) according to the EPA Bulk Test Method (EPA 600/R-93/116). All sample preparation followed a standard CARB Method 435 prep method (see Laboratory Reports in Appendix B).

The great majority of mine tunneling in barren rock for the Idaho-Maryland Mine Project is expected to occur in the meta-andesite porphyrite "Brunswick Block" (EMKO, 2020). No asbestos was detected in samples from this lithology.

In the Idaho mineralized veins, a diabase dike is commonly present in the footwall of the vein (AMEC, 2017). No asbestos was detected in the diabase lithology.

A small amount of tunneling would occur in serpentinite (EMKO, 2020). This lithology is commonly altered to ankerite in proximity to the mineralized veins (AMEC, 2017). Asbestos was detected in two samples of fresh, unaltered, serpentinite and asbestos was detected in two samples of weakly altered serpentinite. Asbestos was not detected in serpentinite with strong ankerite alteration, near mineralized veins.

Two samples were taken from the historic tailings at the Centennial Industrial Site. No asbestos was detected in the historic tailings samples.

Two blank samples were sent to the laboratory for Quality Assurance / Quality Control (QA/QC). No asbestos was detected in the blank samples.

A summary of asbestos sampling and presence by rock type is displayed in Table 1. Details of the samples are displayed in Table 2. Supporting Laboratory Reports (#1573-00001 and #365408) are included in Appendix B. Sample locations by general mine elevation are shown on Sheet 1, Sheet 2, and Sheet 3.

Table 1 - Asbestos Sample by Rock Type

Asbestos % Summary by Rock Type		
Rock Type	Total # Samples	# Samples Asbestos Detected
Porphyrite (meta-andesite)	17	0
Diabase	9	0
Serpentinite (including db/sp & pt/sp)	12	4
Tails	2	0
Blanks	2	0
TOTAL	42	4

The 38 drill core samples were taken from 6 of the diamond drillholes completed during the Rise exploration drill program, which occurred from 2017 to 2019. In total, Rise drilled 19 drillholes targeting the Idaho and Brunswick veins and 4 of the 19 drillholes intersected the serpentinite rock unit at depth. Refer to Sheets 1 – 3. All exploration drill core is stored in boxes by Rise as standard practice.

USGS geology maps do not show the serpentinite rock unit at surface on Rise's Brunswick Industrial Site or Rise's Centennial Industrial Site (Johnston 1940). Rise drilling collared in the area of the planned Service Shaft, immediately south of the clay lined pond, intersected only Meta-Andesite Porphyrite at and near surface. Rise drilling at the west side of the Brunswick Site, near Union Hill mine, intersected only Meta-Andesite Porphyrite at and near surface. Rise has not conducted core drilling at the Centennial Site.

2 Asbestos in Serpentinite

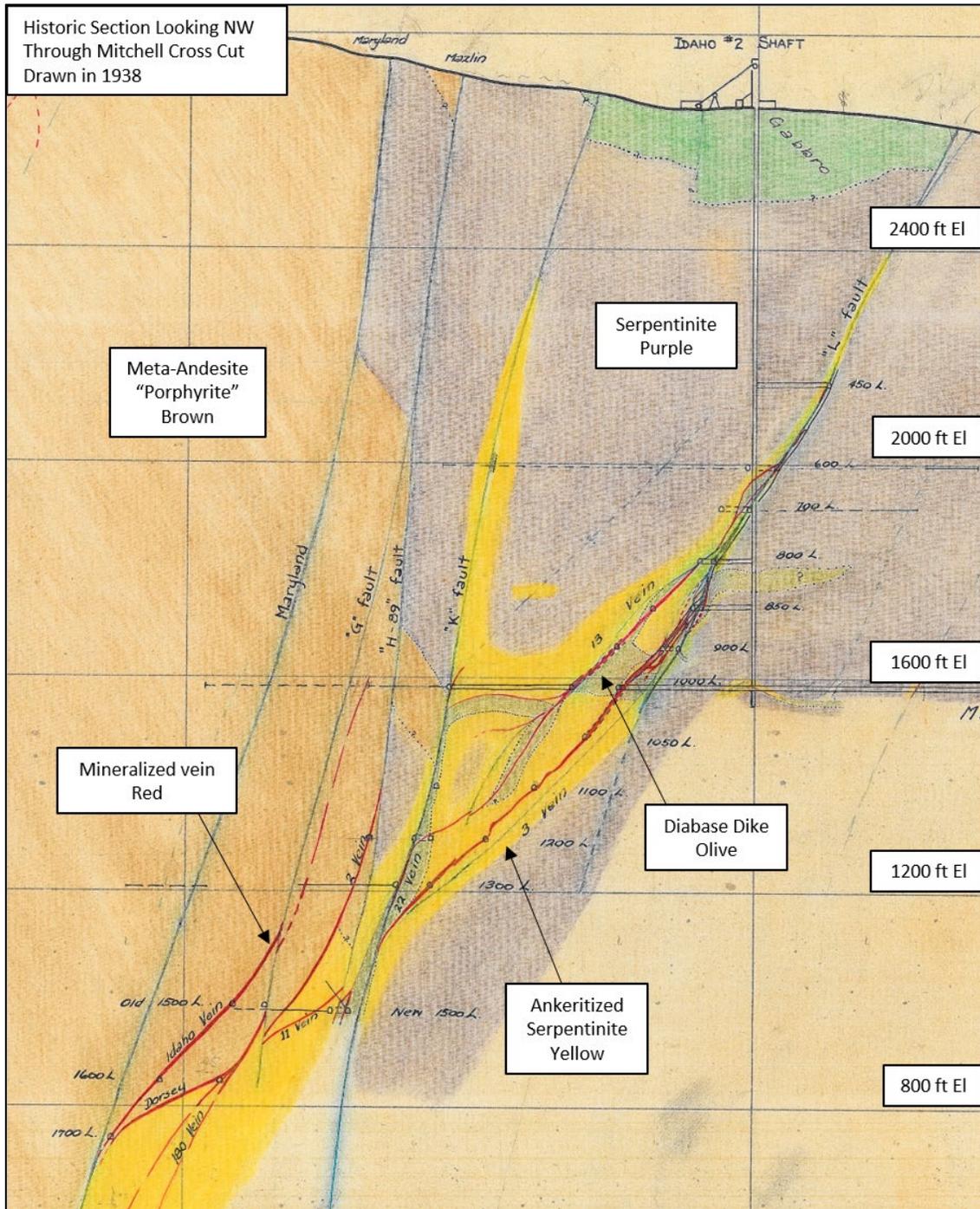
Laboratory testwork shows that asbestos is present in unaltered serpentinite. Asbestos ranging from 2.0% to 3.1% occurs as Chrysotile in unaltered serpentinite. Testwork shows weakly ankeritized serpentinite has a lesser amount of asbestos ranging from 0.8% to 2.5% and strongly ankeritized serpentinite has no detectable asbestos. The relationship of ankerite alteration to asbestos content is illustrated in Table 2 and in core photos in Appendix A. Ankerite is a magnesium-iron-carbonate mineral ($2\text{CaCO}_3 \cdot \text{MgCO}_3 \cdot \text{FeCO}_3$)

Extensive historic records show that serpentinite is located on the periphery of the Idaho veins of the Idaho-Maryland Mine. However, serpentinite is not located near the Brunswick veins of the Idaho-Maryland Mine.

Ankeritized serpentinite is noted extensively on historic mine geology maps in the Idaho veins of the Idaho-Maryland Mine. This term was widely used term represents a rock that has been largely altered to ankerite. It appears to be a distinct hydrothermal alteration, related to ore mineralization – thereby being an indicator of the presence of vein quartz.

The resulting rock in many places has a mottled appearance, resembling gabbro in texture, hence it has been called ankeritized "gabbro" (Bateman, 1948). Figure 1 shows a historic section of the Idaho #3 vein with the surrounding halo of ankeritized serpentinite. Ankerite is a common alteration mineral and may occur in the mafic and ultra-mafic rocks and the meta-volcanic rocks. The mineralized wall rock is strongly carbonate altered (AMEC, 2017). Mining of mineralized veins of the Idaho type, which may have an ankeritized serpentinite footwall should have little concern in regard to asbestos due to lack of asbestos detected in ankeritized serpentinite.

Figure 1 - Historic Cross Section of Idaho #3 Vein showing Ankeritized Serpentinite



3 MSHA Federal Asbestos Regulations

Underground mining operations are obligated to comply with MSHA (Mine Safety and Health Administration) Federal Regulations.

Exposure limits for airborne contaminants, including asbestos, are described in section Subpart D – Air Quality and Physical Agents (pg. 300) as well as other sections of the Title 30 – Mineral Resources (MSHA Code): <https://www.msha.gov/regulations/standards-regulations>. MSHA regulation limit exposure to asbestos fibers to an 8-hour time weighted average of 0.1 fibers per cubic centimeter and a maximum concentration of 1 fiber per cubic centimeter averaged over a period of 30 minutes.

4 Asbestos in Rock Derived from Mining

Tunneling through fresh, unaltered serpentinite, will require mitigation measures for health and regulatory compliance. Mitigation measures would include the application of water sprays to broken rock piles and exhaust auxiliary ventilation systems with filtration systems. The management of asbestos fibers in ventilation air under safety regulations would also prevent the exhausting of significant asbestos fibers to surface through the mines' ventilation exhaust at the Brunswick Shaft headframe.

Barren rock derived from tunnelling in serpentinite will require separate handling from other barren rock lithologies. This material would be placed in separate compartment of the Brunswick shaft silo and when used as engineered fill would require the implementation of the Asbestos Dust Mitigation Plan (MM-AQ-3) included in the Dudek Air Quality Technical Report for the Idaho-Maryland Mine Project (Dudek, 2020). Earthwork and other disturbance of materials containing mafic or ultramafic rocks is regulated by CARB and the Northern Sierra Air Quality Management District (NSAQMD). Pursuant to the California Code of Regulations Title 17, Section 93105, an Asbestos Dust Mitigation Plan (ADMP) is typically required to describe material handling protocols to be used during construction to reduce the release of naturally occurring Asbestos into the atmosphere during earthwork grading or other soil/rock disturbance (NV5, 2019). If available, an empty stope (previously mined out area) in the underground mine may be designated as a "serpentinite" storage area where rock would be blended into and encapsulated with cemented paste fill.

Future underground mining within or around historic mine workings would occur in areas of known geology. Personnel would be aware of the potential to encounter serpentinite prior to mining occurring in those areas. Measures and management plans will be in place to ensure personnel do not have exposure to asbestos, as per regulations.

Future underground mining in new areas, including extensions of the historically mined veins, will occur as the mine expands. The generalized steps that occur to define mining areas include:

1. Underground exploration drilling is completed to determine locations of gold veins and define extents of veins. Geologists log the drill core, including lithology (rock type).
2. A mine plan is developed to determine feasibility of mining in new areas.
3. If feasible, mining occurs based on a defined mine plan.

The rock units where planned mining will occur will be defined prior to commencing mining in new areas. Therefore, personnel would be aware of the potential to encounter serpentinite prior to mining occurring in those areas. Similarly, measures and management plans will be part of operational procedures to ensure personnel do not have exposure to asbestos, as per regulations.

Table 2 – Samples Tested for Asbestos

Drill Hole	Sample	From (ft)	To (ft)	Length (ft)	Description	Rock Type	%	Asbestos Type	Test Method
Blank	Y962845				Carbonate landscape rock	blank	<0.25%	None Detected	CARB 435-A
Blank	Y962846				Carbonate landscape rock	blank	<0.25%	None Detected	CARB 435-A
I-18-11	Y962837	1802.60	1803.00	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-18-11	Y962990	4016.30	4016.70	0.40	Diabase + porphyrite	db/pt	<0.25%	None Detected	CARB 435-A
I-18-11	Y962991	4026.20	4026.70	0.50	Diabase	db	<0.25%	None Detected	CARB 435-A
I-18-11	Y962986	4264.30	4264.80	0.50	Diabase	db	<0.25%	None Detected	CARB 435-A
I-18-11	Y962987	4284.70	4285.10	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-18-11	Y962988	4641.80	4642.20	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-18-11	Y962989	4661.70	4662.20	0.50	Ankeritized diabase/serpentinite	db/sp	<0.25%	None Detected	CARB 435-A
I-18-11	Y962992	4683.10	4683.40	0.30	Weakly ankeritized diabase/serpentinite	db/sp	0.75%	Chrysotile	CARB 435-A
I-18-11	Y962980	4725.60	4726.50	0.90	Serpentinite unmineralized	sp	3.1%	Chrysotile	TEM (EPA 600)
I-18-12	Y962838	2712.4	2713	0.60	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-13	Y962839	1843.10	1843.40	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-13	Y962841	3259.90	3260.30	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-13	Y962842	3269.60	3270.00	0.40	Ankeritized diabase	db	<0.25%	None Detected	CARB 435-A
I-19-13	Y962982	4526.60	4527.00	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-13	Y962983	4536.90	4537.30	0.40	Ankeritized diabase/serpentinite	db/sp	<0.25%	None Detected	CARB 435-A
I-19-13	Y962984	4652.90	4653.30	0.40	Ankeritized diabase/serpentinite	db/sp	<0.25%	None Detected	CARB 435-A
I-19-13	Y962985	4666.40	4666.90	0.50	Porphyrite for asbestos testing	pt	<0.25%	None Detected	CARB 435-A
I-19-13	Y962847	5090.50	5091.60	1.10	Serpentinite, unmineralized. (Duplicate)	sp	<0.25%	None Detected	CARB 435-A
I-19-13	Y962981	5090.50	5091.60	1.10	Serpentinite, unmineralized	sp	2.0%	Chrysotile	TEM (EPA 600)
I-19-13A	Y962995	4502.90	4503.20	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962996	4530.20	4530.60	0.40	Serpentinite?	sp	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962998	4542.40	4542.80	0.40	Mixture porphyrite and serpentinite	pt/sp	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962993	4645.7	4646.1	0.40	Porphyrite for asbestos testing	pt	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962994	4658.40	4658.80	0.40	Ankeritized serpentinite?	sp	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962997	4724.30	4724.70	0.40	Ankeritized serpentinite	sp	<0.25%	None Detected	CARB 435-A
I-19-13A	Y962999	4786.60	4787.00	0.40	Weakly ankeritized serpentinite	sp	2.50%	Chrysotile	CARB 435-A

Drill Hole	Sample	From (ft)	To (ft)	Length (ft)	Description	Rock Type	%	Asbestos Type	Test Method
I-19-14	Y962840	2442.60	2443.00	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14	Y963000	3275.50	3275.90	0.40	Diabase	db	<0.25%	None Detected	CARB 435-A
I-19-14	Y962827	3280.00	3280.40	0.40	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14	Y962828	3343.20	3343.50	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14	Y962829	3344.30	3344.70	0.40	Diabase	db	<0.25%	None Detected	CARB 435-A
I-19-14	Y962830	3347.00	3347.30	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14	Y962831	3360.00	3360.40	0.40	Diabase	db	<0.25%	None Detected	CARB 435-A
I-19-14	Y962832	3385.60	3386.10	0.50	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14A	Y962833	3309.90	3310.20	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14A	Y962834	3312.90	3313.20	0.30	Diabase	db	<0.25%	None Detected	CARB 435-A
I-19-14A	Y962836	3320.00	3320.30	0.30	Porphyrite	pt	<0.25%	None Detected	CARB 435-A
I-19-14A	Y962835	3326.70	3327.00	0.30	Diabase	db	<0.25%	None Detected	CARB 435-A
Tailings	Y962844	668816E	4343369N	Grab	"New" grey tailings on flat	tails	<0.25%	None Detected	CARB 435-A
Tailings	Y962843	668927E	4343310N	Grab	"Old" brown tailings in bank	tails	<0.25%	None Detected	CARB 435-A

5 References

Amec Foster Wheeler (AMEC). (2017). *Technical Report on the Idaho-Maryland Project Grass Valley California, USA*. Vancouver, BC

Bateman, A.M. (1948). *Report on Geology and Structure of Idaho-Maryland Mine Grass Valley, California*.

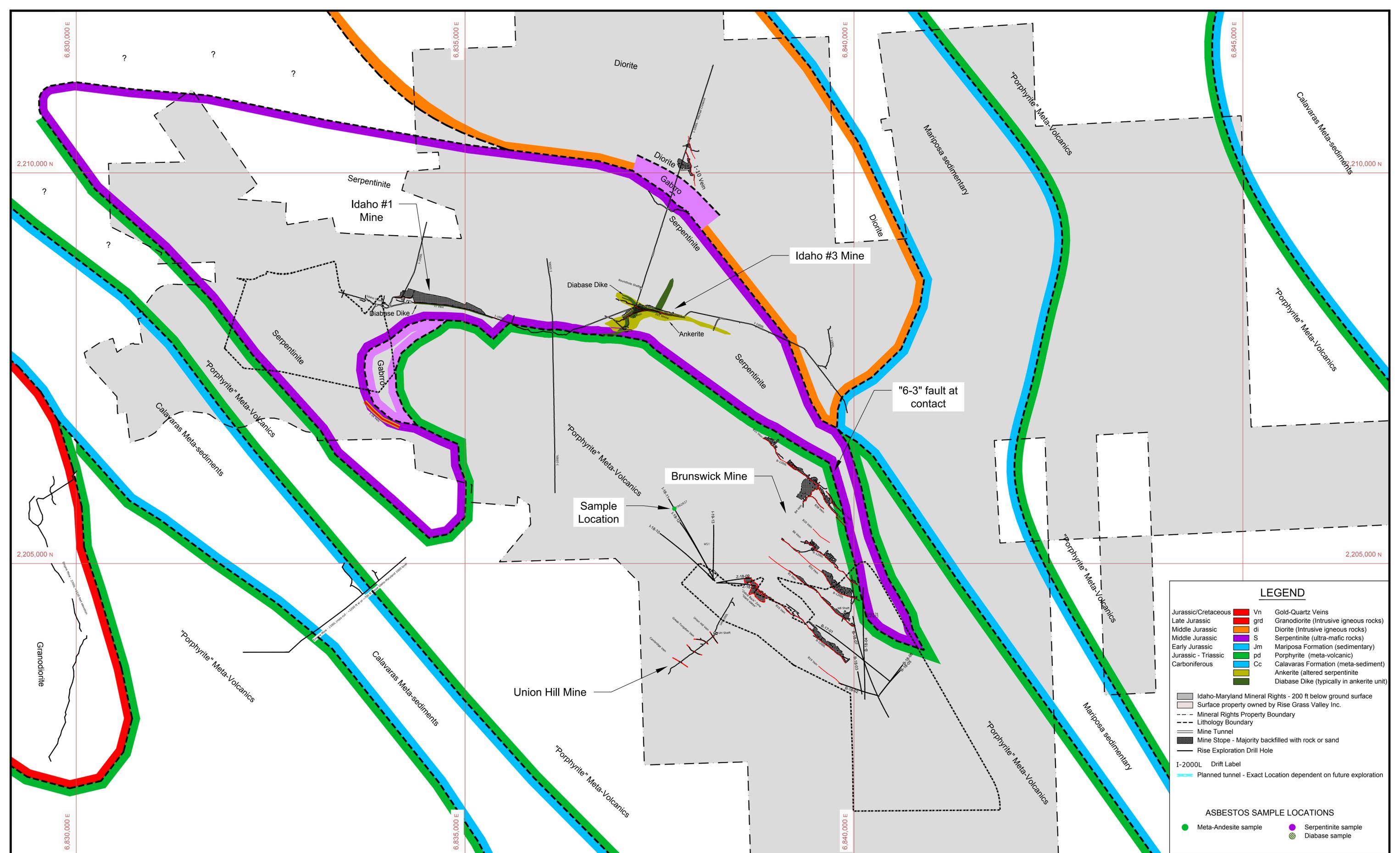
Dudek. (2020). *Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project Nevada County, California*. Sacramento, CA.

EMKO Environmental, Inc. (2020). *Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project, Nevada County, California*. El Dorado Hills, CA.

Johnston, W.G., Jr. (1940). *The Gold Quartz Veins of Grass Valley, California: U.S. Geological Survey Professional Paper 194*. Washington D.C.

NV5. (2019). *Geotechnical Engineering Report Idaho-Maryland Mine Project – Brunswick Industrial Site*. Nevada City, CA.

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LEGEND

Jurassic/Cretaceous	Vn	Gold-Quartz Veins
Late Jurassic	grd	Granodiorite (Intrusive igneous rocks)
Middle Jurassic	di	Diorite (Intrusive igneous rocks)
Middle Jurassic	S	Serpentinite (ultra-mafic rocks)
Early Jurassic	Jm	Mariposa Formation (sedimentary)
Jurassic - Triassic	pd	Porphyrite (meta-volcanic)
Carboniferous	Cc	Calaveras Formation (meta-sediment)
		Ankerite (altered serpentinite)
		Diabase Dike (typically in ankerite unit)

Idaho-Maryland Mineral Rights - 200 ft below ground surface
Surface property owned by Rise Grass Valley Inc.
Mineral Rights Property Boundary
Lithology Boundary
Mine Tunnel
Mine Stope - Majority backfilled with rock or sand
Rise Exploration Drill Hole

I-2000L Drift Label

Planned tunnel - Exact Location dependent on future exploration

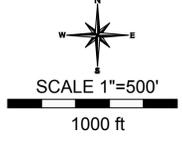
ASBESTOS SAMPLE LOCATIONS

Meta-Andesite sample	Serpentinite sample
	Diabase sample

R Idaho-Maryland Gold Project
 Rise Grass Valley Inc.
 PO Box 271
 Grass Valley, California, USA 95945

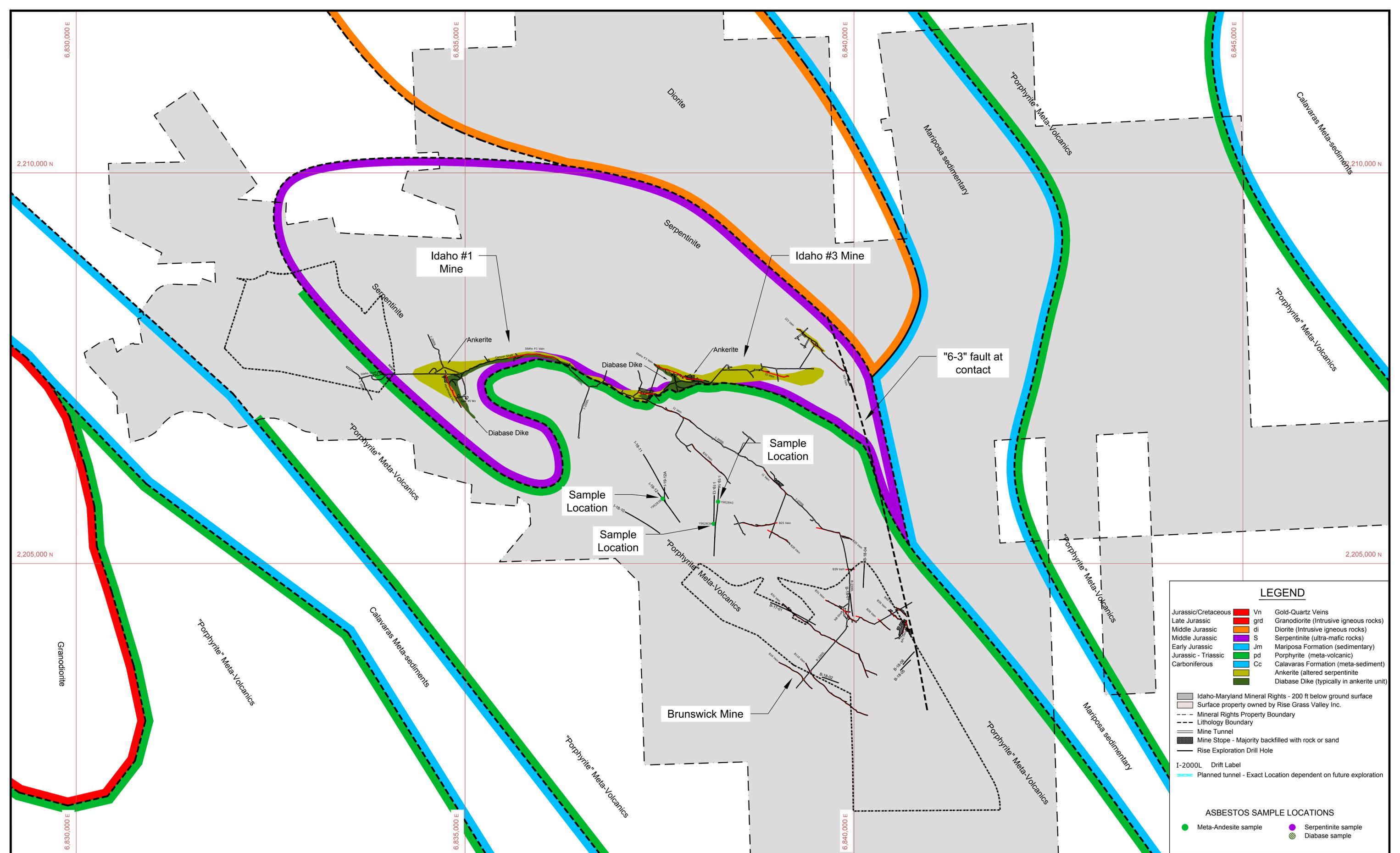
Generalized Geological Mapping Compilation
 Based on USGS mapping - 1940, Johnston
 and internal maps from Idaho-Maryland Mine

Idaho-Maryland Mineral Rights
 Total Area = 2585 Acres
 Mineral rights contiguous at 200 feet
 below ground surface



Sheet 1
 Mine Geology & Asbestos Samples 1000L
 Overview showing mine workings and geology at 1000 level
 elevation ~1570 feet

Drawnby : Rise Grass Valley - Feb 1 / 20



LEGEND

Jurassic/Cretaceous	Vn	Gold-Quartz Veins
Late Jurassic	grd	Granodiorite (Intrusive igneous rocks)
Middle Jurassic	di	Diorite (Intrusive igneous rocks)
Middle Jurassic	S	Serpentinite (ultra-mafic rocks)
Early Jurassic	Jm	Mariposa Formation (sedimentary)
Jurassic - Triassic	pd	Porphyrite (meta-volcanic)
Carboniferous	Cc	Calaveras Formation (meta-sediment)
		Ankerite (altered serpentinite)
		Diabase Dike (typically in ankerite unit)

Idaho-Maryland Mineral Rights - 200 ft below ground surface
Surface property owned by Rise Grass Valley Inc.
Mineral Rights Property Boundary
Lithology Boundary
Mine Tunnel
Mine Stope - Majority backfilled with rock or sand
Rise Exploration Drill Hole

I-2000L Drift Label
 Planned tunnel - Exact Location dependent on future exploration

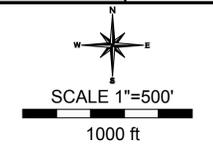
ASBESTOS SAMPLE LOCATIONS

Meta-Andesite sample	Serpentinite sample
	Diabase sample

R Idaho-Maryland Gold Project
 Rise Grass Valley Inc.
 PO Box 271
 Grass Valley, California, USA 95945

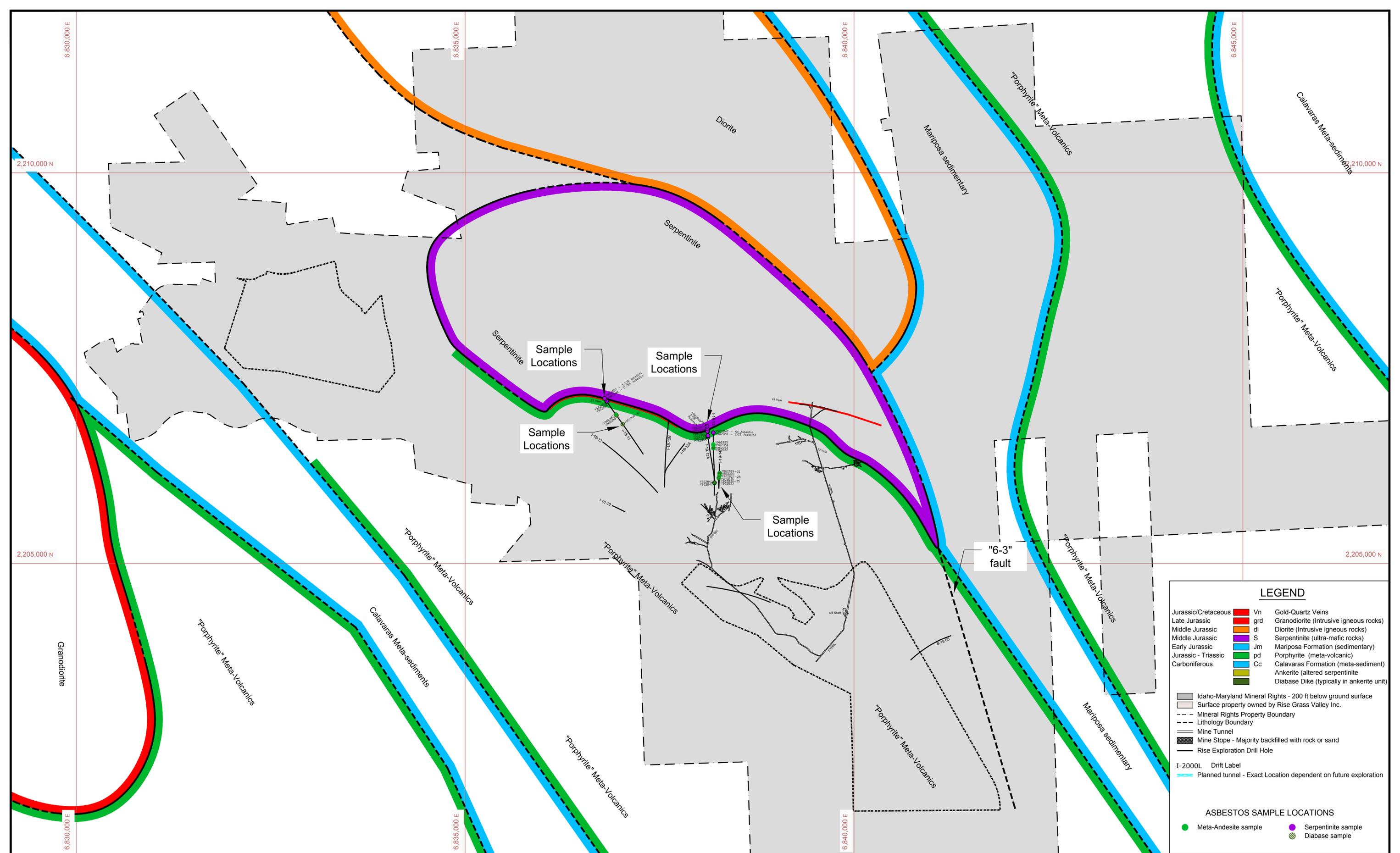
Generalized Geological Mapping Compilation
 Based on USGS mapping - 1940, Johnston
 and internal maps from Idaho-Maryland Mine

Idaho-Maryland Mineral Rights
 Total Area = 2585 Acres
 Mineral rights contiguous at 200 feet
 below ground surface



Sheet 2
Mine Geology & Asbestos Samples 2000L
 Overview showing mine workings and geology at 2000 level
 elevation ~ 420 feet

Drawnby : Rise Grass Valley - Feb 1 / 20



LEGEND

Jurassic/Cretaceous	Vn	Gold-Quartz Veins
Late Jurassic	grd	Granodiorite (Intrusive igneous rocks)
Middle Jurassic	di	Diorite (Intrusive igneous rocks)
Middle Jurassic	S	Serpentine (ultra-mafic rocks)
Early Jurassic	Jm	Mariposa Formation (sedimentary)
Jurassic - Triassic	pd	Porphyrite (meta-volcanic)
Carboniferous	Cc	Calaveras Formation (meta-sediment)
		Ankerite (altered serpentinite)
		Diabase Dike (typically in ankerite unit)

	Idaho-Maryland Mineral Rights - 200 ft below ground surface
	Surface property owned by Rise Grass Valley Inc.
	Mineral Rights Property Boundary
	Lithology Boundary
	Mine Tunnel
	Mine Stope - Majority backfilled with rock or sand
	Rise Exploration Drill Hole

I-2000L Drift Label
 Planned tunnel - Exact Location dependent on future exploration

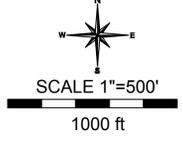
ASBESTOS SAMPLE LOCATIONS

	Meta-Andesite sample		Serpentinite sample
	Diabase sample		

R Idaho-Maryland Gold Project
 Rise Grass Valley Inc.
 PO Box 271
 Grass Valley, California, USA 95945

Generalized Geological Mapping Compilation
 Based on USGS mapping - 1940, Johnston
 and internal maps from Idaho-Maryland Mine

Idaho-Maryland Mineral Rights
 Total Area = 2585 Acres
 Mineral rights contiguous at 200 feet
 below ground surface



Sheet 3
 Mine Geology & Asbestos Samples - 3300L
 Overview showing mine workings and geology at 3300 level
 elevation ~ -520 feet

Drawnby : Rise Grass Valley - Feb 1 / 20

Appendix A

Photos of Unaltered & Altered Serpentinite Samples

Figure 1 - Drill hole I-18-11 - Sample Y962880 in fresh, unaltered, serpentinite at 4726 feet downhole contained 3.1% Asbestos.



Figure 2 - Drill hole I-18-11 - Sample Y962992, in weakly altered, ankeritized serpentinite at 4684 feet downhole contained 0.75% Asbestos

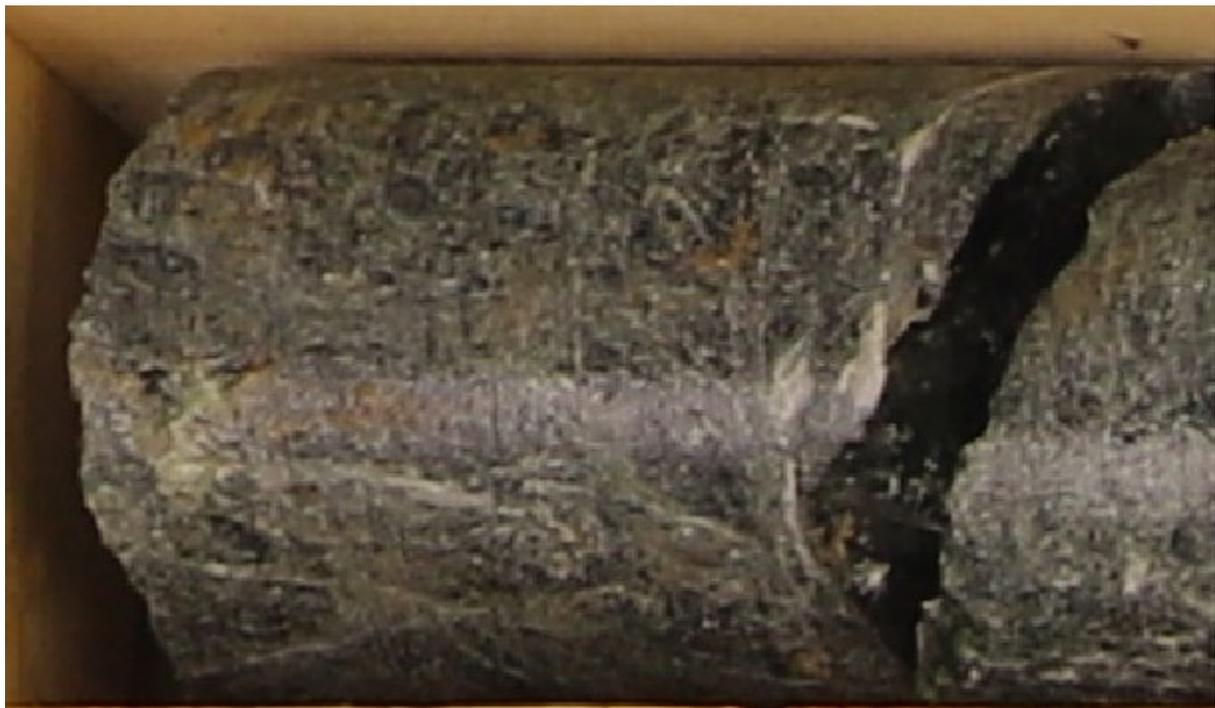


Figure 3 - Drill hole I-18-11 - Sample Y962989, in altered, ankeritized, serpentinite at 4662 feet downhole contained no detectable Asbestos.



Figure 4 - Drill hole I-19-13 - Sample Y962981 in fresh, unaltered, serpentinite at 5091 feet downhole contained 2.0% Asbestos.



Figure 5 - Drill hole I-19-13 - Sample Y962984 in altered, ankeritized, serpentinite at 4653 feet downhole contained no detectable Asbestos.



Figure 6 - Drill hole I-19-13A - Sample Y962999 in weakly altered, ankeritized serpentinite at 4787 feet downhole contained 2.50% Asbestos



Figure 7 - Drill hole I-19-13A - Sample Y962997 in altered, ankeritized, serpentinite at 4724 feet downhole contained no detectable Asbestos.

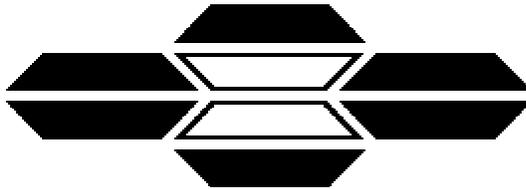


Appendix B

Asbestos TEM Laboratories, Inc.

Laboratory Report #1573-00001

Laboratory Report #365408



ASBESTOS TEM LABORATORIES, INC.

**CARB/EPA Quantitative Bulk Test Method
Transmission Electron Microscopy
Analytical Report**

Laboratory Report # 365408

600 Bancroft Way, Ste. A
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429
www.asbestostemplabs.com



ASBESTOS TEM LABORATORIES, INC

Aug/15/2019

Tessa Brinkman
Rise Grass Valley Inc
333 Crown Point Circle, Ste 215
Grass Valley, CA, 94945

RE: LABORATORY REPORT #365408

Transmission electron microscopy analytical results for 2 bulk material sample(s).
Job Site: Rise Core Sample
Job No.:

Please find below the results for the TEM analysis of one or more bulk material samples. The analytical procedures were performed according to the EPA Test Method For the Determination of Asbestos in Bulk Building Materials - TEM method (EPA 600/R-93/116) modified for quantitative bulk soil sample analysis. Prior to analysis, each sample was logged-in and all pertinent data was recorded. Each sample was checked for damage and disruption of any chain-of-custody seals. A unique laboratory number was assigned to each sample. A hard copy Log-In sheet was generated. This, and all other relevant paper work was kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation followed a standard CARB 435 prep method. The entire sample was dried at 135-150 C and then crushed to ~3/8" gravel size. If the submitted sample was >~1 quart, the sample may have been split using a 1/2" riffle splitter following ASTM Method C-702-98 to reduce the sample volume for pulverization. The remaining aliquot, or entire original sample, was then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. A representative ~60 mg aliquot of material was weighed out, and then placed into solution in a 500 ml beaker filled with distilled water. A known volume of the liquid suspension was filtered onto a 0.2 micron pore size Millipore mixed cellulose ester filter. The filter was then dried in HEPA filtered, Class 100 air on a clean bench. The filter was placed onto a glass microscope slide, sectioned, and collapsed in acetone. The collapsed filter was plasma-etched to remove 10% of the filter surface and then carbon coated. The carbon coated filter was sectioned and the sections placed onto 200-mesh copper TEM sample grids in dimethyl sulfoxide and acetone wick washers. After sufficient time to dissolve the filter material, the TEM sample grids were removed from the baths and placed into labeled sample containers.

TEM analysis was performed on a Philips CM-12 or JEOL 1200 transmission electron microscope operating at 80 or 100 kV. The sample was placed into the microscope where it was first scanned at low magnification to confirm that the distribution of material was reasonably homogeneous. High magnification analysis was performed using a two tier approach: 1) A relatively large area of several TEM grid openings for large asbestos fibers or fiber bundles, and 2) a relatively small area of a number of fields of view for individual asbestos fibers (fibrous particles exhibiting an aspect ratio greater than or equal to 3 to 1, and a length greater than or equal to .5 um). Detected asbestiform structures were subjected to detailed morphological and/or selected area diffraction analysis. If necessary, energy dispersive X-ray analysis was also performed. The length and width of each asbestos fiber was measured. From this data, a total volume and mass of asbestos observed in the scanned area is calculated, and extrapolated to a total weight percent asbestos for each sample.

Sincerely Yours,

A handwritten signature in black ink, appearing to read "R. M. Brinkman", written in a cursive style.

Laboratory Manager

--- These results relate only to the samples tested and must not be reproduced, except in full, with the approval of the laboratory. This report must not be used to claim product endorsement by NVLAP or any other agency of the U.S. Government. ---

TRANSMISSION ELECTRON MICROSCOPY ANALYTICAL REPORT

Contact: Tessa Brinkman	REPORT NO. 365408
Address: Rise Grass Valley Inc 333 Crown Point Circle, Ste 215 Grass Valley, CA, 94945	Date: <u>Aug-15-19</u>
Job Site / No. Rise Core Sample	Date Received: <u>Aug-08-19</u>
	Total Samples Analyzed: 2

SAMPLE DESCRIPTION	
Client Sample # Y962980	Serpentine Core Sample
Laboratory Sample # 96-02947-001	

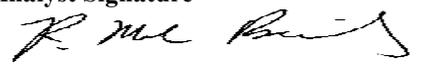
SAMPLE PREPARATION PARAMETERS			
Weight of Material Suspended (mg): <u>58.8</u>	Filter Type & Pore Size <u>MCE0.22um</u>		
Volume of Suspension Water (ml): <u>500</u>	Effective Filter Area (sq.mm) <u>346</u>		
Volume of Suspension Filtered (ml): <u>0.5</u>			

ASBESTOS STRUCTURES DETECTED IN SCAN AREA				CALCULATED ASBESTOS CONCENTRATION (WEIGHT %)		
CHRYBOTILE		AMPHIBOLE		CHRYBOTILE	AMPHIBOLE	TOTAL
<u>< 5 µm</u>	<u>≥ 5 µm</u>	<u>< 5 µm</u>	<u>≥ 5 µm</u>			
30	4	NSD	NSD	3.1	<0.001	3.1

COMMENTS	
Chrysotile Asbestos Detected	Filter Loading: Moderate SAED Photo ID Nos.

TEM / ANALYTICAL PARAMETERS			
Grid Op. # Scanned For Large Fibers & Bundles <u>20</u>	Grid Area (sq.mm) <u>0.0097</u>	Bundle Scan Area (sq.mm) <u>0.194</u>	
Grid Op. # Scanned For Small Fibers & Bundles <u>5</u>	Grid Area (sq.mm) <u>0.0097</u>	Fiber Scan Area (sq.mm) <u>0.0485</u>	
Magnification: <u>15,000X</u>			

NOTATION KEY	
Chrys. - Chrysotile Asbestos	1 µm = 1 micron = 0.001 mm
Amph. - Amphibole Asbestos	1 mm = 1 millimeter
NSD - No Structures Detected	1 sq.mm = 1 square millimeter
Non-Asb. - Non-Asbestos	1 cc = 1 cubic centimeter


 Analyst Signature

 Lab QC Reviewer Signature

TRANSMISSION ELECTRON MICROSCOPY ANALYTICAL REPORT

Contact: Tessa Brinkman	REPORT NO. 365408
Address: Rise Grass Valley Inc 333 Crown Point Circle, Ste 215 Grass Valley, CA, 94945	Date: <u>Aug-15-19</u>
Job Site / No. Rise Core Sample	Date Received: <u>Aug-08-19</u>
	Total Samples Analyzed: 2

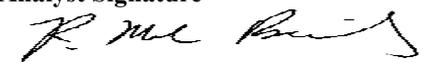
SAMPLE DESCRIPTION	
Client Sample # Y962981	Serpentine Core Sample
Laboratory Sample # 96-02947-002	

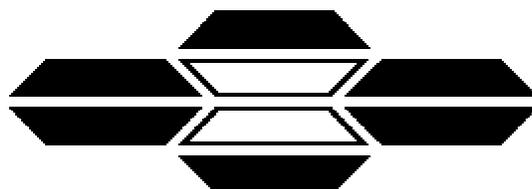
SAMPLE PREPARATION PARAMETERS			
Weight of Material Suspended (mg): <u>62.5</u>	Filter Type & Pore Size <u>MCE0.22um</u>		
Volume of Suspension Water (ml): <u>500</u>	Effective Filter Area (sq.mm) <u>346</u>		
Volume of Suspension Filtered (ml): <u>0.5</u>			

ASBESTOS STRUCTURES DETECTED IN SCAN AREA				CALCULATED ASBESTOS CONCENTRATION (WEIGHT %)		
CHRYSOTILE		AMPHIBOLE		CHRYSOTILE	AMPHIBOLE	TOTAL
<u>< 5 µm</u>	<u>≥ 5 µm</u>	<u>< 5 µm</u>	<u>≥ 5 µm</u>			
22	17	NSD	NSD	2.0	<0.001	2.0
COMMENTS						
Chrysotile Asbestos Detected				Filter Loading: Moderate SAED Photo ID Nos.		

TEM / ANALYTICAL PARAMETERS					
Grid Op. # Scanned For Large Fibers & Bundles <u>20</u>	Grid Area (sq.mm) <u>0.0097</u>	Bundle Scan Area (sq.mm) <u>0.194</u>			
Grid Op. # Scanned For Small Fibers & Bundles <u>1</u>	Grid Area (sq.mm) <u>0.0097</u>	Fiber Scan Area (sq.mm) <u>0.0097</u>			
Magnification: <u>15,000X</u>					

NOTATION KEY	
Chrys. - Chrysotile Asbestos	1 µm = 1 micron = 0.001 mm
Amph. - Amphibole Asbestos	1 mm = 1 millimeter
NSD - No Structures Detected	1 sq.mm = 1 square millimeter
Non-Asb. - Non-Asbestos	1 cc = 1 cubic centimeter


 Analyst Signature

 Lab QC Reviewer Signature



ASBESTOS TEM LABORATORIES, INC.

**CARB Method 435
Polarized Light Microscopy
Analytical Report**

Laboratory Job # 1573-00001

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429



ASBESTOS TEM LABORATORIES, INC

CA DPH ELAP
Lab No. 1866



NVLAP Lab Code: 101891-0
Berkeley, CA

Sep/17/2019

Tessa Brinkman
Rise Grass Valley Inc.
333 Crown Point Circle, Suite 215
Grass Valley, CA 95945

RE: LABORATORY JOB # 1573-00001
Polarized light microscopy analytical results for 40 bulk sample(s).
Job Site:
Job No.: Rise Core Sample

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microscope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting technique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

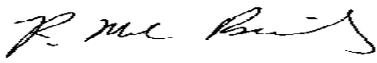
630 BANCROFT WAY • BERKELEY, CA 94710 • PH. (510) 704-8930 • FAX (510) 704-8429

With Branch Offices Located At: 1350 FREEPORT BLVD. UNIT 104, SPARKS, NV 89431

POLARIZED LIGHT MICROSCOPY CARB 435 ANALYTICAL REPORT

Contact: Tessa Brinkman	Samples Submitted: 40	Report No. 365840
Address: Rise Grass Valley Inc. 333 Crown Point Circle, Suite Grass Valley, CA	Samples Analyzed: 40 Job Site / No. Rise Core Sample	Date Submitted: Sep-03-19 Date Reported: Sep-17-19

SAMPLE ID	POINTS COUNTED	ASBESTOS		LOCATION / DESCRIPTION
		%	TYPE	
Y962827		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-001	400 - Total Points			No Asbestos Detected
Y962828		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-002	400 - Total Points			No Asbestos Detected
Y962829		<0.25%	None Detected	Diabase
Lab ID # 1573-00001-003	400 - Total Points			No Asbestos Detected
Y962830		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-004	400 - Total Points			No Asbestos Detected
Y962831		<0.25%	None Detected	Diabase
Lab ID # 1573-00001-005	400 - Total Points			No Asbestos Detected
Y962832		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-006	400 - Total Points			No Asbestos Detected
Y962833		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-007	400 - Total Points			No Asbestos Detected
Y962834		<0.25%	None Detected	Diabase
Lab ID # 1573-00001-008	400 - Total Points			No Asbestos Detected
Y962835		<0.25%	None Detected	Diabase
Lab ID # 1573-00001-009	400 - Total Points			No Asbestos Detected
Y962836		<0.25%	None Detected	Porphyrite
Lab ID # 1573-00001-010	400 - Total Points			No Asbestos Detected

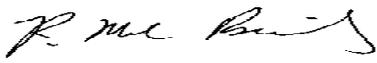
QC Reviewer 

Analys 

POLARIZED LIGHT MICROSCOPY CARB 435 ANALYTICAL REPORT

Contact: Tessa Brinkman	Samples Submitted: 40	Report No. 365840
Address: Rise Grass Valley Inc. 333 Crown Point Circle, Suite Grass Valley, CA	Samples Analyzed: 40	Date Submitted: Sep-03-19
	Job Site / No. Rise Core Sample	Date Reported: Sep-17-19

SAMPLE ID	POINTS COUNTED	ASBESTOS		LOCATION / DESCRIPTION
		%	TYPE	
Y962837		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-011	400 - Total Points			
Y962838		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-012	400 - Total Points			
Y962839		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-013	400 - Total Points			
Y962840		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-014	400 - Total Points			
Y962841		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-015	400 - Total Points			
Y962842		<0.25%	None Detected	Ankeritized diabase No Asbestos Detected
Lab ID # 1573-00001-016	400 - Total Points			
Y962843		<0.25%	None Detected	Sand No Asbestos Detected
Lab ID # 1573-00001-017	400 - Total Points			
Y962844		<0.25%	None Detected	Sand No Asbestos Detected
Lab ID # 1573-00001-018	400 - Total Points			
Y962845		<0.25%	None Detected	Carbonate landscape rock No Asbestos Detected
Lab ID # 1573-00001-019	400 - Total Points			
Y962846		<0.25%	None Detected	Carbonate landscape rock No Asbestos Detected
Lab ID # 1573-00001-020	400 - Total Points			

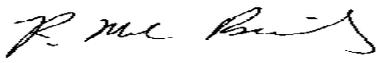
QC Reviewer 

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POLARIZED LIGHT MICROSCOPY CARB 435 ANALYTICAL REPORT

Contact: Tessa Brinkman	Samples Submitted: 40	Report No. 365840
Address: Rise Grass Valley Inc. 333 Crown Point Circle, Suite Grass Valley, CA	Samples Analyzed: 40 Job Site / No. Rise Core Sample	Date Submitted: Sep-03-19 Date Reported: Sep-17-19

SAMPLE ID	POINTS COUNTED	ASBESTOS		LOCATION / DESCRIPTION
		%	TYPE	
Y962847		<0.25%	None Detected	Duplicate No Asbestos Detected
Lab ID # 1573-00001-021	400 - Total Points			
Y962982		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-022	400 - Total Points			
Y962983		<0.25%	None Detected	Ankeritized diabase/serpentinite No Asbestos Detected
Lab ID # 1573-00001-023	400 - Total Points			
Y962984		<0.25%	None Detected	Ankeritized diabase/serpentinite No Asbestos Detected
Lab ID # 1573-00001-024	400 - Total Points			
Y962985		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-025	400 - Total Points			
Y962986		<0.25%	None Detected	Diabase No Asbestos Detected
Lab ID # 1573-00001-026	400 - Total Points			
Y962987		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-027	400 - Total Points			
Y962988		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-028	400 - Total Points			
Y962989		<0.25%	None Detected	Ankeritized diabase/serpentinite No Asbestos Detected
Lab ID # 1573-00001-029	400 - Total Points			
Y962990		<0.25%	None Detected	Diabase + Porphyrite No Asbestos Detected
Lab ID # 1573-00001-030	400 - Total Points			

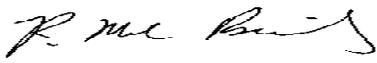
QC Reviewer 

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POLARIZED LIGHT MICROSCOPY CARB 435 ANALYTICAL REPORT

Contact: Tessa Brinkman	Samples Submitted: 40	Report No. 365840
Address: Rise Grass Valley Inc. 333 Crown Point Circle, Suite Grass Valley, CA	Samples Analyzed: 40	Date Submitted: Sep-03-19
	Job Site / No. Rise Core Sample	Date Reported: Sep-17-19

SAMPLE ID	POINTS COUNTED	ASBESTOS %	TYPE	LOCATION / DESCRIPTION
Y962991		<0.25%	None Detected	Diabase No Asbestos Detected
Lab ID # 1573-00001-031	400 - Total Points			
Y962992	3	0.75%	Chrysotile	Weakly ankeritized diabase/serpentinite Chrysotile fibers observed.
Lab ID # 1573-00001-032	400 - Total Points			
Y962993		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-033	400 - Total Points			
Y962994		<0.25%	Chrysotile	Ankeritized Serpentinite? Trace Chrysotile fibers observed.
Lab ID # 1573-00001-034	400 - Total Points			
Y962995		<0.25%	None Detected	Porphyrite No Asbestos Detected
Lab ID # 1573-00001-035	400 - Total Points			
Y962996		<0.25%	None Detected	Serpentinite? No Asbestos Detected
Lab ID # 1573-00001-036	400 - Total Points			
Y962997		<0.25%	None Detected	Ankeritized Serpentinite No Asbestos Detected
Lab ID # 1573-00001-037	400 - Total Points			
Y962998		<0.25%	None Detected	Mixture porphyrite and serpentinite No Asbestos Detected
Lab ID # 1573-00001-038	400 - Total Points			
Y962999	10	2.5 %	Chrysotile	Weakly ankeritized serpentinite Chrysotile fibers observed.
Lab ID # 1573-00001-039	400 - Total Points			
Y963000		<0.25%	None Detected	Diabase No Asbestos Detected
Lab ID # 1573-00001-040	400 - Total Points			

QC Reviewer 

Analys 



ASBESTOS TEM LABORATORIES CHAIN OF CUSTODY

Client 1573

CALIFORNIA: 600 Bancroft Way, Suite A, Berkeley, CA 94710 Phone (510) 704-8930 Fax (510) 704-8429
NEVADA: 1350 Freeport Blvd. #104, Sparks, NV 89431 Phone (775) 359-3377 Fax (775) 359-2798
You may also email this chain of custody to coc@asbestostemlabs.com * denotes required field

202010

Company: Rise Grass Valley Inc.	Contact: * Tessa Brinkman	Phone: * 250-617-6757	Email: * tbrinkman.peng@gmail.com
Address: * 333 Crown Point Circle, Ste 215	City: * Grass Valley	State: * CA Zip: 95945	Email:

Job Site: * Rise Core Sample	Job #:	PO #:	Email:
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Reporting *	<input type="checkbox"/> Email	<input type="checkbox"/> Phone	<input type="checkbox"/> Fax	<input type="checkbox"/> Mail	<input type="checkbox"/> FTP	<input type="checkbox"/> Pickup	Billing	<input type="checkbox"/> Fax	<input type="checkbox"/> Email	<input type="checkbox"/> Mail	<input type="checkbox"/> Pre-Paid	<input type="checkbox"/> On Receipt:	<input type="checkbox"/> 3 rd Party
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Results Due: *	<input type="checkbox"/> 2 HR	<input type="checkbox"/> 4 HR	<input type="checkbox"/> 6 HR	<input type="checkbox"/> 8 HR	<input type="checkbox"/> 24 HR	<input type="checkbox"/> 48 HR	<input type="checkbox"/> 3 DAY	<input type="checkbox"/> 4 DAY	<input type="checkbox"/> 5 DAY	<input type="checkbox"/> 10 DAY	<input type="checkbox"/> Hold Samples	<input type="checkbox"/> After Hours: **	see below
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Asbestos Air	<input type="checkbox"/> PCM (NIOSH 7400A)	<input type="checkbox"/> TEM AHERA	<input type="checkbox"/> TEM CARB Mod. AHERA	<input type="checkbox"/> TEM EPA Yamate Level II	<input type="checkbox"/> TEM NIOSH 7402	<input type="checkbox"/> ISO 10312	<input type="checkbox"/> ISO 13794
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Asbestos Bulk	<input type="checkbox"/> PLM Standard (EPA 600/R-93-1)	<input type="checkbox"/> PLM 400 PC	<input type="checkbox"/> PLM 1000 PC	<input type="checkbox"/> PLM 400 PC Grav. Red.	<input type="checkbox"/> PLM 1000 PC Grav. Red.	<input type="checkbox"/> TEM EPA Qualitative	<input type="checkbox"/> TEM EPA Quantitative
	<input type="checkbox"/> TEM Chatfield (Semi-Quant)	<input type="checkbox"/> PREP ONLY	<input type="checkbox"/> Custom Analysis: **				

Asbestos Soils	<input type="checkbox"/> CARB 435 Prep Only	<input checked="" type="checkbox"/> CARB 435 PLM 400 PC	<input type="checkbox"/> CARB 435 PLM 1000 PC	<input type="checkbox"/> EPA Soil Screening Qualitative	<input type="checkbox"/> TEM EPA/CARB Quantitative
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Asbestos Dust	<input type="checkbox"/> ASTM D-5755 Fiber Count	<input type="checkbox"/> ASTM D-5756 Wt. %	<input type="checkbox"/> ASTM D-5756 Mass	<input type="checkbox"/> ASTM D-6480-99 Dust Wipe	<input type="checkbox"/> Total Particulates (Grav.)
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Asbestos Water	<input type="checkbox"/> 100.2 Potable Drinking Water	<input type="checkbox"/> 100.1 Non Potable Water	<input type="checkbox"/> REPORT TO STATE: EDT # _____
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Lead/Silica	<input type="checkbox"/> Lead Paint Chips	<input type="checkbox"/> Lead Dust Wipe	<input type="checkbox"/> Lead Air Cassette	<input type="checkbox"/> Lead Soil	<input type="checkbox"/> Silica Dust Airborne by NIOSH 7500	<input type="checkbox"/> Crystalline Silica (Single Species)	<input type="checkbox"/> Silica Dust Bulk by NIOSH 7500	<input type="checkbox"/> Crystalline Silica in Bulk (Single Species)
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Sample Storage	<input type="checkbox"/> No Test, Hold Until: _____	<input checked="" type="checkbox"/> Test AND Hold Until: _____	All samples will be held for 3 months from the date of receipt at ATEM. Additional sample storage time may be obtained through ATEM Customer Service.
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Custom Order	<input type="checkbox"/> Sensitivity: _____	<input type="checkbox"/> Composite	<input type="checkbox"/> 8 Hour TWA	<input type="checkbox"/> Special Instructions:
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REANALYSIS	Original Login/Lot # _____ / _____	New Analysis Type: _____	TAT: _____	Special Instructions: _____
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Sample # *	Sample Type	Date Collected	Time On	Time Off	Total Time (min)	Flow Rate (lpm)			Volume or Area Sampled	Hold Sample	Description *
						On	Off	Average			
See attached spreadsheet										<input type="checkbox"/>	
40 samples										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	
										<input type="checkbox"/>	

Submitted By * Tessa Brinkman <i>Tessa Brinkman</i>	Received By <i>KTZ</i>
Date/Time Submitted * Sent by Courier (UPS) on Aug 30th 2019	Date/Time Received
Submitted By	Received By
Date/Time Submitted	Date/Time Received

** Any special instructions, RUSH results or Custom Analysis, you must clarify these specifications AND, of more importance, contact us here at ATEM ahead of time to manage scheduling to meet your requests. Drop off and processing of samples after hours cannot be accommodated without proper notification from you, and confirmation by ATEM staff.

365870

Sample #	Sample Type	Hold Sample	Description
Y962827	Rock Sample	X	Porphyrite
Y962828	Rock Sample	X	Porphyrite
Y962829	Rock Sample	X	Diabase
Y962830	Rock Sample	X	Porphyrite
Y962831	Rock Sample	X	Diabase
Y962832	Rock Sample	X	Porphyrite
Y962833	Rock Sample	X	Porphyrite
Y962834	Rock Sample	X	Diabase
Y962835	Rock Sample	X	Diabase
Y962836	Rock Sample	X	Porphyrite
Y962837	Rock Sample	X	Porphyrite
Y962838	Rock Sample	X	Porphyrite
Y962839	Rock Sample	X	Porphyrite
Y962840	Rock Sample	X	Porpyrite
Y962841	Rock Sample	X	Porphyrite
Y962842	Rock Sample	X	Ankeritized diabase
Y962843	Sand Sample	X	Sand
Y962844	Sand Sample	X	Sand
Y962845	Rock Sample	X	Carbonate landscape rock
Y962846	Rock Sample	X	Carbonate landscape rock
Y962847	Pulps Sample	X	Duplicate
Y962982	Rock Sample	X	Porphyrite
Y962983	Rock Sample	X	Ankeritized diabase/serpentine
Y962984	Rock Sample	X	Ankeritized diabase/serpentine
Y962985	Rock Sample	X	Porphyrite
Y962986	Rock Sample	X	Diabase
Y962987	Rock Sample	X	Porphyrite
Y962988	Rock Sample	X	Porphyrite
Y962989	Rock Sample	X	Ankeritized diabase/serpentine
Y962990	Rock Sample	X	Diabase + porphyrite
Y962991	Rock Sample	X	Diabase
Y962992	Rock Sample	X	Weakly ankeritized diabase/serpentine
Y962993	Rock Sample	X	Porphyrite
Y962994	Rock Sample	X	Ankeritized serpentine?
Y962995	Rock Sample	X	Porphyrite
Y962996	Rock Sample	X	Serpentine?
Y962997	Rock Sample	X	Ankeritized serpentine
Y962998	Rock Sample	X	Mixture porphyrite and serpentine
Y962999	Rock Sample	X	Weakly ankeritized serpentine
Y963000	Rock Sample	X	Diabase