

## TECHNICAL MEMORANDUM

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**DATE:** May 23, 2019

**TO:** Greg Ghidotti

**FROM:** Kate Duke (DHC)

**SUBJECT:** Occurrence of Asbestiform Minerals in Resolution Ore and Development Rock

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### **SUMMARY**

Asbestos is present in trace to minor amounts in the Resolution ore and development rock as fibrous forms of the amphibole minerals tremolite and actinolite. Tremolite is the principal potentially asbestiform mineral with smaller amounts of actinolite present. Tremolite and actinolite are mainly located in the skarn-type alteration zones of the ore body. Measured asbestos amounts are small (<0.25 wt.% to 1.75 wt.%), and rocks with skarn-type alteration account for less than 7 wt.% of the Resolution ore. Based on these values, estimated abundances of asbestiform minerals in the mine panels range from approximately 0 to 0.1 wt.%. For reference, the U.S. Code of Federal Regulations 40 C.F.R § 61.141 (2002) defines asbestos-containing material (ACM) as "...more than 1 percent asbestos as determined by... Polarized Light Microscopy". Data presented in this technical memorandum indicate that asbestos abundance in Resolution ore and development rock falls well below this criterion. Based on analysis of asbestos occurrence in Resolution ore it is likely that asbestos abundances in the tailings will also be low.

### **BACKGROUND**

Asbestos is a term used to describe silicate minerals that have fibrous form; it is the fibrous form not the mineral composition that defines a mineral occurrence as asbestiform. The United States Occupational Safety and Health Standards (OSHA 1910.1001) define an asbestos fiber as, "a particulate form of asbestos 5 micrometers or longer, with a length-to-diameter ratio of at least 3 to 1." Silicate minerals with the potential to be present as fibrous (i.e., asbestiform) particles include the serpentine mineral chrysotile, and the amphibole minerals amosite, crocidolite, anthophyllite, tremolite, and actinolite. Tremolite and actinolite are the principal potentially asbestiform minerals in the Resolution ore. Tremolite is associated with magnesian skarns that occur in altered portions of the Precambrian Mescal Limestone (pCmls) and Devonian Martin Limestone (Dm). Actinolite is also present, though in smaller amounts than tremolite; the actinolite is associated with calcic skarns and altered diabase along the southern margin of the Resolution ore body (Henke et al., 2007). The other potentially asbestiform

amphibole minerals amosite, crocidolite and anthophyllite have not been detected in the Resolution ore body. Only one instance of chrysotile has been observed, not in the Resolution ore body, but rather in a sample of development rock collected from borehole RES-008A located outside the ore body.

#### **MINERAL COMPOSITION OF RESOLUTION ORE**

Mineralogical and metallurgical ore composites are generated by Resolution Copper Geology and analyzed using Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN). This data set comprises 992 samples from 110 RES-series exploration boreholes that lie within the mine panels as defined in the General Plan of Operations (RCM, 2014). Abundances of tremolite/actinolite (the only potentially asbestiform minerals detected in the Resolution ore body) are described below and data are provided in **Attachment 1**.

#### **Tremolite/Actinolite**

Tremolite and actinolite are aluminum-poor, calcium-rich amphiboles (chain silicates) that form a solid-solution series  $\text{Ca}_2(\text{Mg},\text{Fe}^{2+})_5[\text{Si}_8\text{O}_{22}](\text{OH},\text{F})_2$ . Magnesium-rich minerals in the series are termed tremolite, whereas more iron-rich examples are classified as actinolite. The software used by QEMSCAN to identify minerals for the Resolution Project does not distinguish between tremolite and actinolite, and the two minerals are lumped together as “tremolite” in the results. Based on Project ore-body knowledge, it appears likely that most of the minerals that report to the “tremolite” classification are tremolite and only a small proportion are actinolite (Henke et al., 2012). Note that tremolite/actinolite abundances presented in this section include both the asbestiform and non-asbestiform mineral types; QEMSCAN does not differentiate based on morphology. Data specifically related to the abundance of the fibrous or asbestiform structural type are presented in later sections.

Tremolite was detected in 891 of the 992 ore samples analyzed (90%). Tremolite abundance ranges from <0.01 to 24.24 weight percent (wt.%). The mean is 0.27 wt. %, median is 0.01 wt.% and the 90<sup>th</sup> percentile is 0.11 wt.%. For calculation of descriptive statistics, half the detection limit (0.005 wt.%) was substituted for those values below the detection limit.

**Table 1** provides descriptive statistics for tremolite abundance for each of the principal alteration types. These data indicate that tremolite is primarily hosted in the skarn and retrograde skarn alteration zones which is consistent with current Project understanding.

TREMOLITE (weight percent)						
Alteration Type	Number of Samples	Mean	Median	Minimum	Maximum	90th Percentile
Argillic/Intermediate						
Argillic/Advanced	124	0.02	0.01	0.00	0.15	0.03
Argillic						
Phyllitic	582	0.03	0.01	0.00	1.64	0.04
Potassic	242	0.11	0.02	0.00	2.76	0.29
Propylitic	1	Measured value 0.02				
Skarn/Retrograde						
Skarn/Retrograde	43	5.24	2.40	0.00	24.24	13.17
Hornfels						

**Table 1:** Tremolite abundance by alteration type in samples collected from boreholes that lie within the mine panels as defined in the General Plan of Operations (RCM, 2014).

### **ABUNDANCE OF FIBROUS CONSTITUENTS**

RCM has conducted two asbestos analysis campaigns. The first, conducted in 2006, was focused on development rock samples produced during drilling of the Shaft No. 10 pilot hole (RES-008/8A). This work was conducted in support of an Arizona Department of Environmental Quality (ADEQ) Aquifer Protection Permit (APP) application for a temporary development-rock stockpile located at the RCM West Plant Site. The second set of analyses, conducted in 2007, targeted a more broadly distributed set of samples from the Resolution ore body. Data from each campaign, along with principal observations, are presented below.

#### **RES-008/8A Development Rock**

In 2006, RCM submitted 34 samples of development rock collected from drilling of RES-008/8A to DCM Science Laboratory in Wheat Ridge, Colorado for bulk asbestos analysis. Bulk asbestos analyses were conducted using polarized light microscopy at 100X magnification. This analysis yielded an identification of each potentially asbestiform mineral phase and an estimate of the proportion of the mineral present in fibrous form both as a percentage and as a range. Results are summarized in **Table 2** and the lab reports are provided in **Attachment 2**.

Most of the samples submitted for analysis (29 of 34; 85%) did not contain detectable asbestiform minerals. The detection limit defined by DCM Science Laboratory is 0.5%.

Five RES-008/8A samples contained detectable amounts of asbestiform minerals. Four samples contained asbestiform tremolite with abundances ranging from trace (TR; defined by DCM Science Laboratory as 0.5%) to 4%. All four samples were from skarn or retrograde skarn alteration zones. One sample of development rock contained 0.5% asbestiform chrysotile. This sample was from pCmls with phyllitic alteration.

### **Resolution Ore**

Fifty-three samples of Resolution ore with skarn-type alteration (including skarn, retrograde skarn, hornfels, and retrograde hornfels) were submitted to DCM Science Laboratory in Wheat Ridge, Colorado for optical microscope analysis. Bulk asbestos analyses were conducted using polarized light microscopy at 100X magnification. All samples in which fibrous minerals were detected (18 of 53) were submitted for further analysis using the point-count method to confirm the asbestiform minerals present and provide a more quantitative measurement of the mineral abundance. The bulk asbestos and point-count data are summarized in **Table 3** and the laboratory reports are provided in **Attachment 3A**.

Of the 53 samples submitted for bulk asbestos analysis, 35 (66%) did not contain detectable asbestiform minerals at a reported detection limit of 0.5%. For the remaining 18 samples, reported asbestiform mineral abundances ranged from 0.5% to 4%. The median of the entire dataset (53 samples), with half the detection limit (0.25%) substituted for samples below the detection limit, is 0.25%.

All samples in which fibrous minerals were detected by polarized light microscopy were submitted for further analysis using the point-count method to confirm the asbestiform minerals present and provide a more quantitative measurement of the mineral abundance. Point-count data are summarized in **Table 3** and the lab reports are provided in **Attachment 3B**.

For the 18 samples submitted for point-count analysis 8 (44%) did not contain detectable asbestiform minerals (detection limit 0.25%). In the 10 samples that did contain asbestiform minerals, detected abundances ranged from 0.25% to 1.75%. The median of the entire dataset (18 samples), with half the detection limit (0.125 %) substituted for samples below the detection limit, is 0.25%

### **ESTIMATED ASBESTOS ABUNDANCE IN RESOLUTION ORE BY BLOCK CAVE PANEL**

In order to estimate the potential range of asbestos abundance in the Resolution ore by panel, we assumed that all asbestiform minerals are tremolite and hosted in skarn. The abundance of skarn in each panel (from the RCM geologic block model) was multiplied by the minimum (0.125% substituted for samples reported as below the detection limit of 0.25%) and maximum (1.75%) asbestiform tremolite abundances to yield an estimated range of asbestiform minerals by panel. Results of this calculation show that estimated asbestos abundances in the Resolution ore range from 0.0 to 0.1 wt. % (**Table 4**). The U.S. Code of Federal Regulations 40 C.F.R § 61.141 (2002) defines asbestos-containing material (ACM) as "...more than 1 percent asbestos as determined by... Polarized Light Microscopy. Data presented in this technical memorandum indicate that the estimated abundance of asbestos in Resolution ore falls well below this threshold.

	<b>Advanced Argillic (wt.%)</b>	<b>Phyllitic (wt.%)</b>	<b>Potassic (wt.%)</b>	<b>Propylitic (wt.%)</b>	<b>Skarn/Retrograde Skarn (wt.%)</b>	<b>Estimated range asbestosiform minerals (wt.%)</b>
<b>Panel 1</b>	53	17	23	0	7	0.0 to 0.1
<b>Panel 2</b>	47	14	31	0	7	0.0 to 0.1
<b>Panel 3</b>	18	40	35	0	7	0.0 to 0.1
<b>Panel 4</b>	0	36	58	1	6	0.0 to 0.1
<b>Panel 5</b>	0	19	76	0	3	0.0 to 0.1
<b>Panel 6</b>	14	61	25	0	0	0

**Table 4:** Relative proportions of alteration types by panel (weight percent) with estimated range of asbestos abundances (see text for calculation details)

#### **ASBESTIFORM MINERALS IN TAILINGS**

The potentially asbestosiform minerals tremolite and actinolite are silicate minerals and therefore will preferentially report to the tailings during sulfide flotation and not to the concentrate. Data are not available to quantitatively define the degree to which asbestos partitions between the NPAG and PAG tailings. In most of the tailings deposition alternatives under consideration at Resolution, the NPAG tailings will remain unsaturated, but the PAG tailings will be deposited sub-aqueously and maintained at or near saturation through the life of the mine. Thus, concerns related to dust-borne release of asbestos are focused on the NPAG tailings. A simple mass balance calculation, using conservative assumptions, is provided here as a qualitative assessment of the potential for elevated asbestos abundances in the NPAG tailings. For this calculation we assume that all the asbestosiform minerals estimated to be present in the Resolution ore report to the NPAG tailings (which is unlikely as the PAG tailings are also mainly composed of silicate minerals (DHC, 2014)). Estimates suggest that approximately 95% of the ore will report to tailings and that NPAG tailings will account for approximately 85% of the total tailings (RCM, 2014). Using the top of the estimated range of asbestos in ore of 0.1 wt.%, if all the asbestos reports to the NPAG tailings the abundance in the NPAG tailings would be 0.12 wt.% ( $= 0.1 / (0.95 * 0.85)$ ). This estimated abundance is still well below the 1 wt.% criterion for asbestos-containing waste provided in 40 C.F.R. § 61.141 (2002).

## **REFERENCES CITED**

- CFR 40 Part 61.141 (2002): 91. <https://www.govinfo.gov/content/pkg/CFR-2002-title40-vol8/pdf/CFR-2002-title40-vol8.pdf>
- DHC. 2014. Geochemical Characterization of Resolution Tailings, Report to Resolution Copper Mining, August 19, 2014.
- Hehnke, C., Ballantyne, G., Martin, H., Hart, W., Schwartz, A., and Stein, H. 2012. *Geology and Exploration Progress at the Resolution Porphyry Cu-Mo Deposit*: Society of Economic Geologists, Inc. Special Publication 16, pp. 147-156.
- OSHA. 2019. Occupational Safety and Health Standards, 1910 Subpart Z: Toxic and Hazardous Substances, 1910.1001 Asbestos; Downloaded United States Department of Labor (URL: <https://www.osha.gov/laws-regulations/standardnumber/1910/1910.1001>) April 4, 2019
- RCM. 2014. *General Plan of Operations, Resolution Copper Mining*, Initially submitted to U.S. Forest Service on November 15, 2013; revised September 23, 2014.

**Table 2:** Bulk asbestos by Polarized Light Microscopy in Resolution development rock

Laboratory Identifier	Sample Identifier	Borehole Identifier	Sample From (ft) <sup>1</sup>	Sample To (ft)	Lithology <sup>2</sup>	Alteration Type <sup>3</sup>	BULK ASBESTOS RESULTS (POLARIZED LIGHT)						
							Asbestos Type	Range <sup>4</sup>	Percent (%)	Total Asbestos in Sample (%)	Other Fibrous Constituents (%)	Non-Fibrous Constituents (%)	Total Percentage Identified Materials (%)
L57712-04	RES13404	RES-008	445.28	455.25	Tal	UNALT			ND <sup>5</sup>	ND	0.0	100.0	100.0
L57712-08	RES13408	RES-008	1294.91	1304.76	Tal	UNALT			ND	ND	0.0	100.0	100.0
L57712-14	RES13414	RES-008	2055.31	2064.76	Tw	UNALT			ND	ND	TR <sup>6</sup>	100.0	100.0
L57712-18	RES13418	RES-008	2708.33	2718.11	Tw	UNALT			ND	ND	0.0	100.0	100.0
L57713-05	RES13425	RES-008A	3719.32	3729.30	Kvs-Cgl	PRO			ND	ND	0.0	100.0	100.0
L57713-09	RES13429	RES-008A	4795.54	4806.23	Kvs-Cgl	HFL			ND	ND	0.0	100.0	100.0
L57713-12	RES13432	RES-008A	5077.03	5086.81	Kvs-VolSed	PRO			ND	ND	TR	100.0	100.0
L57713-13	RES13433	RES-008A	5239.50	5249.34	Kvs-VolSed	HFL			ND	ND	TR	100.0	100.0
L57713-14	RES13434	RES-008A	5357.61	5367.45	Kvs-VolSed	HFL			ND	ND	1.0	99.0	100.0
L57713-17	RES13437	RES-008A	5803.28	5813.16	Ks-Ss	PRO			ND	ND	0.0	100.0	100.0
L57713-18	RES13438	RES-008A	5830.68	5840.55	QEP	PHY			ND	ND	0.0	100.0	100.0
L57713-19	RES13439	RES-008A	5845.01	5855.61	Ks-Ss	PHY			ND	ND	0.0	100.0	100.0
L57714-01	RES13441	RES-008A	6050.20	6058.40	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-02	RES13442	RES-008A	6079.69	6089.44	Skn	PHY	Tremolite/Actinolite	[1-5]	4.0	4.0	0.0	96.0	100.0
L57714-03	RES13443	RES-008A	6099.93	6109.88	Skn	PHY	Tremolite/Actinolite	[TR]	0.5	0.5	0.0	99.5	100.0
L57714-04	RES13444	RES-008A	6161.42	6172.90	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-05	RES13445	RES-008A	6212.27	6222.11	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-06	RES13446	RES-008A	6276.25	6287.40	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-07	RES13447	RES-008A	6324.90	6334.88	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-08	RES13448	RES-008A	6379.27	6389.11	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-09	RES13449	RES-008A	6406.43	6418.57	Skn	PHY	Tremolite/Actinolite	[TR-1]	0.5	0.5	0.0	99.5	100.0
L57714-10	RES13450	RES-008A	6465.26	6475.39	Skn	PHY			ND	ND	0.0	100.0	100.0
L57714-12	RES13452	RES-008A	6495.90	6505.71	Qzite	SIL			ND	ND	0.0	100.0	100.0

**Table 2:** Bulk asbestos by Polarized Light Microscopy in Resolution development rock

Laboratory Identifier	Sample Identifier	Borehole Identifier	Sample From (ft) <sup>1</sup>	Sample To (ft)	Lithology <sup>2</sup>	Alteration Type <sup>3</sup>	BULK ASBESTOS RESULTS (POLARIZED LIGHT)						
							Asbestos Type	Range <sup>4</sup>	Percent (%)	Total Asbestos in Sample (%)	Other Fibrous Constituents (%)	Non-Fibrous Constituents (%)	Total Percentage Identified Materials (%)
L57714-13	RES13453	RES-008A	6508.63	6520.01	Sltt	SIL			ND	ND	0.0	100.0	100.0
L57714-14	RES13454	RES-008A	6520.01	6529.53	LsBx	SKRET			ND	ND	0.0	100.0	100.0
L57714-15	RES13455	RES-008A	6529.95	6539.83	LsBx	SKRET			ND	ND	0.0	100.0	100.0
L57714-16	RES13456	RES-008A	6540.81	6546.33	LsBx	SKRET			ND	ND	0.0	100.0	100.0
L57714-18	RES13458	RES-008A	6570.21	6580.12	Ls	SKRET	Tremolite/Actinolite	[1-5]	1.0	1.0	0.0	99.0	100.0
L57714-19	RES13459	RES-008A	6583.33	6591.54	Ls	PHY	Chrysotile	[TR-1]	0.5	0.5	0.0	99.5	100.0
L57714-20	RES13460	RES-008A	6593.21	6603.02	Mrbl				ND	ND	0.0	100.0	100.0
L57715-05	RES13465	RES-008A	6738.22	6748.06	Diab	PHY			ND	ND	0.0	100.0	100.0
L57715-06	RES13466	RES-008A	6761.88	6771.72	Diab	PHY			ND	ND	0.0	100.0	100.0
L57715-14	RES13471	RES-008A	6943.01	6952.92	Qzite	PHY			ND	ND	0.0	100.0	100.0
L57715-12	RES13474	RES-008A	7123.88	7133.92	Qzite	PHY			ND	ND	0.0	100.0	100.0

<sup>1</sup>ft - feet

<sup>2</sup>Lithology: Diab = Diabase; Ks-Ss = Cretaceous Sedimentary Rocks-Sandstone; Kvs-Cgl = Cretaceous Volcaniclastic Rocks-Conglomerate; Kvs-VolSed = Cretaceous Volcaniclastic Rocks-Volcaniclastic Sediments; LsBx = Limestone Breccia; Mrbl = Marble; QEP = Quartz-Eye Porphyry; Qzite = Quartzite; Sltt = Siltite; Skn = Skarn; Tal = Tertiary Apache Leap Tuff; Tw = Tertiary Whitetail Conglomerate

<sup>3</sup>Alteration type: HFL = Hornfels; HFLRET = Retrograde hornfels; PHY = Phyllitic; PRO = Propylitic; SIL = silicic; SKN = Skarn; SKRET = Retrograde skarn; UNALT = Unaltered

<sup>4</sup>Range in percent (%); for calculation purposes trace (TR) is assumed to be 0.5%

<sup>5</sup>ND = Not detected at detection limit of 0.5%

<sup>6</sup>TR = Trace (assumed to be 0.5%)

**Table 3:** Bulk and point-count asbestos results for Resolution ore

Sample Identifier	Borehole Identifier	Sample From (ft) <sup>1</sup>	Sample To (ft)	Lithology <sup>2</sup>	Alteration Type <sup>3</sup>	BULK ASBESTOS RESULTS (POLARIZED LIGHT)						ASBESTIFORM MINERAL FIBERS (% BY POINT COUNT)						
						Asbestos Type	Range <sup>4</sup>	Percent (%)	Total Asbestos in Sample (%)	Other Fibrous Constituents (%)	Non-Fibrous Constituents (%)	Total Percentage Identified Materials (%)	Amosite	Anthophyllite	Chrysotile	Crocidolite	Tremolite-Actinolite	Total Asbestos Counted
RES02504	MB-20A	5804.99	5810.01	Skn	SKRET			ND <sup>5</sup>	ND	0	100	100						
RES02574	MB-20A	6114.99	6120.01	Skn	SKRET	Tremolite/Actinolite	[TR-1] <sup>6</sup>	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES02615	MB-20A	6310.01	6314.99	Hfl	HFL			ND	ND	0	100	100						
RES02680	RES-001C	6007.22	6017.06	Hfl	HFLRET			ND	ND	0	100	100						
RES02687	RES-001C	6076.12	6085.96	Hfl	HFLRET			ND	ND	0	100	100						
RES02691	RES-001C	6105.64	6115.49	Hfl	HFLRET			ND	ND	0	100	100						
RES03891	RES-001C	6938.98	6948.82	Hfl	HFLRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES04054	RES-001C	7004.59	7014.44	Hfl	HFLRET	Tremolite/Actinolite	[1-5]	4	4	0	96	100	ND	ND	ND	ND	0.75	0.75
RES04083	RES-001C	7221.13	7230.97	Hfl	HFLRET	Tremolite/Actinolite	[1-5]	3	3	0	97	100	ND	ND	ND	ND	0.75	0.75
RES04095	RES-001C	7283.46	7293.31	Hfl	HFLRET	Tremolite/Actinolite	[1-5]	4	4	0	96	100	ND	ND	ND	ND	1.50	1.50
RES06341	RES-001D	5433.07	5442.91	Skn	SKRET			ND	ND	0	100	100						
RES08304	RES-001E	6824.15	6829.72	Hfl	SKN	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES08329	RES-001E	6998.03	7007.87	Hfl-Skn	SKRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES08342	RES-001E	7109.58	7119.42	Hfl	SKRET	Tremolite/Actinolite	[TR-1]	1	1	0	99	100	ND	ND	ND	ND	<0.25	<0.25
RES08346	RES-001E	7139.11	7148.95	Hfl	SKRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	0.25	0.25
RES08384	RES-001E	7444.23	7454.07	Hfl	SKRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	0.25	0.25
RES08400	RES-001E	7545.93	7555.77	Hfl	SKRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	0.25	0.25
RES08407	RES-001E	7614.83	7624.67	Hfl	SKRET	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES08415	RES-001E	7683.73	7693.57	Hfl	SKRET	Tremolite/Actinolite	[TR]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES03414	RES-002C	6558.40	6564.96	Skn	SKRET			ND	ND	0	100	100						
RES03440	RES-002C	6722.44	6732.28	Skn	HFLRET			ND	ND	0	100	100						
RES03450	RES-002C	6820.87	6830.71	Hfl	SKRET			ND	ND	0	100	100						
RES03465	RES-002C	6928.15	6932.74	Skn	SKRET			ND	ND	0	100	100						

**Table 3:** Bulk and point-count asbestos results for Resolution ore

Sample Identifier	Borehole Identifier	Sample From (ft) <sup>1</sup>	Sample To (ft)	Lithology <sup>2</sup>	Alteration Type <sup>3</sup>	BULK ASBESTOS RESULTS (POLARIZED LIGHT)						ASBESTIFORM MINERAL FIBERS (% BY POINT COUNT)						
						Asbestos Type	Range <sup>4</sup>	Percent (%)	Total Asbestos in Sample (%)	Other Fibrous Constituents (%)	Non-Fibrous Constituents (%)	Total Percentage Identified Materials (%)	Amosite	Anthophyllite	Chrysotile	Crocidolite	Tremolite-Actinolite	Total Asbestos Counted
RES03490	RES-002C	7139.11	7148.95	Hfl	HFLRET			ND	ND	0	100	100						
RES04128	RES-002C	7349.08	7355.64	Skn	SKRET			ND	ND	0	100	100						
RES04137	RES-002C	7401.57	7411.42	Skn	HFLRET			ND	ND	0	100	100						
RES06004	RES-003D	6396.98	6407.48	Hfl	SKRET			ND	ND	0	100	100						
RES06076	RES-003D	6706.04	6715.88	Hfl	HFLRET			ND	ND	0	100	100						
RES07721	RES-004A	7137.47	7145.67	Skn	SKN			ND	ND	0	100	100						
RES07904	RES-004A	7253.94	7257.22	Skn	SKN			ND	ND	0	100	100						
RES07954	RES-004A	7501.64	7509.84	Hfl	SKN			ND	ND	0	100	100						
RES07957	RES-004A	7529.53	7539.37	Hfl	SKN	Tremolite/Actinolite	[TR-1]	1	1	0	99	100	ND	ND	ND	ND	0.25	0.25
RES11516	RES-006	6118.11	6121.88	LsCgl	SKRET			ND	ND	0	100	100						
RES11524	RES-006	6170.80	6178.81	LsCgl	SKRET			ND	ND	0	100	100						
RES13316	RES-006B	5291.47	5298.88	Skn	SKN	Tremolite/Actinolite	[1-5]	1	1	0	99	100	ND	ND	ND	ND	0.75	0.75
RES13327	RES-006B	5359.88	5369.72	Skn	SKN	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	1.75	1.75
RES13331	RES-006B	5387.96	5397.08	Skn	SKN	Tremolite/Actinolite	[TR-1]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	0.25	0.25
RES13335	RES-006B	5417.16	5427.00	Skn	SKN	Tremolite/Actinolite	[TR]	0.5	0.5	0	99.5	100	ND	ND	ND	ND	<0.25	<0.25
RES13350	RES-006B	5527.72	5535.07	Skn	SKN			ND	ND	0	100	100						
RES13552	RES-006B	5539.70	5548.16	Skn	SKN			ND	ND	0	100	100						
RES12593	RES-006B	5825.49	5836.94	LsCgl	SKRET			ND	ND	0	100	100						
RES12600	RES-006B	5883.79	5893.21	LsCgl	SKRET			ND	ND	0	100	100						
RES12659	RES-006B	5953.25	5958.83	LsCgl	SKRET			ND	ND	0	100	100						
RES12373	RES-006B	6493.44	6503.28	Skn	SKRET			ND	ND	0	100	100						
RES12379	RES-006B	6541.67	6551.51	Skn	SKRET			ND	ND	0	100	100						
RES12384	RES-006B	6581.04	6590.88	Skn	SKRET			ND	ND	0	100	100						

**Table 3:** Bulk and point-count asbestos results for Resolution ore

Sample Identifier	Borehole Identifier	Sample From (ft) <sup>1</sup>	Sample To (ft)	Lithology <sup>2</sup>	Alteration Type <sup>3</sup>	BULK ASBESTOS RESULTS (POLARIZED LIGHT)						ASBESTIFORM MINERAL FIBERS (% BY POINT COUNT)						
						Asbestos Type	Range <sup>4</sup>	Percent (%)	Total Asbestos in Sample (%)	Other Fibrous Constituents (%)	Non-Fibrous Constituents (%)	Total Percentage Identified Materials (%)	Amosite	Anthophyllite	Chrysotile	Crocidolite	Tremolite-Actinolite	Total Asbestos Counted
RES12387	RES-006B	6610.56	6620.41	Skn	SKRET			ND	ND	0	100	100						
RES12395	RES-006B	6659.78	6667.39	Skn	SKRET			ND	ND	0	100	100						
RES11768	RES-007B	5580.58	5593.70	Skn	SKRET			ND	ND	0	100	100						
RES15715	RES-009	5100.10	5109.94	LsCgl	PHY			ND	ND	0	100	100						
RES15728	RES-009	5189.67	5194.95	LsCgl	SKRET			ND	ND	0	100	100						
RES15734	RES-009	5220.08	5225.62	LsCgl	SKRET			ND	ND	0	100	100						
RES15742	RES-009	5268.37	5274.41	LsCgl	PHY			ND	ND	0	100	100						

<sup>1</sup>ft - feet

<sup>2</sup>Lithology: Hfl = Hornfels; LsCgl = Limestone Conglomerate; Skn = Skarn

<sup>3</sup>Alteration type: HFL = Hornfels; HFLRET = Retrograde hornfels; PHY = phyllitic; SKN = Skarn; SKRET = Retrograde skarn

<sup>4</sup>Range in percent (%); for calculation purposes trace (TR) is assumed to be 0.5%

<sup>5</sup>ND = Not detected at detection limit of 0.5%

<sup>6</sup>TR = Trace (assumed to be 0.5%)

**ATTACHMENT 1**

**TREMOLITE ABUNDANCE IN RESOLUTION ORE COMPOSITES**

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-001B	1B-4	5278.871	5413.386	4	AA	0.02
RES-001B	1B-5	5413.386	5652.887	4	SKRET	3.42
RES-001B	1B-6	5652.887	5859.58	4	IA	1.17
RES-001B	1B-7	5859.58	5967.848	4	SKRET	0.03
RES-001B	1B-8	5967.848	6110.236	4	PHY	0.03
RES-001B	1B-9	6110.236	6203.543	4	SKRET	0.01
RES-001B	1B-10	6203.543	6302.493	4	POT	0.02
RES-001B	1B-11	6302.493	6479.659	4	AA	0.02
RES-001B	1B-12	6479.659	6729.003	4	PHY	0.1
RES-001B	1B-13	6729.003	6866.798	4	PHY	0.11
RES-002A	2A-5	5016.404	5251.64	3	SKRET	0.01
RES-002A	2A-6	5251.64	5456.037	3	PHY	0
RES-002A	2A-7	5456.037	5605.643	4	PHY	0.01
RES-002A	2A-8	5605.643	5776.476	4	PHY	0.01
RES-002A	2A-9	5776.476	5989.337	4	PHY	0.01
RES-002A	2A-10	5989.337	6105.643	4	PHY	0.02
RES-002A	2A-11	6105.643	6361.549	4	POT	0.11
RES-002A	2A-12	6361.549	6546.752	4	POT	0.13
RES-002A	2A-13	6546.752	6686.352	4	PHY	0.07
RES-002B	2B-4	5098.425	5298.556	3	POT	0
RES-002B	2B-5	5298.556	5505.249	3	POT	0.01
RES-002B	2B-6	5505.249	5613.517	3	POT	0.01
RES-002B	2B-7	5613.517	5788.714	3	POT	0
RES-002B	2B-8	5788.714	5954.724	3	PHY	0.01
RES-002B	2B-9	5954.724	6129.593	3	POT	0.02
RES-002B	2B-10	6129.593	6276.247	3	PHY	0.01
RES-002B	2B-11	6276.247	6502.133	3	PHY	0.01
RES-002B	2B-12	6502.133	6640.42	3	PHY	0.02
RES-002B	2B-13	6640.42	6863.517	3	PHY	0.12
RES-002D	2D-08	5054.7	5216	3	PHY	0.02
RES-002D	2D-09	5216	5353.15	3	POT	0.03
RES-002D	2D-10A	5353.15	5426.5	3	PHY	0.53
RES-002D	2D-11	5426.5	5521	3	POT	0.01
RES-002D	2D-12	5521	5696	3	POT	0
RES-002D	2D-13	5696	5816	3	PHY	0.02
RES-002D	2D-14	5816	5958.6	3	PHY	0.03
RES-002D	2D-15	5958.6	6066	3	PHY	2.76
RES-002D	2D-16	6080	6138	3	SKRET	0.04
RES-002E	2E-01_	6062.91	6142.91	3	POT	0.02
RES-002E	2E-02_	6142.91	6283.5	3	PHY	0.08
RES-002E	2E-03A	6283.5	6417	3	PHY	0.09
RES-002E	2E-04_	6417	6497	3	POT	0.37
RES-002E	2E-05_	6497	6655	3	PHY	0.09
RES-003E	3.00E-03	5017	5184	3	POT	0.01
RES-003E	3.00E-04	5184	5456	3	PHY	0.01
RES-003E	3.00E-05	5456	5607.5	3	PHY	0.01
RES-003E	3.00E-06	5607.5	5709	3	PHY	0.01
RES-003E	3E-07A	5709	5862	3	POT	0.03
RES-003E	3.00E-08	5862	5973.1	3	SKRET	0.02
RES-003E	3.00E-09	5973.1	6219.5	3	PHY	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-003E	3.00E-10	6219.5	6379.5	3	PHY	0.09
RES-003E	3.00E-11	6379.5	6555.75	3	POT	0.12
RES-003E	3.00E-12	6555.75	6812.5	3	PHY	0.23
RES-005H	5H-3	5445.997	5593.766	2	SKRET	0
RES-005H	5H-4	5593.766	5704.987	2	POT	0.02
RES-005H	5H-5	5704.987	5823.097	3	PHY	0.01
RES-005H	5H-7	5925.361	6033.957	3	POT	0.01
RES-005H	5H-8	6033.957	6185.367	3	POT	0.01
RES-005H	5H-9	6185.367	6295.932	3	PHY	0.02
RES-005H	5H-10	6295.932	6457.251	3	PHY	0.02
RES-005H	5H-11	6457.251	6588.911	3	PHY	0.02
RES-005H	5H-12	6588.911	6680.479	3	AA	20.69
RES-005I	5I-3	5561.778	5701.28	3	POT	0.03
RES-005I	5I-4	5701.28	5824.245	3	POT	0.01
RES-005I	5I-5	5824.245	5932.743	3	AA	0.01
RES-005I	5I-7	6059.416	6152.822	3	POT	0.01
RES-005I	5I-8	6152.822	6250.951	3	POT	0.01
RES-005I	5I-9	6250.951	6374.869	3	PHY	0.01
RES-005I	5I-10	6374.869	6532.349	3	AA	0.02
RES-005I	5I-11	6532.349	6694.291	3	PHY	0.04
RES-005I	5I-12	6694.291	6857.71	3	PHY	0.01
RES-005K	5K-4	5658.99	5827.657	2	PHY	0.01
RES-005K	5K-6	5998.491	6161.253	2	POT	0.07
RES-005K	5K-7	6161.253	6332.677	2	PHY	0.02
RES-005K	5K-8	6332.677	6484.35	2	PHY	0.03
RES-005K	5K-9	6484.35	6617.454	2	PHY	0.01
RES-005K	5K-10	6617.454	6772.966	2	PHY	0.01
RES-005L	5L-2	5391.995	5634.252	2	PHY	0.01
RES-005L	5L-3A	5634.252	5811.089	2	PHY	0.01
RES-005L	5L-4	5811.089	5922.014	2	PHY	0.01
RES-005L	5L-5	5922.014	6183.76	2	POT	0.02
RES-005L	5L-6	6183.76	6301.87	2	PHY	0.02
RES-005L	5L-7	6301.87	6481.102	2	PHY	0.01
RES-005L	5L-8	6481.102	6653.543	2	PHY	0.02
RES-005L	5L-9	6653.543	6787.631	2	PHY	0.03
RES-005L	5L-10	6787.631	7058.727	2	POT	0.01
RES-006D	6D-5	6791.765	6925.197	1	PHY	0.06
RES-006D	6D-6	6925.197	7054.003	1	AA	0.02
RES-006D	6D-7	7054.003	7172.113	1	PHY	0.13
RES-006D	6D-8	7172.113	7305.971	1	PHY	0.34
RES-007	7_7A-2	5254.396	5355.84	2	PHY	0.01
RES-007	7_7A-3	5365.486	5508.858	2	AA	0.01
RES-007A	7_7A-4	5509.186	5603.018	2	POT	0.01
RES-007A	7_7A-5	5603.018	5698.622	2	PHY	0
RES-007A	7_7A-6	5698.622	5832.021	2	PHY	0.01
RES-007A	7_7A-7	5832.021	5975.427	2	PHY	0
RES-007A	7_7A-8	5975.427	6100.755	2	PHY	0.01
RES-007A	7_7A-9	6100.755	6260.072	2	PHY	0.01
RES-007A	7_7A-10	6260.072	6377.592	2	PHY	0.01
RES-007A	7_7A-11	6377.592	6513.944	2	POT	0.02

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-007A	7_7A-12	6513.944	6666.667	2	PHY	0.01
RES-007A	7_7A-13	6666.667	6751.706	3	PHY	0.01
RES-007A	7_7A-14	6751.706	6912.402	3	PHY	0.01
RES-007A	7_7A-15	6912.402	7069.882	3	POT	0.03
RES-007A	7_7A-16	7069.882	7221.129	3	PHY	0.02
RES-007A	7_7A-17	7221.129	7339.239	3	AA	0.01
RES-007A	7_7A-18	7339.239	7445.308	3	PHY	0.03
RES-007C	7C-3	5272.408	5408.99	1	PHY	0.01
RES-007C	7C-4	5408.99	5507.612	1	AA	0.01
RES-007C	7C-5	5507.612	5576.05	1	POT	0.03
RES-007C	7C-6	5576.05	5659.843	1	PHY	0.01
RES-007C	7C-8	5827.165	5995.243	1	PHY	0.02
RES-007C	7C-10	6188.091	6346.096	1	POT	0.06
RES-009A	9A-3	5242.782	5380.61	2	POT	0.02
RES-009A	9A-4	5380.61	5479.003	2	POT	0
RES-009A	9A-5	5479.003	5582.677	2	AA	0
RES-009A	9A-6	5582.677	5710.63	2	PHY	0
RES-009A	9A-7	5710.63	5800.525	2	PHY	0.01
RES-009A	9A-8	5800.525	5897.31	2	PHY	0.01
RES-009A	9A-9	5897.31	6037.795	2	PHY	0.02
RES-009A	9A-10	6037.795	6194.226	2	POT	0
RES-009A	9A-11	6194.226	6352.854	3	PHY	0.01
RES-009A	9A-12	6352.854	6465.387	3	PHY	0.07
RES-009A	9A-13	6465.387	6576.083	3	PHY	0.01
RES-009A	9A-14	6576.083	6737.566	3	PHY	0.11
RES-009A	9A-15	6737.566	6878.018	3	PHY	0.17
RES-009A	9A-16	6878.018	7035.105	3	PHY	0.29
RES-009D	9D-4	5863.386	6022.572	3	SKRET	0.01
RES-009D	9D-5	6022.572	6107.94	3	IA	0.02
RES-009D	9D-6	6107.94	6224.475	3	ARG	0.22
RES-009D	9D-7	6224.475	6321.883	3	PHY	1.73
RES-009D	9D-9	6464.075	6599.573	3	PHY	1.13
RES-009D	9D-10	6599.573	6746.03	3	AA	0.24
RES-009D	9D-11	6746.03	6912.073	3	AA	0.32
RES-009D	9D-12	6912.073	7028.642	3	POT	0.25
RES-009D	9D-14	7156.66	7256.824	4	PHY	0.31
RES-009F	9F-1	5797.244	5915.354	2	AA	0.01
RES-009F	9F-2	5915.354	6071.194	2	PHY	0.01
RES-009F	9F-3	6071.194	6164.829	2	PHY	1.13
RES-009F	9F-4	6164.829	6313.78	2	PHY	0.01
RES-009F	9F-5	6313.78	6444.226	3	PHY	0.01
RES-009F	9F-6	6444.226	6571.982	3	PHY	3.15
RES-009F	9F-7	6571.982	6710.63	3	AA	7.98
RES-009F	9F-8	6710.63	6868.11	3	PHY	13.2
RES-009G	9G-4	5236.811	5352.428	1	PHY	0.05
RES-009G	9G-5	5352.428	5433.432	1	AA	0.01
RES-009G	9G-6	5433.432	5544.849	1	PHY	0.01
RES-009G	9G-7	5544.849	5625.984	1	PHY	0.05
RES-009G	9G-8	5625.984	5723.294	1	POT	0.02
RES-009G	9G-9	5723.294	5920.144	1	PHY	0.04

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-009G	9G-10	5920.144	6099.934	1	PHY	0.03
RES-009G	9G-11	6099.934	6267.224	1	PHY	0.03
RES-009G	9G-12	6267.224	6447.671	1	PHY	0.04
RES-009J	9J-4	5348.556	5457.579	1	PHY	0.02
RES-009J	9J-5	5457.579	5579.068	1	POT	0
RES-009J	9J-6	5579.068	5687.795	1	PHY	0.03
RES-009J	9J-7	5687.795	5810.039	1	IA	0.09
RES-009J	9J-8	5810.039	6024.541	1	AA	0.02
RES-009J	9J-9	6024.541	6147.277	1	POT	0.03
RES-009J	9J-10	6147.277	6282.513	1	PHY	0.01
RES-009J	9J-11	6282.513	6497.638	1	AA	0.01
RES-009J	9J-12	6497.638	6627.297	1	PHY	0.15
RES-009J	9J-13	6627.297	6784.777	1	PHY	0.29
RES-009M	9M-7	5695.44	5867.028	2	PHY	0
RES-009M	9M-8	5867.028	6059.711	2	PHY	0.03
RES-009M	9M-9	6059.711	6240.978	2	POT	0.01
RES-009M	9M-10A	6240.978	6489.501	2	PHY	0.09
RES-009M	9M-11	6489.501	6684.711	2	PHY	0.14
RES-009N	9N-03A	5123.5	5314	2	POT	0.03
RES-009N	9N-04	5314	5477.87	2	PHY	0.01
RES-009N	9N-05	5477.87	5608	2	POT	0
RES-009N	9N-06	5608	5703.71	2	PHY	0.01
RES-009N	9N-07	5703.71	5862	2	PHY	0.02
RES-009N	9N-08	5862	6021.73	2	PHY	0.02
RES-009N	9N-09	6021.73	6155.32	2	POT	0.01
RES-009N	9N-10	6155.32	6352	2	AA	0.01
RES-009N	9N-11	6352	6528.55	2	PHY	0.01
RES-009N	9N-12	6528.55	6658.35	2	POT	0.01
RES-009N	9N-13	6658.35	6708.55	2	PHY	0.05
RES-013	13-04	6256.923	6411.089	6	POT	0
RES-013	13-05	6411.089	6561.778	6	PHY	0
RES-013	13-06	6561.778	6749.475	6	POT	0
RES-014	14-5	6021.85	6189.403	5	IA	0.74
RES-014	14-6	6189.403	6346.883	5	POT	1.07
RES-014	14-7	6346.883	6504.364	5	POT	0.49
RES-014	14-8	6504.364	6623.622	5	PHY	1.2
RES-014	14-9	6623.622	6747.047	5	PHY	1.22
RES-014	14-10	6747.047	6875	5	POT	0.4
RES-014B	14B-8	6209.744	6349.803	5	PHY	0.75
RES-014B	14B-9	6349.803	6510.827	5	POT	0.62
RES-014B	14B-10	6510.827	6668.307	5	PHY	0.45
RES-014B	14B-11	6668.307	6825.787	5	AA	0.9
RES-014D	14D-07	5590	5662	4	SKRET	0.03
RES-014D	14D-08	5662	5821	4	PHY	0.02
RES-014D	14D-09	5821	5974.72	4	POT	0.03
RES-014D	14D-10	5974.72	6121.9	4	PHY	0.04
RES-014D	14D-11	6121.9	6309.9	4	PHY	0.02
RES-014D	14D-12	6309.9	6395.4	4	PHY	0.05
RES-014D	14D-13A	6395.4	6635.4	4	PHY	0.37
RES-014D	14D-14	6635.4	6835.4	4	POT	0.62

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-015A	15A-4	5206.102	5293.143	3	PHY	0.01
RES-015A	15A-5	5293.143	5408.235	3	POT	0
RES-015A	15A-6	5408.235	5526.345	3	POT	0.03
RES-015A	15A-7	5526.345	5632.054	3	POT	0.01
RES-015B	15B-1	5446.982	5604.495	3	SKRET	0
RES-015B	15B-2	5604.495	5722.605	3	ARG	0.01
RES-015B	15B-3	5722.605	5868.602	3	PHY	0
RES-015B	15B-4	5868.602	6014.009	3	PHY	0.02
RES-015B	15B-5	6014.009	6168.209	3	POT	0.02
RES-015B	15B-6	6168.209	6361.647	3	POT	0.02
RES-015B	15B-7	6361.647	6509.482	3	POT	0.01
RES-015B	15B-8	6509.482	6644.619	3	PHY	0.01
RES-015B	15B-9	6644.619	6762.73	3	PHY	0.01
RES-015B	15B-10	6762.73	6891.01	3	PHY	0.07
RES-016A	16A-8	6787.402	6990.584	4	POT	0.32
RES-017	17_17B-02	5281.824	5444.226	2	POT	0.03
RES-017	17_17B-03	5444.226	5594.16	2	PHY	0.01
RES-017	17_17B-04	5594.16	5768.307	2	POT	0.02
RES-017B	17_17B-05	5746.719	5864.829	2	PHY	0.02
RES-017B	17_17B-06	5864.829	6070.538	2	PHY	0.01
RES-017B	17_17B-07	6070.538	6257.546	2	PHY	0.02
RES-017B	17_17B-08	6257.546	6414.042	2	POT	0.03
RES-017B	17_17B-09	6414.042	6602.69	2	PHY	0.03
RES-017B	17_17B-10	6602.69	6757.874	2	PHY	0.01
RES-017B	17_17B-11	6757.874	6881.234	2	AA	0.01
RES-017B	17_17B-12	6881.234	7087.861	2	PHY	0.15
RES-017F	17F-3	5127.953	5319.882	2	POT	0.02
RES-017F	17F-4	5319.882	5500	2	POT	0.02
RES-017F	17F-5	5500	5631.726	2	PHY	0.02
RES-017F	17F-6A	5631.726	5703.806	2	PHY	13.01
RES-017F	17F-6B	5703.806	5750.492	2	PHY	0.18
RES-017F	17F-7	5750.492	5890.026	2	PHY	0.02
RES-017F	17F-8	5890.026	6080.971	2	PHY	0.01
RES-017F	17F-9	6080.971	6268.34	2	PHY	0.04
RES-017F	17F-10	6268.34	6487.336	2	AA	0.03
RES-017F	17F-11	6487.336	6601.05	2	PHY	0.01
RES-017F	17F-12	6601.05	6896.818	2	AA	0.01
RES-017F	17F-13	6896.818	7097.441	2	PHY	0.04
RES-017G	17G-5	5230.906	5364.961	2	AA	0.01
RES-017G	17G-6	5364.961	5478.675	2	POT	0.01
RES-017G	17G-7	5478.675	5636.483	2	AA	0.03
RES-017G	17G-8	5636.483	5736.45	2	PHY	24.24
RES-017G	17G-9	5736.45	5885.236	2	PHY	0.02
RES-017G	17G-10	5885.236	6130.249	2	AA	0.09
RES-017G	17G-11	6130.249	6326.247	2	AA	0.06
RES-017G	17G-12	6326.247	6564.075	2	AA	0.03
RES-017G	17G-13	6564.075	6721.555	2	PHY	0.01
RES-017G	17G-14	6721.555	6899.869	2	AA	0.01
RES-017G	17G-15	6899.869	7116.732	2	PHY	0.01
RES-017I	17I-5	5123.228	5258.432	2	POT	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-017I	17I-6	5258.432	5361.056	2	PHY	0.01
RES-017I	17I-7	5361.056	5474.081	2	PHY	0.01
RES-017I	17I-8	5474.081	5639.895	2	PHY	0.01
RES-017I	17I-9	5639.895	5799.377	2	PHY	0.01
RES-017I	17I-10	5799.377	5956.857	2	PHY	0.02
RES-017I	17I-11	5956.857	6119.849	2	PHY	0.02
RES-017I	17I-12	6119.849	6310.105	2	POT	0.01
RES-017I	17I-13	6310.105	6474.278	2	PHY	0
RES-017I	17I-14	6474.278	6652.231	2	POT	0.01
RES-017I	17I-15	6652.231	6810.203	2	POT	0.02
RES-017K	17K-4	5098.425	5299.77	3	PHY	0.02
RES-017K	17K-5	5299.77	5432.119	3	POT	0.01
RES-017K	17K-6	5432.119	5537.5	3	PHY	0.01
RES-017K	17K-7	5537.5	5712.139	3	PHY	0.02
RES-017K	17K-8	5712.139	5856.759	3	POT	0.01
RES-017K	17K-9	5856.759	5969.094	3	PHY	0.01
RES-017K	17K-10	5969.094	6089.797	3	POT	0.01
RES-017K	17K-11	6089.797	6195.44	3	AA	0.01
RES-017K	17K-12	6195.44	6312.336	3	PHY	0.01
RES-017K	17K-13	6312.336	6482.415	3	PHY	0.01
RES-017K	17K-14	6482.415	6651.64	3	PHY	0.02
RES-017K	17K-15	6651.64	6747.244	3	POT	0.02
RES-017K	17K-16	6747.244	6904.003	3	PHY	0.03
RES-017L	17L-4	5233.366	5454.396	2	AA	0.01
RES-017L	17L-5	5454.396	5522.933	2	AA	0
RES-017L	17L-6	5522.933	5613.287	2	POT	0
RES-017L	17L-7	5613.287	5780.906	2	PHY	0.01
RES-017L	17L-8A	5780.906	5982.021	2	PHY	0
RES-017L	17L-9	5982.021	6100.591	2	PHY	0.01
RES-017L	17L-10	6100.591	6269.685	2	PHY	0
RES-017L	17L-11	6269.685	6414.304	2	SKRET	0.01
RES-017L	17L-12	6414.304	6515.65	2	PHY	0
RES-017L	17L-13	6515.65	6668.963	2	PHY	0
RES-017L	17L-14	6668.963	6787.073	2	PHY	0.02
RES-017M	17M-6	5126.017	5282.152	3	POT	0.01
RES-017M	17M-7	5282.152	5384.514	3	POT	0.01
RES-017M	17M-8A	5384.514	5602.854	3	PHY	0.02
RES-017M	17M-9	5602.854	5685.696	3	SKRET	0.01
RES-017M	17M-10	5685.696	5821.293	3	PHY	0.02
RES-017M	17M-11	5821.293	6006.955	2	POT	0.02
RES-017M	17M-12	6006.955	6182.808	2	PHY	0.01
RES-017M	17M-13	6182.808	6362.828	2	PHY	0.01
RES-017M	17M-14	6362.828	6500.066	2	PHY	0.01
RES-017M	17M-15	6500.066	6619.193	2	POT	0.01
RES-017M	17M-16	6619.193	6787.238	2	PHY	0.1
RES-017N	17N-6	5200.919	5364.567	3	PHY	0
RES-017N	17N-7	5364.567	5561.417	3	PHY	0
RES-017N	17N-8	5561.417	5789.567	3	PHY	0.01
RES-017N	17N-9	5789.567	5986.417	3	PHY	0.02
RES-017N	17N-10A	5986.417	6196.982	3	PHY	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-017N	17N-11	6196.982	6399.77	3	AA	0.01
RES-017N	17N-12	6399.77	6497.178	3	PHY	0.01
RES-017N	17N-13	6497.178	6778.15	3	PHY	0.01
RES-017N	17N-14	6778.15	6987.139	3	PHY	0.02
RES-017O	17O-5A	5220.899	5486.516	3	PHY	0.01
RES-017O	17O-6	5486.516	5687.73	3	PHY	0.02
RES-017O	17O-7	5687.73	5873.655	3	PHY	0.01
RES-017O	17O-8	5873.655	6071.391	3	PHY	0.01
RES-017O	17O-9	6071.391	6165.978	3	PHY	0
RES-017O	17O-10	6165.978	6322.671	3	PHY	0
RES-017O	17O-11	6322.671	6440.453	3	PHY	0.01
RES-017O	17O-12	6440.453	6637.303	3	POT	0.07
RES-017O	17O-13	6637.303	6834.154	3	AA	0.09
RES-017P	17P-05	5182.4	5356.25	2	SKRET	0.01
RES-017P	17P-06	5356.25	5523.06	2	PHY	0.01
RES-017P	17P-07A	5523.06	5706.38	2	PHY	0.01
RES-017P	17P-08	5706.38	5863.95	2	PHY	0.01
RES-017P	17P-09	5863.95	5983.95	2	PHY	0.01
RES-017P	17P-10	5983.95	6103.3	2	PHY	0.01
RES-017P	17P-11	6103.3	6216.5	2	PHY	0.02
RES-017P	17P-12	6216.5	6332	2	AA	0.01
RES-017P	17P-13	6332	6470.2	2	AA	0.01
RES-017Q	17Q-01	5218	5330.53	2	POT	0.02
RES-017Q	17Q-02	5330.53	5459.55	2	POT	0.01
RES-017Q	17Q-03	5459.55	5610.4	2	PHY	0.02
RES-017Q	17Q-04	5610.4	5690.4	2	PHY	0
RES-017Q	17Q-05A	5690.4	5777	2	POT	0
RES-017Q	17Q-06	5777	5818	2	PHY	0.02
RES-017Q	17Q-07	5818	5928	2	AA	0.01
RES-017Q	17Q-08	5928	6100.5	2	POT	0.01
RES-017Q	17Q-09	6100.5	6248.9	2	PHY	0.02
RES-017Q	17Q-10	6248.9	6341	2	SKRET	0.04
RES-017Q	17Q-11	6341	6394	2	PHY	0.03
RES-017Q	17Q-12	6394	6514	2	PHY	0
RES-017Q	17Q-13	6514	6620.6	2	PHY	0.01
RES-017Q	17Q-14	6620.6	6805.2	2	PHY	0.01
RES-017Q	17Q-15	6805.2	6836	2	AA	0.08
RES-017R	17R-04	5017.5	5048.75	3	POT	0
RES-017R	17R-05	5048.75	5218	3	POT	0.01
RES-017R	17R-06	5218	5338	3	AA	0
RES-017R	17R-07	5338	5465.15	3	AA	0
RES-017R	17R-08A	5465.15	5571.88	3	PHY	0
RES-017R	17R-09	5571.88	5686.25	3	PHY	0.01
RES-017R	17R-10	5686.25	5806.25	3	AA	0.03
RES-017R	17R-11	5806.25	5898.95	3	POT	0.05
RES-017R	17R-12	5898.95	5985.5	3	SKRET	0.01
RES-017R	17R-13	5985.5	6156.9	3	PHY	0.01
RES-017R	17R-14	6156.9	6276.9	3	SKRET	0.04
RES-017R	17R-15	6276.9	6422.88	3	PHY	0.05
RES-017R	17R-16	6422.88	6531	3	PHY	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-017R	17R-17	6531	6619.26	3	POT	0.34
RES-017S	17S-04	5066	5260	3	PHY	0.01
RES-017S	17S-05	5260	5460	3	POT	0.01
RES-017S	17S-06	5460	5541	3	PHY	0.01
RES-017S	17S-07	5541	5661	3	PHY	0.03
RES-017S	17S-08A	5661	5777.25	3	AA	0.04
RES-017S	17S-09	5777.25	5869.7	3	PHY	0.01
RES-017S	17S-10	5869.7	6045.28	3	PHY	0.01
RES-017S	17S-11	6045.28	6228.9	3	POT	0.04
RES-017S	17S-12	6228.9	6284.4	3	PHY	0.02
RES-017S	17S-13	6284.4	6404.4	3	PHY	0.08
RES-017S	17S-14	6404.4	6551	3	PHY	0.19
RES-017S	17S-15	6551	6667.7	3	PHY	0.04
RES-023B	23B-7	6397.638	6500.164	2	PHY	0.1
RES-023B	23B-8	6500.164	6678.314	2	POT	0
RES-023B	23B-9	6678.314	6858.53	2	PHY	0.03
RES-023B	23B-10	6858.53	6968.504	2	POT	0.02
RES-023B	23B-11	6968.504	7114.993	2	SKRET	0.11
RES-023B	23B-12a	7114.993	7219.948	2	PHY	0.05
RES-023B	23B-12b	7219.948	7309.974	2	AA	0.12
RES-023D	23D-4A	6490.518	6684.547	2	PHY	0
RES-023D	23D-5	6684.547	6723.917	2	SKRET	0.03
RES-023D	23D-6	6723.917	6766.667	2	PHY	0.03
RES-023D	23D-7	6766.667	6811.22	2	POT	0.03
RES-023D	23D-8	6811.22	6868.012	2	PHY	0
RES-023D	23D-9	6868.012	7086.516	2	PHY	0.01
RES-023D	23D-10	7086.516	7219.816	2	PHY	0.03
RES-023D	23D-11	7219.816	7467.848	2	PHY	0.15
RES-023D	23D-12	7467.848	7640.256	2	PHY	0.08
RES-023D	23D-13	7640.256	7791.634	2	PHY	0.14
RES-023E	23E-6A	6648.622	6819.226	2	PHY	0.02
RES-023E	2.30E-06	6819.226	6890.978	2	PHY	0.01
RES-023E	2.30E-07	6890.978	7005.84	2	POT	0
RES-023E	2.30E-08	7005.84	7173.983	2	POT	0.02
RES-023E	2.30E-09	7173.983	7304.79	2	POT	0.02
RES-023E	2.30E-10	7304.79	7388.255	2	PHY	0.03
RES-023E	2.30E-11	7388.255	7459.875	2	PHY	0.03
RES-023E	2.30E-12	7459.875	7641.24	2	POT	0.08
RES-023E	2.30E-13	7641.24	7919.849	2	PHY	0.12
RES-023F	23F-4	6422.408	6588.156	2	PHY	0
RES-023F	23F-5	6588.156	6706.266	2	POT	0.17
RES-023F	23F-6A	6706.266	6879.921	2	AA	0.97
RES-023F	23F-7	6879.921	7057.251	2	PHY	0.24
RES-023F	23F-8	7057.251	7284.678	2	PHY	0.07
RES-023F	23F-9	7284.678	7454.56	2	PHY	0.14
RES-023G	23G-3	6415.354	6539.206	2	PHY	0.01
RES-023G	23G-4	6539.206	6696.686	3	PHY	0.86
RES-023G	23G-5A	6696.686	6887.073	3	PHY	2.4
RES-023G	23G-6	6887.073	7062.205	3	PHY	7.84
RES-023G	23G-7	7062.205	7201.575	3	PHY	0.31

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-023G	23G-8	7201.575	7371.063	3	POT	0.3
RES-023I	23I-6A	6937.664	7089.698	2	AA	8.92
RES-023I	23I-7	7089.698	7279.856	2	PHY	13.06
RES-025A	25A-4	5474.836	5625.361	2	PHY	0.01
RES-025A	25A-5	5625.361	5830.906	2	POT	0
RES-025A	25A-6	5830.906	5951.772	2	PHY	0.01
RES-025A	25A-7a	5951.772	6047.211	2	AA	0.03
RES-025A	25A-7b	6047.211	6100.459	2	SKRET	0.01
RES-025A	25A-7c	6100.459	6151.28	2	PHY	0.03
RES-025A	25A-8	6151.28	6345.144	2	PHY	0.02
RES-025A	25A-9	6345.144	6543.93	2	PHY	0.02
RES-025A	25A-10	6543.93	6719.816	2	PHY	0.01
RES-025A	25A-11	6719.816	6864.469	2	AA	0.01
RES-025A	25A-12a	6864.469	6949.705	1	PHY	0.04
RES-025A	25A-12b	6949.705	7023.36	1	PHY	0.11
RES-025A	25A-13	7023.36	7179.495	1	AA	0.18
RES-025A	25A-14	7179.495	7342.421	1	POT	0.12
RES-025B	25B-5	5368.438	5524.114	2	PHY	0
RES-025B	25B-6	5524.114	5638.451	2	POT	0.03
RES-025B	25B-7	5638.451	5747.343	2	POT	0.01
RES-025B	25B-8	5747.343	5899.377	2	PHY	0.03
RES-025B	25B-9A	5899.377	6125	2	AA	9.46
RES-025B	25B-10	6125	6259.547	2	POT	0.02
RES-025B	25B-11	6259.547	6363.845	2	PHY	0.01
RES-025B	25B-12	6363.845	6510.269	2	PHY	0.01
RES-025B	25B-13	6510.269	6733.104	2	PHY	0.05
RES-025C	25C-4	5388.451	5554.429	2	AA	0
RES-025C	25C-5	5554.429	5803.871	2	POT	0
RES-025C	25C-6	5803.871	5939.6	2	PHY	0.02
RES-025C	25C-7	5939.6	6005.577	2	AA	0.29
RES-025C	25C-8A	6005.577	6175.361	1	PHY	0.02
RES-025C	25C-9	6175.361	6287.959	1	PHY	0.01
RES-025C	25C-10	6287.959	6428.74	1	PHY	0.02
RES-025C	25C-11	6428.74	6592.192	1	PHY	0.01
RES-025C	25C-12	6592.192	6711.975	1	POT	0.01
RES-025C	25C-13	6711.975	6866.339	1	PHY	0.01
RES-025C	25C-14	6866.339	7069.029	1	PHY	0.01
RES-025C	25C-15	7069.029	7344.062	1	AA	0.01
RES-025D	25D-6A	5354.495	5596.85	2	PHY	0.04
RES-025D	25D-7	5596.85	5730.282	2	POT	0.16
RES-025D	25D-8	5730.282	5973.031	2	AA	0.01
RES-025D	25D-9	5973.031	6198.983	2	POT	0.01
RES-025D	25D-10	6198.983	6392.913	2	POT	0.01
RES-025D	25D-11	6392.913	6594.488	2	PHY	0.01
RES-025D	25D-12	6594.488	6824.147	2	PHY	0.02
RES-025D	25D-13	6824.147	7001.673	2	PHY	0.02
RES-025E	2.50E-02	5254.921	5458.727	2	PHY	0.01
RES-025E	25E-4A	5458.727	5685.696	2	PHY	0.01
RES-025E	2.50E-04	5685.696	5793.471	2	PHY	0.02
RES-025E	2.50E-05	5793.471	5832.841	2	PHY	0.02

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-025E	2.50E-06	5832.841	5903.084	2	PHY	0.01
RES-025E	2.50E-07	5903.084	6165.354	2	PHY	0.01
RES-025E	2.50E-08	6165.354	6314.501	2	SKRET	0.01
RES-025E	2.50E-09	6314.501	6477.362	2	AA	0.02
RES-025E	2.50E-10	6477.362	6564.993	2	POT	0.01
RES-025E	2.50E-11	6564.993	6760.138	2	PHY	0.01
RES-025E	2.50E-12	6760.138	6962.139	2	PHY	0.01
RES-025E	2.50E-13	6962.139	7170.538	2	PHY	0.01
RES-025F	25F-2	5205.5	5325.5	2	PHY	0.02
RES-025F	25F-3A	5325.5	5473.89	2	PHY	0.01
RES-025F	25F-4	5473.89	5548.98	2	POT	0
RES-025F	25F-5	5548.98	5667.12	2	POT	0.01
RES-025F	25F-6	5667.12	5711.62	2	PHY	0.02
RES-025F	25F-7	5711.62	5805.57	2	PHY	0.01
RES-025F	25F-8	5805.57	5924.75	2	POT	0.01
RES-025F	25F-9	5924.75	6174.78	2	PHY	0.02
RES-025F	25F-10	6174.78	6308.15	2	PHY	0.01
RES-025F	25F-11	6308.15	6410	2	AA	0.03
RES-025F	25F-12	6410	6530	2	POT	0.01
RES-025F	25F-13	6530	6650	2	PHY	0.02
RES-025F	25F-14	6650	6894.25	2	POT	0.01
RES-025I	25I-01A	5753	5831.2	2	AA	2.78
RES-025I	25I-02	5831.2	5960.5	2	PHY	0.72
RES-025I	25I-03	5960.5	6088.5	2	PHY	0.19
RES-025I	25I-04	6088.5	6198.95	2	PHY	0.03
RES-025I	25I-05	6198.95	6289	2	POT	0.01
RES-025I	25I-06	6289	6387.55	2	PHY	0.02
RES-025I	25I-07	6387.55	6467.55	2	POT	1.11
RES-025I	25I-08	6467.55	6587.55	2	PHY	0.04
RES-025I	25I-09	6587.55	6724.3	2	POT	0.03
RES-027	27-3	5811.778	6051.476	6	AA	0.01
RES-027	27-4	6051.476	6198.491	6	POT	0.02
RES-027	27-5	6198.491	6351.64	6	AA	0.02
RES-027	27-6	6351.64	6503.937	2	PHY	0.06
RES-027	27-7	6503.937	6691.273	2	PHY	0.01
RES-027	27-8	6691.273	6914.436	2	PHY	0.02
RES-027	27-9	6914.436	7147.244	2	PHY	0.02
RES-027	27-10	7147.244	7245.604	2	PHY	0.01
RES-027A	27A-4	5756.988	5977.69	6	PHY	0.01
RES-027A	27A-5	5977.69	6121.555	6	PHY	0.01
RES-027A	27A-6	6121.555	6241.831	6	PHY	0.07
RES-027A	27A-7	6241.831	6282.841	6	PHY	0.88
RES-027A	27A-8	6282.841	6482.874	6	AA	0.03
RES-027A	27A-9	6482.874	6576.903	6	PHY	0.03
RES-027A	27A-10	6576.903	6804.199	6	PHY	0.02
RES-027A	27A-11	6804.199	6962.467	6	AA	0.01
RES-027A	27A-12A	6962.467	7203.806	2	SKRET	0.01
RES-027B	27B-5	5910.433	6049.934	6	PHY	0.01
RES-027B	27B-6	6049.934	6283.268	6	POT	0.03
RES-027B	27B-7A	6283.268	6496.719	6	PHY	0.02

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-027B	27B-8	6496.719	6605.643	6	PHY	0.01
RES-027B	27B-9	6605.643	6732.972	6	PHY	0.02
RES-027B	27B-10	6732.972	6916.339	6	PHY	0.01
RES-027C	27C-5	5999.672	6144.226	6	ARG	0.01
RES-027C	27C-6	6144.226	6248.95	6	PHY	0.01
RES-027C	27C-7	6248.95	6448.819	6	PHY	0.02
RES-027C	27C-8	6448.819	6623.294	6	PHY	0.02
RES-027C	27C-9A	6623.294	6807.448	2	PHY	0.01
RES-027C	27C-10	6807.448	6939.895	2	POT	2.44
RES-027C	27C-11	6939.895	7133.465	2	PHY	0.85
RES-027C	27C-12	7133.465	7350.164	2	PHY	0.04
RES-027D	27D-3	5873.031	6109.252	6	POT	0.01
RES-027D	27D-4	6109.252	6279.528	6	PHY	0.02
RES-027D	27D-5	6279.528	6444.062	6	PHY	0.05
RES-027D	27D-6	6444.062	6669.948	6	POT	0.02
RES-027D	27D-7	6669.948	6946.063	6	PHY	0.01
RES-027D	27D-8A	6946.063	7218.012	6	POT	6.23
RES-027E	27E-5A	6188.714	6434.711	6	POT	0.01
RES-027E	2.70E-05	6434.711	6631.562	6	POT	0.01
RES-027E	2.70E-06	6631.562	6824.147	6	POT	0.01
RES-027E	2.70E-07	6824.147	6942.257	6	POT	0.02
RES-027E	2.70E-08	6942.257	7099.738	3	PHY	0.05
RES-027E	2.70E-09	7099.738	7244.094	3	PHY	0.1
RES-027E	2.70E-10	7244.094	7324.967	3	PHY	0.01
RES-028	28-2	5146.818	5204.429	2	PHY	0
RES-028	28-3	5204.429	5364.173	2	POT	0
RES-028	28-4	5364.173	5541.339	2	PHY	0.04
RES-028	28-5	5541.339	5692.257	2	PHY	0.01
RES-028	28-6	5692.257	5856.529	2	PHY	1.54
RES-028	28-7	5856.529	5983.924	2	POT	0.02
RES-028A	28A-2	5211.516	5374.639	2	PHY	0
RES-028A	28A-3	5374.639	5561.581	2	POT	0.01
RES-028A	28A-4A	5561.581	5794.521	2	PHY	0.01
RES-028A	28A-5	5794.521	5941.47	2	PHY	0.02
RES-028A	28A-6	5941.47	6131.89	2	AA	0.02
RES-028A	28A-7	6131.89	6310.663	2	PHY	0.01
RES-028A	28A-8	6310.663	6486.22	2	PHY	0.02
RES-028A	28A-9	6486.22	6663.714	2	PHY	0.01
RES-028A	28A-10	6663.714	6762.172	2	PHY	0.01
RES-028A	28A-11	6762.172	6827.1	2	PHY	0.01
RES-028B	28B-3A	5174.114	5306.102	2	POT	0
RES-028B	28B-4	5306.102	5444.554	2	PHY	0.01
RES-028B	28B-5	5444.554	5625.492	2	SKRET	0.03
RES-028B	28B-6	5625.492	5779.396	2	PHY	14.2
RES-028B	28B-7	5779.396	5865.682	2	PHY	0.01
RES-028B	28B-8	5865.682	6034.482	2	PHY	0.02
RES-028B	28B-9	6034.482	6204.199	2	PHY	0.02
RES-028B	28B-10	6204.199	6376.017	2	POT	0.01
RES-028B	28B-11	6376.017	6600.919	2	AA	0.03
RES-028B	28B-12	6600.919	6794.488	2	AA	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-028B	28B-13	6794.488	6998.327	2	PHY	0.02
RES-028C	28C-2	5179.101	5245.243	2	POT	0
RES-028C	28C-3	5245.243	5363.353	2	POT	0
RES-028C	28C-4	5363.353	5617.093	2	POT	0.01
RES-028C	28C-5	5617.093	5813.944	2	POT	0.01
RES-028C	28C-6	5813.944	6030.151	2	POT	0.04
RES-028C	28C-7A	6030.151	6246.85	2	AA	0.01
RES-028C	28C-8	6246.85	6445.735	2	PHY	0.01
RES-028C	28C-9	6445.735	6559.81	2	PHY	0.01
RES-028C	28C-10	6559.81	6787.927	2	POT	0.01
RES-028C	28C-11	6787.927	6975.361	2	PHY	0.01
RES-028D	28D-2	5422.9	5650.853	2	POT	0.01
RES-028D	28D-3	5650.853	5798.556	2	PHY	0.01
RES-028D	28D-4A	5798.556	6000.164	2	POT	0.03
RES-028D	28D-5	6000.164	6115.814	2	POT	0.01
RES-028D	28D-6	6115.814	6402.625	2	POT	0.01
RES-028D	28D-7	6402.625	6689.206	2	PHY	0.01
RES-028D	28D-8	6689.206	6827.526	2	PHY	0.01
RES-028F	28F-2	5199.8	5321.7	2	PHY	0.01
RES-028F	28F-3	5321.7	5498.1	2	PHY	0.01
RES-028F	28F-4A	5498.1	5738.1	2	PHY	0.02
RES-028F	28F-5	5738.1	5788	2	PHY	0
RES-028F	28F-6	5788	5803.8	2	PHY	0.02
RES-029	29-3	5028.248	5170.308	1	PHY	0.01
RES-029	29-4	5170.308	5321.522	1	PHY	0.01
RES-029	29-5	5321.522	5419.652	1	POT	0.02
RES-029	29-6	5419.652	5471.161	1	PHY	0.14
RES-029	29-7	5471.161	5665.846	1	POT	0.01
RES-029	29-8A	5665.846	5922.638	2	AA	0.01
RES-029	29-9	5922.638	6198.95	2	POT	0.01
RES-029	29-10	6198.95	6532.644	2	PHY	0
RES-029	29-11	6532.644	6748.95	2	PHY	0.01
RES-029A	29A-4	5345.308	5491.24	2	PHY	0.02
RES-029A	29A-5	5491.24	5694.521	2	PHY	0.01
RES-029A	29A-6A	5694.521	5883.661	2	POT	1.64
RES-029A	29A-7	5883.661	6063.55	2	SKRET	0.01
RES-029A	29A-8	6063.55	6181.66	2	SKRET	0.02
RES-029A	29A-9	6181.66	6354.035	2	PHY	0.01
RES-029A	29A-10	6354.035	6511.516	2	PHY	0.01
RES-029A	29A-11	6511.516	6686.188	2	PHY	0.01
RES-029A	29A-12	6686.188	6856.66	2	PHY	0.01
RES-029A	29A-13	6856.66	7000.492	2	POT	0
RES-029A	29A-14	7000.492	7210.433	2	PHY	0.01
RES-029B	29B-4	5031.168	5142.717	1	POT	0.01
RES-029B	29B-5	5142.717	5259.58	1	PHY	0.01
RES-029B	29B-6	5259.58	5397.769	1	PHY	0.01
RES-029B	29B-7	5397.769	5568.832	1	PHY	0.02
RES-029B	29B-8	5568.832	5727.264	1	POT	0.01
RES-029B	29B-9A	5727.264	5970.801	1	PHY	0.01
RES-029B	29B-10	5970.801	6224.442	1	POT	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-029B	29B-11	6224.442	6459.974	1	PHY	0.01
RES-029B	29B-12	6459.974	6590.354	1	PHY	0.02
RES-029B	29B-13	6590.354	6751.969	1	AA	0
RES-029D	29D-3A	5024.88	5268.65	2	PHY	0.03
RES-029D	29D-4	5268.65	5434	2	SKRET	0.02
RES-029D	29D-5	5434	5501.4	2	SKRET	0.02
RES-029D	29D-6	5501.4	5581.45	2	POT	1.09
RES-029D	29D-7	5581.45	5757.55	2	PHY	0.01
RES-029D	29D-8	5757.55	5868.85	2	POT	0.36
RES-029D	29D-9	5868.85	6077.7	2	PHY	0.02
RES-029D	29D-10	6077.7	6296.4	2	AA	0.02
RES-029D	29D-11	6296.4	6449.2	2	PHY	0.02
RES-029D	29D-12	6449.2	6552.5	2	PHY	0.01
RES-029D	29D-13	6552.5	6709.8	2	POT	0.01
RES-029D	29D-14	6709.8	6869.8	2	PHY	0.02
RES-029D	29D-15	6869.8	6991.5	2	PHY	0.02
RES-029F	29F-04A	5165.88	5395	2	PHY	0
RES-029F	29F-05	5395	5468	2	PHY	0.01
RES-029F	29F-06	5468	5548	2	PHY	0.01
RES-029G	29G-01	5521.1	5604.75	2	PHY	0.03
RES-029G	29G-02A	5604.75	5736.5	2	POT	12.4
RES-029G	29G-03	5736.5	5800.3	2	PHY	0.06
RES-029G	29G-04	5800.3	5920.3	2	PHY	0.07
RES-029G	29G-05	5920.3	6002.7	2	POT	0.01
RES-029G	29G-06	6002.7	6053	2	IA	0.01
RES-029G	29G-07	6053	6138	2	PHY	0.01
RES-029G	29G-08	6138	6259.6	2	PHY	0.02
RES-029G	29G-09	6259.6	6389.15	2	PHY	0.1
RES-029G	29G-10	6389.15	6428	2	POT	0.01
RES-029G	29G-11	6428	6458.25	2	PHY	0.01
RES-029G	29G-12	6458.25	6675.67	2	PHY	0.04
RES-029I	29I-05	5232.47	5388	2	AA	0.03
RES-029I	29I-06	5388	5562	2	PHY	0.04
RES-029I	29I-07	5562	5637.87	2	POT	0.8
RES-029I	29I-08	5637.87	5782.41	2	POT	0.01
RES-029I	29I-09	5782.41	5822.41	2	PHY	0.06
RES-029I	29I-10	5822.41	5911.4	2	POT	0.02
RES-029I	29I-11	5932.4	6045.55	2	PHY	0.02
RES-029I	29I-12	6045.55	6153.55	2	POT	0.01
RES-029I	29I-13	6153.55	6238.1	2	AA	0.04
RES-029I	29I-14	6238.1	6404	2	POT	0.02
RES-029I	29I-15	6404	6483.6	2	PHY	0.01
RES-029K	29K-05	5154.91	5322.12	2	PHY	0.01
RES-029K	29K-06	5322.12	5481.31	2	POT	0
RES-029K	29K-07	5481.31	5599.55	2	PHY	0
RES-029K	29K-08	5599.55	5702.79	2	POT	0.01
RES-029K	29K-09A	5702.79	5822.79	2	POT	0.02
RES-029K	29K-10	5822.79	5974.9	2	POT	0
RES-029K	29K-11	5974.9	6134.9	2	SKRET	0.01
RES-029K	29K-12	6134.9	6261.8	2	POT	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-029K	29K-13	6261.8	6329	2	PHY	0.01
RES-029K	29K-14	6329	6481.05	2	AA	0.01
RES-029K	29K-15	6481.05	6677	2	PHY	0.02
RES-029M	29M-02	5041	5182.15	1	POT	0.01
RES-029M	29M-03	5182.15	5289.55	1	PHY	0.01
RES-029M	29M-04	5289.55	5344.85	1	POT	0.02
RES-029M	29M-05	5344.85	5388.25	1	PHY	0.01
RES-029N	29N-02	5036	5180.5	1	POT	0.03
RES-029N	29N-03A	5180.5	5322	1	PHY	0
RES-029N	29N-04	5322	5354.4	1	PHY	0.02
RES-029N	29N-05	5354.4	5453.62	1	ARG	0
RES-029N	29N-06	5453.62	5521.28	1	PHY	0
RES-029N	29N-07	5521.28	5547.65	1	POT	0.03
RES-029N	29N-08	5547.65	5663.12	1	PHY	0.01
RES-029Q	29Q-02	4976	5059.44	1	AA	0.01
RES-029Q	29Q-03	5059.44	5145.45	1	PHY	0.02
RES-029Q	29Q-04	5145.45	5223.35	1	PHY	0
RES-029Q	29Q-05A	5223.35	5364.55	1	AA	0.02
RES-029Q	29Q-06	5364.55	5418.1	1	PHY	0
RES-029Q	29Q-07	5418.1	5453.7	1	PHY	0.06
RES-029Q	29Q-08	5453.7	5481.3	1	PHY	0.02
RES-029Q	29Q-09	5481.3	5610.23	1	PHY	0.01
RES-031	31-3	5251.181	5457.677	3	PHY	0.02
RES-031	31-4	5457.677	5582.349	2	ARG	0.01
RES-031	31-5	5582.349	5635.991	2	AA	0.03
RES-031	31-6	5635.991	5752.953	2	ARG	6.05
RES-031	31-7	5752.953	5892.388	2	AA	0.02
RES-031	31-8	5892.388	6145.013	2	PHY	0.01
RES-031	31-9	6145.013	6395.407	2	POT	0.02
RES-031	31-10A	6395.407	6664.304	2	PHY	0.02
RES-031	31-11	6664.304	6924.902	2	PHY	0.01
RES-031	31-12	6924.902	7161.122	2	AA	0.03
RES-031A	31A-3	5289.37	5455.217	3	PHY	0.01
RES-031A	31A-4A	5455.217	5604.659	3	AA	0.01
RES-031A	31A-5	5604.659	5879.757	3	POT	0.01
RES-031A	31A-6	5879.757	5965.059	3	AA	0.01
RES-031A	31A-7	5965.059	6222.014	3	PHY	0.02
RES-031A	31A-8	6222.014	6416.273	3	SKN	0.02
RES-031A	31A-9	6416.273	6625.984	3	PHY	0.01
RES-031A	31A-10	6625.984	6701.608	2	POT	0
RES-031A	31A-11	6701.608	6896.686	2	SKRET	0.02
RES-031B	31B-3	5480.7	5582	2	AA	0.01
RES-031B	31B-4	5582	5782	2	AA	0.01
RES-031B	31B-5	5782	5864.7	2	PHY	0.01
RES-031B	31B-6	5864.7	6104.7	2	PHY	0.02
RES-031B	31B-7	6104.7	6344.7	2	PHY	0.01
RES-031B	31B-8	6344.7	6544.7	2	SKRET	0.01
RES-031B	31B-9	6544.7	6813.2	2	POT	0.07
RES-031B	31B-10	6813.2	6976.2	2	PHY	0.02
RES-031E	3.10E-01	5477.85	5593.35	3	PHY	0.05

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-031E	3.10E-02	5593.35	5672.25	3	PHY	0.07
RES-031E	3.10E-03	5672.25	5752.25	3	PHY	0.02
RES-031E	3.10E-04	5752.25	5872.25	2	PHY	0.01
RES-031E	3.10E-05	5872.25	5999.2	2	POT	0.05
RES-031E	3.10E-06	5999.2	6156.44	2	POT	0.01
RES-031E	31E-08A	6156.44	6285.25	2	AA	0
RES-031E	3.10E-08	6285.25	6398	2	PHY	0.01
RES-031E	3.10E-09	6398	6530.5	2	PHY	0.03
RES-031E	3.10E-10	6530.5	6649.4	2	PHY	0.01
RES-031E	3.10E-11	6649.4	6795.4	2	PHY	1.26
RES-031E	3.10E-12	6795.4	6902.1	2	PHY	0.01
RES-031F	31F-05	5288.9	5470.5	3	POT	0.01
RES-031F	31F-06	5470.5	5612.25	3	PHY	0.01
RES-031F	31F-07A	5612.25	5759.5	3	PHY	0.01
RES-031F	31F-08	5759.5	5854.5	3	PHY	0.02
RES-031F	31F-09	5854.5	5954.8	3	POT	0
RES-031F	31F-10	5954.8	6075.22	3	PHY	0.01
RES-031F	31F-11	6075.22	6235.22	3	PHY	0.01
RES-031F	31F-12	6235.22	6419.08	3	POT	0.02
RES-031F	31F-13	6419.08	6599.12	3	POT	0.02
RES-031F	31F-14	6599.12	6783.55	3	AA	0
RES-031F	31F-15	6783.55	6966.6	3	PHY	0
RES-031G	31G-05	5316	5382.05	3	POT	0
RES-031G	31G-06A	5382.05	5518.97	3	PHY	0.01
RES-031G	31G-07	5518.97	5598.97	3	POT	0.01
RES-031G	31G-08	5598.97	5767.64	3	PHY	0
RES-031G	31G-09	5767.64	5806.11	3	PHY	0.45
RES-031G	31G-10	5806.11	5913.5	3	PHY	0.01
RES-031G	31G-11	5913.5	6073.5	3	PHY	0.01
RES-031G	31G-12	6073.5	6233.5	3	PHY	0.01
RES-031G	31G-13	6233.5	6422	3	PHY	0.01
RES-031G	31G-14	6422	6598	3	PHY	0.01
RES-031G	31G-15	6598	6760.6	2	AA	0.01
RES-031G	31G-16	6760.6	6920.6	2	PHY	0
RES-031G	31G-17	6920.6	7068	2	POT	0
RES-031G	31G-18	7068	7099	2	PHY	0.03
RES-031I	31I-03	5515.03	5635.03	3	POT	0
RES-031I	31I-04	5635.03	5755.17	3	PHY	0.01
RES-031I	31I-05	5755.17	5875.17	3	AA	0.01
RES-031I	31I-06	5875.17	5989	3	PHY	0.01
RES-031I	31I-07A	5989	6131	3	POT	0.01
RES-031I	31I-08	6131	6254.88	4	PHY	0.02
RES-031I	31I-09	6254.88	6415.7	4	POT	0.01
RES-031I	31I-10	6415.7	6532.8	4	PHY	0.04
RES-031I	31I-11	6532.8	6708.82	4	PHY	0
RES-031I	31I-12	6708.82	6838.15	4	PHY	0.82
RES-031I	31I-13	6838.15	7037.37	4	PHY	0.36
RES-031J	31J-04	5270	5390	3	PHY	0.01
RES-031J	31J-05	5390	5510	3	PHY	0.02
RES-031J	31J-06	5510	5630	3	POT	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-031J	31J-07A	5630	5750	3	PHY	0.01
RES-031J	31J-08	5750	5862.3	3	PHY	0
RES-031J	31J-09	5862.3	5962.1	3	PHY	0
RES-031J	31J-10	5962.1	6080.25	3	PHY	0.01
RES-031J	31J-11	6080.25	6280.75	3	PHY	0.01
RES-031J	31J-12	6280.75	6467	3	PHY	0.01
RES-031J	31J-13	6467	6557	3	PHY	0.01
RES-031J	31J-14	6557	6679	3	PHY	0.01
RES-031J	31J-15	6679	6839	3	PHY	0
RES-031K	31K-01	5455.35	5575.35	3	PHY	0
RES-031K	31K-02	5575.35	5735.35	3	PHY	0
RES-031K	31K-03	5735.35	5871.42	3	IA	0.01
RES-031K	31K-04	5871.42	5988	3	POT	0.02
RES-031K	31K-05	5988	6148	3	PHY	0.04
RES-031K	31K-06	6148	6268	3	PHY	0.02
RES-031K	31K-07	6268	6457	3	SKN	0.01
RES-031K	31K-08	6457	6522	3	PHY	0.02
RES-031K	31K-09A	6522	6680.05	3	POT	0
RES-031K	31K-10	6680.05	6796	3	PHY	0
RES-031K	31K-11	6796	6912.52	3	PHY	0.01
RES-031L	31L-02	5266.35	5478.22	3	POT	0.01
RES-031L	31L-03	5478.22	5599.9	3	POT	0.02
RES-031L	31L-04	5599.9	5764	3	PHY	0.01
RES-031L	31L-05	5764	5891	3	PHY	0.01
RES-031L	31L-06	5891	6039	3	POT	0.01
RES-031L	31L-07	6039	6128.6	3	PHY	0.01
RES-031L	31L-08	6128.6	6208.6	3	POT	0.02
RES-031L	31L-09	6208.6	6360.43	3	PHY	0.02
RES-031L	31L-10	6360.43	6490	3	PHY	0
RES-031L	31L-11	6490	6680.25	3	PHY	0
RES-031L	31L-12	6680.25	6758.5	3	PHY	0.01
RES-031L	31L-13	6758.5	6843	3	PHY	0.03
RES-031L	31L-14A	6843	7000	3	POT	0.53
RES-031L	31L-15	7000	7033.18	3	SKRET	0.11
RES-031L	31L-16	7033.18	7096.65	3	AA	0.13
RES-031L	31L-17	7096.65	7221	3	PHY	0.43
RES-031M	31M-04	5377	5598.12	3	AA	0.01
RES-031M	31M-05	5598.12	5734.32	3	PHY	0
RES-031M	31M-06	5734.32	5891.8	3	PHY	0
RES-031M	31M-07	5891.8	6058.36	3	POT	0.01
RES-031M	31M-08	6058.36	6227.65	3	PHY	0
RES-031M	31M-09	6227.65	6421.42	3	PHY	0.01
RES-031M	31M-10	6421.42	6551.74	3	POT	0
RES-031M	31M-11	6551.74	6735.23	3	POT	0
RES-031M	31M-12	6735.23	6855.37	3	PHY	0.02
RES-031M	31M-13A	6855.37	7055.37	3	POT	0.1
RES-031M	31M-14	7055.37	7201	3	AA	0.41
RES-031M	31M-15	7201	7345.31	3	POT	0.27
RES-032	32-07	5850.558	6154.692	4	SKRET	0.09
RES-032	32-08	6154.692	6329.396	4	AA	0.02

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-032	32-09	6329.396	6572.966	4	AA	0.01
RES-032	32-10	6572.966	6851.411	4	PHY	0.05
RES-032	32-11	6851.411	7103.314	4	POT	0.01
RES-034	34-02	5589.21	5703.4	2	PHY	0.01
RES-034	34-03	5703.4	5783.4	2	POT	0.03
RES-034	34-04	5783.4	5863.4	2	PHY	0.02
RES-034	34-05	5863.4	5937.68	2	SKRET	0.05
RES-034	34-06	5937.68	6093.25	2	AA	0.01
RES-034	34-07	6093.25	6253.25	2	IA	0.01
RES-034	34-08	6253.25	6361.7	2	PHY	0.01
RES-034	34-09	6361.7	6520.4	2	POT	0.01
RES-034	34-10	6520.4	6676	2	PHY	0.02
RES-034	34-11A	6676	6855	2	PHY	0.02
RES-034	34-12	6855	7006.1	2	POT	0.01
RES-034	34-13	7006.1	7125.3	2	POT	0.01
RES-034	34-14	7125.3	7218	2	POT	0.01
RES-034B	34B-3	5693.95	5823	2	PHY	0.01
RES-034B	34B-4	5823	5918	2	AA	0.01
RES-034B	34B-5	5918	6032.45	2	POT	0.02
RES-034B	34B-6	6032.45	6152.45	2	POT	0.01
RES-034B	34B-7A	6152.45	6216	2	POT	0.02
RES-034B	34B-8	6216	6289.8	2	PHY	0.01
RES-034B	34B-9	6289.8	6360	2	PHY	0.01
RES-034B	34B-10	6360	6498.8	2	PHY	0.01
RES-034B	34B-11	6498.8	6552.95	2	PHY	0.01
RES-034B	34B-12	6552.95	6669	2	POT	0.02
RES-034B	34B-13	6669	6773.04	2	PHY	0
RES-034C	34C-3	5574.6	5660.74	2	PHY	0.01
RES-034C	34C-4	5660.74	5740.74	2	PHY	0.02
RES-034C	34C-5	5740.74	5847.87	2	PHY	0.01
RES-034C	34C-6	5847.87	5911.95	2	PHY	0.02
RES-034C	34C-7	5911.95	5999.3	2	PHY	0.01
RES-034C	34C-8	5999.3	6217.9	2	PHY	0.01
RES-034C	34C-9	6217.9	6445.47	2	SKRET	0.02
RES-034C	34C-10	6445.47	6507.9	2	PHY	0.02
RES-034C	34C-11	6507.9	6634.25	2	POT	0.01
RES-034C	34C-12	6634.25	6809.3	2	POT	0.02
RES-034C	34C-13A	6809.3	6990	2	POT	0.03
RES-034C	34C-14	6990	7107	2	PHY	0.01
RES-034D	34D-02	5553.2	5694	2	POT	0.01
RES-034D	34D-03	5694	5774	2	PHY	0.02
RES-034D	34D-04	5774	5894	2	AA	0.02
RES-034D	34D-05	5894	5974	2	PHY	0.01
RES-034D	34D-06	5974	6094	2	PHY	0.02
RES-034D	34D-07	6094	6254	2	IA	0.01
RES-034D	34D-08	6254	6410.22	2	PHY	0.01
RES-034D	34D-09	6410.22	6570.22	2	POT	0.02
RES-034D	34D-10	6570.22	6713.3	2	AA	0.01
RES-034D	34D-11	6713.3	6873.3	2	AA	0.01
RES-034D	34D-12A	6873.3	7037.25	2	PHY	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-034D	34D-13	7037.25	7113.4	2	AA	0.02
RES-035A	35A-09	5469.42	5724.8	1	POT	0.01
RES-035B	35B-06	5305.45	5389	1	POT	0.01
RES-035B	35B-07	5389	5513	1	PHY	0
RES-035D	35D-03	5207	5285	1	PHY	0.02
RES-035D	35D-04	5285	5365	1	POT	0.02
RES-035D	35D-05	5365	5440.25	1	POT	0.01
RES-035D	35D-06	5440.25	5517.25	1	PHY	0.05
RES-035D	35D-07	5517.25	5637	1	POT	0.01
RES-035D	35D-08	5637	5748.24	1	POT	0.02
RES-035D	35D-09	5748.24	5805.33	1	AA	0.01
RES-035D	35D-10A	5805.33	5882.08	1	PRO	4.04
RES-035E	35E-01	5134.4	5203.4	1	PHY	0.02
RES-035E	35E-02	5203.4	5307	1	PHY	0.02
RES-035E	35E-03	5307	5377.6	1	PHY	0.04
RES-035E	35E-04	5377.6	5480.8	1	PHY	0.03
RES-035E	35E-05	5480.8	5600.8	1	AA	0.02
RES-035E	35E-06	5600.8	5672.5	1	PHY	0.03
RES-035E	35E-07	5672.5	5769.1	1	PHY	11.6
RES-035E	35E-08	5769.1	5876.1	1	PHY	0.05
RES-035E	35E-09	5876.1	5962.3	1	PHY	0.01
RES-035E	35E-10A	5962.3	6111.8	1	PHY	0.01
RES-035E	35E-11	6111.8	6278.85	1	PHY	0.02
RES-035E	35E-12	6278.85	6415	1	PHY	0.04
RES-035E	35E-13	6415	6552.28	1	PHY	0.02
RES-035E	35E-14	6552.28	6596	1	POT	0.03
RES-035E	35E-15	6596	6708	1	PHY	0.01
RES-035E	35E-16	6708	6848.48	1	AA	0.01
RES-037	37-4	5411.19	5542.4	2	SKRET	0.01
RES-037	37-5	5542.4	5641.47	2	PHY	0.01
RES-037	37-6	5641.47	5765.67	2	PHY	0.01
RES-037	37-7	5765.67	5918.05	2	PHY	0.01
RES-037	37-8A	5918.05	6021	2	PHY	0.01
RES-037	37-9	6021	6109.6	2	SKRET	0.01
RES-037	37-10	6109.6	6207	2	PHY	0.02
RES-037	37-11	6207	6241.2	2	PHY	0.01
RES-037	37-12	6241.2	6361.2	2	PHY	0.01
RES-037A	37A-03	5407.1	5500.5	2	POT	0.02
RES-037A	37A-04	5500.5	5686.68	2	ARG	0.02
RES-037A	37A-05	5686.68	5748.65	2	PHY	0.01
RES-037A	37A-06	5748.65	5868.65	2	AA	0.01
RES-037A	37A-07	5868.65	6028.65	2	POT	0.01
RES-037A	37A-08	6028.65	6177	2	POT	0.01
RES-037A	37A-09	6177	6341	2	AA	0.01
RES-037A	37A-10	6341	6492.2	2	PHY	0.01
RES-037A	37A-11	6492.2	6630.35	2	PHY	0.01
RES-037A	37A-12	6630.35	6686.6	2	PHY	0.01
RES-037A	37A-13	6686.6	6840.8	2	PHY	0
RES-037A	37A-14	6840.8	6960.8	2	PHY	0.01
RES-037A	37A-15	6960.8	7113.3	2	PHY	0.01

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-037B	37B-02A	5329.59	5484.62	2	POT	0.01
RES-037B	37B-03	5484.62	5542	2	PHY	0.01
RES-037B	37B-04	5542	5622	2	PHY	0.02
RES-037B	37B-05	5622	5718.77	2	POT	0.02
RES-037B	37B-06	5718.77	5798.77	2	POT	0.02
RES-037B	37B-07	5798.77	5918.77	2	PHY	0.02
RES-037B	37B-08	5918.77	6035.4	2	PHY	0.03
RES-037B	37B-09	6035.4	6198.71	2	POT	0.03
RES-037B	37B-10	6198.71	6380	2	POT	0.01
RES-037B	37B-11	6380	6562.4	2	POT	0.01
RES-037B	37B-12	6562.4	6638.84	2	PHY	0.01
RES-037C	37C-01	5481.19	5601.19	2	PHY	0.02
RES-037C	37C-02	5601.19	5681.19	2	ARG	0.01
RES-037C	37C-03	5681.19	5801.19	2	PHY	0.01
RES-037C	37C-04	5801.19	5881.19	2	PHY	0.01
RES-037C	37C-05	5881.19	5961.19	2	PHY	0
RES-037C	37C-06	5961.19	6041.19	2	PHY	0.04
RES-037C	37C-07A	6041.19	6161.19	2	PHY	0.01
RES-037C	37C-08	6161.19	6277.87	2	PHY	0.04
RES-037C	37C-09	6277.87	6357.87	2	PHY	0.01
RES-037C	37C-10	6357.87	6437.87	2	PHY	0.01
RES-037C	37C-11	6437.87	6517.87	2	POT	0.02
RES-037C	37C-12	6517.87	6616.43	2	PHY	0.02
RES-037C	37C-13	6616.43	6666.43	2	PHY	0.01
RES-037C	37C-14	6666.43	6817.5	2	PHY	0.01
RES-037D	37D-01	5273	5351	2	PHY	0.02
RES-037D	37D-02	5351	5471	2	AA	0.03
RES-037D	37D-03	5471	5550	2	PHY	0.01
RES-037F	37F-03	5306.8	5415	2	PHY	0.02
RES-037F	37F-04	5415	5591	2	PHY	0.04
RES-037F	37F-05	5591	5775.55	2	PHY	0.03
RES-037F	37F-06	5775.55	5966	2	PHY	0.02
RES-037F	37F-07A	5966	6142.95	2	HFLRET	0.02
RES-037F	37F-08	6142.95	6277.4	2	PHY	0.03
RES-037F	37F-09	6277.4	6370	2	PHY	0.02
RES-037F	37F-10	6370	6530	2	AA	0.01
RES-037F	37F-11	6530	6742.8	2	PHY	0.01
RES-037F	37F-12	6742.8	6798.65	2	PHY	0.01
RES-037F	37F-13	6798.65	6890.98	2	AA	0.05
RES-037H	37H-04	5524	5584.8	2	PHY	0.01
RES-037H	37H-05	5584.8	5704	2	PHY	0
RES-037H	37H-06	5704	5828.83	2	AA	0
RES-037H	37H-07	5828.83	5953.1	2	PHY	0.01
RES-037H	37H-08	5953.1	6142.7	2	PHY	0.01
RES-037H	37H-19	7339.3	7499.3	1	POT	0.07
RES-037I	37I-03	5398.5	5509	2	PHY	0.02
RES-037I	37I-04	5509	5675	2	POT	0.06
RES-037I	37I-05	5675	5834.25	2	POT	0.01
RES-037I	37I-06	5834.25	5954	2	POT	10.9
RES-037I	37I-07A	5954	6088.7	2	PHY	14.2

**ATTACHMENT 1:** Tremolite abundance in Resolution ore composites using QEMSCAN

Borehole Identifier	Sample Identifier	Composite From (feet)	Composite To (feet)	Panel <sup>1</sup>	Alteration Type <sup>2</sup>	Tremolite (wt.%) <sup>3</sup>
RES-037I	37I-08	6088.7	6190.47	2	SKRET	0.3
RES-037I	37I-09	6190.47	6275.5	2	PHY	1.4
RES-037I	37I-10	6275.5	6430.3	2	PHY	0.04
RES-037I	37I-11	6430.3	6597.5	2	SKRET	0
RES-037I	37I-12	6597.5	6774.5	2	AA	0.05
RES-038	38-01	5160.07	5240	2	PHY	0.01
RES-038	38-02	5240	5286.37	2	POT	0.01
RES-038	38-03	5286.37	5401.31	2	POT	0
RES-038	38-04	5401.31	5497	2	POT	0
RES-038	38-05	5497	5574.1	2	PHY	0.01
RES-038	38-06	5574.1	5693.35	2	PHY	0.02
RES-038	38-07	5693.35	5778.72	2	PHY	0.08
RES-038	38-08A	5778.72	5853	2	POT	0.03
RES-038	38-09	5853	5907.5	2	SKRET	0.01
RES-038A	38A-01	5682.9	5762.9	2	PHY	0.03
RES-038A	38A-02	5762.9	5850.52	2	PHY	0.03
RES-038A	38A-03A	5850.52	5973.4	2	SKRET	0.02
RES-038A	38A-04	5973.4	6068.65	2	PHY	0.04
RES-038A	38A-05	6068.65	6153	2	PHY	0.01
RES-038A	38A-06	6153	6300.6	2	PHY	0.01
RES-038A	38A-07	6300.6	6508.6	2	PHY	0.04
RES-038A	38A-08	6508.6	6627	2	PHY	0.01
RES-038B	38B-02A	5409.37	5569.37	2	AA	0.01
RES-038B	38B-03	5569.37	5716.45	2	PHY	0.01
RES-038B	38B-04	5716.45	5858.55	2	POT	0.01
RES-038B	38B-05	5858.55	5989.72	2	SKRET	0.02
RES-038B	38B-06	5989.72	6149.72	2	AA	0.03
RES-038B	38B-07	6149.72	6309.72	2	PHY	0.04
RES-038B	38B-08	6309.72	6450.35	2	AA	0.05
RES-038C	38C-01	5405.62	5530.27	2	PHY	0.01
RES-038C	38C-02	5530.27	5578.05	2	POT	0.01
RES-038C	38C-03	5578.05	5609.86	2	POT	0.01
RES-038C	38C-04	5609.86	5706.55	2	PHY	0.01
RES-038C	38C-05	5706.55	5745.84	2	PHY	0.01
RES-038C	38C-06	5745.84	5865.7	2	PHY	0.02
RES-038C	38C-07	5865.71	6046.75	2	AA	0.02
RES-038C	38C-08A	6046.75	6166.75	2	POT	0.11
RES-038C	38C-09	6166.75	6310.4	6	PHY	0.01
RES-038C	38C-10	6310.4	6430.4	6	AA	0.04
RES-038C	38C-11	6430.4	6576.5	6	PHY	0.03
RES-038C	38C-12	6576.5	6710.77	6	PHY	0.01
RES-038C	38C-13	6710.77	6830.77	6	PHY	0.01

<sup>1</sup>Panel = Mine panel as defined in the General Plan of Operations (RCM, 2014)

<sup>2</sup>Alteration type: AA = advanced argillic; ARG = argillic; HFLRET = Retrograde hornfels;

IA = Intermediate argillic; PHY = Phyllitic; POT = Potassic; PRO = Propylitic; SKN = Skarn;  
SKRET = Retrograde skarn

<sup>3</sup>wt.% = weight percent

**ATTACHMENT 2**

**RESOLUTION DEVELOPMENT ROCK  
BULK ASBESTOS LABORATORY REPORTS**

November 28, 2006

Report to:

Casey McKeon  
Resolution Copper Mining, LLC  
47206 N. Magma Shaft #9 Rd.  
Superior, AZ 85273

Bill to:

Crystal Chipp  
Resolution Copper Mining, LLC  
P.O. Box 550  
Magna, UT 84044-0550

cc: Mimi Hart, Mark Harris

Project ID: Abestos Analysis  
ACZ Project ID: L60120

Casey McKeon:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 07, 2006. This project has been assigned to ACZ's project number, L60120. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan, version 11.0. The enclosed results relate only to the samples received under L60120. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after December 28, 2006. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than \$10/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical reports for five years.

If you have any questions or other needs, please contact your Project Manager.



12/Dec/06

Scott Habermehl, Project Manager, has reviewed and approved this report in its entirety.





2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**CHAIN of  
CUSTODY****Report to:**

Name: Scott Habermehl
Company: ACZ LABS, INC.
E-mail: scotth@acz.com

Address: 2773 DOWNHILL DR
STEAMBOAT SPGS, CO 80487
Telephone: (970) 879-6590

**Copy of Report to:**

Name: N/A
Company:

E-mail:
Telephone:

**Invoice to:**

Name: YVONNE BAKER
Company: ACZ LAS, INC.
E-mail: yb@acz.com

Address: 2773 DOWNHILL DR
STEAMBOAT SPGS, CO 80487
Telephone: (970) 870-6590

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES   
NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

**PROJECT INFORMATION****ANALYSES REQUESTED (attach list or use quote number)**

Quote #:

Project/PO #:

Shipping Co.:

Tracking #:

Reporting state for compliance testing:

Are any samples NRC licensable material?

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	ASBESTOS								
L57712-04	7/17/2006 00:00	SO	1	✓								
L57712-08	7/17/2006 00:00	SO	1	✓								
L57712-14	7/17/2006 00:00	SO	1	✓								
L57712-18	7/17/2006 00:00	SO	1	✓								
L57713-05	7/17/2006 00:00	SO	1	✓								
L57713-09	7/17/2006 00:00	SO	1	✓								
L57713-12	7/17/2006 00:00	SO	1	✓								
L57713-13	7/17/2006 00:00	SO	1	✓								
L57713-14	7/17/2006 00:00	SO	1	✓								
L57713-17	7/17/2006 00:00	SO	1	✓								

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

**REMARKS**

SUBCONTRACTED - DCM, 12421 W. 49th Ave., Unit #6, Wheatridge, CO 80033 - Attn: Ron Schott  
(303) 463-8270

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	Page
Laura Z. Graham	11/16/2006 1600			Of



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## CHAIN OF CUSTODY

### Report to:

Name: Scott Habermehl	Address: 2773 DOWNHILL DR
Company: ACZ LABS, INC.	STEAMBOAT SPRGS, CO 80487
E-mail: scott@acz.com	Telephone: (970) 879-6590

### Copy of Report to:

Name: N/A	E-mail:
Company:	Telephone:

### Invoice to:

Name: YVONNE BAKER	Address: 2773 DOWNHILL DR
Company: ACZ LAS, INC.	STEAMBOAT SPRGS, CO 80487
E-mail: yb@acz.com	Telephone: (970) 870-6590

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES   
NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

### PROJECT INFORMATION

### ANALYSES REQUESTED (attach list or use quote number)

Quote #:	# of Containers	ASBESTOS										
Project/PO #:												
Shipping Co.:												
Tracking #:												
Reporting state for compliance testing:												
Are any samples NRC licensable material?												
SAMPLE IDENTIFICATION	DATE:TIME	Matrix										
L57713-18	7/17/2006 00:00	SO	1	✓								
L57713-19	7/17/2006 00:00	SO	1	✓								
L57714-01	7/17/2006 00:00	SO	1	✓								
L57714-02	7/17/2006 00:00	SO	1	✓								
L57714-03	7/17/2006 00:00	SO	1	✓								
L57714-04	7/17/2006 00:00	SO	1	✓								
L57714-05	7/17/2006 00:00	SO	1	✓								
L57714-06	7/17/2006 00:00	SO	1	✓								
L57714-07	7/17/2006 00:00	SO	1	✓								
L57714-08	7/17/2006 00:00	SO	1	✓								

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

### REMARKS

SUBCONTRACTED - DCM, 12421 W. 49th Ave., Unit #6, Wheatridge, CO 80033 - Attn: Ron Schott (303) 463-8270

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	Page
Laura Z. Graham	11/16/2006 1600			



# ACZ Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

## CHAIN of CUSTODY

### Report to:

Name: Scott Habermehl
Company: ACZ LABS, INC.
E-mail: scott@acz.com

Address: 2773 DOWNHILL DR
STEAMBOAT SPGS, CO 80487
Telephone: (970) 879-6590

### Copy of Report to:

Name: N/A
Company:

E-mail:
Telephone:

### Invoice to:

Name: YVONNE BAKER
Company: ACZ LAS, INC.
E-mail: yb@acz.com

Address: 2773 DOWNHILL DR
STEAMBOAT SPGS, CO 80487
Telephone: (970) 870-6590

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES   
NO

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

### PROJECT INFORMATION

### ANALYSES REQUESTED (attach list or use quote number)

Quote #:
Project/PO #:
Shipping Co.:
Tracking #:
Reporting state for compliance testing:
Are any samples NRC licensable material?

### # of Containers

### ASBESTOS

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	ASBESTOS									
L57714-09	7/17/2006 00:00	SO	1	✓									
L57714-10	7/17/2006 00:00	SO	1	✓									
L57714-12	7/17/2006 00:00	SO	1	✓									
L57714-13	7/17/2006 00:00	SO	1	✓									
L57714-14	7/17/2006 00:00	SO	1	✓									
L57714-15	7/17/2006 00:00	SO	1	✓									
L57714-16	7/17/2006 00:00	SO	1	✓									
L57714-18	7/17/2006 00:00	SO	1	✓									
L57714-19	7/17/2006 00:00	SO	1	✓									
L57714-20	7/17/2006 00:00	SO	1	✓									

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

### REMARKS

SUBCONTRACTED - DCM, 12421 W. 49th Ave., Unit #6, Wheatridge, CO 80033 - Attn: Ron Schott  
(303) 463-8270

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	Page
Laura Z. Graham	11/16/2006 1600			Of



2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

**CHAIN of  
CUSTODY**

**Report to:**

Name: Scott Habermehl	Address: 2773 DOWNHILL DR.
Company: ACZ LABS, INC.	STEAMBOAT SPRGS, CO 80487
E-mail: scott@acz.com	Telephone: (970) 879-6590

**Copy of Report to:**

Name: N/A	E-mail:
Company:	Telephone:

**Invoice to:**

Name: YVONNE BAKER	Address: 2773 DOWNHILL DR
Company: ACZ LAS, INC.	STEAMBOAT SPRGS, CO 80487
E-mail: yb@acz.com	Telephone: (970) 870-6590
If correct, check here: <input checked="" type="checkbox"/>	

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

## PROJECT INFORMATION

**ANALYSES REQUESTED** (attach list or use quote number)

Matrix SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

**REMARKS**

SUBCONTRACTED - DCM, 12421 W. 49th Ave., Unit #6, Wheatridge, CO 80033 - Attn: Ron Schott  
(303) 463-8270

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME	Page Of
Laura Z. Graham	11/16/2006 1600			

BULK ASBESTOS TEST REPORT  
PAGE 1 OF 2

CLIENT:  
ACZ LABORATORIES, INC.  
2773 DOWNHILL DRIVE  
STEAMBOAT SPRINGS, CO 80487

ANALYSIS DATE: 11-20-06  
REPORTING DATE: 11-22-06  
RECEIPT DATE: 11-17-06  
CLIENT JOB NO.: NONE GIVEN  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: ACZ20

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE				TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
				PERCENT	ASBESTOS TYPE	RANGE	%				
-1	L57712-04	7-17-06	A. PINK ROCK	100.0%				ND	ND	0.0	100.0
-2	L57712-08	7-17-06	A. PINK ROCK	100.0%				ND	ND	0.0	100.0
-3	L57712-14	7-17-06	A. TAN ROCK	100.0%				ND	ND		
-4	L57712-18	7-17-06	A. TAN ROCK	100.0%				ND	ND	0.0	100.0
-5	L57713-05	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-6	L57713-09	7-17-06	A. TAN ROCK	100.0%				ND	ND	0.0	100.0
-7	L57713-12	7-17-06	A. GREEN ROCK	100.0%				ND	ND		
-8	L57713-13	7-17-06	A. MULTICOLORED ROCK	100.0%				ND	ND		
-9	L57713-14	7-17-06	A. MULTICOLORED ROCK	100.0%				ND	ND	1.0	99.0
-10	L57713-17	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0

FOR CALCULATION PURPOSES, TRACE (TR) IS ASSUMED TO BE 0.5%.

(1) - INSEPARABLE LAYERS

ND - NONE DETECTED

OTHER FIBROUS CONSTITUENTS WERE IDENTIFIED AS WOLLASTONITE GROUP MINERALS.

**DCM SCIENCE LABORATORY, INC.**  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

DCM Project No.: AC220

### Bulk Sample Analysis

#### BULK SAMPLE ANALYSIS PROCEDURES

DCM Science Laboratory, Inc. analyzes bulk asbestos samples following procedures developed by the McCrone Research Institute and in compliance with guidelines established by the Environmental Protection Agency (EPA-600/R-93/116, July, 1993).

Bulk samples are prepared for analysis using a 10X-80X stereo microscope in a hepa filter hood which provides a contamination-free environment. The sample is then analyzed by polarized light microscopy (PLM) at 100X. When a sample consists of more than one layer, each layer is prepared and analyzed separately. Fiber and matrix materials are identified by the characterization of optical properties including color and pleochroism, form, cleavage, relief, birefringence, extinction, orientation, twinning, interference figure and other distinguishing features. Dispersion staining is also used to further aid in mineral identification. All percentages of asbestos, other fibers and non-fibrous constituents are calculated from the values obtained from the stereo and PLM microscopes analysis. In-house and NIST standards as well as a chart prepared by R.D. Terry and G.V. Chilinger for "The Journal of Sedimentary Petrology", (Volume 24, pp. 229-234, 1955) provide a guide for estimating percentages. All samples are archived for six months unless other arrangements are made by the client.

#### ACCREDITATION:

DCMSL is accredited by NVLAP (since April 1, 1989). DCMSL complies with NVLAP requirements unless otherwise noted.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim endorsement by NVLAP or any agency of the U.S. Government.

This test report relates only to the items tested. This report may not be reproduced except in full, without the written approval of the laboratory. The analysis was performed by:



John Silverman, Analyst  
**Ron Schott**  
Laboratory Director



Ron Schott, Analyst  
**11-20-06**  
Date

**NVLAP**  
NVLAP Code 101258

BULK ASBESTOS TEST REPORT  
PAGE 1 OF 2

CLIENT:  
ACZ LABORATORIES, INC.  
2773 DOWNHILL DRIVE  
STEAMBOAT SPRINGS, CO 80487

ANALYSIS DATE: 11-20-06  
REPORTING DATE: 11-22-06  
RECEIPT DATE: 11-17-06  
CLIENT JOB NO.: NONE GIVEN  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: ACZ21

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	% IN SAMPLE	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-1	L57713-18	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-2	L57713-19	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-3	L57714-01	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-4	L57714-02	7-17-06	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[1-5]	4.0	ND	ND	0.0	100.0
-5	L57714-03	7-17-06	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[TR]	0.5	ND	ND	96.0	100.0
-6	L57714-04	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-7	L57714-05	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-8	L57714-06	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-9	L57714-07	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0
-10	L57714-08	7-17-06	A. GREY ROCK	100.0%				ND	ND	0.0	100.0

FOR CALCULATION PURPOSES, TRACE (TR) IS ASSUMED TO BE 0.5%.

(1) - INSEPARABLE LAYERS

ND - NONE DETECTED

**DCM SCIENCE LABORATORY, INC.**  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

DCM Project No.: AC221

### Bulk Sample Analysis

#### BULK SAMPLE ANALYSIS PROCEDURES

DCM Science Laboratory, Inc. analyzes bulk asbestos samples following procedures developed by the McCrone Research Institute and in compliance with guidelines established by the Environmental Protection Agency (EPA-600/R-93/116, July, 1993).

Bulk samples are prepared for analysis using a 10X-80X stereo microscope in a hepa filter hood which provides a contamination-free environment. The sample is then analyzed by polarized light microscopy (PLM) at 100X. When a sample consists of more than one layer, each layer is prepared and analyzed separately. Fiber and matrix materials are identified by the characterization of optical properties including color and pleochroism, form, cleavage, relief, birefringence, extinction, orientation, twinning, interference figure and other distinguishing features. Dispersion staining is also used to further aid in mineral identification. All percentages of asbestos, other fibers and non-fibrous constituents are calculated from the values obtained from the stereo and PLM microscopes analysis. In-house and NIST standards as well as a chart prepared by R.D. Terry and G.V. Chilinger for "The Journal of Sedimentary Petrology", (Volume 24, pp. 229-234, 1955) provide a guide for estimating percentages. All samples are archived for six months unless other arrangements are made by the client.

#### ACCREDITATION:

DCMSL is accredited by NVLAP (since April 1, 1989). DCMSL complies with NVLAP requirements unless otherwise noted.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim endorsement by NVLAP or any agency of the U.S. Government.

This test report relates only to the items tested. This report may not be reproduced except in full, without the written approval of the laboratory. The analysis was performed by:



John Silverman, Analyst  
**Ron Schott**  
Laboratory Director



Ron Schott, Analyst  
**11-20-06**  
Date

**NVLAP**  
NVLAP Code 101258

BULK ASBESTOS TEST REPORT  
PAGE 1 OF 3

CLIENT:  
ACZ LABORATORIES, INC.  
2773 DOWNHILL DRIVE  
STEAMBOAT SPRINGS, CO 80487

ANALYSIS DATE: 11-21-06  
REPORTING DATE: 11-22-06  
RECEIPT DATE: 11-17-06  
CLIENT JOB NO.: NONE GIVEN  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: AC222

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	% IN SAMPLE	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-1	L57714-09	7-17-06	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-2	L57714-10	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-3	L57714-12	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-4	L57714-13	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-5	L57714-14	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-6	L57714-15	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-7	L57714-16	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-8	L57714-18	7-17-06	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[1-5]	1.0	1.0	0.0	99.0	100.0
-9	L57714-19	7-17-06	A. GREY ROCK	100.0%	CHRYSOTILE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-10	L57714-20	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-11	L57715-05	7-17-06	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0

DCM SCIENCE LABORATORY, INC.  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

BULK ASBESTOS TEST REPORT  
PAGE 2 OF 3

CLIENT:  
ACZ LABORATORIES, INC.  
2773 DOWNHILL DRIVE  
STEAMBOAT SPRINGS, CO 80487

ANALYSIS DATE: 11-21-06  
REPORTING DATE: 11-22-06  
RECEIPT DATE: 11-17-06  
CLIENT JOB NO.: NONE GIVEN  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: ACZ22

PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE			ASBESTOS TYPE	RANGE	% IN SAMPLE	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
				TOTAL	ASBESTOS	%							
-12	L57715-06	7-17-06	A. GREY ROCK	100.0%			ND	ND		ND	0.0	100.0	100.0
-13	L57715-11	7-17-06	A. GREY ROCK	100.0%			ND	ND		ND	0.0	100.0	100.0
-14	L57715-14	7-17-06	A. GREY ROCK	100.0%			ND	ND		ND	0.0	100.0	100.0

FOR CALCULATION PURPOSES, TRACE (TR) IS ASSUMED TO BE 0.5%.

(I) - INSEPARABLE LAYERS

ND - NONE DETECTED

**DCM SCIENCE LABORATORY, INC.**  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

DCM Project No.: ACZ22

### Bulk Sample Analysis

#### BULK SAMPLE ANALYSIS PROCEDURES

DCM Science Laboratory, Inc. analyzes bulk asbestos samples following procedures developed by the McCrone Research Institute and in compliance with guidelines established by the Environmental Protection Agency (EPA-600/R-93/116, July, 1993).

Bulk samples are prepared for analysis using a 10X-80X stereo microscope in a hepa filter hood which provides a contamination-free environment. The sample is then analyzed by polarized light microscopy (PLM) at 100X. When a sample consists of more than one layer, each layer is prepared and analyzed separately. Fiber and matrix materials are identified by the characterization of optical properties including color and pleochroism, form, cleavage, relief, birefringence, extinction, orientation, twinning, interference figure and other distinguishing features. Dispersion staining is also used to further aid in mineral identification. All percentages of asbestos, other fibers and non-fibrous constituents are calculated from the values obtained from the stereo and PLM microscopes analysis. In-house and NIST standards as well as a chart prepared by R.D. Terry and G.V. Chilinger for "The Journal of Sedimentary Petrology", (Volume 24, pp. 229-234, 1955) provide a guide for estimating percentages. All samples are archived for six months unless other arrangements are made by the client.

#### ACCREDITATION:

DCMSL is accredited by NVLAP (since April 1, 1989). DCMSL complies with NVLAP requirements unless otherwise noted.

#### ENDORSEMENT:

The results of this analysis must not be used by the client to claim endorsement by NVLAP or any agency of the U.S. Government.

This test report relates only to the items tested. This report may not be reproduced except in full, without the written approval of the laboratory. The analysis was performed by:



John Silverman, Analyst  
**Ron Schott**  
Laboratory Director



Ron Schott, Analyst  
**11-21-06**  
Date

**NVLAP®**  
NVLAP Code 101258

**ATTACHMENT 3A**

**RESOLUTION ORE COMPOSITES**

**BULK ASBESTOS LABORATORY REPORTS**

BULK ASBESTOS TEST REPORT  
PAGE 1 OF 6

CLIENT:

RESOLUTION COPPER MINING CO.  
43206 N. MAGMA SHAFT #9 ROAD  
SUPERIOR, AZ 85273

ANALYSIS DATE: 8-22-07  
REPORTING DATE: 8-22-07  
RECEIPT DATE: 8-17-07  
CLIENT JOB NO.: 3100031164  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: RCMC1

## PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-1	RES02504	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-2	RES02574	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-3	RES02615	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-4	RES02680	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-5	RES02687	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-6	RES02691	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-7	RES03891	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-8	RES04054	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[1-5]	4.0	4.0	0.0	96.0	100.0
-9	RES04083	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[1-5]	3.0	3.0	0.0	97.0	100.0
-10	RES04095	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[1-5]	4.0	4.0	0.0	96.0	100.0
-11	RES06341	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0

BULK ASBESTOS TEST REPORT  
PAGE 2 OF 6

CLIENT:

RESOLUTION COPPER MINING CO.  
43206 N. MAGMA SHAFT #9 ROAD  
SUPERIOR, AZ 85273

ANALYSIS DATE: 8-22-07  
REPORTING DATE: 8-22-07  
RECEIPT DATE: 8-17-07  
CLIENT JOB NO.: 3100031164  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: RCMC1

## PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-12	RES08304	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-13	RES08329	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-14	RES08342	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	1.0	1.0	0.0	99.0	100.0
-15	RES08346	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-16	RES08384	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-17	RES08400	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-18	RES08407	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-19	RES08415	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR]	0.5	0.5	0.0	99.5	100.0
-20	RES03414	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-21	RES03440	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-22	RES03450	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0

## BULK ASBESTOS TEST REPORT

PAGE 3 OF 6

## CLIENT:

RESOLUTION COPPER MINING CO.  
43206 N. MAGMA SHAFT #9 ROAD  
SUPERIOR, AZ 85273

ANALYSIS DATE: 8-22-07  
REPORTING DATE: 8-22-07  
RECEIPT DATE: 8-17-07  
CLIENT JOB NO.: 3100031164  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: RCMC1

## PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-23	RES03465	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-24	RES03490	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-25	RES04128	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-26	RES04137	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-27	RES06004	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-28	RES06076	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-29	RES07721	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-30	RES0794	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-31	RES07954	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0
-32	RES07957	-	A. GREY ROCK	100.0%	TREMOLITE/ ACTINOLITE	[TR-1]	1.0	————— 1.0	0.0	99.0	100.0
-33	RES11516	-	A. GREY ROCK	100.0%			ND	————— ND	0.0	100.0	100.0

BULK ASBESTOS TEST REPORT  
PAGE 4 OF 6

CLIENT:

RESOLUTION COPPER MINING CO.  
43206 N. MAGMA SHAFT #9 ROAD  
SUPERIOR, AZ 85273

ANALYSIS DATE: 8-22-07  
REPORTING DATE: 8-22-07  
RECEIPT DATE: 8-17-07  
CLIENT JOB NO.: 3100031164  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: RCMC1

## PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-34	RES11524	-	A. TAN ROCK	100.0%			ND	ND	0.0	100.0	100.0
-35	RES13316	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[1-5]	1.0	1.0	0.0	99.0	100.0
-36	RES13327	-	A. GREY ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-37	RES13331	-	A. TAN ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR-1]	0.5	0.5	0.0	99.5	100.0
-38	RES13335	-	A. TAN ROCK	100.0%	TREMOLITE/ACTINOLITE	[TR]	0.5	0.5	0.0	99.5	100.0
-39	RES13350	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-40	RES13552	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-41	RES12593	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-42	RES12600	-	A. BROWN ROCK	100.0%			ND	ND	0.0	100.0	100.0
-43	RES12659	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-44	RES12373	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0

BULK ASBESTOS TEST REPORT  
PAGE 5 OF 6

CLIENT:

RESOLUTION COPPER MINING CO.  
43206 N. MAGMA SHAFT #9 ROAD  
SUPERIOR, AZ 85273

ANALYSIS DATE: 8-22-07  
REPORTING DATE: 8-22-07  
RECEIPT DATE: 8-17-07  
CLIENT JOB NO.: 3100031164  
PROJECT TITLE: NONE GIVEN  
DCMSL PROJECT: RCMC1

## PERCENTAGE COMPOSITION BY VISUAL ESTIMATE

DCMSL SAMPLE NUMBER	CLIENT SAMPLE NUMBER	SAMPLE DATE	DESCRIPTION	PERCENT OF SAMPLE	ASBESTOS TYPE	RANGE	%	TOTAL ASBESTOS IN SAMPLE	OTHER FIBROUS CONSTITUENTS	NON-FIBROUS CONSTITUENTS	TOTAL PERCENTAGE IDENTIFIED MATERIALS
-45	RES12379	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-46	RES12384	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-47	RES12387	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-48	RES12395	-	A. BROWN ROCK	100.0%			ND	ND	0.0	100.0	100.0
-49	RES11768	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-50	RES15715	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-51	RES15728	-	A. BROWN ROCK	100.0%			ND	ND	0.0	100.0	100.0
-52	RES15734	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0
-53	RES15742	-	A. GREY ROCK	100.0%			ND	ND	0.0	100.0	100.0

FOR CALCULATION PURPOSES, TRACE (TR) IS ASSUMED TO BE 0.5%.

(I) - INSEPARABLE LAYERS

ND - NONE DETECTED

**ATTACHMENT 3B**

**RESOLUTION ORE COMPOSITES  
ASBESTOS POINT COUNT LABORATORY REPORTS**

DRAFT

DCM SCIENCE LABORATORY, INC.  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

BULK ASBESTOS ANALYSIS - POINT COUNT METHOD  
PAGE 1 OF 5

CLIENT:	ANALYSIS DATE:	8-24-07
RESOLUTION COPPER MINING CO.	REPORTING DATE:	8-27-07
43206 N. MAGMA SHAFT #9 ROAD	RECEIPT DATE:	8-22-07
SUPERIOR, AZ 85273	CLIENT JOB NO.:	3100031164
	PROJECT TITLE:	NONE GIVEN
	DCMSL PROJECT:	RCMC2
	CROSS REFERENCE:	RCMC1

PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-1	-2	-3	-4	-5
SAMPLE DATE:	-	-	-	-	-
% OF TOTAL SAMPLE:	100.0%	100.0%	100.0%	100.0%	100.0%
CLIENT NO.:	RES02574 PART A	RES03891 PART A	RES04054 PART A	RES04083 PART A	RES04095 PART A

ASBESTIFORM MINERAL FIBERS:

CHRYSOTILE	ND	ND	ND	ND	ND
AMOSITE	ND	ND	ND	ND	ND
CROCIDOLITE	ND	ND	ND	ND	ND
TREMOLITE-ACTINOLITE	<0.25%	<0.25%	0.75%	0.75%	1.50%
ANTHOPHYLLITE	ND	ND	ND	ND	ND
TOTAL ASBESTOS COUNTED	<0.25%	<0.25%	0.75%	0.75%	1.50%
TOTAL ASBESTOS IN LAYER	<0.25%	<0.25%	0.75%	0.75%	1.50%
TOTAL ASBESTOS IN SAMPLE	<0.25%	<0.25%	0.75%	0.75%	1.50%

NOTES: SAMPLES NO. 1 - 5 ARE GREY ROCK.

ND - NONE DETECTED

DEFINITIONS

TOTAL ASBESTOS COUNTED =	THE AMOUNT OF ASBESTOS PRESENT IN THE SAMPLE EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN LAYER =	THE PERCENT OF SAMPLE REMAINING TIMES ASBESTOS COUNTED EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN SAMPLE =	THE PERCENT OF TOTAL SAMPLE (FROM PLM/SM ANALYSIS) TIMES THE TOTAL ASBESTOS IN LAYER (IF NO ASBESTOS IN OTHER LAYERS).

DRAFT

DCM SCIENCE LABORATORY, INC.  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

BULK ASBESTOS ANALYSIS - POINT COUNT METHOD  
PAGE 2 OF 5

CLIENT:	ANALYSIS DATE:	8-24-07
RESOLUTION COPPER MINING CO.	REPORTING DATE:	8-27-07
43206 N. MAGMA SHAFT #9 ROAD	RECEIPT DATE:	8-22-07
SUPERIOR, AZ 85273	CLIENT JOB NO.:	3100031164
	PROJECT TITLE:	NONE GIVEN
	DCMSL PROJECT:	RCMC2
	CROSS REFERENCE:	RCMC1

PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-6	-7	-8	-9	-10
SAMPLE DATE:	-	-	-	-	-
% OF TOTAL SAMPLE:	100.0%	100.0%	100.0%	100.0%	100.0%
CLIENT NO.:	RES08304 PART A	RES08329 PART A	RES08342 PART A	RES08346 PART A	RES08384 PART A

ASBESTIFORM MINERAL FIBERS:

CHRYSOTILE	ND	ND	ND	ND	ND
AMOSITE	ND	ND	ND	ND	ND
CROCIDOLITE	ND	ND	ND	ND	ND
TREMOLITE-ACTINOLITE	<0.25%	<0.25%	<0.25%	0.25%	0.25%
ANTHOPHYLLITE	ND	ND	ND	ND	ND
TOTAL ASBESTOS COUNTED	<0.25%	<0.25%	<0.25%	0.25%	0.25%
TOTAL ASBESTOS IN LAYER	<0.25%	<0.25%	<0.25%	0.25%	0.25%
TOTAL ASBESTOS IN SAMPLE	<0.25%	<0.25%	<0.25%	0.25%	0.25%

NOTES: SAMPLES NO. 6-10 ARE GREY ROCK.

ND - NONE DETECTED

DEFINITIONS

TOTAL ASBESTOS COUNTED =	THE AMOUNT OF ASBESTOS PRESENT IN THE SAMPLE EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN LAYER =	THE PERCENT OF SAMPLE REMAINING TIMES ASBESTOS COUNTED EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN SAMPLE =	THE PERCENT OF TOTAL SAMPLE (FROM PLM/SM ANALYSIS) TIMES THE TOTAL ASBESTOS IN LAYER (IF NO ASBESTOS IN OTHER LAYERS).

DRAFT

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12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

BULK ASBESTOS ANALYSIS - POINT COUNT METHOD  
PAGE 3 OF 5

CLIENT:	ANALYSIS DATE:	8-24-07
RESOLUTION COPPER MINING CO.	REPORTING DATE:	8-27-07
43206 N. MAGMA SHAFT #9 ROAD	RECEIPT DATE:	8-22-07
SUPERIOR, AZ 85273	CLIENT JOB NO.:	3100031164
	PROJECT TITLE:	NONE GIVEN
	DCMSL PROJECT:	RCMC2
	CROSS REFERENCE:	RCMC1

PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-11	-12	-13	-14	-15
SAMPLE DATE:	-	-	-	-	-
% OF TOTAL SAMPLE:	100.0%	100.0%	100.0%	100.0%	100.0%
CLIENT NO.:	RES08400 PART A	RES08407 PART A	RES08415 PART A	RES07957 PART A	RES13316 PART A

ASBESTIFORM MINERAL FIBERS:

CHRYSOTILE	ND	ND	ND	ND	ND
AMOSITE	ND	ND	ND	ND	ND
CROCIDOLITE	ND	ND	ND	ND	ND
TREMOLITE-ACTINOLITE	0.25%	<0.25%	<0.25%	0.25%	0.75%
ANTHOPHYLLITE	ND	ND	ND	ND	ND
TOTAL ASBESTOS COUNTED	0.25%	<0.25%	<0.25%	0.25%	0.75%
TOTAL ASBESTOS IN LAYER	0.25%	<0.25%	<0.25%	0.25%	0.75%
TOTAL ASBESTOS IN SAMPLE	0.25%	<0.25%	<0.25%	0.25%	0.75%

NOTES: SAMPLES NO. 11 - 15 ARE GREY ROCK.

ND - NONE DETECTED

DEFINITIONS

TOTAL ASBESTOS COUNTED =	THE AMOUNT OF ASBESTOS PRESENT IN THE SAMPLE EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN LAYER =	THE PERCENT OF SAMPLE REMAINING TIMES ASBESTOS COUNTED EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN SAMPLE =	THE PERCENT OF TOTAL SAMPLE (FROM PLM/SM ANALYSIS) TIMES THE TOTAL ASBESTOS IN LAYER (IF NO ASBESTOS IN OTHER LAYERS).

DRAFT

DCM SCIENCE LABORATORY, INC.  
12421 W. 49TH AVENUE, UNIT #6  
WHEAT RIDGE, CO 80033 (303) 463-8270

BULK ASBESTOS ANALYSIS - POINT COUNT METHOD  
PAGE 4 OF 5

CLIENT:	ANALYSIS DATE:	8-24-07
RESOLUTION COPPER MINING CO.	REPORTING DATE:	8-27-07
43206 N. MAGMA SHAFT #9 ROAD	RECEIPT DATE:	8-22-07
SUPERIOR, AZ 85273	CLIENT JOB NO.:	3100031164
	PROJECT TITLE:	NONE GIVEN
	DCMSL PROJECT:	RCMC2
	CROSS REFERENCE:	RCMC1

PERCENTAGE COMPOSITION BY AREA/VOLUME

DCM LAB NO.:	-16	-17	-18
SAMPLE DATE:	-	-	-
% OF TOTAL SAMPLE:	100.0%	100.0%	100.0%
CLIENT NO.:	RES13327 PART A	RES13331 PART A	RES13335 PART A

ASBESTIFORM MINERAL FIBERS:

CHRYSOTILE	ND	ND	ND
AMOSITE	ND	ND	ND
CROCIDOLITE	ND	ND	ND
TREMOLITE-ACTINOLITE	1.75%	0.25%	<0.25%
ANTHOPHYLLITE	ND	ND	ND
TOTAL ASBESTOS COUNTED	1.75%	0.25%	<0.25%
TOTAL ASBESTOS IN LAYER	1.75%	0.25%	<0.25%
TOTAL ASBESTOS IN SAMPLE	1.75%	0.25%	<0.25%

NOTES: SAMPLE NO. 16 IS GREY ROCK. SAMPLES NO. 17 AND 18 ARE TAN ROCK.

ND - NONE DETECTED

DEFINITIONS

TOTAL ASBESTOS COUNTED =	THE AMOUNT OF ASBESTOS PRESENT IN THE SAMPLE EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN LAYER =	THE PERCENT OF SAMPLE REMAINING TIMES ASBESTOS COUNTED EXPRESSED AS A PERCENT.
TOTAL ASBESTOS IN SAMPLE =	THE PERCENT OF TOTAL SAMPLE (FROM PLM/SM ANALYSIS) TIMES THE TOTAL ASBESTOS IN LAYER (IF NO ASBESTOS IN OTHER LAYERS).