

# **GEOCHEMICAL**

### ASSESSMENT REPORT

### **ON THE**

## **ERIN PROPERTY**

# **ERIN 1 - 8 MINERAL CLAIMS**

### **HOUSTON AREA**

### **OMINECA MINING DIVISION, B.C.**

NTS: LATITUDE: LONGITUDE: OWNER: OPERATOR: AUTHOR: DATE: 093L/06E 54° 22'15"N 127° 06' W W.R. Gilmour Discovery Consultants T.H. Carpenter, P.Geo. September 21, 1999

T.H. Carpenter, P.Geo. September 21, 1999 GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

26.076

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# **APPENDICES**

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## APPENDIX A Soil Sampling Survey Analytical Procedures and Results

# APPENDIX B Rock Sample Descriptions, analytical procedures and results

### **SUMMARY**

The Erin prospect comprises possible porphyry related shear-hosted copper, silver and gold mineralization within Lower Jurassic Hazelton volcanics intruded by Late Cretaceous Bulkley Intrusives.

The occurrence is located 26 kilometres west-southwest of Houston and 45 kilometres south of Smithers.

Extensive exploration work was carried out on the property from 1965 to 1969 over an area measuring 1500 metres by 700 metres.

Further work was carried out in the area in the late 1980s following the release of a government regional geochemical survey. A high-grade sample collected in 1988 from one trench yielded 43% copper, 356 oz. silver/ton and 0.21 oz. gold/ton.

In 1994 a limited soil and rock-sampling program was carried out on the property. This work was complemented in 1999 by additional rock and soil sampling.

## **LOCATION AND ACCESS**

The Erin property is centred at latitude 54°22'15"N and longitude 127°06'W, 26 kilometres west-southwest of Houston and 45 kilometres south of Smithers (Figure 1).

Access to the property can be gained by helicopter from Houston and Smithers. A logging road is located 12 km to the east of the property. This road turns into a track that follows a ridgeline onto the property. This track appears to be negotiable by all-terrain vehicle.

### **TOPOGRAPHY**

The Erin property lies on a relatively flat, grassy plateau situated above treeline. Elevations range from 5300 feet (1615 metres) at the southwest corner of the property to 6000 feet (1830 metres) at the northeastern corner of the property.

Westerly and southerly flowing drainages are relatively moderate in the claim area. Drainage is to the west into Houston Tommy Creek.

Outcrop is exposed in numerous trenches located on the property, along valley sides and on knolls.



# **PROPERTY**

The Erin property (Figure 2) comprises eight two-post claims, designated Erin 1-8,

located by Murray Beenen on August 24, 1995 and recorded in Smithers on September 09, 1995.

Frin 1 330562 W.R. Gilmour August 24	2002
Erin 2 330563 W.R. Gilmour August 24,	2002
Erin 3 330564 W.R. Gilmour August 24,	2002
Erin 4 330565 W.R. Gilmour August 24,	2002
Erin 5 330566 W.R. Gilmour August 24,	2002
Erin 6 330567 W.R. Gilmour August 24,	2002
Erin 7 330568 W.R. Gilmour August 24,	2002
Erin 8 330569 W.R. Gilmour August 24,	2002

The claims are held in trust for the Phoenix Syndicate.

\* Pending acceptance of this report.

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### **HISTORY**

The area of the present Erin claims was staked by the Phelps Dodge Corporation in 1965, as part of the "B" claims to cover the area of copper anomalies in silt samples. From 1965 to 1969 the company explored for copper and base metals. Extensive geochemical sampling and trenching were carried out on the property. At least 85 trenches were dug by bulldozer, blasting, or hand-trenching. A "cat" road, some 19.3 kilometres in length, was constructed to provide access to the property. No records of the trenching program are available.

In 1973 the Lunlik claims were staked to the east of the present Erin claims. Granges Exploration Ltd. completed geophysical and geochemical surveys over the Lunlik claims and drilled 6 diamond drill holes totalling 813.5 m to test for mineralization in a quartz diorite stock.

In 1987 a government geological survey reported moderate to strongly anomalous gold values in three creeks in the area. The area of the present Erin claims was staked, also as the Erin claims, by Geostar Mining Corporation to cover the upper reaches of a creek anomalous in gold, copper, arsenic, antimony, barite and manganese. A program of reconnaissance geological mapping, prospecting, soil, and silt sampling was carried out over a three-day period in 1988.

The Erin property, staked in 1994 by Discovery Consultants, covers the mineralized areas of the B and the former Erin claims. A limited rock sampling, soil sampling and mapping program carried out in 1994, was complemented by additional rock and soil sampling in 1999.

### **GENERAL GEOLOGY**

The Erin property lies in the Intermontane Belt of the Canadian Cordillera, near the eastern edge of the Coast Crystalline Complex. The area is underlain largely by subaerial to submarine volcanic, volcaniclastic and sedimentary rocks of the Hazelton Group.

The Hazelton Group, comprising and island arc assemblage deposited in Early to Middle Jurassic time, has been divided into the Telkwa, Nilkitkwa and Smithers Formations.

The oldest formation, the Telkwa, consists of calc-alkaline volcanics predominantly of subaerial origin and lesser subaqueous volcanics. The Nilkitkwa Formation conformably to disconformably overlies the Telkwa Formation and comprises fine grained clastic and tuffaceous assemblages. Overlying the Nilkitkwa Formation disconformably are fossiliferous sandstones, siltstones and intercalated felsic tuffs of the Smithers Formation.

The Telkwa Formation has been divided into five distinct facies of which the Howson subaerial facies is thought to underlie the Erin property. Strata of the Howson facies comprise well-bedded, red to green coloured, basaltic to rhyolitic pyroclastic and flow rocks as well as terrestrial sedimentary rocks. The most common rocks are andesitic to dacitic pyroclastics, which have been altered to a subgreenschist metamorphic grade.

Late Cretaceous intrusives have been mapped to the northeast and to the south of the Erin property. These intrusives have been mapped as porphyritic granodiorites, quartz diorites and quartz monzonites.

Mineralization on the property is exposed principally in old bulldozer trenches. Bornite, chalcopyrite, tetrahedrite, malachite and azurite occur as massive to locally disseminated patches in andesite and locally in quartz veins and stringers. Assays from mineralized trenches reported high copper and silver with local gold values. Rhodochrosite is widespread in trenches.

### WORK COMPLETED

The work carried out on the property in 1994 comprised soil sampling and rock sampling. The individual surveys are discussed below.

<u>Soil Sampling</u>

### A) Program Parameters

Thirty-three soil samples were collected on the Erin 1-6 claims. Samples were collected at 50 metre intervals along lines 400S, 700S and 900S at right angles to the Erin claim line.

The samples were collected by shovel from the "B" horizon, placed in 9 cm. by 25 cm. kraft sample bags and sent to Chemex Labs in North Vancouver, B.C. At Chemex analyses were carried out for gold (30g, fire assay/AA) and 32 additional elements by ICP. Sample locations are shown on Figure 3. Analytical results and procedures are contained in Appendix 1.

B) Program Results

Infill soil sampling in 1999 produced similar results to 1994 sampling. The maximum values obtained in soils for 1999 sampling for copper, gold, arsenic and barium were 245 ppm, 25 ppb, 962 ppm and 1170 ppm respectively.

Soil values for copper and arsenic, though anomalous, do not reflect values of these elements in rocks which run up to 1.6% copper and >3200 ppm respectively.

Gold values in soils are low and appear to be reflective of low gold values overall in rocks. Barium values on the other hand appear to be stronger in soils than in rocks.

Analytical results for copper, gold, arsenic and barium are shown on figures 4 to 7 respectively. Complete analytical results are contained in Appendix A.

2. <u>Rock Sampling</u>

### A) **Program Parameters**

Five rock samples were collected from trenches on the Erin 1-5 claims. The rocks were collected to confirm previous results as well as to determine by ICP analyses the extent of associated mineralization. The sample locations were tied in to claim lines.

The rocks were shipped to Chemex Labs in North Vancouver where they were tested for gold (30g, fire assay/AA analysis) and 34 additional elements by ICP analysis. Rock sample descriptions, analytical results and analytic procedures are contained in Appendix 2.

B) Program Results

A copper value of 1.3% was noted in rock sample TC-03, collected in a trench at the northeast corner of the Erin 1 claim. Thus far on the claims rock sampling in 1994 and 1999 has shown copper in excess of 1% over a strike length of 800 metres.

This mineralization is readily apparent in previously constructed trenches on the property (Figure 3).

Gold values are low in the samples collected in 1999. A maximum of 25 ppb was detected in sample TC-05, which comprised quartz vein material in an area of felsic dyking at the northeast corner of the Erin 2 claim.

Rock sample locations for 1994 and 1999 are shown on Figure 3 with analytical data for copper, gold, arsenic and barium on Figure 4 to 7 respectively. Rock sample descriptions and complete analytical results are contained in Appendix B.

### **CONCLUSIONS**

The Erin property underwent extensive exploration for base metal mineralization in the 1960s. No results of this work, which included widespread trenching, are available. There is no record of any diamond drilling on the property.

Mapping, combined with rock and soil sampling programs in 1994 and 1999 have shown that copper mineralization up to 1.6% occurs in a series of northeast to southwest trending trenches which occur over a northwesterly direction for over 800 metres and which appear to follow the trend of the mineralization.

The mineralization on the property appears to be, at least in part, structurally controlled and possibly related to an intrusive at depth.

Soil samples do not appear to reflect strong bedrock values in copper.

The area of the property is the source of anomalous gold values in gold, copper, arsenic, antimony and barite in streams draining the area but no distinct gold association with copper mineralization has been demonstrated.

### **RECOMMENDATIONS**

Air photo coverage of the property should be obtained, trenches accurately located and a detailed mapping and trench sampling program carried out to define controls for, and the extent of, copper and gold mineralization.

Geophysical surveys, including an Induced Potential survey, should be carried out to define mineralized zones, controlling structures, and possible zones where mineralization in bedrock is not reflected by soil sampling.

Rock sampling and mapping should be carried out away from the zone of copper mineralization to aid in defining the source for anomalous gold values in streams draining the area.

Diamond drilling should be carried out if suitable targets are delineated.

Respectfully submitted, T.H. Ca

Vernon B.C. September 21, 1999

### <u>REFERENCES</u>

British Columbia Ministry of Energy, Mines and Petroleum Resources Annual Report

1965 - pg. 80 1966 - pg. 103

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British Columbia Ministry of Energy, Mines and Petroleum Resources - Geology, Exploration and Mining in British Columbia

1974 - pg. 258

British Columbia Ministry of Energy, Mines and Petroleum Resources - Assessment Reports

#1189, 5094, 17994

Tipper, H.W. and Richards T.A. (1976); Jurassic Stratigraphy, and History of North Central British Columbia, Geological Survey of Canada, Bulletin 270

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# **STATEMENT OF COSTS**

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		Total Exploration Costs :	\$4,300.32
	a or b - whichever is less		729.25
	b) @50% of Exploration Costs of \$7	29.25	
	a) total transportation costs	\$1,458.50	
	<b>D</b>		
	gas	92.26	
	В. 4х4 ниск days @э40/day 980 km @\$0.30/km	294.00	
	B Avd Truck dave @@40/day		
	A. Helicopter	1072.24	
5	Transportation		
		<b>Exploration</b> Costs :	\$3,571.07
			- 900.38
	Communications, Report & Map printing	102.0	0
	Lodging & Meals	154.6	3
	Freight	45.0	ю
	Equipment Rental	16.0	0
	Field Supplies	19.7	5
	50 8018 (@\$15.92/sample	\$ 569.0	0
	5 IOCKS (4) 18.28/sample	477 60	
	(Au + 33 elements ICP) 5 rooks @\$19.29/sample	91.40	
	Analysis - Unemex Labs Ltd.		
4	Expenses		
	-		240.09
	Data Compilation	44.25	240.00
	Secretarial	79.65	
	Drafting	116.19	
3	Office Personnel	_	
			849.6
	3.0 days @\$283.20/day	849.60	
	Rock & Soil Sampling, and GPS Survey		
2	R.Mitchell (August 21 - 23, 1999)		
2	Field Personnel		<i>+ - ,-</i> · - · - ·
	5.0 day (6,550/day	1,000.00	\$1,575.00
	Geological (August 21 - 23, 1999) 2.0 dow @\$250/dow	1 050 00	
	1.5 day at \$350/day	\$ 525.00	
	Planning, Data Interpretation & Report Writin	g	
	T. Carpenter (P.Geo.)		
1	Professional Services		

# **STATEMENT OF QUALIFICATIONS**

I, THOMAS H. CARPENTER of 3902 14th Street, Vernon, B.C., V1T 3V2, DO HEREBY CERTIFY that:

- 1. I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, B.C.
- 2. I am a 1971 graduate of the Memorial University of Newfoundland with a Bachelor of Science degree in geology.
- 3. I have been practicing my profession since graduation.
- 4. I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
- 5. This report is based upon knowledge of the Erin property gained from property work, research and supervision.
- 6. I hold no interest either directly or indirectly in the Erin property.



Vernon, B.C.

# APPEDIX A

### ANALYTICAL PROCEDURES

# **Geochemical Analysis**

by Chemex Labs Ltd.

ELEME	NT	LOWER DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5 ppb	fire assay	A.A.
Al*	Aluminum	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sb	Antimony	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
As	Arsenic	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ba*	Barium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Be*	Beryllium	0.5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Bi	Bismuth	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Cd	Cadmium	0.5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ca*	Calcium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Cr*	Chromium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Co	Cobalt	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Cu	Copper	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ga*	Gallium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Fe	Iron	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
La*	Lanthanum	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Pb	Lead	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Mg*	Magnesium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Mn	Maganese	5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Hg	Mercury	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Мо	Molybdenum	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ni	Nickel	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Р	Phosphorus	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
K*	Potassium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sc*	Scandium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ag	Silver	0.2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Na*	Sodium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sr*	Strontium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
TI*	Thallium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ti*	Titanium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
W*	Tungsten	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
U	Uranium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
V	Vanadium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Zn	Zinc	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma

\* Incomplete digeston.

#### Project 654

### Erin

# Soil Sample Analyses

file. 654:geodata:Scil\_99 vk-l Reference : a9 28350

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	30	lg FA/AA	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ЮP
Sample ID	Lab	Au	Ag	As	Sb	Cu	Pb	Zn	W	Cd	Mo	Bi	NI	Co	Cr	Fe	Mn	Ba
	report #	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ррго	ppm	ppm	ppm	ppm	%	ppm	ppm
S001	a9928350	5	<0.2	248	<2	34	2	180	<10	0.5	<1	<2	14	12	36	4.20	1895	490
S002	a9928350	15	<0.2	18	<2	31	2	192	<10	<0.5	<1	<2	17	10	40	4.16	1000	260
S003	a9928350	10	0.4	58	2	176	2	208	< 10	0.5	<1	<2	19	14	42	4.53	2520	500
S004	a9928350	15	<0.2	10	<2	29	2	256	<10	<0.5	<1	<2	13	14	27	5.00	1450	320
S005	a9928350	25	<0.2	12	6	28	<2	176	<10	05	<1	6	14	10	30	3.89	1050	250
S006	a9928350	5	0.2	50	<2	40	<2	154	<10	0.5	< 1	<2	13	9	38	3.49	2110	220
5007	a9928350	10	0.2	24	4	27	10	140	<10	0.5	<1	<2	11	10	35	3.89	1905	220
S008	a9928350	10	<0.2	22	6	50	8	208	<10	<0.5	<1	2	14	11	34	3.85	955	360
\$009	a9928350	5	02	10	<2	19	12	110	<10	<0.5	<1	<2	11	7	32	2.91	970	170
S010	a9928350	5	<0.2	66	2	71	<2	168	<10	<0.5	<1	2	15	10	95	3.98	1000	170
S011	a9928350	<5	<0.2	10	<2	27	<2	152	<10	0.5	<1	2	10	10	32	3.96	1345	180
S012	a9928350	5	<0.2	16	<2	70	2	132	<10	0.5	<1	<2	19	16	55	4.57	1290	100
S013	a9928350	<5	<0.2	28	<2	70	<2	128	<10	0.5	<1	<2	20	15	56	4.14	1475	200
S014	a9928350	<5	0.2	36	4	92	8	148	<10	1.5	<1	<2	23	20	67	4.61	5930	1030
S015	a9928350	<5	<0.2	28	6	114	2	118	<10	1.0	<1	<2	25	18	61	4.26	1965	260
S016	a9928350	<5	0.2	378	<2	56	<2	120	<10	<0.5	<1	<2	25	14	105	4.08	1695	390
S017	a9928350	10	<0.2	334	2	85	10	156	<10	0.5	1	<2	24	17	76	4.09	>10000	1810
S018	a9928350	<5	<0.2	84	2	92	8	78	<10	<0.5	< 1	<2	23	16	61	4.27	5070	490
S019	a9928350	<5	<0.2	72	6	74	12	130	<10	1.0	<1	6	26	20	69	4.67	4210	230
S020	a9928350	<5	0.2	68	<2	245	10	124	<10	5.0	<1	<2	27	19	60	4.51	8170	500
S021	a9928350	<5	<0.2	50	<2	115	8	120	<10	<0.5	1	<2	25	16	59	4.25	2070	210
S022	a9928350	<5	0.6	70	2	161	6	122	<10	05	<1	<2	20	14	49	4.15	2680	290
S023	a9928350	10	<0.2	84	4	88	<2	76	<10	<0 5	< 1	<2	37	24	96	4.16	6660	330
S024	a9928350	<5	<0.2	70	12	69	6	68	<10	<0 5	< 1	<2	24	19	76	3.97	4820	220
S025	a9928350	<5	<0.2	62	8	111	4	78	<10	<0.5	<1	<2	29	25	84	4.20	5200	180
S026	a9928350	<5	<0.2	82	2	122	<2	82	<10	05	<1	<2	31	26	86	4.34	6840	220
S027	a9925350	<5	<0.2	72	8	152	4	78	<10	05	<1	<2	26	21	78	4.06	4190	160
S028	a9928350	<5	<0.2	90	2	63	2	84	<10	<0.5	<1	<2	21	17	83	3.59	3570	380
S029	a9928350	<5	<0.2	962	8	58	14	154	<10	<0.5	1	<2	19	18	113	3.53	8450	1170
S030	a9928350	<5	<0.2	280	2	77	<2	84	<10	<0.5	<1	<2	22	18	83	3.68	5720	530

### Erin

### Soil Sample Analyses (part 2)

	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	<b>ICP</b>	ICP	ICP	ICP	ICP	ICP	IC
Sample ID	V	Hg	Sr	La	AI	Mg	Ca	Na	ĸ	Ti	U	Be	Ga	P	Sc	TI	8	;
	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	°,
S001	82	<1	21	<10	3 69	1.14	0.25	0.01	0.10	0.11	<10	<0.5	<10	880	8	<10	<10	0.0
S002	77	<1 `	24	<10	3.79	1.09	0.23	0.01	0.09	0.10	<10	<0.5	<10	960	8	<10	<10	0.04
5003	94	<1	27	<10	3.66	1.37	0.58	0.02	0.13	0 13	<10	<0.5	< 10	620	13	<10	<10	0.0
S004	101	<1	23	<10	3.47	1.33	0.45	0.02	0.08	0.18	< 10	<0.5	<10	630	11	<10	<10	0.0
S005	68	<1	19	<10	3.72	0.97	0.23	0.01	0.08	0.11	<10	<0.5	<10	960	8	<10	<10	0.0
S006	79	<1	17	<10	3.95	0.89	0.25	0.01	0.09	0.09	<10	<0.5	<10	1560	5	<10	<10	0.1
\$007	78	<1	19	<10	3.80	0.86	0.24	0.01	0.07	0.10	<10	<0.5	<10	1120	6	<10	<10	0.0
5008	70	<1	28	<10	3.98	0.94	0.35	0.01	0.09	0.10	<10	<0.5	<10	1260	8	<10	<10	0.0
\$009	69	<1	17	<10	2.85	0.72	0.17	0.01	0.08	0.10	<10	<0.5	<10	1280	4	<10	<10	0.0
S010	121	<1	21	<10	3.74	1 07	0 45	0.01	0.08	0.09	<10	<0.5	10	· 2140	6	<10	<10	0.1
S011	77	<1	20	<10	3.58	0.85	0.19	0.01	0.09	0.09	<10	<0.5	<10	1410	6	<10	<10	0.0
S012	114	<1	25	<10	3.65	1.53	0.39	0.01	0.10	0.17	<10	<0.5	<10	1200	12	<10	<10	0.0
S013	106	<1	21	<10	3.39	1.49	0.50	0.01	0.08	0.15	<10	<0.5	<10	1380	11	<10	<10	0.0
S014	131	<1	26	<10	3.10	1.60	0.61	0.01	0.08	0.12	10	<0.5	<10	930	16	<10	<10	0.01
\$015	106	<1	25	<10	3.66	1.74	0.61	0.01	0.07	0.16	<10	<0.5	<10	900	11	<10	<10	0.0
S016	95	<1	20	<10	3.12	1.65	0.75	0.01	0.06	0.12	<10	<0.5	<10	1480	13	<10	<10	0.08
\$017	125	<1	40	<10	2.97	1.29	0.73	0.01	0.10	0.10	50	<0.5	10	1480	13	<10	<10	0.07
\$018	127	<1	41	<10	3.20	1.27	0.59	0.01	0.06	0 16	10	<0.5	<10	480	14	<10	<10	0.0
S019	116	<1	30	<10	3.93	1.76	0.48	0.01	0.12	0.19	<10	<0.5	<10	910	12	<10	<10	0.00
S020	128	<1	30	<10	3.80	1.59	0.59	0.01	0.10	0.16	10	<0.5	10	780	13	<10	<10	0.03
S021	106	<1	20	<10	3.50	1.44	0.39	0.01	0.11	0.15	<10	<0.5	<10	920	10	<10	<10	0.04
S022	100	<1	29	< 10	3.92	1.37	0.51	0.04	0.09	0.13	<10	<0.5	<10	1100	11	<10	<10	0.05
\$023	124	<1	43	<10	3.56	2.05	0.77	<0.01	0 04	0.20	10	<0.5	<10	490	18	<10	<10	0.0
S024	116	<1	42	<10	3 36	1.51	0.86	< 0.01	0.06	0.16	<10	<0.5	<10	790	14	<10	<10	0.0
S025	126	<1	50	<10	3.85	2.12	0.91	< 0.01	0.04	0.21	<10	<0.5	< 10	700	18	<10	<10	0.0
S026	131	<1	60	< 10	4.03	2.10	0.98	<0.01	0.04	0.21	10	< 0.5	<10	740	17	<10	<10	0.0
5027	118	<1	44	<10	3.69	171	0.85	< 0.01	0.04	0.16	<10	<0.5	<10	850	14	<10	<10	0.0
5028	105	<1	35	<10	3.25	1.50	0.78	<0.01	0.04	0.11	<10	<05	<10	1190	12	<10	<10	0.0
5029	100	<1	38	<10	2.89	1.23	0.84	0.01	0.05	0.05	10	< 0.5	<10	1370	11	<10	<10	0.0
\$030	104	<1	36	< 10	3.02	1.44	0.76	0.01	0.04	0.10	10	<0.5	<10	960	11	<10	<10	0.0

# APPEDIX B

# **ROCK DESCRIPTIONS**

TC-01	Andesite with red (Mn?) alteration.
TC-02	Light green alteration with red to pink manganese.
TC-03	Dark green altered rock. <u>Not</u> epidote. Altered and esite at north end of N-S trench $\sim 200^{\circ}$ long. Slickensides in area. Fault dip 30°E.
TC-04	Epidotized zone in maroon andesites. Malachite in vugs in andesite and with epidotized rock.
	LO $3+50E$ South end of boulder field with felsic float, strong epidote alteration and volcanic breccia and field is ~ 50m wide and strikes NW
TC-05	at this location. Quartz vein material with epidote and k feldspar. Comprises bull quartz, quartz crystals and cockscomb quartz.

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## ANALYTICAL PROCEDURES

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### **Geochemical Analysis**

### by Chemex Labs Ltd.

ELEME	ENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD
Au	Gold	5 ppb	fire assay	A.A.
Al*	Aluminum	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sb	Antimony	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
As	Arsenic	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ba*	Barium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Be*	Beryllium	0.5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Bi	Bismuth	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Cd	Cadmium	0.5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ca*	Calcium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Cr*	Chromium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Co	Cobalt	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Cu	Copper	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ga*	Gallium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Fe	Iron	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
La*	Lanthanum	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Pb	Lead	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Mg*	Magnesium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Mn	Maganese	5 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Hg	Mercury	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Мо	Molybdenum	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ni	Nickel	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Р	Phosphorus	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
K*	Potassium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sc*	Scandium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ag	Silver	0.2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Na*	Sodium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
Sr*	Strontium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
TI*	Thallium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Ti*	Titanium	0.01%	Aqua-Regia digestion	Ind. Coupled Plasma
W*	Tungsten	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
U	Uranium	10 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
V	Vanadium	1 ppm	Aqua-Regia digestion	Ind. Coupled Plasma
Zn	Zinc	2 ppm	Aqua-Regia digestion	Ind. Coupled Plasma

\* Incomplete digeston.

### Project 654

#### Erin

### file 654:geodala<sup>:</sup>Rock\_99 wk4

# Rock Sample Analyses

Deference :	30928352	29929184						• * *	- -										
Reigience .	a5520552						======			=======		=====		=====	======	=======	=====		======
Sample ID	Lab report #	30g FA/AA Au ppb	ICP Ag ppm	ICP As ppm	ICP Sb ppm	ICP Cu ppm	FA Cu %	ICP Pb ppm	ICP Zn ppm	ICP W ppm	ICP <b>Cd</b> ppm	ICP Mo ppm	ICP Bi ppm	ICP Ni ppm	ICP Co ppm	ICP Cr ppm	ICP Fe %	ICP Mn ppm	ICP Ba ppm
			0.6			10		<2	44	<10	<0.5	<1	<2	26	31	112	3.23	>10000	250
1C-01	9928352	×0	0.0	500		10		~2	36	<10	<0.5	<1	<2	13	18	94	0.75	>10000	1430
TC-02	9928352	<5	<0.2	762	14	12		~2	40	210	0.0	- 1	-2	17	16	121	3 37	1310	10
TC-03	9928352	<5	06	50	4	122		12	42	< 10	0.5			17	10	125	2.60	1280	40
TC-04	9929184	<5	7.2	28	<2	>10000	1.30	<2	42	<10	1.5	<1	int		10	133	2.03	1200	40
TC-05	9928352	20	0.8	8	<2	408		<2	32	<10	<0 5	<1	<2	5	8	155	0.80	1200	40

### Rock Sample Analyses (part 2)

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Sample ID	ICP	ICP	ICP	ICP	ICP	IСР	IСР	IСР	IСР	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP
	V	Hg	Sr	La	Al	<b>Мд</b>	Са	<b>Na</b>	<b>К</b>	Ti	U	Be	Ga	P	Sc	Ti	B	<b>S</b>
	ppm	ppm	ppm	ppm	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
TC-01	51	<1	82	<10	1.50	1 61	1.51	0.08	<0 01	0.15	40	<0.5	10	470	14	<10	<10	<0.01
TC-02	77	<1	27	<10	1.40	0.94	1.14	0.01	0.31	0.04	30	<0.5	<10	350	3	<10	<10	<0.01
TC-03	184	<1	20	<10	5.49	1.69	9.26	0.01	<0.01	0.17	<10	<0.5	10	470	18	<10	<10	<0.01
TC-04	100	<1	472	<10	2.72	0.92	2.70	0.01	<0.01	0.22	<10	<0.5	<10	int	8	<10	<10	0.20
TC-05	147	<1	10	<10	4.35	0 60	4.74	0.04	0 05	<0.01	<10	<0.5	<10	10	<1	<10	<10	<0.01









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