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Gold Commissioner's Office VANCOUVER, B.C.

RECONAISSANCE REPORT ON THE REST PROPERTY

LIARD MINING DIVISION BRITISH COLUMBIA

CENTERED ON:

LATITUDE:56° 52' 26" N LONGITUDE:130° 37' 59"W

104B/15E

<u>BY</u>

NORTHGATE EXPLORATION LTD.

2050-1055 W GEORGIA ST., VANCOUVER, B.C. V6E-3R5

APRIL 2003

F.C. EDMUNDS P.GEO

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,172

1.0 SUMMARY

The Rest Property comprises six mineral claims covering a total of 18.5 km² (1848ha/4565acres), located in the Liard Mining Division, approximately 24 kms west of Bob Quinn airstrip along the Stewart-Cassiar highway. There is good gravel road access to within 9 kms provided by Barrick's privately owned Eskay Creek mine access road. The claims are 100% owned by Northgate Exploration Limited, of Vancouver, British Columbia.

Paleozoic rocks of the Stikine Assemblage, and Mesozoic rocks of the lower-middle Jurassic Hazelton Group underlie the Rest claims. Lithologies present include intermediate to felsic dacite tuff, pillow basalt and epiclastic rocks. Both the Hazelton Group and Stikine Assemblage rocks are prospective for precious metal enriched massive sulphides deposits. This report outlines the results of reconnaissance rock sampling on the property.

TABLE OF CONTENTS	
1.0 SUMMARY	2
TABLE OF CONTENTS	3
2.0 INTRODUCTION	4
2.1 TERMS OF REFERENCE	4
2.2 LOCATION, ACCESS AND PROPERTY DESCRIPTION	4
2.3 PHYSIOGRAPHY, CLIMATE AND INFRASTRUCTURE	
2.4 EXPLORATION HISTORY	7
3.0 REGIONAL GEOLOGY	8
4.0 PROPERTY GEOLOGY AND MINERALIZATION	11
5.0 SEPTEMBER 2002 PROGRAM	12
6.0 CONCLUSIONS AND RECOMMENDATIONS	13
7.0 REFERENCES	13
8.0 STATEMENT OF QUALIFICATIONS	14
9.0 STATEMENT OF COSTS	15
APPENDIX ONE - SAMPLE DESCRIPTIONS	16
APPENDIX TWO - BASE & PRECIOUS METAL RESULTS	17
APPENDIX THREE – ASSAY CERTIFICATES	18
ADDENDIN FOUR CAMPIE I COATION MAD	

2.0 INTRODUCTION

2.1 TERMS OF REFERENCE

This report on work is prepared to satisfy assessment requirements, and reviews work conducted on the property on September 22 2002. The data contained herein is derived from sampling traverses and published maps, reports and government open file reports. Sample locations were determined using Garmin 12XL global positioning receivers.

2.2 LOCATION, ACCESS AND PROPERTY DESCRIPTION

The Rest Property consists of 76 units in four 4-post claims (Rest 1 to 4) and 2 units in two-post claims (Really & Clay) situated 24 kms west of Bob Quinn airstrip located on the Stewart-Cassiar highway. The airfield is suitable for most fixed wing aircraft as it regularly services Eskay Creek mine. The nearest town is the hamlet of Stewart located 115 kms by air to the south. Access is by helicopter from Bob Quinn airstrip. The Rest Property claims fall within the Liard Mining Division and are located at latitude 56°52'26"N and longitude 130°37'59"W, on NTS mapsheet 104B/15E shown on Figure 1 and 2.

The recorded 100% owner of the claims is Northgate Exploration Ltd. of Vancouver B.C. The claims have not been subject to legal survey and the Summary Claim Data is shown below in Table 1.

Table 1	9	.mmarv	Claims	Data

TODO I. CO	TITLE Y CRUIIN	<u> </u>					
Tenure#	Claim Name	Owned%	GSB Map	Expiry Date	Mining Division	Units	Tag#
396462	Really	100	104B087	9/22/2003	Liard	1	714368M
396463	Clay	100	104B087	9/22/2003	Liard	1	714369M
393452	REST 1	100	104B087	5/23/2003	Liard	20	241136
393453	REST2	100	104B087	5/23/2003	Liard	20	241137
393454	REST3	100	104B087	5/23/2003	Liard	20	241138
393455	REST4	100	104B087	5/23/2003	Liard	16	241139

Total 78

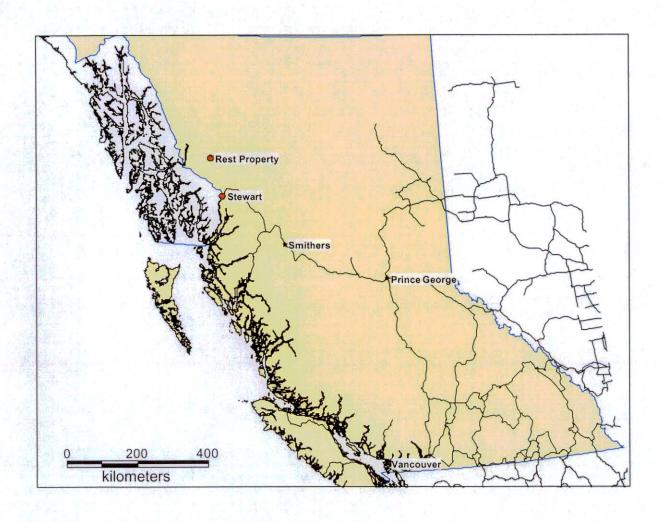


Figure 1. Rest Property Location Map

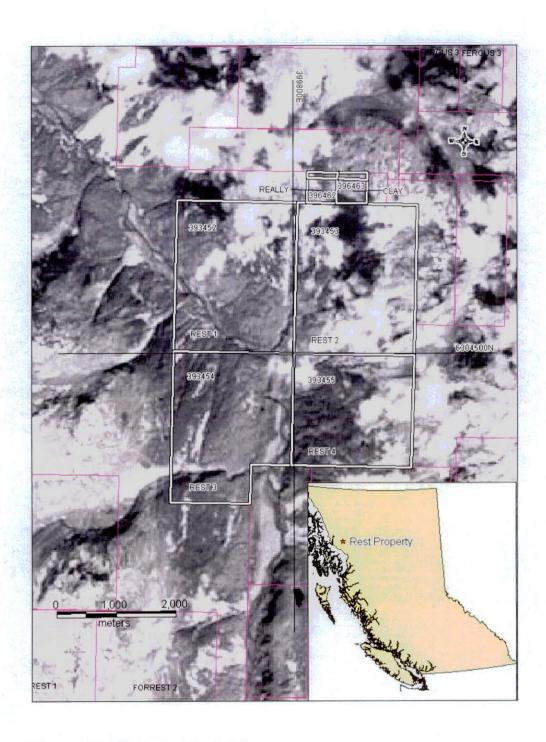


Figure 2 Rest Claims Location Detail

2.3 PHYSIOGRAPHY, CLIMATE AND INFRASTRUCTURE

The property area is located straddling the Forrest Kerr river drainage just north of its confluence with the Iskut River. The topography of the area is best characterized as rugged glaciated mountainous terrane with elevations ranging from 300m to 1800m. Treeline occurs at 1000m below which the vegetation is dominated by mature growth timber of spruce, hemlock and cedar, with intermittent but challenging patches of tag alder and devil's club. Alpine vegetation is sparse comprised of heather and stunted spruce.

The area receives around 2.0m of precipitation per year and is best worked between the months of June and September. During the course of this field program the property was covered by 30cms of freshly fallen snow.

Nearest infrastructure is at KM 45 Camp on the Eskay Creek mine road located 25 kms south by helicopter from the property, or at Bob Quinn, where there are bed & breakfast style accommodations available. The property is remote from any hydropower source, with the nearest being located at Meziadin Lake en route to Stewart.

2.4 EXPLORATION HISTORY

The first recorded work in the area corresponds with the 21 Zone discoveries made at Eskay Creek in 1988 and the release of government funded stream sediment surveys. The area was worked by a number of companies until 1991 followed by a period of quiescence until 1998. The work history on record with the BCGS is summarized and tabulated below:

Name	Owner	Date	Work
Kerr	Todoruk, Steve L.	1989	Prospecting
Arc	Kestrel Resources Ltd.	1989	Geochemical, Prospecting
Tic	Kestrel Resources Ltd.	1989	Geochemical, Prospecting
Tic	Kestrel Resources Ltd.	1989	Geochemical, Prospecting
Glimmer	Esso Resources Canada Limited	1989	Geochemical, Prospecting
FK	Kaye, K.	1989	Prospecting
isk	Ecstall Mining Corporation	1990	Prospecting
Best Bet	Canarc Res.	1990	Geochemical, Geological
isk-Bell	Ecstall Mining Corporation	1990	Geochemical, Geological
Kik	Kestrel Resources Ltd.	1990	Prospecting
Kik	Marietta Resources Corp.	1990	Prospecting
Bell	Ecstall Mining Corporation	1990	Geochemical
FK	Canadian Cariboo Resources Ltd.	1990	Geochemical, Geological
Glimmer 2	Homestake Canada Inc.	1991	Geochemical, Geological
FK	Athabaska Gold Resources Ltd.	1991	Geochemical, Prospecting
Tic	Kestrel Resources Ltd.	1991	Geochemical
Best Bet	Glendale Resources	1991	Geochemical, Geological, Prospecting
PBR	Homestake Canada Inc.	1998	Geological, Physical, Geochemical
PBR	Homestake Canada Inc.	2001	Drilling, Geochemical

Most of the work completed is of a prospecting nature with a total of 886 rocks, 432 silts and 1044 soil samples coming from the 104B087 map sheet, which includes the Rest claims. Only one drill hole has been completed in the area on Barrick's PBR property located 5.2 kms south of the Rest claims. This hole was completed to a depth of 1419.2m and returned no significant assays.

3.0 REGIONAL GEOLOGY

The Iskut-Forrest Kerr area forms part of the Stikine Terrane (Stikinia) of the Intermontane belt of the Canadian cordillera, flanked by the Coast Plutonic Complex located 80kms to the west. The Stikine Terrane is comprised of four unconformity bound litho-stratigraphic assemblages as outlined in the table below.

ASSEMBLAGE	AGE	LITHOLOGY
Bowser Lake Group	Middle Jurassic	Siltstone, mudstone and conglomerate
Hazelton Group	Early Jurassic	Siliciclastics, epiclastics from andesitic to dacitic protoliths, rhyolite, basalt and mudstone with minor limestone.
Stuhini Group	Late Triassic	Andesitic volcanic rocks and related epiclastic rocks.
Stikine Assemblage	Mid Devonian to Late Permian	Tholeiitic to calcalkaline, mafic and bimodal flows and volcaniclastics, interbedded carbonate, minor
		shale and chert

Rocks from all the assemblages listed above are found in the vicinity of the Rest claims. The Hazelton Group has been the focus of much exploration activity and research since it hosts the precious metal deposit at Eskay Creek. The Hazelton Group has traditionally been divided into four or five major formations, however recent workers (Macdonald et. al., 1996; Roth et. al., 1997) have eschewed the earlier framework due to inconsistencies in application. Logan et. al. 2000 have identified sections of strata correlative to the Salmon River Formation which forms the upper portion of the Hazelton Group in the East Forrest Kerr area. The lower section of the Salmon River formation in the Eskay Creek area is host to the 21 Zone Ag-Au deposits. Figure 3 shows the lithologies encountered in the area and more specifically those Hazelton lithologies present in the vicinity of the Rest claims (Logan et.al. 2000).

At least six distinct plutonic events have effected the rocks in the Stewart-Iskut area ranging from late Devonian, early Missisippian to late Triassic, late Triassic to early Jurassic, late early Jurassic, middle Jurassic and Eocene. The nearest plutonic rocks to the Rest property are those of the Forrest Kerr pluton located several kilometers to the west. The Forrest Kerr pluton is a N-S trending composite body of hornblende diorite and younger granodiorite with tonalite to trondihemite phases.

A major north-south fault structure transects the area, known as the Forrest Kerr Fault. This feature and its related West Slope Fault transect the Rest Claims. Four phases of deformation have affected the area. The Paleozoic rocks contain elements of all four periods while the Mesozoic assemblages are less deformed characterized by more upright folds and less ductile features of the last two events. In the South Forrest Kerr area D1 and D2 is manifest as mesoscopic, NE trending SE verging isoclinal folds interpreted as active during the Paleozoic and pre-late Triassic. D3 is present as upright

ERA	PERIOD	GROUP OR FORMATION	MAP	LITHOLOGY	THICKNESS (metres)		INTRUBIVE SUITES	
Q U A T	RECENT		Qu Qob Clair	tris deposits divine basell uncontelidated glacial til	10-20		benalic dken	AK E
	PLEISTOCENE	BIG RAVEN FORMATION	СР	d'ivine-plagioclase-aug le basait	10-20		ins siic ckes	
T E R	PLICICENE	EPECTRUM FORMATION NEDO FORMATION	TSr	Seucocratic peralkatine myolite aphyric and olivine-phyric besalt subaerial towe, intercerated favoid gravet	7			m.J.Bp strin bedded shele, eardst a conglomen kneed
	LATE CRETACEOUS	SUSTUT GROUP	uXSa	conglomerale, quanzose sandsione, arkose	,			
	MIDDLE JURRASIC TO CRETACEOUS	BOWSER LAKE GROUP	aBL poet	greywadie, shale, minor cross badded sandslone drent petitra to granule conglumerala	500		ctabesic-dionia (MAIdi)	
M & S O N O - C	EARLY TO MIDDLE JURASSIC	HAZELTON GROUP	mJHsi mJHsi UHv UHv UHv UHvi	Decoated and fractured dark given stice-to-a SISBbne stittene, enchatene, prince tof if the beast purple, manor tof if the beast purple, manore, and given anders the feet or we door stah-flow fulf, myclibe fower in another propagation and control propagation or property of the feet or the feet of the feet	1000-2000		Yehinuko (Rulan monzonite (Milmz), Mionzonite (Milmz), Mionzonite (EJmz) and grantie (EJg) stocks, expira- plag octase dootte	Jw & Jwcg undwided lepin trif
ľ	LOWER JURASSIC	STUHIN	Ung UTS	Ends was based conjugarents	200-309	1	bride and these	
		GROUP NEWMONT LAKE	2154 uTw 3135 2154	plapischase crystal stif prix flow-layared rhypitis agai imsessine flomblands-plagischase phyric andeasa	.400	2000	Hombierde-plagiociase pophyry (LTest); Pyroxene diorite (LTept	Manuface Cilia
	upper triassic	MESS LAKE fades	uTSvb uTSvb uTSvb uTSmi uTSv	Dick phagicolasse-pyonense posytivy's flows, interbacked kiff massive palse weaking crystal huff, lapini hiff namew's benefit flows and tuff surpertinized basatic hiff palse green grey utils mirror basati flows	800		L'Epd), syanife (L'Es), homisiende dionie (L'Ehid) and periodoste (L'Eum)	must be sell to the sell to th
		MORE CREEK tades	uTSs uTSc uTSsn uTSst	hick poorly backflad sends sone grey aparsely crincidal litrestone well beddad feldspath's kandishoe trn farringstytkeub killichune	1500			Intertrected Source and Source an
	EARLY MEDOLE TRIASSIC		mīs	hin badded chart, sittatone	>15			P P P P P P P P P P P P P P P P P P P
	EARLY PERMIAN		PSu PSc IPSdt	undivised metavolossic and metasedimentary rocks medium bedded to massive fossiliferous carbonate deformed tuff	? <20	9		
P 4 L H O Z I C	CARBONFEROUS UPPER CARBONFEROUS TO LOWER PERMIAN	зпане	CSet uCSr uCSr uCSmv uCSb uCSo uCSos uCSos	phylitic allistorm, graphitic orgilitis, tuthaneous phylitis transvers and foliated investment, others, with arre- mances to prey, flow-dayword and subentill or hydrid transon tell and spall staff, and-tieve tutil transvers and produced to basel, witcome, conglomerate allistorme, sardetome, sufficecous wasche	500-10	xog		E CONTROL TIIN backled mJHst affatone and
	MID CARBONIFEROUS	1	mCSc	bioclastic limeatone	206	_		
	DEVONIAN TO EARLY MISSISSIPPIAN		DMSvr DMSvr ImDSIv	p low baself - andertie, hyaloclesite and bracota myodactie low bracota, luff and subvolcantic intrusives intermediate to fetalioptaplicolase-physic tuffs	>2000-	1000	More Greek Plubon: Forrest Kurr Plubon: bioble grande	Tame Street Stre
			tanDSc IznDSs	deformed thin-bedded to massive limeatone bin-bedded sillistone, sandstone and argittle]		(LDg/EMg). hambiende diarite	SOUTHFAST FORREST
	LOWER AND MIDDLE DEVONIAN		imDSqs imDSqs imDSqs	green and purple achistone fulfs quartz seriol le achist graphitic solitat			(LDd/EAA), gabbro, homblerdile, dino-pyroxenite (LDum) pyroxene d'onte (EDd)	SOUTHEAST FORREST KERR CREEK

Figure 3 Detailed Lithogies in the region and Hazelton Group Detail at East Forrest Kerr (Logan et.al.2000)

west to northwest trending open folds. The last event is characterized by macroscopic NE to NW trending folds and is loosely constrained as post late Triassic in age.

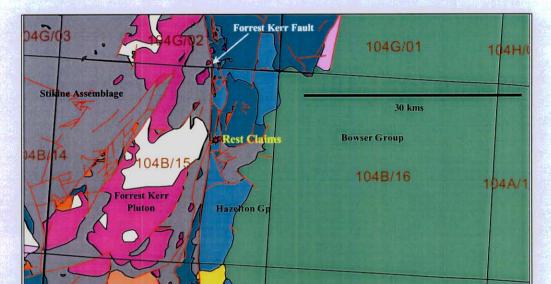


Figure 4 illustrates the regional geology of the area and the major fault structures.

Figure 4 Regional Geology of the Iskut-Forrest Kerr Area (From The Map Place BCGS)

Eskay Creek 104B/09

Most of the rocks in the area have undergone sub-greenschist regional metamorphism. The fact that primary textures are preserved in the Mesozoic rocks but not in the older rocks suggests that the thermal event coincides with the earliest deformation event D1.

Current mineral production comes from Barrick's Eskay Creek Ag-Au mine located 32 kms south of the Rest Claim group. Annual production from the deposit in 2002 amounted to nearly 360,000 ounces of gold and 18 million ounces of silver from 254,000 tons. Reserves stated 12/31/02 is 1.433 Mtons grading 0.998 opt gold and 44.6 opt Ag or about six years production at 2002 rates.

Eskay Creek is a remarkably precious metal enriched volcanic associated massive sulfide deposit, hosted by lower middle Jurassic felsic volcanic rocks and overlying mudstone and mafic volcanic flows. Regionally, Eskay occurs at the top of the Salmon River formation where felsic and mafic volcanic rocks become interleaved with interflow mudstone.

Other important deposits known in the district are large Cu-Au+Mo porphyry deposits known at Schaft Creek (971Mt @ 0.298%Cu, 0.033%MoS₂, and 1.2 gpt Ag) and Galore

Creek (233Mt @ 0.67%Cu, 0.35 gpt Au and 7.0gpt Ag). Mineral occurrences proximal to the Rest claims can be described in four categories; Cu-Au±Mo porphyry deposits, mesothermal Cu-Ag-Au±As-Sb vein deposits, precious metal enriched volcanic associated massive sulphide deposits and carbonate hosted Pb-Zn deposits. The Rest claims are prospective for the latter two deposit types.

4.0 PROPERTY GEOLOGY AND MINERALIZATION

Paleozoic plutonic and arc-derived volcano-sedimentary rocks of the Stikine Assemblage exclusively underlie the western half of the Rest Claims. To the east of the

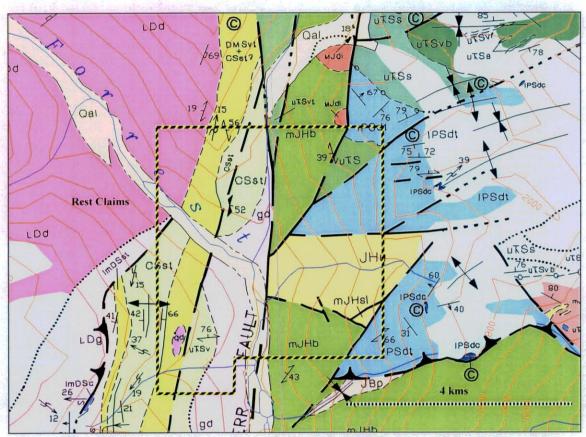


Figure 5 Geology of Rest Claims (Logan 1997) See Table for description of unit codes.

Forrest Kerr Fault the claims are underlain by EW trending tectonic wedges of Lower Permian siliceous tuff and sedimentary rocks. Logan has mapped undifferentiated upper Triassic volcanic rocks on the property, as well as basaltic tuff, silicic siltstone and breccia. Most of the contacts between assemblages are noted as tectonic and there is very little structural information in the Mesozoic units. Figure 5 shows the property geology as mapped by Logan et.al. 1997. The table below describes the lithologic units and their codes.

MAPPING UNIT	AGE	LITHOLOGY
JHu	Jurassic	Undifferentiated volcanic and associated sedimentary rocks.
mJHb	Middle Jurassic	Pillow basalt breccia, and tuff interbedded with white and grey thinly laminated silicic siltstone and tuff.
uTSs	Upper Triassic	Thickly bedded augite bearing volcanic sandstone with interbeds of sharpstone conglomerate
uTS	Upper Triassic	Undifferentiated volcanic and arc derived sedimentary rocks.
IPSdt	Lower Permian	Deformed and interlayered intermediate siliceous tuff and sedimentary rock.
CSst	Carboniferous	Grey-light green phyllitic siltstone, graphitic argillite, siliceous tuff and thin lenses of dark brown siltstone.
DMsvt	Devonian-Miss	Pale to dark green well bedded dust tuff, mafic tuff and minor pyritic felsic welded tuff.
LDd	Late Devonian	Late Devonian medium grained hornblende diorite, quartz diorite mainly equigranular to gneissic
gđ	Undifferentiated	Pink equigranular biotite granite, monzonite, monzodiorite

No mineral occurrences are documented on the Rest claims in government records, however five regional stream geochemistry samples have been taken from the drainages on the property and one located on Rest 3 (104B873150) returned 487 ppb Au. This stream drains the western half of the property and the sample site is located on the SE of Rest 3.

5.0 SEPTEMBER 2002 PROGRAM

On September 22, the author accompanied by Ms J Pautler (P.Geo), Ms J Mazvihwa, and Mr R Hall spent one day on the Rest property. The objective of the work was to assess the mineral potential and conduct reconnaissance prospecting on the property sampling rocks and stream sediment material (silt and moss mat). Weather conditions were not optimal for the work as there was 30cms of freshly fallen snow at alpine elevations (1500m).

During the property visit a total of 15 rock and 5 stream silt samples were collected from the NE portion of the Rest 2 claim and the Clay claim. The rock descriptions are presented in Appendix 1. All rock samples are grab samples from outcrop. Results are tabulated in Appendix 2 summarized for precious and base metals. Appendices 3 and 4 show assay certificates and sample locations respectively. No significant values were produced from the sampling.

During the course of the fieldwork felsic volcanic rocks were noted north and east of the Rest 2 claim and additional claims were staked covering these lithologies.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The September 2002 program was successful in confirming the presence of a lithologic package prospective for precious metal enriched volcanic associated massive sulphides deposits.

Although no significant assays were returned from the weather abbreviated sampling program more prospecting and geochemical exploration work is warranted and is recommended.

For 2003 it is proposed planned that a 4-person camp be established to further delineate and prospect the felsic and mafic volcanic rocks on the property.

7.0 REFERENCES

- Barrick Gold Corporation Website (2003): Barrick Analyst Briefing 2003 Eskay Creek P15
- Cunningham-Dunlop, I. R.; Gale, D. F.; and Buschman, A. (2001): Diamond Drill Report on the PBR 9 Claim ARIS File 26709
- Logan, J.M., Drobe, J.R., Koyanagi, V.M., and Elsby, D.C. (1997): Geoscience Map 1997-3
- Logan, J.M., Drobe, J.R., McClelland, W.C., (2000): Geology of the Forrest Kerr-Mess Creek Area, Northwestern British Columbia in Bulletin 104 B.C. Ministry of Energy and Mines.
- Roth, T. (1977): The Precious Metal-Rich Eskay Creek Deposit, Northwestern British Columbia; in Volcanic Hosted Massive Sulphide Deposits, Short Course Notes, GAC, V13, p. 367-383.
- Macdonald, A.J., Lewis, P.D., Thompson, J.F.H., Nadaraju, G., Bartsch, R.D., Bridge, D.J., Rhys, D.A., Roth, T., Kaip, A., Godwin, C.I., and Sinclair, A.J., (1996): Metallogeny of an Early to Middle Jurassic Arc, Iskut River Area, Northwestern British Columbia: Economic Geology and the Bulletin of the Society of Economic Geologists, v. 91, p. 1098-1114.

8.0 STATEMENT OF QUALIFICATIONS

- I, Frederick Carl Edmunds, of 986 Leah Circle, Reno, NV, 89511, do hereby certify that:
- 1. I have supervised the 2002 exploration program completed at the Rest Property, reviewed all the data contained herein, and contributed to the preparation of this report.
- 2. I graduated from the University of Edinburgh in 1983 with a B.Sc. (Honours) in Geology.
- 3. I graduated from Queens University, Kingston, Ontario in 1988 with an M.Sc. in Mineral Exploration.
- 4. I am a Professional Geoscientist (P.Geo.) registered with the Association of Professional Engineers and Geoscientists of British Columbia, member # 19724, and have been a member in good standing since 1992.
- 5. I am a member of the Society for Mining, Metallurgy and Exploration, member #897500, and have been a member of good standing since 1992.
- 6. From 1985 until present I have been continuously employed as a Geologist in mineral exploration.

Dated at Kemess South Mine, Omineca Mining Division, the 28th day of April 2003.

F.C Edmunds P.Geo

9.0 STATEMENT OF COSTS

The following costs were incurred completing the work described in this report:

Travel	\$ 693.24
Food/Lodging	\$ 328.07
Manpower	\$ 2,822.00
Helicopter	\$ 1,260.00
Analytical	\$ 490.86
Reporting	\$1,100.00
Total	\$6,694.17

APPENDIX ONE - SAMPLE DESCRIPTIONS

Sample#	Easting	Northing Type	Description
113493	401549	6306929 Rock	Medium-coarse grained basalt with 5% pyrite.
113494	401825	6306652 Rock	Orange-dark gray weathering medium grained mafic volcanic rock.
113495	401783	6306515 Rock	Orange-dark gray weathering medium grained mafic volcanic rock. Cross cutting calcite veinlet.
113496	401678	6306450 Rock	Medium fine grained dark grey basalt; minor plagioclase phenocrysts
113497	401615	6306428 Rock	Dark green, fine grained mafic volcanic rock; several 2-3mm wide calcite veinlets.
113498	401520	6306445 Rock	Coarse plagioclase megacrystic porphyry with trace pyrite; dark grey groundmass, phenocryst up to 1 cm.
116958	401029	6307449 Rock	
116959	400881	6307347 Rock	
116960	400881	6307347 Rock	
116961	400808	6307294 Rock	
116962	400805	6307299 Rock	
116963	400772	6307368 Rock	
116964	400714	6307463 Rock	
116965	400672	6307437 Rock	
116966	400672	6307437 Rock	
ES2	401748	6306707 Silt	
ES3	401748	6306707 Silt	
ES4	401825	6306652 Silt	
ES5	401088	6306106 Silt	
116966	400672	6307437 MM	

APPENDIX TWO - BASE & PRECIOUS METAL RESULTS

Sample#	Туре	Au_ppb	Ag_ICP	As_ppm	Cu_ppm	Pb_ppm	Zn_ppm
113493	Rock	-5	-0.2	10	3	2	77
113494	Rock	15	-0.2	-5	26	8	63
113495	Rock	-5	-0.2	-5	27	10	68
113496	Rock	-5	-0.2	-5	47	8	68
113497	Rock	5	-0.2	-5	47	8	47
113498	Rock	5	-0.2	-5	57	18	55
116958	Rock	25	2.0	140	21	28	133
116959	Rock	-5	0.2	-5	8	10	126
116960	Rock	-5	-0.2	-5	15	8	52
116961	Rock	5	-0.2	-5	74	16	40
116962	Rock	5	0.2	25	2	6	44
116963	Rock	5	-0.2	25	3	4	38
116964	Rock	-5	0.2	- 5	12	-2	75
116965	Rock	5	-0.2	15	8	10	101
116966	Rock	-5	-0.2	-5	74	12	66
ES2	Silt	<5	0.4	10	76	12	140
ES3	Silt	5	<0.2	10	38	10	70
ES4	Silt	<5	<0.2	<5	47	12	65
ES5	Silt	10	0.2	5	55	12	64
116966	MM	5	<0.2	25	47	12	101

 \mathbf{C}

APPENDIX THREE - ASSAY CERTIFICATES



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

25-Oct-02

0041 Dallas Drive, Kamloops, B.C. V2C 6T4 Phone (250) 573-5700 Fax (250) 573-4557 email: ecotech@direct.ca

CERTIFICATE OF ANALYSIS AK 2002-418

KEMESS MINE

P.O. Box 3519 Smithers, BC V0J 2N0

ATTENTION: Carl Edmunds

No. of samples received: 25 Sample Type: Reject **Project #: 4099**

Shipment #: None given

REST CLAIMS

Note: Values expressed in percent

	ET #.	Tag #	BaO	P205	SiO2	MnO	Fe203	MgO	Al203	CaO	TiO2	Na2O	K20	L.O.I.
.=	3	113493	0.17	0.05	74.28	0.04	3.43	0.64	12.15	0.08	0.28	2.92	4.78	1.31
).	8	113498	0.58	0.32	53.73	0.13	3.85	0.79	17.50	5.96	0.53	3.74	7.24	5.63
,	15	116963	0.23	0.13	74.62	0.05	3.28	0.98	11,59	0.83	0.52	4.04	2.21	1.52
	16	116964	0.04	0.45	47.03	0.19	13.73	4.80	11.95	2.74	1.63	2.56	0.70	14.17
	22	116970	0.17	0.01	76.79	0.01	0.72	0.46	12.99	0.21	0.25	5.20	2.65	0.58
	QC DATA Repeat: 3	<u>:</u> 113493	0.17	0.05	74,50	0.04	3.49	0.65	12.16	0.01	0.27	2.92	4.60	1.36
;	Standard: sy4 mrg-1	•	0.05 0.01	0.23 0.01	49.92 38.38	0.12 0.18	6.16 18.13	0.57 13.14	21.12 8.44	8.23 15.15	0.29 3.77	7.15 0.70	1.60 0.01	4.56 2.22

df/wr380 XLS/02 Invacé Puis Mumer Man

ECO TECH LABORATORY LTD.

Jutta Jealouse B.C. Certified Assayer



ECO TECH LABORATORY LTD. 10041 Dallas Drive KAMLOOPS, B.C. V2C 6T4

Phone: 250-573-5700 Fax : 250-573-4557



ICP CERTIFICATE OF ANALYSIS AK 2002-418

P.O. Box 3519 Smithers, BC VOJ 2N0

ATTENTION: Carl Edmunds

No. of samples received: 25 Sample Type: Reject Project #: 4099 Shipment #: None given

Values in ppm unless otherwise reported

	• • • • • • • • • • • • • • • • • • • •	Au	•																											
Et #.	Tag #	(ppb)	Ag	AI%	As_	Ba	Bi	Ca %_	Cd	Co	Cr	Cu	Fe %	La I	Mg % _	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	T1 %	<u>U</u>		<u> w</u>	<u> </u>	Zn
1	1 113491	5	<0.2	2.48	<5	15	30	3.61	<1	47	49	38	6.57	20	1.90	993	<1	0.07	29	910	6	<5	<20	<1	0.67	<10	311	<10	47	71
2	R 113492	10	< 0.2	3.57	<5	75.	<5	0.85	<1	30	46	145	8.05	20	2.52	613	<1	0.07	20	930	8	<5	<20	14	0.12	<10	298	<10	15	68
3	R 113493	<5	<0.2	0.67	10	70	<5	0.06	<1	3	57	3	2.63	20	0.40	257	3	0.04	3	120	2	<5	<20	2	0.04	<10	5	<10	6	77
4	R 113494	15	<0.2	1.36	<5	110	<5	2.05	<1	14	42	26	4.39	20	0.62	395	<1	0.04	15	1010	8	<5	<20	90	0.06	<10	44	<10	10	63
5	P. 113495	<5	<0.2	2.35	<5	25	10	7.85	<1	20	52	27	5.18	20	2.12	1084	<1	0.06	37	1190	10	<5	<20	309	0.08	<10	172	<10	12	68
6	g 113496	<5	<0.2	3.05	<5	65	<5	2.21	<1	26	41	47	6.16	20	2.64	1216	<1	0.12	16	1200	8	<5	<20	365	0.11	<10	178	<10	12	68
7	R 113497	5	<0.2	2.42	<5	70	<5	4.62	<1	23	40	47	5.38	20		1253	<1	0.07	22	1540	8	<5	<20	345	0.09	<10	182	<10	11	47
,	R 113498	5		0.75	<5	60	<5	4.38	<1	20	25	57	2.91	20	0.47	923	<1	0.04	14	670	18	<5	<20	213	0.05	<10	132	<10	7	55
٥	£ 116957	5	0.2	0.56	<5	30	<5	0.13	<1	3	66	4	1.23	10	0.60	201	5	0.04	6	120	10	<5	<20	3	0.07	<10	17	<10	7	70
10	R 116958	25	2.0	1.18	140	80	20	0.49	<1	23	42	21	7.21	20	0.86	805	<1	0.02	12		28	<5	<20	<1	0.43	<10	305	<10	22	133
.0	K 110550	20	2.0	1.10	170	00	20	0.40	*'	20	-				0.00	•			-	,										
11	116959	<5	0.2	0.58	<5	30	<5	0.10	<1	4	60	8	1.48	20	0.45	244	2	0.02	8	190	10	<5	<20	<1	0.10	<10	18	<10	10	126
12	116960	<5	<0.2	1.24	<5	40	10	0.26	<1	13	62	15	3.87	20	1.45	382	5	0.04	7	210	8	<5	<20	<1	0.18	<10	39	<10	17	52
13	116961	5	< 0.2	4.24	<5	1 1 5	10	2.16	<1	46	105	74	4.64	10	4.84	734	<1	0.04	170	350	16	<5	<20	<1	0.24	<10	92	<10	15	40
14	116962	5	0.2	0.64	25	30	10	0.77	<1	7	65	2	1.75	10	0.52	287	1	0.04	6	180	6	<5	<20	<1	0.17	<10	11	<10	21	44
15	116963	5	<0.2	0.67	25	35	5	0.49	<1	7	64	3	2.46	20	0.54	311	2	0.05	5	460	4	<5	<20	<1	0.10	<10	28	<10	22	38
																					_	_				.45	0.40	-40	-	75
16	116964	<5		0.45	<5	60	5		<1	36	50	12		20		1174	<1	0.05		1140	<2	<5	<20	<1	0.13	<10	240	<10	23	75 101
17	116965	5		0.95	15	65	5	2.73	<1	11	69	8	1.94	10	1.04	352	2	0.02	23	190	10	<5	<20	<1	0.08	<10	25	<10	10	101
18	116966	<5		2.63	<5	25	10	2.17	<1	37	98	74	3.04	<10	2.22	358	<1	0.09	110	560	12	<5	<20	<1	0.20	<10	56	<10	15	66 46
19	116967	10	<0.2	2.45	<5	50	15	1.23	<1	33	69	89	4.53	<10	1.99	732	<1	0.07	46	490	10	<5	<20	2		<10	142	<10	21 5	46 70
20	116968	5	0.2	1.11	<5	95	<5	0.04	<1	3	63	10	2.58	10	0.87	348	4	0.02	3	110	34	<5	<20	2	0.04	<10	4	<10	5	70
	110000		.0.0	4.00		0.5	40	4.00		0.5		67	2.62	40	1.73	506	3	0.07	45	430	10	<5	<20	<1	0.25	<10	120	<10	29	44
21	116969	<5	<0.2		<5	35	10	1.60	<1	25	64	67	3.63	10			-					<5	<20	<1	0.23	<10	8	<10	24	8
22	116970	10	<0.2	0.31	<5	15	<5	0.17	<1	3	96	2	0.61	10	0.30	115	4	0.07	18 109	120 560	2	<5	<20	<1	0.32	<10	98	<10	19	47
23	116971	5	<0.2	4.17	<5	5	15	4.56	<1	38	95	75	4.48	<10	2.79	703	<1	0.05			18	<5	<20	<1	0.40	<10	93	<10	28	69
. 24	116972	<5 40	<0.2	1.89	10	105	20	1.48	<1	35	58	76	4.18	<10	2.06	484	<1	0.11 0.03	38	620 380	10 28	<5	<20	<1	0.40	<10	38	<10	16	67
25	₩11697 3	10	1.4	0.74	35	65	10	0.27	<1	8	61	11	2.57	20	0.58	382	- 1	บ.บอ	,	300	20	~	~20	`1	0.17	110		-10		

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ECO	Troil	LABORATORY I	
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Et #.	Tag #	Au (ppb)		Al %	As	Ва	Bi C	Ca %	Cd	Со	Cr	Cu	Fe %	La l	Mg %	Mn	Мо	Na %	Ni	Р	Pb	Sb	Sn	Sr	Tì %_	U	v	<u>w</u>	ΥΥ	Zn
QC DATA:														"-																
1	113491	-	<0.2	2.51	<5	10	35	3.65	<1	48	50	39		20	1.92	1006	<1	0.07	31	940	12	<5	<20	<1	0.69	<10	315	<10	47	73
10	116958	-	2.0	1.19	140	85	25	0.50	<1	23	42	21	7.23	20	0.86	807	<1	0.02	13	1800	30	<5	<20	<1	0.44	<10	306	<10	23	137
Standard: GEO '02			1.6	1.62	50	140	<5	1.55	<1	19	61	85	3,45	10	0.95	634	<1	0.04	30	670	20	<5	<20	41	0.13	<10	70	<10	10	64

JJ/kejd df/418 XLS/02

ECO TÉCH LABORATORY LTD.
Jutta Jealeuse
B.C. Certified Assayer

Ecotech Analytical Procedures

Sample Preparation – dry and crush entire sample to 95% –10 mesh; riffle out 0.25 kgs for pulverizing 95% -150 mesh Whole Rock Samples: ICP Whole Rock Package Au Geochem – 30g Fire Assay AA Finish Multi-Element ICP (28)

APPENDIX FOUR - SAMPLE LOCATION MAP

