

T ROOGICAL SIRE

### **Ministry of Energy & Mines** Energy & Minerals Division

Geological Survey Branch

	ASSESS	SMEN	T REP	ORT
TITLE	PAGE	AND	SUMM	ARY

TITLE OF REPORT [type of survey(s)] Prospecting, Trenching, Sampling	тотаl cost \$14,917
AUTHOR(S) J.David Williams, P.Eng.	The A MANH THE
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)	not applicable YEAR OF WORK 2007
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE	E(S) 4192805 / 28 January 2008
PROPERTY NAME Fox Property	
CLAIM NAME(S) (on which work was done) 551340, 551341,	551588, 555469, 555473, 557614, 557666, 563737
COMMODITIES SOUGHT Zinc, Copper, Silver	
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 0921	SE191
MINING DIVISION Nicola, Kamloops	NTS 0921.037, 0921.047
LATITUDE <u>50</u> ° <u>21</u> , <u>52</u> " LONGITUE	DE <u>120 <sup>o</sup> 38</u> ' <u>09</u> " (at centre of work)
OWNER(S)	
1) Craig Alvin Lynes	2)
MAILING ADDRESS	
P.O. Box 131	
Grindrod, BC V0E 1Y0	
OPERATOR(S) [who paid for the work]	
1) Rich River Exploration Ltd.	2)
MAILING ADDRESS	
P.O. Box 131	
Grindrod, BC V0E 1Y0	
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, struc	cture, alteration, mineralization, size and attitude):
Property underlain by volcanics, volcaniclastics & sediments of	f Late Traissic to Early Jurassic Nicola Group, part of Quesnellia
terrane. Blacktop Showing, a Kuroko-style, steeply west-dippir	ng Zn-Cu mineralized zone in intensely altered & sheared Nicola rocks
located near center of Property, can be traced 100m on west si	ide of Coquihalla Highway. On the west side of Helmer Lake, in south
part of the Property, a series of northwest trending quartz-carbo	onate veins contain Pb-Zn-Cu in altered andesite.
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSM	
02715, 02811, 03894, 04057, 04765, 06040, 06119	

	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Seismic			
Other			
GEOCHEMICAL			
number of samples analysed for)			
Soil 2 samples: 36	-element ICP, Fire geochem Au	563737	\$ 1,056
Silt			
Rock 26 samples: 36	-element ICP, Fire geochem Au	551340, 551588, 557614	\$ 81
Other			
DRILLING			
RILLING			
RILLING			
RILLING otal metres; number of holes, size) Core			
RILLING otal metres; number of holes, size) Core Non-core			
RILLING otal metres; number of holes, size) Core Non-core ELATED TECHNICAL			
PRILLING cotal metres; number of holes, size) Core Non-core RELATED TECHNICAL Sampling/assaying			
PRILLING otal metres; number of holes, size) Core Non-core ELATED TECHNICAL Sampling/assaying Petrographic			
RILLING otal metres; number of holes, size) Core Non-core ELATED TECHNICAL Sampling/assaying Petrographic Mineralographic			
PRILLING         otal metres; number of holes, size)         Core         Non-core         PELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic		551340, 551341, 551588, 555469,	\$ 6,890
PRILLING Core Non-core RELATED TECHNICAL Sampling/assaying Petrographic Mineralographic Metallurgic PROSPECTING (scale, area)		551340, 551341, 551588, 555469, 555473, 557614, 557666	\$ 6,890
DRILLING         total metres; number of holes, size)         Core         Non-core         RELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         PROSPECTING (scale, area)         PREPARATORY/PHYSICAL		551340, 551341, 551588, 555469, 555473, 557614, 557666	\$ 6,890
DRILLING         total metres; number of holes, size)         Core         Non-core         Non-core         RELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         PROSPECTING (scale, area)         PREPARATORY/PHYSICAL         Line/grid (kilometres)         Topographic/Photogrammetric	1:20,000, 245 ha,	555473, 557614, 557666	\$ 6,890
PRILLING         cotal metres; number of holes, size)         Core         Non-core         Non-core         RELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         PREPARATORY/PHYSICAL         Line/grid (kilometres)         Topographic/Photogrammetric         (scale, area)	1:20,000, 245 ha,	555473, 557614, 557666	\$ 6,890
PRILLING         otal metres; number of holes, size)         Core         Non-core         Non-core         PELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         REPARATORY/PHYSICAL         Line/grid (kilometres)         Topographic/Photogrammetric         (scale, area)         Legal surveys (scale, area)	1:20,000, 245 ha,	555473, 557614, 557666	\$ 6,890
PRILLING         otal metres; number of holes, size)         Core         Non-core         Non-core         PetroD TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         RCOSPECTING (scale, area)         REPARATORY/PHYSICAL         Line/grid (kilometres)         Topographic/Photogrammetric         (scale, area)         Legal surveys (scale, area)         Road, local access (kilometres)/tr	1:20,000, 245 ha,	555473, 557614, 557666	\$ 6,890
RILLING         otal metres; number of holes, size)         Core         Non-core         Non-core         ELATED TECHNICAL         Sampling/assaying         Petrographic         Mineralographic         Metallurgic         ROSPECTING (scale, area)         REPARATORY/PHYSICAL         Line/grid (kilometres)         Topographic/Photogrammetric         (scale, area)         Legal surveys (scale, area)         Road, local access (kilometres)/tr	1:20,000, 245 ha,	555473, 557614, 557666 551340	
RILLING otal metres; number of holes, size) Core Non-core ELATED TECHNICAL Sampling/assaying Petrographic Mineralographic Metallurgic ROSPECTING (scale, area) REPARATORY/PHYSICAL Line/grid (kilometres) Topographic/Photogrammetric (scale, area) Legal surveys (scale, area) Road, local access (kilometres)/trr Trench (metres) Underground dev. (metres)	1:20,000, 245 ha,	555473, 557614, 557666 551340	

### **Prospecting, Trenching and Sampling Report** on the

**FOX PROPERTY** in 2007

**BC Geological Survey** Assessment Report 30006

Tenures Worked:	551340, 551341, 551588, 555469, 555473, 557614, 557666, 563737
Mining Division:	Nicola & Kamloops
NTS:	0921.037 & .047
Latitude:	50°21'52"N
Longitude:	120°38'09"W
Owner:	Rich River Exploration Ltd.
Operator:	Rich River Exploration Ltd.
Consultant:	J.David Williams, P.Eng., geological consultant

for Craig. A. Lynes **RICH RIVER EXPLORATION Ltd.** P.O. Box 131 Grindrod BC V0E 1Y0 www.richriver.bc.ca



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J.David Williams, P.Eng.

27 April 2008

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#### SUMMARY

Through 2007 Craig Lynes of Rich River Exploration Ltd. ["Rich River"] staked his wholly owned Fox Property [the "Property"] located in south-central British Columbia, roughly 30kms north of the town of Merritt. Staking continued in stages throughout the year so that it now consists of 19 tenures covering 3,051 hectares.

The earliest claims were to enclose the Blacktop Showing, a VMS-style zinccopper occurrence discovered by Michael Moore in 2000. Mineralization of the Blacktop Showing is buried under a half-meter of contoured riprap just above the west shoulder of the Coquihalla Highway, a recently built four lane divided thoroughfare that opened in the late 1980's and runs north-south through the entire length of the Property.

Additional claims were added to acquire polymetallic veins exposed just above the west shore of Helmer Lake in the southwest of the Property and to include interesting geology and mineralization located when prospecting in what is now the southeast and north of the Property.

The Property has had a history of exploration extending through the 1970's on a patchwork of claims that overlapped portions of the current Property boundary, principally on its north end and areas surrounding Helmer Lake in the southern part. The 1980's and 1990's saw only sporadic work until the Blacktop Showing was discovered. Most of that historical work emphasized copper targets following a porphyry model similar to discoveries through the 1950's in the Guichon Batholith to the west of the Property, or the skarn-type model of the Craigmont deposit, discovered in 1957, southwest of the Property, or the more recent Afton porphyry copper porphyry deposit in the Iron Mask batholith northeast of the Property, and discovered in 1970.

That early work was confined to geochemical surveys, usually of soils but also stream sediments, and ground geophysics, usually IP or magnetics. Soil geochemistry was successful in locating anomalies around Helmer Lake, another cluster just off the southeast corner of the Property, and more streaking throughout the northern reaches of the Property. That early anomalous geochemistry has a relevance that they continue to represent targets for follow up exploration. IP geophysics located a target off the Property west of Helmer Lake and the magnetic surveys emphasized the northeast fabric of the geology in the south of the Property which contrasts with a distinct northwest fabric in the north.

In 1997 three core holes, were drilled by International Skyline Gold Corp. targeting porphyry-type copper in the center of the Fox Property. Curiously, those holes were following up chargeability anomalies in the same area which was to become of interest once the Blacktop Showing was discovered. Those three 1997 holes did not intersect any mineralization of interest. But at least one hole, K97-3, intersected more than 25 meters of intense quartz-sericite alteration in an area where boulders mineralized in copper were discovered. That alteration may be of interest in follow up exploration.

Discovery of the Blacktop Showing shifted the emphasis of exploration to include VMS-style zinc-copper targets. Gitennes Exploration Inc. ["Gitennes"] optioned Michael

Moore's original claims in 2000, and staked a larger area that comprised its own "Fox" property. Gitennes' Fox property occupied an area that encompassed most of what now known as the Fox Property owned by Craig Lynes.

Gitennes, through 2000 and 2001 conducted an aggressive and comprehensive exploration campaign that emphasized the Blacktop Showing and included work further afield throughout their property. That work included a property-wide airborne EM and magnetic survey, stream sediment survey throughout most of the property, and, in the Blacktop area, ground geophysics, and soil geochemistry, culminating in eight drill holes in the Showing area. The drilling succeeded in intersecting only a single 70cm wide intersection of massive sulfides. But their other efforts added several new targets of interest throughout the Property. They include airborne EM anomalies and anomalous zinc in stream silts north of Helmer Lake and anomalous copper in silts west of the Blacktop Showing. Gitennes also identified what it dubbed the "Corridor of Merit", an eight kilometer-long magnetic low which includes the Blacktop Showing and runs from just north of it to the south, through the western part of Helmer Lake. Gitennes suggested the magnetic low of the Corridor of Merit may be attributable to the lithology sequence hosting the Blacktop Showing and speculated that additional mineralization may be discovered within that magnetic trough.

Fieldwork on the Property consisted of prospecting and sampling. The primary goals of that work were:

- to obtain a degree of familiarity with the infrastructure and topographic condition at the Property and especially to locate and assess the areas of greatest potential specifically near Helmer Lake and at the Blacktop Showing,
- to obtain samples of the mineralization exposed in the area west of Helmer Lake and to verify assays reported from Zn-Cu mineralization of the Blacktop Showing.

Four rock samples were gathered west of Helmer Lake, each of which returned values of interest ranging from 1.55% to 8.36% combined Pb+Zn. Copper ranged to just over 1%, silver to 163 ppm and a maximum value of 1,260 ppm in gold, all in different samples.

From a series of seven trenches dug with hand tools at the Blacktop Showing, six mineralized rock samples were chipped from the newly excavated bedrock. In a sequence of three samples from Trench 'A' a 1.5 meter-long zone (nearly true width) assayed 10.42% Zn, 0.76% Cu, 0.27% Pb, and 43.7 g/tne Ag, 0.32 g/tne Au. Less strongly mineralized samples from three other trenches returned an average 3.49% Zn, 0.25% Cu, 0.47% Pb and 18.7 g/tne Ag, 0.23 g/tne Au over widths ranging from half a meter to 1.2 meters. The tenor and range of these results correspond to that reported by Gitennes from its sampling in 2000.

Exploration by previous workers on their ground that covered parts of what is now the Fox Property, have provided a number of targets to pursue. Those are:

- the Blacktop Showing and the Corridor of Merit that includes it along with alteration in drill hole K97-3, and just west of the Showing, boulders mineralized in copper and anomalous copper in streams silts.
- the polymetallic veins, anomalous soil geochemistry, anomalous zinc in stream silts north of there, and slightly further northwest, anomalous EM and magnetics.

• the anomalous copper soils that streak through the north and northeastern corner of the Property.

A proposed exploration budget of \$934,000 is recommended which consists of two principal phases. Phase one, amounting to \$375,000, and of 100 days duration is intended to prospect the entire Property along the newest roads and cut-blocks and to select the best target for a follow up period of detailed geological mapping, soil geochemical sampling, and field geophysics. That activity is designed to locate drill targets, which if successful, will be tested in a second phase of drilling. Phase two, budgeted at \$530,000, consists of 2,500m of core drilling distributed among as many as a dozen holes identified in Phase one. An optional task of reviewing prospects of interest outside the Property boundary but in its vicinity, or new prospects located in Phase one that merit a closer look, is allowed in a 10 day period amounting to \$29,000.



Photo 1: Panoramic view of part of the Fox Property looking southeast from a logging road west of the Coquihalla Highway about 3 kms north of the Helmer Interchange. A small portion of the Coquihalla Highway is visible in shade at the base of the slope in the background and in the middle foreground at the right edge of the image. Photo is taken on ground underlain by volcanics and volcaniclastics of the Nicola Group looking across to metamorphosed equivalents and intrusives of the Nicola Horst. Note the pine beetle damage to the standing forest and the meadow-like clearings where it has been logged. Photo by C.Lynes 31 July 2007.

#### INTRODUCTION

Over the winter and early summer of 2007, Craig Lynes staked an ever-increasing number of claims in ground that had recently become open north of Merritt in British Columbia. That claim group, now known as the Fox Property, initially embraced the Blacktop zinc-copper showing [MINFILE 092ISE191] and grew to encompass showings near Helmer Lake at the south end of the Property and additional potential documented west of Surrey Lake in its north end.

Craig Lynes, assisted by William Nelson spent a total of 10 days on the Property over a period that extended from 27 July to 20 August 2007. During that time their fieldwork consisted of prospecting specific targets of the Property, particularly the area just west of Helmer Lake and the area on both sides of the Coquihalla Highway in the vicinity of the Blacktop Showing. Part of the prospecting effort was in preparation of a sampling program to verify the mineralization of those areas.

During the period of 02–04 August 2007, the author with	Mining Divis
the assistance of C.Lynes and W.Nelson conducted that sampling	NTS:
program which featured the mineralization exposed in old	Latitude:
trenches and veins in outcrop just along the western shore of	Longitude:
Helmer Lake and somewhat further west, and the mineralization	UTM N:
at the Blacktop Showing. The Blacktop Showing is shallowly	UTM E:
covered by a screen of gravel and rip-rap on an east facing slope that lies within the fenced right-of-way of the Coquihalla Highway. To expose the bedrock and the Zn-Cu mineralization of the Blacktop Showing, a series of seven trenches were dug with hand tools over a total length of 13.4 meters. Additional rock samples were taken along with a pair of soil samples in other areas of the Property during a few prospecting traverses.	Area: Owner: Expiry: BC Minfile Names: Minfile ID:

The intended purpose of the sampling program was to test the mineralization in polymetallic veins exposed in the Helmer Lake area and to verify the assays reported by Gitennes in their sampling of the Blacktop Showing. Sampling in the Helmer Lake are was not meant to be necessarily representative but rather a representation of the mineralization wherever it was found. In contrast, great effort was made at the Blacktop Showing to make that sampling representative. In general, the veins near Helmer Lake do contain mineralization of interest, and the assays at the Blacktop Showing closely conform to the range and tenor of results reported by Gitennes.

Software used in the preparation of this Report include AutoCAD Map 2008, Microsoft Office 2003, specifically Access, Excel and Word, and CoreDRAW and Photo-Paint of Corel Graphics Suite X3. And to generate the PDF version of this Report, as submitted to Mineral Titles Branch, Adobe Acrobat 7.0 Pro was employed.

All units of measurement are consistent with the *Systéme Internationale d'Unités* [SI] unless specifically noted otherwise. All maps and drawings containing Universal Transverse Mercator [UTM] coordinates conform to North American Datum 1983 [NAD83] unless specified differently. All monetary figures are in Canadian dollars.

### Table 1: FOX PROPERTY

Mining Division: Nicola & Kamloops				
NTS:	0921.37, 0921.047			
Latitude:	50°21'52"			
Longitude:	120°38'09"			
UTM N:	5,581,825			
UTM E:	668,136			
	(Zone 10, NAD83)			
Area:	3026 hectares			
Owner:	Craig A. Lynes [100%]			
Expiry:	11 January 2009			
BC Minfile				
Names: Fox, Blacktop				
Minfile ID:	092ISE191			

### LOCATION & ACCESS

The Fox Property is located in south-central BC (figure 1), about 30 kms north of the nearest town of Merritt on a stretch of Highway 5 that runs a further 58 kms to Kamloops. Highway 5, often referred to as the "Coquihalla Highway" runs through the length of the Property.

The easiest approach to the Fox Property is via the Coquihalla Highway which runs through the length of the Fox Property. The Helmer Lake interchange allows traffic to turn off the highway and connect to a network of unpaved roads that run throughout the Property, providing vehicle access to most areas of it.

The Coquihalla is a divided four or five lane controlled-access thoroughfare and is fenced along its right of way<sup>1</sup> for its entire length through the Property and beyond. At certain points along that fence, spring loaded one-way gates are positioned providing a means to access or to cross the highway. There is the occasional underpass



supported by culvert about as large as 5m across, intended for cattle or game, which could convenience the mobility of an exploration crew.

Although the Coquihalla Highway is a toll road, the booth is located 60km south of Merritt, allowing use of the highway to the nearest centers in the interior of the Province without concern for tolls.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Wildlife exclusion fencing is 2.4m high

<sup>&</sup>lt;sup>2</sup> Toll rates are listed by the BC Ministry of Transportation at <u>www.th.gov.bc.ca/coquilhalla/index.ca</u>



### **TOPOGRAPHY, VEGETATION & PHYSIOGRAPHY**

The Fox Property falls within the Nicola Plateau and is at the northern edge of the Nicola watershed, within the Clapperton Creek subbasin (Uunila, 2007, p.2)

Topography consists of rolling hills with elevations at their lowest in the Helmer Lake area in the south, at 1350m elevation, and the highest of the rounded hills, in the west central part of the Property reach an elevation of 1663m. And about 2km west of there, Mount Guichon rises to the highest elevation in the area at 1733m elevation.

Forested areas consist of lodgepole pine, spruce and poplar with denser patches of willows and aspen as undergrowth or in wetter areas.

Occasional poorly drained and swampy areas are rare. On the west side of the Coquihalla Highway, where the bulk of the Property lies, a number of isolated ponds and small creeks are scattered throughout the area. Much of the Property shows a persistent south southeast drainage pattern as the creeks flow into Clapperton Creek.

The Property occupies part of the headwaters of Clapperton Creek as they are collected by Surrey Lake, 55ha in size, then just 700m further south, the 25ha Sussex Lake. Clapperton Creek runs south for a further 6km to drain into Helmer Lake, its 17ha fully contained by the Fox Property at its south extent, before continuing further south to flow into the Nicola River.

Outcrop is generally sparse over most areas of the Property. Overburden consists of a variable thickness of glacial sand, gravel and silt. Glacial deposits appear to be thickest on southern slopes of most slopes; to the lee of the ice flow direction of 160°Az (McArthur, et al, p.15). There are local areas of low knobby ground, ridges and steep slopes of predominant outcrop, but more typical is the rolling terrain where bedrock exposures are sparse. Logging roads, as they usually do, offer valuable glimpses into bedrock or expose float that would otherwise remain obscured.

For geophysical surveys, a wide range of cultural effects need to be noted. They can include the BC Transmission Corp. [BCTC] power lines and Telus' stainless steel cased optic fiber line as well as fencing that isolates Highway 5 and, off the highway, additional fencing and cattle guards.

For geochemical surveys, especially stream sediment and soil sampling, a number of sources of contamination are characteristic of the Property. They include galvanized culverts crossing both logging roads and Highway 5 along with soil disturbance by logging roads, clear-cut areas and gravel pits could frustrate interpretation if not adequately recognized. A culvert buried parallel to the west lane of the Coquihalla Highway in the area of the Blacktop Showing, presumably to route drainage water (McArthur et al, 2001a, p.24), will have an effect on not only soil and stream geochemistry but also geophysics in that area as well.

The available climate history for Merritt ought to reflect those conditions on the Property. Average daily temperatures range from  $18^{\circ}$  in July and August to  $-4^{\circ}$ C in December and January with extremes of  $-40^{\circ}$  and  $+40^{\circ}$ . Precipitation in Merritt averages 322mm divided between 239mm of rainfall and 83cm of snowfall<sup>3</sup>. Some consideration of the elevation difference between Merritt, at 609m, and elevations of around 1,400m on the Property would need to be applied to those statistics.

Snow-free months extend from about May through to October. The amount of snowfall should not obviate certain exploration activities, such as drilling, throughout the winter months.

#### Infrastructure

A pair of power lines owned and maintained by the [BCTC] cross through the Property. A 500 kilovolt line cuts through the northeast corner of the Property while a 130 kilovolt line passes through its southern end, just north of Helmer Lake.<sup>4</sup> A third single phase line runs north from Nicola Lake along the Coquihalla Highway to supply service to the Helmer Lake interchange (McArthur, 2002, p.3).

A fiber optic cable owned by Telus that generally parallels the Coquihalla Highway to its west for the entire length of the Property. The cable is a stainless-steel jacketed cable less than 20cm in diameter, buried at a depth of several meters. Portions of the cable at road crossings and through drainages have been 'hardened' either by being

<sup>&</sup>lt;sup>3</sup> Climate statistics 1971-2000, (Environment Canada, 2008).

<sup>&</sup>lt;sup>4</sup> Line capacity and route coverage from BC Transmission Corp., System Overview & Maps: <u>www.bctc.com/the\_tramsmission\_system/system\_overview\_maps/</u>

encased in stainless steel pipe or being overlain by rebar-reinforced concrete structures (McArthur et al, 2001a, p.6)<sup>5</sup>

Helmer Lake (1370m elev.) is dammed at its outflow on its southern shore and serves as the central feature of the adjoining campground that occupies most of the lowland along its southern margin. The lake is promoted as a fishing spot for rainbow trout.<sup>6</sup> Sussex Lake also provides a fishery with rainbow trout and a small campground occupies a spot on its northern shore which falls within the Property boundary.<sup>7</sup> And a few kilometers further north, Surrey Lake also supports a rainbow trout fishery. A 10-cabin resort is located on its northern shore. Surrey Lake and the lodge lie just of the eastern edge of the Property.<sup>8</sup>



Photo 2: View of the Blacktop Showing while sampling. Looking northwest with both lanes of the Coquihalla Highway in the foreground. Just above the highway, rusty hangingwall volcanics overlie lighter colored scree hosting the zinc-copper mineralization of the Blacktop Showing. Note the clean logged area above the highway's perimeter fence that is typical of the salvage operation being conducted over much of the Fox Property.

Photo of the author sampling taken by Craig Lynes 04Aug07.

<sup>6</sup> British Columbia Adventure Network, Helmer Lake:

www.bcadventure.com/adventure/explore/high\_country/merritt/helmer.htm

<sup>&</sup>lt;sup>5</sup> McArthur & Foster (2001, p.6) references a personal communication with Bruce Macdonald of Telus in Kamloops.

<sup>&</sup>lt;sup>7</sup> Campgrounds at Helmer Lake and Sussex Lake are maintained by the BC Ministry of Tourism, Sport and the Arts: <u>www.tsa.gov.bc.ca/sites\_trails/</u>

<sup>&</sup>lt;sup>8</sup> At least one of the previous operators of claims that formerly occupied part of the Property worked out of the Surrey Lake Lodge.

#### **MINERAL TENURE DISPOSITION**

A group of 19 contiguous mineral claims make up the Property. They occupy an area of 3,051 hectares (table 2) that extends roughly 11 kms north-south and about 2.5 kms east-west (figure 3).

As noted earlier, a buried fiber optic cable line owned by Telus Corp. bisects the Property along its entire length. Coinciding with that route, a 20 meter-wide mineral reserve was established by EMPR in 1989.<sup>9</sup> That reserve, over which no staking is permitted, amounts to just over 25 hectares as it runs through the Property.

Tenure No.	Claim Name	Area [ha]	Registration Date
551340	BLACKTOP - FOX	515.267	06Feb 2007
551341	BLACKTOP - FOX 2	515.551	06 Feb 2007
551342	COPPER-CLAP	123.787	06 Feb 2006
551347	FOXY 1	123.687	06 Feb 2007
551478	N - FOX	123.617	08 Feb 2007
551583	SOUTH - FOX - FIVE	103.153	10 Feb 2007
551588	BIG-AL	61.891	11 Feb 2007
551591	FOX - WEST - 12	247.470	11 Feb 2007
551627	FOX HOLE	103.136	11 Feb 2007
551628	BLACKTOP - NW	123.639	11 Feb 2007
555469	BIG - AL - SW	61.900	31 Mar 2007
555472	BIG - AL - SE	41.268	31 Mar 2007
555473	EL-RIO COPPER	144.198	31 Mar 2007
556670	ZINC - FOX - 8	164.994	19 Apr 2007
557614	RIO - VEGA COPPER	247.162	19 Apr 2007
557666	HELMER	41.259	27 Apr 2007
557896	FARGO-VEGA COPPER	185.37	01 May 2007
560646	SUSSEX - FOX	82.433	13 Jun 2007
563737	RED-RIO	41.184	27 Jul 2007
TOTAL Area	of Mineral Claims	3050.966	
332544 <sup>10</sup>	Mineral Reserve fiber optic cable	(25.008)	Established in 1989
Net Area for	Exploration	3025.958	

Table 2: Mineral Tenures of the Fox Property

All mineral claims were acquired from February to July of 2007 by Craig Lynes under the Mineral Titles Online [MTO] system. The claims are registered in his name and are wholly owned by him (FMC 116233). No royalty agreement or other encumbrance applies to any part of the Property. On 28 January 2008 Craig Lynes issued to BC Mineral Titles a 'Statement of Work' extending the expiry of all mineral claims to a common date of 11 January 2009. That expiry date is contingent on acceptance, by the

<sup>&</sup>lt;sup>9</sup> Mineral Reserve tenure number 332544 described by EMPR as "Lightguide Transmission System" in a list of Reserves established in 1989, ref.: <u>www.em.gov.bc.ca/mining/titles/reserves/1989Reserves.htm</u>

<sup>&</sup>lt;sup>10</sup> Mineral Tenure 332544 applies to the entire 20 meter-wide Mineral Reserve as it runs from Chilliwack nearly to Blue River. The area tabulated above applies only to that part bounded by the perimeter of the claim group that constitutes the Fox Property.

BC Mineral Titles Branch, of this Report in support of that Statement of Work (ref. BC Mineral Titles Event Number 4192805).

No privately owned land title exists on the Fox Property. Grazing rights cover the Property and a water licence may do so as well. As far as is known no environmental liabilities apply to the Property. No permits related to physical work are in force and no application in the form of a 'Notice of Work' has been made to the BC Ministry of Energy, Mines and Petroleum Resources [EMPR].



Figure 3: Claim Map of the Fox Property. Nineteen MTO cell-blocks comprise the Property. Most fall within the Nicola Mining District; a small portion at the north end of the Property lies in the Kamloops Mining District. Infrastructure passing through the Property includes the Coquihalla Highway (Hwy. 5), BCTC electric transmission lines in both the north and south of the Property, and Telus' fiber optic line bisecting the Property as it parallels Hwy 5 to its west. A 20 meter-wide Mineral Reserve excludes that fiber optic line from staking. Location of the Blacktop zinc-copper showing adjacent to the highway is highlighted, additional mineralization occurs in scattered veins west and northwest of Helmer Lake and soil anomalies populate the northeast portion of the Property. Claim detail after Mineral Titles (2008).

### **PROPERTY HISTORY**

Mineral development in Nicola Rocks of the Property area began as far back as the 1890's when gold-silver bearing quartz veins were discovered near Stump Lake about 20kms west of the Property. Development of those deposits continued through the 1920's to be joined by promising discoveries at Iron Mountain, Nicola Lake and Swakum Mountain, all south of the Property. Some of the deposits saw production, the largest of those, the Enterprise-King William veins which operated intermittently from 1916 to 1942 (Meyers, et al, 1989, p.17).

Stimulated by discoveries in Highland Valley in the Guichon Batholith west of the Property during the 1950s, exploration in the Promontory Hills area lead to the discovery of Craigmont in 1957, which saw production from 1961 to 1982 (ibid). Longtime activity in the Iron Mask batholith north of the Property culminated in the Afton discovery hole in 1970 which caused a regional staking rush (Lammle, 1972, p.2) that extended as far south as the northern part of the Property. It is in that year that the exploration history of the Fox Property begins in earnest.

The original Fox claims were staked by Michael Moore, the discoverer of what was dubbed the Blacktop Showing, in July 2000. The property was quickly optioned by Gitennes Exploration (Cathro, 2001, p.38) who expanded the property with additional staking. Gitennes conducted detailed exploration over the Showing along with property-wide activity through 2000 and into 2001. Although about 1,200 claims were staked as a result of the mini-rush spurred by the discovery of the Blacktop Showing, little work was done by companies or individuals owning adjacent ground (Cathro, 2002, p.40). All of Gitennes claims had lapsed by 2005 and no work was done in the area until Craig Lynes staked his own Fox Property in 2007. Since the author's visit in August 2007, no additional exploration has been done on the Property

#### **Property History**

The Fox Property is large enough to have at least partially encompassed the claims on which several projects by earlier workers were initiated through much of the 1970's and finally by Gitennes from 2000 through to 2004 (table 3 & figure 4). The following exploration history includes all work that applied to claims that formerly overlapped the current Fox Property boundary even if the field work completed on those older claims occurred completely outside the Property. Exploration reported by earlier workers, whether it falls within or just off the Property, may be worthwhile experience of a context that could be ultimately realized on the Fox Property.

The first recorded assessment work was filed in 1970 by Ronrico Exploration (Stadnyk, 1970) who reported work on its Smokie claim group which surrounded Helmer Lake and extended east by more than 3km<sup>11</sup>. Stadnyk (ibid, p.3) mentions that six trenches had been dug on the west side of Helmer Lake previous to his involvement.

<sup>&</sup>lt;sup>11</sup> Location of the Smokie claims is subject to an error of not less than 200m near Helmer Lake where the maps included in Stadnyk (1970) provide some topographic detail. That accuracy degrades to not less than 500m at the east end of the claim group where no topographic detail is plotted on those same maps. Stadnyk's maps contain no world coordinates of any kind.

Those trenches exposed quartz-calcite veins containing pyrite, limonite, chalcopyrite, malachite and lesser galena in sheared and altered andesite host rock. He goes on to mention that "silver is also present in minute quantities" (ibid)

		Table 3: Fox Pro	pperty History	
Year	Owner/Operator	Claims	Work Performed	Reference(s)
<1970	unknown.	Unknown	Six bulldozed trenches	Stadnyk, 1970, p3
1970	Ronrico Explorations Ltd.	Smokie group	71.6 line-km field grid, 969 soil samples, magnetic survey, claim survey	AR02715, Stadnyk, 1970
1970	Richrock Mines Ltd.	ST group	19.2 line-km field grid, magnetic survey	AR02811, Allen, 1971
1972	Largo Mines Ltd.	El Rio, Vega, Fargo, Eagle, Vera groups	48.3 line-km field grid, 1466 soil samples	AR3894, Mark 1972
1972	Newco Ventures Ltd.	Des	Field grid, 1280 soil samples	AR04057 Lammle, 1972
1973	Noranda Exploration Co. Ltd.	Leo group	21.0 line-km field grid, IP & resistivity survey	AR4675, Walker, 1973
1974	Canadian Occidental Petroleum Ltd.	(Nicky Project)	Regional stream sediment geochemistry survey	George, 1975, p.3
1975	Canadian Occidental Petroleum Ltd.	Clap 1 – 18	34.2 line-km field grid, geological mapping, 567 soil, 122 stream & 87 rock samples	AR05678, George, 1975
1976	Canadian Occidental Petroleum Ltd.	Clap 19	5.5 line-km field grid, geological mapping, 98 soil samples	AR06040, Macdonald, 1976
1976	Cominco Ltd.	Hel group	16.0 line-km field grid, IP, resistivity & magnetic survey	AR06119, Klein, 1976
1983	Promina Development Co. Ltd.	Klara	5.6 line-km field grid, magnetic survey	AR12287, Cukor, 1984
1997	International Skyline Gold Corp.	Kent group	Soil sampling, geological mapping, geophysical surveys, 451.5m in 3 NX drill holes, 80 core samples	AR25209, Moore, 1997
2000	Gitennes Exploration Inc.	Fox. Terry, Clap	526 line-km airborne DIGHEM magnetic & airborne survey, 25.5 line-km field grid, 25.3 line-kms magnetics, 12.7 line-kms IP & 1.2Kms horizontal loop EM, 357 stream silts, 149 MMI & 21 C-horizon soils, 57 rock samples, prospecting, reconnaissance geological mapping	Gitennes, 2001, McArthur, et al, 2001a, Smith, 2001, Walcott, 2001
2001	Gitennes Exploration Inc.	Fox, Terry, Clap	1234.7 m in 8 NQ drill holes, 318 core samples	McArthur, et al, 2001b, McArthur, 2002
2002- 2004	Gitennes Exploration Inc.	Terry 5, Clap group (Fox South)	Geological mapping, VLF-EM geophysics, MMI & B-horizon geochemical soil survey, airborne EM & magnetic geophysics	AR27476, Foster, 2004

Table 3: Fox Property History

Ronrico established a field grid 71.6 km [44.5 miles] in size over which 969 soil samples were collected and a magnetometer survey was run. The field grid lines ran eastwest at 61m [200 foot] intervals with picketed stations along those lines every 61m [200 feet] as well.

Soil samples were gathered at 20 to 36cm [8 - 14 in.] depth with a spoon at 61m [200 foot] spacings along all grid lines. The samples were analyzed for copper, lead and zinc. A statistical analysis of the soil assays revealed background levels of <25ppm for

Cu and <46ppm for Pb and Zn, while values >40ppm for Cu and >65ppm for Pb and Zn, were anomalous. Returned values ranged to 540ppm in Cu, 123ppm for Pb and 390ppm Zn.

The soil samples showed an irregular area of anomalous results in the south east corner of the Property – especially near the west shore of Helmer Lake extending further south and to the northwest over a distance spanning nearly 2km. It was the results of zinc that outlined the most expressive anomaly with a pair of very high Pb assays correlating with the highest Zn values. Anomalous Cu results clustered in the same area as well as scattered in small unorganized and isolated clusters throughout the rest of the field grid. Those latter anomalous results Stadnyk attributed to false anomalies in swampy ground.

The magnetometer survey was also run with readings recorded along the grid lines every 61m [200 feet]. Stadnyk noticed a pair of trends in the magnetic survey; a broadly higher level of readings surrounding Helmer Lake than those further east on the claim group, and a strong northeast trend coincident with schistosity measured in some of the trenches. Also, high copper values in soils west of Helmer Lake correlate with low magnetometer readings. Stadnyk recommended follow up work including prospecting and trenching anomalous soil results, geological mapping over the entire claim group and more detailed soil and magnetic surveying along with drilling, if warranted.

**R**ichrock Mines, in November 1971, completed a 17.2 line-km [63,000 line-feet<sup>12</sup>] magnetic survey on a field grid cut for that purpose (Allen, 1971). Unfortunately, that assessment report provides no location map for the ST claim group; the latitude-longitude coordinates are somewhat inconsistent with the general description of the claim location.<sup>13</sup> The uncertainty in the location of Richrock's claims is at least as great as 5km.

Richrock was targeting anomalous magnetics at the contact between metamorphosed intrusives of the Nicola batholith<sup>14</sup> with Nicola Group volcaniclastics. The ST claims were staked to straddle that contact as indicated in available mapping by the Geological Survey of Canada (ibid, p.6<sup>15</sup>). The magnetic signature of interest would be one that mirrors that expressed by the Craigmont deposit, located about 28km southwest of the Fox Property.

<sup>&</sup>lt;sup>12</sup> The size of the field grid is not mentioned by Allen (1972). That measure was scaled off the map showing the field grid and magnetometer readings contained in his report.

<sup>&</sup>lt;sup>13</sup> Assessment Report by Allen (1971, p.2) provides coordinates of 50°20'N, 120°38'W but also describes the location of the claims "on the east side of Helmer Lake, and one mile [1.6km] northeast of Swakum Mountain." That distance NE of Swakum Mountain is clearly *west* of Helmer Lake. (Helmer Lake is about 4.5km NE of Swakum Mountain.). The latitude-longitude coordinates (given only to nearest minute precision - a minute of latitude is equivalent to over 1800m on the ground and a minute in longitude is very close to a kilometer) place the claim group about 2km northeast of Helmer Lake on the east side of Clapperton Creek in the south portion of the Fox Property. The map in Allen's assessment report contains no world coordinates of any kind.

<sup>&</sup>lt;sup>14</sup> Partly due to the uncertainty in the location of Richrock's claims, it is likely that the Nicola batholith is the same feature named the Nicola Horst as described in following sections of this Report.

<sup>&</sup>lt;sup>15</sup> Allen (1971) references Cockfield (1948) and Duffel, et al (1952).



Figure 4: Historical claims that overlap the Fox Property and field grids. Spatial accuracy for many claims and their corresponding field grid is highly uncertain, especially for that of Richrock Mines which is almost certainly misplaced (see text). Gitennes' Fox Property varied over its lifetime (2000-2004), finally being reduced to the southern claims known as the Fox South property. Backdrop: Raster TRIM (Data Distribution Service, 2008)

The field grid established by Richrock consisted of 14 east-west lines each 1,372m [4,500 feet] long at 122m [400 foot] spacings. Stations marked by pickets were set at 30m [100 foot] intervals at which a magnetometer reading was recorded.

From the vertical magnetic component measured by the Richrock's fluxgate magnetometer four anomalous areas were outlined. A broad, east-west area extending through the center of the grid shows a weak extension to the south, nearly coincident with the targeted geological contact. A smaller and weaker magnetic low was outlined to the south of the central anomaly. Two areas of high magnetic response, occur north of that same central magnetic low. They are oriented roughly east-west and straddle the contact of interest. Allen concluded that the presence of magnetic minerals was not indicated but recommended that the largest magnetic low be prospected.

Largo Mines owned a series of contiguous claim blocks that stretched east of Sussex and Surrey Lakes to the west for a distance of 7.3kms (Mark, 1972).<sup>16</sup> Largo Mines concentrated its field program of 1972 in the area within and outside its claims over an area that encircled Surrey Lake and the northern part of Sussex Lake. That work area lies in the east half of the north-central part of the Fox Property and further east of it. A 48.3 line-km [30 line-mile] field grid was established from which 1,466 soil samples were gathered and assayed for copper only. Largo Mines was targeting copper mineralization in an area generally east of what, in its day, were relatively recent discoveries at Craigmont, Bethlehem, Lornex, Highmont, Valley Copper and Afton.

The field grid consisted of east-west lines spaced 152m [500 feet] and in some locations, 305m [1,000 feet] apart. Each grid line extends in discontinuous segments over a length of about 2.2kms. Soil samples were gathered at 30m [100 feet] intervals, usually from B-horizon depths, or in thin soils, from the A-horizon. A statistical analysis of the analytical results determined a background threshold value of 35ppm Cu and values exceeding 47ppm to be anomalous.

Several isolated anomalous copper values were returned from samples scattered throughout the field grid. Mark, in his assessment report (ibid, p.11), noted that the apparent isolation of the anomalous values are aligned in as many as four northwesterly oriented zones. He speculates that these zones can be attributed to copper mineralization contained in veins or shears or as disseminations in the underlying host rocks.

A field program of geological mapping was recommended along with an expanded soil sampling program to cover extensions to the northwestern trends further north and west on ground to be staked to accommodate that follow up work. Also it was recommended that grid line spacings be reduced from 152m [500 feet] to 76m [250 feet]. And finally, geophysical surveys including Self-Potential, VLF-EM and magnetics were recommended

Newco Ventures conducted a similar soil survey on its Des claims (Lammle, 1972) to the north of and nearly concurrently with Largo Mines program of 1972. The

<sup>&</sup>lt;sup>16</sup> Location of the claims, and concomitantly, the location of the field grid is uncertain by a minimum estimate of 200m. Maps in Mark (1972) show few world coordinates or consistent topographic detail.

southern third of the former Des claims occupy the northern-most four claims of the Fox Property.

The field grid, 99.3 line-kms in size [325,925 line-feet]<sup>17</sup>was controlled by a pair of 5.6km- [18,400 foot-] long baselines oriented northwest from which 24 grid lines were cut at 244m [800 foot] spacings. Infill lines were added in the north central part of the grid. Soil samples were taken along the grid lines at 61m [200 foot] intervals, or at 30m [100 foot] intervals over the same area of the infill lines, for a total count of 1,280 samples all of which were analyzed for copper only.

An examination of the distribution of copper analyses, which ranged to 1,150 ppm, showed that background values are those less than 25 ppm. Anomalous copper values were localized in two principal areas: one southeast of Desmond Lake and another much larger area about a kilometer west of the lake, both of which are beyond the north end of the Fox Property. Apart from some trace amounts of chalcopyrite in a single locality, the source of these anomalous values is otherwise unexplained. Nevertheless, these anomalies were recognized as attractive exploration targets and additional work was recommended to include geological mapping, infill soil geochemical sampling, magnetic and IP geophysics, trenching and drilling.

In addition, several "linear chains" (ibid, p.5) oriented northwest consisting of single sample anomalies are interpreted as nearly continuous across adjacent lines. These trends were attributed to mineralized shears, as does Largo Mines from its results on adjacent ground. The longest and most prominent of the chains falls on the northwest corner of the Fox Property and extends off of it heading northwest for a total length of nearly 5km.<sup>18</sup>

**N**oranda Exploration in 1973 established a 21 line-km [68,800 line-feet<sup>19</sup>] field grid on its Leo claim group (Walker, 1973) which straddles the west boundary in the south-central area of the Fox Property. That field grid consisted of 7 lines spaced at 244m [800 feet] radiating from a 2,500 meter- [8,200 foot-] long north-south oriented baseline. Additional lines were cut later that season with a pair of lines that infilled part of the original grid at 122m [400 foot] intervals and 8 new lines in a southern extension of that grid at 400 foot intervals.

An IP survey was subsequently run over that grid. The survey was conducted at frequencies of 0.3Hz and 5.0Hz in a dipole-dipole array at 122m [400 foot] and 244m [800 foot] separations. A background of 0.5 to 1.5% Frequency Effect was obtained with an anomalous area of readings ranging from 3.0 to 6.0% FE located just off the Fox Property boundary west of claim 557666. Walker classed that anomaly as "significant" (ibid, p.4) and recommended it be followed up with drilling.

<sup>&</sup>lt;sup>17</sup> Size of field grid scaled from maps contained in assessment report by Lammle (1972).

<sup>&</sup>lt;sup>18</sup> Locating the field grid and soil samples from maps contained in Lammle (1972) is somewhat indefinite. Topographic features plotted on his maps cannot be consistently matched to accurately georeferenced topographic detail. There are no world coordinates on any field grid maps (figures 1 & 2) of any kind. Expected positional accuracy of Newco Ventures' field grid and soil sample locations may be as much as 1.5km in the south and southwest of the field grid with better certainty, no better than 150m, in the north and northeast of that same field grid.

<sup>&</sup>lt;sup>19</sup> Size of field grid was not mentioned in Noranda's assessment report; that measure was scaled off the drawings included in Walker's report.

Occidental Petroleum staked its Clap claim group in 1974 based on the results of its "Nicky project regional stream sediment geochemistry program" (George, 1975, p.3)<sup>20</sup> that was completed in the summer of that year. During the next year, 1975, a field grid was established followed by geological mapping along with a program of soil, stream and rock sampling. The Clap claim group of 1974 falls outside the Fox Property but barely, as the west edge of the Clap group coincides with the east boundary of the Fox Property along the latter's extreme southeast  $corner^{21}$ .

To fulfill some of the recommendations offered by George (ibid, p.40) the Clap property was enlarged to the west with three adjoining claim units (claim Clap 19). Part of that new ground occupies a small portion in the southeast corner of the Fox Property. In 1976 the geological mapping and soil survey of the previous year was extended onto Clap 19 (Macdonald, 1976). Although most of the Clap claim group and the exploration conducted on them falls outside of the Fox Property, the results and observations resulting from the work by Occidental Petroleum may be of value in similar work that is to be contemplated for the Fox Property proper.

The field grid of 1975 consisted of 23 lines, each 1,372 meters [4,500 feet] in length, cut east-west and joined by an 8,800 foot base line for a total grid size of 34.2 line-kms [112,300 feet]. In the following year, an additional 12 lines were extended west onto newly staked ground by 457m [1,500 feet] totaling 5.5 line-kms  $[18,000 \text{ feet}]^{22}$ .

Soil samples were gathered along the grid lines and the baseline from the B-horizon at 61m [200 feet] intervals. Samples were analyzed for copper only. Assay values ranged from <10ppm to 700ppm Cu. A cumulative probability analysis determined a background threshold of 24ppm and anomalous values arbitrarily defined as any value greater than 80 ppm Cu.

An irregular broad area of anomalous soil was outlined and lies off the southeast corner of the Fox Property by about 350m. That anomalous area is nearly a kilometer long by about half a kilometer wide heading east-northeast. That area is underlain by diorite containing mineralized quartz veins along with a chlorite-kaolinite alteration zone to its immediate south. Mineralization in quartz veins consists of chalcopyrite, bornite and rare molybdenite and supergene alteration of bornite to chalcocite and malachite. Anomalous stream sediment values and rock sample assays also cluster in that is nearly coincident with the anomalous soils and the best of the bedrock mineralization.

After Occidental Petroleum completed its 1975 field program additional sampling was recommended to trace the anomalous soil results off the claim group to the west.

<sup>&</sup>lt;sup>20</sup> No reference to that regional stream geochemical survey was located. George in his assessment report (1975) provides no references of any kind. <sup>21</sup> That is what the author has established after georeferencing the *idealized* claim boundary as shown in

maps in George (1975). But his geology map shows a different outline of the same claim boundaries as one that is much more irregular and which lies entirely east of the Fox Property by roughly 150m. Maps included in George contain no world coordinate references but show topographic detail from the 1:50,000 topographic map of NTS 092I/07 (CanMatrix, 2008). The author estimates the positional accuracy in georeferencing George's maps based on their topographic detail to be no less than 25m. <sup>22</sup> That total scaled from georeferenced maps in assessment report by Macdonald (1976), no measurement

of field grid lines was mentioned in his report.

After staking the additional claims of Clap 19 and extending the soil sampling into that recommended area in 1976, Occidental Petroleum finally concluded its program with a recommendation for no further work, even though the soils gathered in that year increased the number of anomalous results.

Cominco, in 1976, ran 16 kilometers of IP and magnetics (Klein, 1976) over an area east and northeast of Helmer Lake, of which about 25% falls within what is now the Fox Property<sup>23</sup>. A copper-molybdenum porphyry deposit was the target of interest in this work. The geophysical surveys were run on eight east-west grid lines ranging in length from 1,300 to 2,100m and spaced 250m apart. Cominco used a time-domain IP system with a pole-dipole array and a basic 'a' spacing of 75m and 'n' intervals of 1 through 4. Readings from a vertical field fluxgate magnetometer were taken along the grid lines and the 1,750 meter-long baseline at 25m intervals.

A strong north-northwest trend is evident in both the resistivity and magnetic data. Klein attributes that trend in both geophysical datasets to geologic features rather than to overburden effects. As an abundance of pyrite, ranging to 20%, was noted in the bedrock exposed along the grid lines, high IP values are attributed to that feature. No further work was recommended in that survey area.

Notably, the north half of Cominco's survey falls overtop Noranda's IP survey of 1973. Noranda noted a strong response that is corroborated by a similarly strong response in the Cominco data. As all of this detail falls outside the Fox Property boundary (but only by 450m or so), any further discussion of this feature is mostly moot.

**P**romina Development financed a field program on its Klara claim in 1983. That work consisted of a 13.3 line-km field grid and 17.5 line-km of ground magnetics that was run over the grid lines and the local network of logging roads (Cukor, 1984). The Klara claim partly falls on the Fox Property at its extreme northwest corner. Almost all of the field grid and the magnetic readings lie off the Fox Property, but barely.

The eleven 1,300 meter-long field grid lines were oriented northeast-southwest and spaced at 100m intervals along a 1.300m baseline. Magnetic readings were taken at 25m intervals along all grid lines, the baseline and logging roads.

A magnetic relief of 550 gammas was observed that illuminated a definite northwest-southeast pattern. An interpretation of those results was deferred to the results from a recommended program that would include geological mapping, and geochemical surveying.

International Skyline Gold, was attracted to the area by the discovery of mineralized boulders that exhibited porphyry-style alteration and chalcopyrite. One of those boulders assayed 1.65% copper and "0.13g/T" gold (Moore, 1997, p.3). After staking the Kent claim group in October 1996 geological mapping, soil sampling and

<sup>&</sup>lt;sup>23</sup> A claim map included in Klein's assessment report was georeferenced to the portion of the 1:50,000 scale topographic map of 092I/07 on which it was made. But the detail of the field grid on that map is not clear enough to locate that grid with an accuracy any better than 150m in a north-south direction, accuracy is much better in the east-west direction, based on that map, and is estimated at no better than 50m.

geophysical surveys were completed, followed by a 451.5m, three-hole drill program completed in January 1997. Of that work, only the drilling is documented. Each of the three holes targeted a chargeability high and all holes intersected sediments and volcanics in various proportions, along with an amount of alteration.

Pyrite was the principal sulfide intersected in the core, usually in trace amounts, sometimes reaching as much as 2%. Trace amounts of chalcopyrite was noted in places. All 80 core samples were analyzed for Au, Ag and Mo, all of which returned background values, and Cu, of which 248 ppm was the highest returned value. That assay was obtained from 26.5 meters (about 25 vertical meters) of intense quartz-sericite alteration in the bottom part of the southernmost of the three drill holes. That hole is located<sup>24</sup> about 1,500 meters south of the Blacktop Showing (figure 5) and may represent a feature for follow up.

Moore (ibid, p.8) concluded that the drilling was technically successful in intersecting porphyry style alteration, they were not successful in outlining economically significant copper mineralization. No recommendations were offered.

Gitennes Exploration staked 8,950 hectares in September 2000 and proceeded to conduct the most comprehensive work in the Report area through the remainder of 2000 and into 2001 (an extended discussion of which is dedicated to the following subsection.), before allowing the entire group to expire by 2006. Gitennes named its claim group the Fox property, which Craig Lynes applied to his own Property. Craig Lynes' namesake property and the subject of this Report, apply to different claims. Although they cover a somewhat similar area their boundaries are distinct from Gitennes former property. Any reference to Gitennes' Fox property will be described in those terms to avoid confusion with the Fox Property as titled herein.

After its intensive campaign of exploration in 2001, Gitennes allowed most of the claims to lapse except for its Terry 5 and Clap group that were retained to make up the Fox South property which saw continued activity from 2002 to 2004. Gitennes completed a program of geological mapping, VLF-EM geophysics and both B-horizon and MMI<sup>25</sup> soil sampling from 2002 through 2004. Even though most of the north half of that Fox South project area falls overtop the southern portion of Rich River's Fox Property, all field work was conducted on the "401 grid" which lay at least 1,200 south of the Fox Property.

The 401 grid was established to follow up a VLF-EM anomaly located by Kerr Addison Mines in earlier work (Paulter, 1988). The type of mineralization being pursued was copper-gold in veins hosted by volcanic and epiclastic units proximal to a diorite intrusive. From tends in the results from the MMI survey, a pair of targets was identified

<sup>&</sup>lt;sup>24</sup> Topographic detail and location references of drill hole location map in assessment report by Moore (1997, p.7) for International Skyline Gold could not be reliably overlaid onto accurately georeferenced maps available to the author. Moore (ibid, p.6) provides drill hole coordinates but they cannot be reconciled with any world coordinate reference. The accuracy of locations for holes K97-1 and K97-2 is not considered better than 500 meters. Field evidence may locate K97-3 to a radius of uncertainty no smaller than 50m.

<sup>&</sup>lt;sup>25</sup> MMI: <u>M</u>obile <u>M</u>etal <u>I</u>on

but no specific recommendations were made to pursue them. Gitennes allowed the claims of the Fox South property to lapse in 2005.

#### Gitennes 2000-2001

The exploration conducted by Gitennes in the few months between September 2000 and March 2001 was rather intensive. It consisted of airborne and ground geophysics, soil sampling, prospecting, reconnaissance geological mapping, and finally 1,235m of diamond drilling. Much of that work focused on the Blacktop Showing, but other locations received some attention including the south part of Swakum Mountain, HelmerLake-Rey Lake, and Mount Guichon areas. Gitennes' work being so comprehensive, some of it unpublished, a summary in its own subsection is justified.

#### Airborne Geophysics

Gitennes completed a 526 line-km helicopter-borne DIGHEM magnetometer and EM survey over its entire property. Flight lines were spaced at 150m with infill lines at 75m spacings over the Blacktop Showing area.

In the area of the Blacktop Showing, Gitennes recognized a north-south oriented "Corridor of Merit" of weak magnetic response bounded on the west by a high magnetic domain and to the east by magnetics of moderate intensity. Gitennes speculated the high magnetics on the west is from basalt and andesite while the response on the east is from andesite and intrusive rocks. The Corridor is 300 to 600 meter wide and can be traced for over 8kms and embraces the Blacktop Showing as it lazily swings to pass south and west of Helmer Lake. Gitennes speculates further with the notion that the Corridor marks a break in the volcanic sequence and traces a complex sequence of tuff, dacite breccia, siliceous mudstone and minor limestone (Gitennes, 2001b, slide 25). The airborne magnetics did not reveal a specific anomalous response to the Blacktop Showing.

Over 600 EM anomalies were recognized, of those 24 were attributable to probable bedrock conductors but only a few show correlation from line to line. Gitennes identified eleven anomalies that it slated for ground follow up (Gitennes, 2001b, slide 25).

#### Field Grid

A field grid 25.5 line-km in size, called the "Highway Grid" was established in the area of the Blacktop Showing to control the ground geophysics - magnetic and IP surveying as well as a few lines of orientation horizontal loop EM [HLEM]. The grid included a baseline running down the median of the Coquihalla Highway at 357°Az with cross-lines run at 100- and 50-meter intervals.<sup>26</sup> The cross lines were placed from 650m north of the Blacktop Showing to 800m south of it. Lines at 100m spacing extend 600m west and 400m east of the baseline, while the 50m infill lines stretch from the baseline 250m west and 350m east.

#### Ground geophysics

Readings of the total-field magnetics were recorded at 12.5m intervals on lines at 50 meter spacings. Gitennes noted that the ground magnetics showed excellent

<sup>&</sup>lt;sup>26</sup> UTM [NAD83] coordinates established by GPS of station 0+00 on the baseline is 5581334N, 668778E (McArthur, et al, 2001, p.24).

correlation with the total field airborne survey. The same magnetic trough bounded by a zone of higher response to the east and an even stronger response from a domain to the west was evident in the contoured data.

The IP survey was conducted over eight lines spaced 100m apart for a total distance 9.0 line-kms. A pole-dipole system was employed with 'a' spacings of 25m run on all or part of 6 grid lines and 50m spacings applied to some of the same and other grid lines before the approaching winter terminated the survey. Measurements of resistivity and apparent chargeability, at 'n' separations from first to sixth, were recorded.

The IP response from the Blacktop Showing suggested that the mineralization is confined to a body of limited depth extent and some 50m in width. Chargeability response related to the Blacktop Showing appears on all sections surveyed at 25m dipole spacings, but on most lines the strength of that response diminishes with depth. The culvert which parallels the Coquihalla Highway complicates that interpretation. Additional chargeability features occur on lines 2+00S at 0+75E which may persist to lines 3+00S and 4+00S. Also, west of the Blacktop Showing, on line 1+00N, a broad chargeability feature appears at 4+75W and a second deeper feature below 2+40W (McArthur, et al, 2001a, p.26-27).

Test traverses of HLEM were carried out on the center portions of four lines near the Blacktop Showing. Coil separation was at 50m with measurements taken at three frequency pairs: 337/112, 1012/112 and 3037/112Hz. Walcott (2001, p.15) noted the survey showed a narrow poor conductor trending northwards across the grid lines and dipping west.

#### Silt Sampling

Reconnaissance stream silt sampling was carried out from the network of logging roads that extend throughout the Property area. Gitennes focused its sampling on four areas: Swakum Mountain, Helmer Lake-Rey Lake, Mount Guichon and the vicinity of the Blacktop Showing. Swakum Mountain and Mount Guichon are southwest and west of the Property, while the Helmer Lake-Rey Lake area straddles the Property boundary on its southeast. Most of the samples were from dried up watercourses leaving open the possibility that the samples could have been contaminated by local wind-blown soil (McArthur, et al, 2001a, p.27). All samples were analyzed by ALS-Chemex Ltd. with a 35-element ICP-AES<sup>27</sup> technique.

Of the 357 silt samples collected, seven samples returned interesting results in zinc in an area north of Helmer Lake (ibid). One of those seven samples, one returned an overlimit value, >10,000ppm Zn. That sample was from a location about a meter downstream of a culvert and upon revisiting that area Gitennes could not locate the original sample site, which by that time was under snow, and the mostly soil (rather than silt) collected in their resample failed to reproduce the original result.

McArthur (et al, 2001a, p.28) notes that the responses for all elements was very subdued, but mentions a 22ppm Pb value near Helmer Lake and a weak Cu-Zn-Ba response at the Blacktop Showing. Also, a pair of creeks north of the Blacktop Showing

<sup>&</sup>lt;sup>27</sup> ICP-AES – <u>Inductively Coupled Plasma – Atomic Emission Spectroscopy</u>

returned weak Cu-Zn-Ba values, And several creeks flowing into Clapperton Creek from the Blacktop Showing were weakly anomalous in Zn and Cu.

The author traversed the area that may have included the creeks north of the Blacktop Showing and noted that the topography is unusually steep, suggesting that those sample sites may be subject to somewhat higher energy stream flow compared to many of the other sites draining the more typical flatter relief. That rather unique setting could influence the material sampled and the resulting assay from that sample(s).

Furthermore, the assay data seems to show a notable response in copper, and gold assays are overwhelmingly below detection limit except for a handful that range to 50ppb. It is recommended that this dataset be examined more closely, both at sites of interest mentioned by Gitennes and perhaps to recognize others buried in the analytical data. An ensuing program dedicated to field visits and resampling of all anomalous sample sites is also recommended.

#### MMI survey

A total of 107 MMI samples were gathered over the Blacktop Showing and an additional 42 MMI samples were taken from a pair of 500 meter-long reconnaissance lines north of Helmer Lake. The latter series was taken over an area where anomalous zinc in stream silts and weak airborne EM conductors were located.<sup>28</sup> All samples were gathered at 25m intervals while observing the specific field procedure recommended by XRAL Laboratories. They were processed with both MMI-A (Cu, Zn, Cd, Pb) and MMI-B (Au, Co, Pd, Ag) analytical packages.

At the Blacktop Showing, MMI sampling responded to the outcropping mineralization and multi-element responses continue along strike to the north to at least 4+00N and to the south to 5+00S (McArthur, et al, 2001a, p.28). On the reconnaissance lines, the response profiles are generally subdued, but a single zinc value of 822ppb is far above background (124ppb). Elsewhere in that series, the two highest cobalt values, 78 and 44ppb, are from successive stations (background 4ppb). Curiously a different sample returned 0.96ppb in palladium resoundingly overshadows a background of 0.1ppb.

#### C-horizon soils

A series of C-horizon soil samples were gathered with an auger over a portion of line 0+00 of the Blacktop field grid to serve as a comparison to MMI samples taken at the same locations. At most stations a sample at a depth of 30 to 50cm and a second at about a meter deep was collected. Boulders in the soil and disturbance of the soil profile related to highway construction conspired against any direct comparison with MMI sampling at overlapping locations.

All samples were analyzed by ALS-Chemex Ltd. with the same 35-element ICP-AES procedure that the silts were treated with. Barium is the most anomalous element and correlates negatively with Cr, Fe, Ni, V and to some extent Cu, and shows a gradient of increasing values from west to east. This result was speculated to reflect a change in bedrock lithology (McArthur, et al, 2001a, p.31). Only a single sample can be

<sup>&</sup>lt;sup>28</sup> Coordinates for the pair of reconnaissance lines in UTM or any other world coordinate system is unknown.

considered anomalous in zinc, at 90ppm, about double the background value for that element.

#### Drilling

Eight NQ size holes totaling 1,234.7m were drilled in March 2001. All holes were drilled west of the highway to target down-dip and strike extensions of Zn-Cu mineralization at the Blacktop Showing. The holes were drilled to depths of 99 to 228m, drilled due east with dips ranging from  $-45^{\circ}$  to  $-80^{\circ}$ , and sited at five locations over a north to south span of about 500m (figure 5).

Only one hole returned significant grade mineralization. Hole F01-02 at 52.6m intersected 70cm of disrupted sphalerite-pyrite-chalcopyrite massive sulfide that assayed 1.18% copper, 16.5% zinc, 0.45 ppm gold and 87.4 ppm silver (McArthur, et al 2001b, p.18). Gitennes concluded that the strong deformation and disruption caused by faulting at the Blacktop Showing makes it unlikely that a cohesive and unifying geological model will be developed at the showing which will permit the certain interpretation and correlation of drill results. The diamond drilling identified a favorable geological environment for further exploration, but the individual drill hole assay results are of limited importance (McArthur, 2002, p.10).

Among the conclusions Gitennes came to in its exploration (McArthur, et al, 2001a, p.22-23) was that the Blacktop Showing is hosted within a trough of low magnetics that it dubbed the "Corridor of Merit" which may be favorable indicator of additional similar massive sulfide deposits.

Also, IP geophysics detected the Blacktop mineralization and the HLEM illuminated a west-dipping conductive zone consistent with geological evidence. Interpretation of ground geophysics was complicated by the uncertain influence of the culvert under that stretch of the Coquihalla Highway in the Blacktop Showing area.

The drilling program caused a reinterpretation of the response by the ground geophysics. Conductive zones and variations in resistivity are thought to be attributable to the hangingwall contact, hematitic fault gouge, horizons of massive sulfides and pyritic footwall rocks. Anomalous geochemical results in the Blacktop area are, in turn, thought to arise from a large mineralized fault, and veins and alteration in volcanic footwall rocks (McArthur, et al, 2001b, p.12).

Gitennes considered the low response from C-horizon soil geochemistry over the Blacktop Showing to be of limited use, in contrast to the success of MMI sampling in detecting bedrock mineralization. But here too, the influence of ground disturbance in building the Coquihalla Highway raised its own uncertainties.

A program of mapping, prospecting and orientation geochemical surveys that range over the entire Gitennes Fox Property was recommended, with particular emphasis on the "Corridor of Merit". Some consideration to test the effectiveness of gravity geophysics with an orientation survey was encouraged, given the density contrast between mineralized zones and the enclosing host rock (McArthur, et al, 2001a, p.22-23).



Figure 5: Location of diamond drill holes on the Fox Property. K97-series holes drilled by International Skyline Gold with a substantial degree of uncertainty (see text). Highlights from that drilling are shown. A portion of Gitennes' Highway Grid of 2000-2001 is also shown. Backdrop of raster TRIM (Data Distribution Service 2008).

### **GEOLOGICAL SETTING**

#### Regional Geology<sup>29</sup>

The Fox Property lies in Nicola Group rocks comprised of a diverse assemblage of Late Triassic to Early Jurassic submarine and subaerial volcanic, volcaniclastic, and sedimentary rocks that underlie much of the Intermontane Belt of south central British

Columbia (figure 7). The Nicola Group, part of the Quesnellia tectono-stratigraphic terrane (figure 6), is accompanied by other early Mesozoic volcanicarc sequences of the Takla and Rossland Groups (Mortimer, 1987, p.2521). Several plutons that straddle the Traissic-Jurrasic boundary intrude the Nicola Group. A tertiary fault-bounded structure of the Nicola Horst, exposes relatively deep-seated metamorphic equivalents of the Nicola Group, intruded by plutons of Triassic to Paleocene age (Moore, 2000, p.2).

#### Nicola Group

Nicola Group rocks have been divided in a sequence of three belts, each characterized by distinct facies and assemblages. A western belt is an easterly facing succession of calcalkaline, mainly plagioclase phyric andesitic flows and breccias, with lenticular interlayers of limestone and bedded volcaniclastic rocks. Although flows are more abundant relative to clastic facies in the western



part of the belt, sedimentary facies can be found throughout its entire width in the Swakum Mountain area. The alternation of thick successions of massive uniform green flows and unsorted breccias with bioclastic limestones, volcanic conglomerate and local subaerial volcanic facies, such as maroon scoriaceous breccias, testifies to deposition near a rapidly fluctuating shoreline. Local felsic centers contain dacite and rhyolite flows, welded tuff and breccia, with intercalated heterolithic, intermediate to felsic volcaniclastics.

The central belt consists of mainly augite and plagioclase-phyric basaltic flows and associated breccias. These may be considered largely submarine deposits of alkalic composition. Subvolcanic intrusions of diorite and gabbro are abundant. Preto (1977, p.41), in the eastern belt south of Merritt, interpreted similar intrusions, at least in some cases, as the erosional remnants of Upper Triassic volcanoes.

Finally, the eastern belt consists almost entirely of mafic augite-phyric volcaniclastics, ranging from predominant coarse breccias to more subordinate fine wacke and siltstone. This eastern succession may be an emergent part of the western belt. Regional metamorphism has advanced to low greenschist facies.

<sup>&</sup>lt;sup>29</sup> Much of this section is summarized or excerpted from Moore, et al, 1990a, pages 5, 6 & 11.



After Moore, 2000, figure 1

An unconformable sequence of clastic rocks of the Early and Middle Jurassic Ashcroft Formation overlie the Nicola Group. They are mostly unlayered, poorly sorted coarse conglomerate with discontinuous interbeds of pyritic, rusty weathering sandstone and siltstone. In the Swakum Mountain area a grey, commonly fetid bioclastic limestone up to 200m thick occurs near the base of the formation. Clasts in the conglomerate consist mainly of volcanics resembling Nicola Group rocks, and granitic and dioritic boulders. At several localities, a distinctive chert-pebble conglomerate containing green clasts overlies the polymictic conglomerate sometimes along with chert-bearing horizons.

Flat-lying Miocene Chilcotin basalts occur north of the Fox Property and probably in smaller outliers elsewhere. These flows are nearly indistinguishable from Pleistocene and Recent valley basalts that once filled the major drainage channels of the region and now occur only as remnants in the Nicola and Quilchena valleys

The seven major plutons that intrude Nicola Group rocks are also of Late Triassic to Early Jurassic in age. Principal among them is the Guichon Creek batholith that consists of biotite and hornblende diorite, quartz monzonite, granodiorite and rare granite. The batholith is chemically and mineralogically is very similar to lavas of the western Nicola belt. Some of the plutons are zoned, consisting of pyroxenite, gabbro, diorite, monzonite and syenite, while others are of biotite and hornblende diorite, quartz monzonite, granodiorite and rare granite (Mortimer, 1987, p.2534). Based on the similarity of their chemical signatures to their adjacent Nicola volcanics, at least some plutons are considered comagmatic to the volcanics they intrude.

#### Nicola Horst

The Nicola Horst is a northerly trending block 40kms long, entirely detached from the surrounding Nicola Group rocks by Tertiary normal faults. The Horst, often referred to as the "Nicola batholith" in earlier studies is a complex of Nicola Group rocks, sedimentary rocks of unknown age, tonalite and tonalite porphyry. Those rocks are all strongly deformed, metamorphosed to low amphibolite facies and intruded by granitoid rocks ranging in age from at least Early Jurassic to Paleocene.

Stratified rocks of the Nicola Horst consist of strongly foliated and lineated quartzite metaconglomerate and interlayered graphitic mica schist as well as several units that are closely comparable to Nicola Group rocks except for their relatively high strain and metamorphic grade. The conglomerate and black schist are not comparable to any facies of the Nicola Group. They appear to structurally overlie the Nicola correlatives in the Horst, although they are separated from them by plutonic units. The conglomerate comprises stretched pebble-size clasts mainly of white, grey and black quartzite in a biotite-muscovite-quartz matrix with a few granitoid clasts. Staurolite and garnet accompany andalusite in the schist that suggests uplift during metamorphism.

The Nicola-like rocks are characterized by hornblende pseudomorphs after augite phenocrysts that resemble units of the central and eastern belts. Those identified with the central belt consist mainly of uniform or meta-augite porphyry while the remainder are mostly layered hornblende and hornblende-biotite schists that appear to be volcaniclastic sediments. In the east-central part of the Horst, these rocks contain relict graded and load-cast beds, but in the north end those primary features are obscured by strain and grain growth.

The most strongly deformed intrusive rocks in the Horst are leucocratic and tonalite porphyry that exhibits strain geometry comparable to the metasediments. Metadiorite, varying to metagabbro and tonalite is generally less penetratively and homogeneously strained. Along the Clapperton Fault system that bounds the west side of the Horst, the metadiorite has been intruded by granodiorite to granite that is also metamorphosed. A lenticular body of metaperidotite is converted to a pale amphibolite assemblage. Two varieties of less-deformed but metamorphosed, coarse biotite granitoid rocks are recognized; the Le Jeune variety containing augen of potassium-feldspar that cuts the Frogmore variety, which is less strongly foliated and more equigranular, containing highly oblate mafic xenoliths. Both of these types vary in composition from granite to tonalite but are predominantly granite and granodiorite. The Le Jeune metagranodiorite has been dated to early Jurassic. The southern part of the Horst is dominated by the Paleocene Rocky Gulch batholith, a potassium-feldspar megacrystic granodiorite to granite that is superficially similar to the earlier units but is typically coarser and essentially massive and undeformed. It cuts the older type with which it is intimately mixed in the north-central part of the Horst.

#### Regional Tectonics & Structure

The tectonic history of the Property region is dominated by a complex pattern of brittle deformation. Only in the Nicola Horst are the rocks penetratively deformed – evident as westerly plunging stretching features probably related to accretion of the Nicola arc in Mesozoic time. Most of the Nicola rocks are steeply dipping with stratigraphic tops facing east. Major northwest trending lineaments are seen in Nicola rocks that are transected by northerly striking Tertiary extensional fault systems. These systems occupy the Nicola River, Guichon, Clapperton and Quilchena Creek valleys. Eocene sediments have been deformed to a near vertical dip and the Nicola Horst elevated relative to its surroundings. Where exposed, these faults exhibit intense shattering, veining and local alteration.



Figure 8: Generalized bedrock geology of the Fox Property area. Most of the Property is underlain by Nicola volcanics and volcaniclastics while the eastern edge falls onto the fault bounded Nicola Horst of more strongly strained and metamorphosed Nicola equivalents and intrusives. Geology legend at overleaf.

Geology after Schiarizza, et al, 1996, backdrop topography Raster TRIM (Data Distribution Service, 2008)

Table 4: Geological Legend – Bedrock Geology of the Fox Property Area				
Tertiary and Quaternary Assemblages				
QUATERNARY				
PLEISTOCENE and RECENT         Qal       Unconsolidated glacial, fluvial and alluvial deposits, volcanic ash         Qv       Vesicular olivine basalt				
TERTIARY				
MIOCENE Mv Olivine basalt				
Proterozoic – Mesozoic Assemblages of the Intermontane Belt				
ImJA Ashcroft Formation: argillite, siltstone, sandstone, conglomerate, minor carbonate				
LATE TRIASSIC and/or EARLY JURASSIC         TrJgd       Granodiorite, quartz diorite, quartz monzonite, lesser monzonite, diorite and gabbro; TrJgdm: metamorphosed and foliated granodiorite of Rocky Gulch batholith.         TrJmm       TrJdim: includes abundant Paleocene granodiorite of Rocky Gulch batholith.         TrJdi       Metamorphosed, highly strained biotite leucotonalite and tonalite porphyry of Nicola Horst.         Diorite, quartz diorite, gabbro, TrJdim: biotite-hornblende metadiorite of Nicola Horst       Ultramafic rocks, commonly associated with alkalic intrusions, TrJum: metaperidotite within Nicola Horst.         UPPER TRIASSIC       UTrNw       Western volcanic facies: mafic to felsic pyroclastic rocks and flows, argillite, sandstone, local carbonate.         UTrNc       UrrNc       Central volcanic facies: intermediate pyroclastic rocks, local pillowed and plagioclase porphyry flows, uTrNcm: highly strained and metamorphosed equivalents within Nicola Horst.         UTrNe       Eastern volcanic facies: mafic breccia and tuff with augite and hornblende-phyric clasts, local intercalated argillite.         uTrNm       Amphibolite, foliated diorite, mylonite and chlorite schist derived from Nicola Group.				
PALEOZOIC or MESOZOIC PMms Quartzite metaconglomerate, staurolite-andalusite-mica schist. Intrusive Rocks PALEOCENE				
Pgd Granodiorite, tonalite and granite with K-feldspar megacrysts				
after Schiarizza, et al, 1996				

#### **Property Geology**

No comprehensive geologic mapping has been conducted over the Fox Property, a consequence at least partly explained by the generally poor outcrop exposure in the area. What is known is that Nicola Group rocks underlie almost all of the Fox Property. They come into contact with their metamorphosed equivalents and intrusives of the Nicola Horst along a fault that runs north-south nearly along the eastern edge of the Property. That Tertiary fault bounds the Nicola Horst on its western side and runs under the alluvium cover of the Clapperton Creek valley and is known as the Clapperton Fault system. Metamorphosed rocks of the Nicola Horst occupy only a relatively small portion of the Property (figure 8).

The western facies of the Nicola Group rocks are represented throughout the Property west of the Clapperton Fault except for a small area underlain by eastern facies Nicola Group in the northwest corner of the Property. The western belt of the Nicola Group can be divided into five lithologic units<sup>30</sup>. Those units are not known to exhibit much continuity and their contacts have rarely been observed. The units consist of andesitic flows, a variety of fragmental types and lenses of grey limestone.

Lava flows are most abundant in the western portion of their domain. The flows are distinctive for their plagioclase phenocrysts as large as two centimeters across or more, and range to 30 percent by volume. They may also contain a subordinate proportion of augite or hornblende phenocrysts and less than 5 percent amygdules filled with quartz, chlorite and/or calcite.

Distinct units of breccias and tuffs, epivolcaniclastic rocks and agglomerates are predominant in the western belt of the Nicola Belt. Breccias and tuffs are monolithologic, mirroring the composition of andesitic flows and display no layering or rounding of fragments. Many breccias many be epiclastic debris from a relatively homogeneous source material. Agglomerates are probably laharic deposits containing a variety of andesitic and sometimes more felsic varieties in massive, unsorted, angular to subrounded fragments up to 5cm in size.

Limestone lenses, thin and grey in character, are a minor but distinctive part of the Nicola succession. Typically these units consist of limestone up to a few meters in thickness, intercalated with heterolithic volcanic breccia-conglomerate with limestone clasts up to a meter in scale. The limestone is invariably bioclastic, containing well-preserved mollusks and coral fragments.

All Nicola volcanic rocks exhibit fine-grained or aphanitic matrices with abundant chlorite and epidote. Their color is usually dark green or purple. The Nicola rocks strike northerly and dip steeply, predominantly to the east and are upright. The Clapperton Fault system is thought to be normal with a net dip slip of at least several kilometers in order to have exhumed the relatively seep-seated rocks of the Nicola Horst. The west northwest trending valley that includes Rey Lake may also contain a major structural break, as the Nicola Group on Mount Guichon just west of the Fox Property, includes

<sup>&</sup>lt;sup>30</sup> Most of the remainder of the subsection of this Report is summarized or excerpted from Moore (et al, 1990a, p.5-10)
well-bedded wackes and coarse laharic deposits without close counterparts along strike south of the Rey Lake valley.

Volcanic features of the western facies of the Nicola Group, such as red agglomerates and rounded clasts in debris flows are clearly indicative of subaerial deposition. The scarcity of well-defined bedding in the volcaniclastic rocks and the prevalence of massive, ill-sorted deposits are evidence of subaerial lahars. On the other hand, criteria such as reefoid limestone demonstrate subaqueous deposition. These and other features demonstrate a transitional subaerial to shallow marine environment, characterized by tectonic instability and ephemeral shorelines.

The central facies of the Nicola Group is mapped in the northeastern corner of the Property. Kalhert (et al, 1993, p.7) in his assessment report that included part of the south and southeastern are of Desmond Lake, described the local rock as maroon and green andesite-basaltic flows and pyroclastic rocks.

# Blacktop Showing Geology<sup>31</sup>

Mineralization of the Blacktop Showing is hosted in strongly sericitic alteration that is overlain by volcanic and volcaniclastics of the western facies of the Nicola Group. The units strike 010°Az and dip steeply west. Airborne and ground magnetic surveys locate the Blacktop Showing within a linear low of the same 010° trend that embraces the rocks hosting the Showing. It is this magnetic low that Gitennes dubbed the "Corridor of Merit" (McArthur, et al, 2001a, p.15).

Based on the eight holes drilled in 2001, Gitennes recognized three rock units at the Blacktop Showing - each unit displaying its own distinctive structural and lithologic character. Those units from west to east are:

- Unit 3: Hanging wall to the Blacktop mineralization composed of a diverse range of Nicola Group rocks. The rocks are disrupted by brittle faulting, joints and veins with rare dikes. At the Showing and to its north, relatively coarse, dark red and green mafic to intermediate volcanics and tuffaceous breccias predominate. Rocks to the south consist of light to dark green intermediate to felsic lapilli-tuff breccias and more massive intrusives or volcanics.
- Unit 2: Contains the Blacktop mineralization in a deformed, strongly foliated intermediate to felsic sequence of tuffaceous rocks that includes various intrusive rocks. The Blacktop mineralization occurs at the top of this unit but is highly disrupted by a north trending, west dipping structure called the Blacktop Fault. In drill core the fault zone is recognized by a chaotic mix of hematitic and sericitic gouge and rock fragments, and clay-altered schistose tuff which becomes progressively less disrupted with depth, passing into schistose, laminated hematitic, chloritic or sericitic laminated tuffs. These, in turn, become interlayered with foliated mafic tuffs and lapilli tuffs, sometimes intensely veined. A hydrothermal breccia was also intersected in a single drill hole in Unit 2. The

<sup>&</sup>lt;sup>31</sup> Most details in this subsection are summarized or excerpted from unpublished Gitennes report by McArthur (2001a, p.15 & 16). Details of rock Units 1–3 are summarized from Gitennes report by McArthur (2002, p.6 & 7).

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breccia consists of subangular to subrounded clasts set in a strongly clay altered heterolithic matrix.

Intrusive rocks in Unit 2 include leucocratic granitic dikes or sills and what Gitennes called the "walleye porphyry", a distinctive quartz-eye porphyry containing ovoid, blush-grey quartz phenocrysts set in a medium grained sericitized feldspathic foliated matrix. Basaltic amygdaloidal dikes are ubiquitous in the upper portion of Unit 2. The dikes are undeformed with calcite amygdules and are often associated with evidence of faulting.

• *Unit 1:* Footwall to the Blacktop mineralization consists of weakly foliated, finegrained mafic tuff and subaqueous tuff interbedded with tuffaceous siltstone and wacke. This unit is known only in drill core as it was not observed in outcrop.

North of the Showing near line 4+25N on the Blacktop field grid, an east-west trending, south dipping volcaniclastic sedimentary sequence outcrops west of the Coquihalla Highway. This abrupt change in strike orientation is reflected in both aerial and ground magnetics. Among the interpretations offered by Gitennes, the preferred explanation for that observation is a result easterly-trending faulting that isolates structural blocks.

Even further north, exposures east and west of the Coquihalla Highway exhibit a 160°Az trending, west-dipping sequence of thin bedded volcanic wackes and pyroclastics. Lahar deposits at the same strike direction northeast of Mount Guichon are distinguished by large limestone cobbles. These rocks are associated with a broad aerial magnetic low which Gitennes interpreted as the strike extension of the sequence hosting the Blacktop Showing.

On higher ground, west of the Showing, outcrops at moderate to high relief expose mafic to intermediate pyroclastic and epiclastic rocks which exhibit high magnetic response. Those rocks are overlain by augite-phyric flows and flow breccias further north and west. South of the Showing silicified epidote-chlorite-altered amygdaloidal pillow and pillow breccias strike 190° to 195°Az. East of the Showing and under quaternary glacial till and fluvium lies the Clapperton Fault system, and rising even further east are the high grade metamorphosed rocks of the Nicola Horst.

## **MINERALIZATION**

## **Blacktop Showing**

Gitennes exposed the Blacktop Showing in shallow hand-dug trenches over a distance of about 100 meters on the west slope of the Coquihalla Highway (figure 9). The mineralization exists in bands of up to 1.5 meters in width intercalated with bleached and sericite altered rocks that are locally cherty or silicic and banded or foliated fine grained equigranular barite. Sulfide mineralization consists of foliated to massive and semi-massive, medium grey, very fine grained sphalerite and lesser pyrite and faint wisps of chalcopyrite, traces of tetrahedrite and galena, accompanied by a gangue of barite, carbonate with quartz and sericite.

Sericite alteration exposed by Gitennes' trenches is in fault contact with overlying generally unmineralized reddish, maroon or grey-green colored sedimentary and pyroclastic rocks (Unit 3). Bedding in these overlying rocks is poorly developed but oriented due north to 010°Az and dipping 50° to 70° west. The mineralization, in Unit 2, is oriented similarly, with strike directions varying from 170° to 010°Az and dips again ranging from 50° to 70° west. Gitennes concluded that the variation in strike of the mineralization is indicative of local folding within the overall 010°Az trend (McArthur, 2001a, p.17).



The contact between Units 2 and 3 is a zone of faulting and strong shearing that appears to have been taken up by the mineralized horizon. Specimens of the massive sulfides exhibit rotated clasts, pressure shadows, snowball texture and schistosity and folding of schistosity.

Chip sampling in the Sulphide Trench averaged 17% Zn, 1.6% Cu, 0.47% Pb, 76 g/tne Ag and 0.49 g/tne Au over 1.1 metres. The Sulphide Pit, located 20 metres to the north, exposed 1.2 metres of the mineralized zone grading 5.96% Zn, 0.18% Cu, 0.07% Pb, 65.2 g/tne Ag and 0.12 g/tne Au. In both exposures, the mineralization was abruptly terminated by excavation for a drainage ditch along the highway. Some 35 meters to the south of the Central Trench, the South Trench did not expose any massive sulphide mineralization. Five metres further to the south, massive sphalerite and pyrite mineralization in the South Pit returned a 1.0-metre interval with 2.31% Zn, 0.19% Cu, 0.18% Pb, 16.2 g/tne Ag and 0.27 g/tne Au (ibid, p.20).

Gitennes in its drilling of eight holes in 2001 collared all holes in Unit 3 and intersected significant mineralization in only a single hole, F01-02. That hole encountered 70cm of tectonized, fine-grained, sphalerite-pyrite-chalcopyrite massive sulfide that assayed 16.5% Zn, 1.18% Cu, 87.4ppm Ag and 0.45 ppm Au (McArthur, 2002, p.10)

## **Helmer Lake Veins**

Above the west and northwest shore of Helmer Lake are a series of six trenches (Stadnyk, 1970, p.3) that expose quartz-carbonate veins in altered, sheared andesitic lavas and tuffs. Mineralization consists of very fine-grained sulfides, principally pyrite with much lesser chalcopyrite, chalcocite, galena and sphalerite that, in aggregate, can amount to as much as 20% by volume. The sulfides typically occur as short centimeter-long slashes or elongate blebs in a gangue of white to grey, aphanitic to fine grained quartz with widely variable fine grained calcite and/or ankerite. Patches of heavily pitted limonite stain may occur as can rare diffuse malachite stain. Stadnyk (ibid) reports that silver is also present in minute quantities.

Mineralization is contained in quartz-carbonate veins that may exceed a meter wide in places. The veins trend northwest with an uncertain dip; but thought to be steep. Almost nothing is known of the spatial extent of the veins or what structural features control their distribution. The anomalous zinc values in soil geochemistry completed by Ronrico in 1970 outlines an area that includes the veins (Stadnyk, ibid, map 4). Ronrico's anomaly clearly emphasizes a northwest trend within a larger zone, about 1,500 meters in length that wraps around Helmer Lake from its south, arcs around the lake to its west then north and northwest of it. Mineralization enclosed by a larger footprint of anomalous soils qualifies that part of the Helmer Lake area as a target for further investigation.

Although samples for assay were undoubtedly taken from the veins over the years since they were trenched, no reference to them is known to exist in the public record. The author gathered four samples in that area in August 2007; those results are discussed in the following section.



Figure 10: Sample locations and areas prospected that constitutes fieldwork completed for Rich River in August 2007. Location and sample numbers of the 26 rock samples and the pair of soil samples gathered in the Helmer Lake area, at the Blacktop Showing and area, and in the north part of the Property are plotted. Sampling at the Blacktop Showing is detailed in a subsequent figure.

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# FIELDWORK OF 2007

A total of 26 rock samples and two soil samples were gathered by the author during his field visit to the Fox Property from the 2<sup>nd</sup> to the 4<sup>th</sup> of August 2007 (figure 10

& table 6). The author was assisted by Craig Lynes and William Nelson who had been on the Property in advance of the sampling program and who continued to work on the Property afterwards. Their work amounted to 10 field days of Prospecting in selected areas of the Property over a period extending from 27 July to 20 October 2007.

That sampling program was intended to verify the existence of potentially favorable

Table 5: Fieldwork at the Fox Property in 2007 Duration: 10 days over period: 27 July - 20 October 2007 Person-days worked: 23 245 hectares Prospecting area: Sampling: 26 rock 2 soil 36-element ICP, fire assay Au Assaying: Physical work: 13.4m in hand-dug trenches

mineralization wherever it was recognized on the Property in general. That included mineralization contained in quartz-carbonate veins exposed in trenches and outcrops near

Helmer Lake. The Blacktop Showing was singled out for rather more intensive sampling in order to at least verify the tenor of assays reported by Gitennes.

# Helmer Lake Sampling

Near Helmer Lake, just above its western shore, four samples (tag nos. 675426-429) were gathered from mineralized vein material in altered and strained andesitic host rock. All four samples returned values of interest ranging from 1.55% to 8.36% combined Pb+Zn. Copper ranged to just over 1%, silver to 163 ppm and a maximum value of 1,260 ppm in gold, all in different samples. Although these samples were not meant to be representative of the vein material, but instead were selected based on visible

Photo 3: Sampling near Helmer Lake. Chip sample (tag no. 675428) ragged quartz-carbonate veinlets in bleached andesite schist containing 5% - 15% sulfides. Assay results: 1.45% Zn & 1.26 g/tne Au. Photo by author on 02 August 2007.

mineralization, there is an indication that the area above west shore of Helmer Lake merits some further investigation.

The anomalous zinc values in soil geochemistry completed by Ronrico in 1970 outlines an area that includes the veins (Stadnyk, ibid, map 4) and the samples gathered by the author in 2007. Ronrico's anomaly clearly emphasizes a northwest trend within a larger zone, about 1,500 meters in length that extends from south of Helmer Lake, arcs around it to its west then dies further to the north and northwest. Mineralization enclosed by a larger footprint of anomalous soils qualifies that part of the Helmer Lake area as a target for further investigation.



# Sampling the Blacktop Showing

A more rigorous sampling approach was directed at the Blacktop Showing (figure 11). Seventeen chip samples (tag nos. 675432-488) were gathered from bedrock exposed in shallow hand-dug trenches cut into the rip-rap covered, east-facing slope adjacent to the Coquihalla Highway.<sup>32</sup> Trench locations were selected based on indications of mineralization in the overburden or faint clues that earlier workers, perhaps most likely Gitennes, had sampled that location years earlier. Trenches were dug over a length that was governed by the appearance of the bedrock, in an attempt to expose mineralization and wall rocks where practical. Samples were cut based on recognized geology; mineralization, alteration and wall rock relegated to their own intervals. Trenches varied from 4 meters long to a few that were little more than excavated pits. Given that the surface was sloping at about 20° east and the geology was dipping steeply west, the sampled intervals are estimated to closely represent true width.

Sample ID	Length	Au [ppb]	Ag [ppm]	Cu [ppm]^	Pb [ppm]^	Zn [ppm]^	Comment
675432	0.30	0	0.1	14.2	14.7	146	
675433	1.30	40	6.0	1870.0	300.0	1.69%	
675434	0.40	10	0.2	57.4	10.1	354	
675435	0.25	380	55.0	13020.0	5500.0	15.56%	Mineralized zone
675436	0.90	370	52.0	8880.0	2900.0	12.85%	Mineralized alteration
675437	0.35	160	14.1	515.8	205.6	4889	Mineralized zone
675438	0.50	10	1.4	257.7	92.4	2816	
675439*	Grabs	740	136.0	2.51%	8000.0	35.97%	Selected mineralization
675440	2.40	10	0.4	87.4	10.0	232	
675441	0.50	360	25.0	4930.0	1600.0	4.77%	Mineralized zone
675442	1.20	80	8.0	1520.0	31.5	2.00%	Mineralized zone
675443	0.60	250	23.0	1240.0	1.25%	3.7%	Mineralized zone
675444	0.50	490	74.2	122.2	169.9	768	
675445	0.90	130	11.6	660.1	173.3	5266	
675446	2.00	30	2.1	57.6	54.7	377	
675447	0.50	20	2.1	166.7	149.8	1989	
675448	0.8	10	0.6	26.4	20.1	370	

Table 6: Samples from the Blacktop Showing, August 2007

\* Grab sample of best of mineralization selected from interval at sample 675437

^ Units of ppm unless otherwise indicated as percent

Of the suite of samples, five samples were from massive to nearly massive mineralized seams ranging in width from 25cm to 1.2 meters. In Trench 'A' two seams were recognized 25 and 35 cms thick separated by 90 cms of chlorite-sericite which did not appear to be mineralized but returned assay values that apparently repudiates that impression. The entire 1.5 meter zone (tag nos. 675435-437) assayed 10.42% Zn, 0.76% Cu, 0.27% Pb, and 43.7 g/tne Ag, 0.32 g/tne Au. Trench 'B' (tag no. 675441), Trench 'C' (tag no. 675442) and Trench 'D' (tag no. 675443) were all taken from mineralization over intervals of 50cm to 1.2 meters that returned much lower values averaging 3.49% Zn, 0.25% Cu, 0.47% Pb and 18.7 g/tne Ag, 0.23 g/tne Au<sup>33</sup>. Most mineralized samples contain proportionately much less lead than the predominant zinc

<sup>&</sup>lt;sup>32</sup> All trenches were filled in immediately after the completion of sampling to restore the original contour of the slope adjacent to the highway.

<sup>&</sup>lt;sup>33</sup> As these samples were taken from individual rather than contiguous mineralized locations, these values are <u>arithmetic</u> averages, not weighted averages

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and subordinate copper values. Sample 675443 is a prominent exception as it contained notable galena, unique in that series of samples.

Sample 675439 consisted of selected grabs of the most massive material taken from the mineralization cut in sample 675437. This was taken to provide an indication of the maximum grades and relative proportion of metals in the mineralization itself, which from a population of similar samples can be useful information. Nearly 36% zinc was returned with 2.5% copper and lesser lead values and 136 g/tne silver.

In as much as the intent of the 2007 sampling at the Blacktop Showing was to corroborate that by Gitennes, the tenor and range of assay results generally reflects their reported values. Gitennes obtained zinc values ranging from just over 2% to 17% which closely matches the spread from 2% to nearly 16% in the 2007 sampling. Copper values by Gitennes reached 1.6%, slightly exceeding the 2007 maximum of 1.3%. Apart from sample 675443 which was unusually enriched in lead, the remaining 2007 analyses of about half a percent or less is the experience shared by Gitennes for that metal. So too are results for silver and gold comparable.



Photo 4: Sampling at the Blacktop Showing. Looking due west across both lanes of the Coquihalla Highway. The author is crouched at Trench 'C' with Trench 'B' prominently visible to his right and flagged samples of Trench 'A' barely visible near the right-hand side of the image. Trenches 'D' and 'E' are just to the right of Trench 'G' which is clearly visible but partly cut off at the left edge of the image. Note the rusty patch of subcrop of the hangingwall andesites (Unit 3) and the lighter, buff colored sericitic subcrop (Unit 2) that hosts the mineralization. Photo taken by Craig Lynes, 03 August 2007.

# **Additional Sampling**

Additional sampling was gathered from various other places on the Property. Among those, two samples of float returned assay values of interest but their source is unknown and, so far, their relevance to the prospects for additional mineralization on the Property is entirely moot. One of those samples (tag no. 675431), located northwest of Helmer Lake, was of a chalcocite-rich andesite tuff that assayed 2.34% in copper. The other sample (tag no. 675449), was from a mineralized boulder taken from a dump graded flat on the opposite side of the Coquihalla Highway, southwest of the Blacktop Showing. It returned 13.7% in both zinc and copper.

# Table 7: Sample descriptions from 2007 Fieldwork

Sample ID	Northing	Easting	Date	Туре	Material	Source	Location	Description	Au [pob]	Ag (ppm)	Cu (ppm)	Pb [ppm]	Zn (ppm)
675426	5576600	666925	02-Aug-07	Grab		Trench excavation	Above west shore of Hellmer	50% white & buff Qtz-cte; upto 40% m & f.g. cc, cpy, sph in various prop'ns; Andesite host.	370	163.0		18600.0	
675427	5576622	666917	02-Aug-07	Chip	Subcrop/F loat	Chips from float 50cm across	Just below power line road, above west shore of Hellmer Lake	Strongly bleached & silicified w/ glassy Qtz domains, abund. wad as selvedges, pitted limonite domains, no primary $Sx_{\rm c}$	560	3.0	130.0	1500.0	1400
675428	5576651	666906	02-Aug-07	Chip	Outcrop	40 x 10cm	40cm wide outcrop above power line road.	Gry & wht, f & m.g Qtz-cte in strongly foliated, bleached (andesitic?) schist. Ragged veinlets & strgrs f.g. & v.f.g. sph, pale py, cpy in various prop'ns (5 - 15%). Foliation –030°Az.	1,260	7.0	1780.0	4100.0	1450
675429	5576644	666898	02-Aug-07	Grab & Chip	Float	5 x 5m area of float	Adjacent to fiber optic line just above power line road	Bleached schist & silicification w/ gry & wht, f.g. Qtz-cte w/ 5- 20% ragged & diss'd py, sph & v. m. cpy.	570	4.0	1040.0	5400.0	2650
675430	5577136	666854	02-Aug-07	Chip	Outcrop	20cm wide	in clear-cut after a burn	Irreg Qtz-cte vein w/ 2-15% irreg streaks, blebs & diss'd flocs tetrahedrite, sph, cc7, cpy & ga; malachite & azurite stain. Vein at -030°Az, conformable to moderately developed fabric (of foliation & jointing).	90	9.8	2422.7	990.8	239
675431	5577014	666940	02-Aug-07	Chip	Float	Chips from small boulder	in firebreak	Maroon, sjightly vesicular tuff? w/ -20% f. to v.c.g. cte streak: & domains; uptp 15% v. irreg cc & abund malachite & chrysocolla in internal patches. No gossanous wx'g.	10	0.8	23390.0	21.8	20
675432			03-Aug-07	Chip	Outcrop	Trench A: 0.00 - 0.30m	Blacktop Showing	Andesite?: mod-drk grn-gry, strongly foliated & chltic, faintly calc, distinct rusty wx'g along some fracture planes, v. m. Sx.	0	0.1	14.2	14.7	14
675433	5581327	668754	03-Aug-07	Chip	Subcrop	Trench A: 0.30 - 1.60m	Blacktop Showing	Med gry w/ patchy but distinct maroon cast, strongly foliated, weakly platey, strongly calc, no Sx.	40	6.0	1870.0	300.0	1690
675434			03-Aug-07	Chip	Outcrop	Trench A: 1.60 - 2.00m	Blacktop Showing	Immediate HWall to thin mx'd zone: variably (weak-strongly) developed foliation, strongly chltic & bleached, variably drk grn & lit gry, often diffusely red brn colored, no mx'n.	10	0.2	57.4	10.1	35
675435			03-Aug-07	Chip	Outcrop	Trench A: 2.00 - 2.25m	Blacktop Showing	Mineralized zone: med-lit gry, dense, v.f.gf.g massive Sx, principally sph, lesser py & py. 10% streaks, blebs, domains of wht cte. Faintly-weakly calc.	380	55.0	13020.0	5500.0	155600
675436			03-Aug-07	Chip	Outcrop	Trench A: 2.25 - 3.15m	Blacktop Showing	Med grn, strongly chitic, strongly foliated, schistose, often muddy, pulverized, fragmented & faintly wet & weepy. Locally faintly calc. No mx'n.	370	52.0	8880.0	2900.0	12850
675437			03-Aug-07	Chip	Outcrop	Trench A: 3.15 - 3.50m	Blacktop Showing	Mineralized zone: med gry, dense, v.f.g f.g. massive Sx, mostly sph? w/ ~10% druzy, irreg'ly streaky & diss'd cpy (w/ py). <5% cte strgrs & patches. Var. calc.	160	14.1	515.8	205.6	488
675438			03-Aug-07	Chip	Outcrop	Trench A: 3.50 - 4.00m	Blacktop Showing	Drk-med red-brn, v.dense & pastey in most places w/ streaks & bands fragmented pale, lit & med grn mat'l, all v.f.g. No mx'n.	10	1.4	257.7	92.4	281
675439			03-Aug-07	Grab	Subcrop	Trench A	Blacktop Showing	Best of mx'n from lower zone: med gry, occ. faintly maroon, dense, v.f.g - c. g. massive Sx, mostly sph? w/ ~10% cpy & py & ~2% strgrs & streaks wht & blk cte.	740	136.0	25100.0	8000.0	35970
675440	5581318	668754	03-Aug-07	Chip	Outcrop	Trench B: westernmost of 2 samples; 2.4m long	Blacktop Showing: coordinates at middle of trench	Various H'Wall rocks: gry & grn andesite, var. chltic & calc w/ several maroon patches or domains, local org & brn wx'g. No mx'n.	10	0.4	87.4	10.0	23
675441			03-Aug-07	Chip	Outcrop	TrB: easternmost of 2 samples; 0.5m long	Blacktop Showing	Mineralized zone: dense med silvery gry, v.f.gf.g., massive mx'n w/ 2 - 10% chite strgrs or blebs; sph w/ diss'd py, cpy; wkly calc.	360	25.0	4930.0	1600.0	4770
675442	5581309	668756	03-Aug-07	Chip	Outcrop	Trench C: 1.2m	Blacktop Showing	Med & lit gry, sometimes bleached and/or silicified, variably (wk-mod) calc; v.f.g f.g., local silvery gry maft thought to be mx/d zone, local brite org gossan & malachite stain at toe of trench; galena reported; most prominent foliation 270*/50*N.	80	8.0	1520.0	31.5	2000
675443	5581291	668757	03-Aug-07	Chip	Outcrop	Trench D: 0.6m	Blacktop Showing	Med gry w/ abund lit gry streaks, f. & v.f.g. w/ var prop'n (ranging to 15%) v.f.g. ga w/ occ cpy; weakly calc; local org gossan/limonite in patch of gouge.	250	23.0	1240.0	12500.0	3700
675444	5581290	668758	03-Aug-07	Chip	Outcrop	Trench E: 0.5 x 0.5m	Blacktop Showing	Prominent org gossan, med gry, v.f.g., hard, silicic, abund local bleached streaks & strgrs; modīly calc; no mx'n.	490	74.2	122.2	169.9	76
675445			03-Aug-07	Chip	Outcrop	Trench F: westernmost of 3 samples, 0.9m long	Blacktop Showing	Med gry, faintly grn, thinly foliated, local org gossan or limonite stain. May be mx'd zone as mud & chips seem heavy.	130	11.6	660.1	173.3	
675446	5581286	668756	03-Aug-07	Chip	-	samples, 2.0m long	Blacktop Showing	Strongly-mod'ly foliated, var. chltic & silicic; no Mx'n.	30	2.1	57.6	54.7	37
675447			03-Aug-07	Chip	Outcrop	Trench F: Eastermos of 3 samples, 0.5m long	Blacktop Showing	Friable, pastey, med blu-gry w/ wht streaks & strgrs, more silicic on N & S walls of foliated, lit & med grn, chlte alt'd host. May be mx'n zone, just above (west) of maroon horiz.	20	2.1	166.7	149.8	198
675448	5581281	668761	03-Aug-07	Chip	Outcrop	Trench G: 0.8m	Blacktop Showing	Var. follated, var grn & buff colored (bleached) w/ patches chltized, maroon or faint red color, hard, silicic, mod'ly calc, f.g., often pulverized & pastely, wet & weepy; no mx'n. Old sample tag #17137.	10	0.6	26.4	20.1	37
675449	5581005	668875	03-Aug-07	Grab	Float	Small bald rock pile.	East of Hwy; across & south of Fox Showing	Med gry, fine grained, strongly calc, 15-50% v.f.g. sph, ga, cpy.	960	38.0	13760.0	500.0	13710
675450	5586840	668850	04-Aug-07	Grab	Float	Fractured boulder	Adjacent to & at bend of	Massive, dense, f.g. brn (garnetite?), drk brn & v. drk brn wx/g t surface w/ internal seams brite org gossan, occ lens or streak carbonized? Organic matter?, non-magnetic, weakly calc.		0.0	14.3	1.8	110
751001	5586022	666943	04-Aug-07	Chip	Float	Boulder	West side of logging road, north portion of Property.	V. rusty, v. calcareous, m.g. w/ abund limonite, patchy malachite stain; sparse, tiny flecks cc.	10	0.9	1861.8	11.1	46
SOIL01	5586848	668871	04-Aug-07	Grab	Soil	Druzy, muddy, bright org seep deposit		mailacinite stain; sparse, tiny tecks cc. Bright org seep. Sample upstream from pair of galvanized stell culverts. Water frio ~0.5//min. Much gravel in sample & proph of long grsss blades.	5	0.2	36.3	3.9	174
SOIL02	5586848	668871	04-Aug-07	Grab	Soil	Dry, dusty bright org seep deposit	At toe of west slope of Hwy 5, ~50m north of underpass to Surrey Lake	Dry clumps of bright org precipitate on slightly elevated west bank of seep SW of SOIL01.	2	0.2	24.9	7.2	115



Figure 11: Sample locations at the Blacktop Showing gathered by the author for Rich River in August 2007. 17 samples were gathered from shallow trenches on the east-facing slope overlooking the Coquihalla Highway. Trenches shown wider than field width and sample length not corrected for 20°slope angle for clarity.

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The pair of soil samples that were gathered was located at the north end of the Property, at the base of a graveled and rip-rap covered slope that marks the west edge of the Coquihalla Highway. A strongly gossanous seep confined to an area of a few square meters was sampled in two places. The bright orange seep produced a dense slime when wet which changed to a dusty pile when dry. A sample was taken from the wet portion and another from a patch of the dry material. Neither sample returned assays of interest and the cause of the prominent seep is unknown.

## Sampling Method & Analyses

Rock samples were gathered in an amount that consisted of at least 3 kilograms in oversize plastic bags that were in continual custody of the author throughout the field day. A sample tag was added to the sample at the time it was gathered. A description and usually location coordinates, by GPS, were recorded in the corresponding receipt portion in the book of sample tags. Soil samples were scooped by hand to fill a standard kraft sample bags to about half its capacity and stored in a ventilated plastic sample bag to drain and dry out.

Once out of the field, samples were stored in the author's vehicle which was locked at all time when unattended. Samples at the end of the field program were personally delivered by the author to Acme Analytical Laboratories Ltd. [Acme Labs] of Vancouver, BC, an ISO 9001:2000 accredited facility. All assayer's certificates are appended to this Report as are a series of 'Methods and Specifications' sheets as released by Acme Labs, that detail the procedures used in the analyses of the reported samples.

All 26 rock samples were dried at 60°C and crushed to 70% -10 mesh [2mm] with a 250 gm riffled portion pulverized to 95% -150 mesh [100  $\mu$ m] pulp in a ring and puck mill. The pair of soil samples were also dried but then sieved to -80 mesh [-177  $\mu$ m].

All samples were initially analyzed by a 36-element ICP-MS procedure (Acme Group 1DX) which consisted of digesting a half-gram subsample of the pulp in hot aqua regia for an hour then, after cooling, diluted to 10ml with a 5% solution of HCl. That solution was aspirated into a mass spectrometer to complete the analyses.

For each of the rock samples a gold assay was determined from a one assay ton [292.gm] aliquot of the sample pulp (Acme Group 6). The aliquot was blended with fluxes and fired at 1050°C to a lead bead then refired in a cupel at 950°C to yield a doré bead. That bead was dissolved then analyzed with and emission spectrometer. Gold values for the soil samples were determined in a similar manner but with a procedure (Group 3B) that has a much lower detection limit (1 ppb vs. 10ppb for Group 6). The final determination is read by a mass spectrometer.

For rock samples that returned overlimit values from the initial ICP-MS procedure in any one of copper, lead zinc or silver, was analyzed for all of those metals by a procedure (Acme Group 7AR), intended for higher grade materials. A one gram aliquot split from the sample pulp was digested for an hour in aqua regia then, after cooling, diluted to 100ml solution with 5% HCl, before being aspirated into an ICP emission spectrograph, to provide the reported determinations.

# INTERPRETATION AND CONCLUSIONS

Based on the bulk of historical exploration data compiled to date, it is evident that there are several features of interest on the Property (figure 12), each of which deserve a measure of follow up:

- 1. In spite of the lack of success that Gitennes had in its drilling of the Blacktop Showing, the sequence of rocks that host the Showing may represent stratigraphy that encloses additional VMS-style mineralization, especially along the "Corridor of Merit" identified by Gitennes.
- 2. South of the Blacktop Showing, hole K97-3 drilled by International Skyline Gold, which intersected more than 20 meters of intense sericite may be of interest, especially since the discovery of mineralized boulders, one of which returned an assay of 1.65% Cu, is what first attracted them to the area (Moore, 1997, p.3). Several stream silt samples returning anomalous values in copper west of the Blacktop Showing and K97-3 may corroborate Moore's reporting of those boulders.
- 3. An area in the southwest of the Property, arcing north through west of Hellmer Lake contains an abundance of geophysical and geochemical targets. The area of anomalous soil geochemistry identified by Ronrico in 1970, as well as stream sediments taken by Gitennes in 2000, should be closely examined in the field.
- 4. North of that anomalous area around Helmer Lake are a series of stream silt samples gathered by Gitennes that returned anomalous values in zinc. That area may be prospective.
- 5. And just to the northwest of those stream silts, a series of EM anomalies as well as a magnetic feature just north of that area, recognized by Gitennes in its airborne geophysical survey, should also be included in a field traverse.
- 6. To the north of the Property, the scattered, sometimes aligned soil anomalies that streak through the area west and northwest of Surrey Lake also deserve a close field examination. These copper soil anomalies by Largo Mines and Newco Ventures date to the early 1970's and should be corroborated al least by some orientation sampling.

Earlier workers have had demonstrated success in obtaining a response from their geochemical surveys, including conventional soil sampling, and MMI and silt sampling by Gitennes. It is among the recommendations in the following section to review as many of those anomalies as possible in order to ascertain whether those anomalies are genuine and to consider building upon them with much broader and more detailed geochemistry.

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Figure 12: Exploration targets on the Fox Property and area. Features of interest generalized and complied from cited sources. Note the persistent northwest-southeast fabric to the drainage pattern in all but the southwest quadrant of the map, and the corresponding patterns in magnetic trends and soil geochemical anomalies. Backdrop: Raster TRIM (Data Distribution Service, 2008)

# RECOMMENDATIONS

The Fox Property contains a large number of targets that merits follow up. Not much is known about the relative merits of each of the targets. To satisfy that uncertainty it is recommended that follow up exploration begin with a period of time devoted to an assessment of the available data followed by a period of about ten field days to examine the Property as a whole. That period is intended for target selection on which a program of detailed exploration will be staged, ultimately leading to identification of specific drill targets. The suite of activities that that early stage of examination includes:

- Data compilation especially of historical soil geochemical surveys and an examination of geophysical data. An effort should be made to acquire from Gitennes its DIGHEM airborne EM and magnetic data, and if successful, review that data, preferably by a geophysicist. So too should an effort be made to obtain unreported field work completed by International Skyline Gold leading up to its 1997 drilling campaign. That work consisted of geological mapping, soil sampling and ground geophysics.
- Prospecting the entire property to include all logging roads, especially the newest ones and all recent clear-cuts.
- Follow up with a field examination all targets, gather samples and run orientation soil lines where applicable along with local geologic mapping if warranted. Consider following up geophysical targets with portable ground instrumentation such as a magnetometer or VLF and perhaps self-potential.

Prospecting will be expedited by the current and unique circumstance where salvage logging has advanced over increasingly large areas. Ease of mobility over terrain that was previously forested will be further facilitated by new logging roads that provide access to nearly every part of the Property. These are advantages not enjoyed by earlier workers but they are only temporary as new growth will restore the original forest cover.

Once that rather cursory Property examination has been completed, and a target of greatest potential has been selected, a more aggressive campaign should ensue with the intention of identifying drill locations in a subsequent exploration phase. It is expected that the field exploration will consist of detailed soil sampling and geophysics as well as geological mapping.

Soil sampling should be collected at 25m intervals on lines not more than 200m apart. Notes at each sample site should include a record of the usual parameters such as topography, depth, color, composition as well as strict emphasis on whether the profile has been disturbed and if so, by what means. That could include highway construction, logging activity, cattle grazing or some other circumstance. As is common nowadays, samples should be analyzed by a multi-element ICP procedure.

No particular geophysical instrumentation is recommended but magnetics appears to respond in a useful manner, HLEM may be considered and VLF or even self-potential may be attempted as well. A magnetic, HLEM or VLF survey should be run on lies not more than 100m apart with readings recorded at 10m if possible but not farther than 25m intervals.

The following exploration budget outlines a proposed exploration program consisting of two phases – an initial phase of target selection and detailed field exploration over that target area and identification of drill targets, followed by a second phase of drilling to test those targets.

PHASE 1 - Field Exploration (Data Compilation & Geological Mapping,	
Propsecting & Ground Geophysics) - (100 days)	Amount
- Geologist (data compilation) @ \$600/day, 10 days [off-site]	6,000
- Field geologist @ \$600/day for 100 days	60,000
- Prospector @ \$500/day for 100 days	50,000
- Field Worker or propsector @ \$350/day for 100 days	35,000
- Expenses (room, board & transportation) @ \$150/person/day, 100 days	45,000
- Assaying - 2,500 total rock, soil & silt samples @ \$40	100,000
- Supplies	7,000
- Equipment rental & purchases [incl. truck, ATV & geophysical instrument rental]	15,000
- Reporting & filing	8,000
- Contingency [15%]	49,000
Total Field Exploration	375,000
PHASE 2 - Drilling (30 days)	
- Diamond Drilling – 2,500 meters NQ core @ \$150/m	375,000
- Core Drill Geologist @\$600/day for 35 days	21,000
- Core Grabber @ \$350/day for 30 days	10,500
- Expenses (room, board & transportation) @ \$150/person/day	9,000
- Assaying – 500 core samples @ \$40/sample	20,000
- Supplies	5,500
- Road & Pad construction & reclamation	12,000
- Equipment Rental & Purchases - core logging tent, rock saw etc	8,000
- Contingency [15%]	69,000
Total Drilling	530,000
OPTIONAL - Regional Prospecting (10 days)	
- Field Geologist @ \$600 day for 10 days	6,000
- Prospector @ \$500/day for 10 days	5,000
- Assaying - 200 total rock, silt & soil @ \$40/sample	8,000
- Expenses (room, board & transportation) @ \$125/person/day	2,500
- Supplies	1,500
- Equipment Purchases & Rentals (four-wheel drive & ATV rental)	2,000
- Contingency [15%]	4,000
Total Regional	29,000
Total Project Budget [All Phases & Options]	934,000

Table 8: Proposed Exploration Budget	Table 8:	Proposed	Exploration	Budget
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Phase one is expected to extend over 100 days of field work by a crew of three amounting to a total expenditure of \$375,000. That crew consists of a geologist, a prospector and a field hand. The geologist would serve as the project's 'qualified person' as well as the project manager. About 10 days of reconnaissance geological mapping, prospecting and orientation soil sampling would be followed by detailed geological

# Rich River Exploration Ltd. Fox Property

mapping, soil sampling and geophysics over the selected target area. That phase would be expected to locate sites of up to a dozen NQ-sized holes in a second phase budgeted at \$530,000 for 2,500 meters of drilling.

Recognition of the value that some regional work could contribute to the success of that program is presented as a separate but optional task budgeted at \$29,000. During those 10 days, some of the local mineral occurrences may be reviewed, perhaps some of those in the Swakum Mountain area. The context of those occurrences may carry over onto the experience gained on the Property itself. An example of how this optional activity could be applied would be to run orientation geochemistry or geophysics over known mineralization in order to develop procedural experience or to reveal a signal that may be transferable to exploration within the Property boundary. It is also entirely possible the early orientation period will locate new mineral occurrences or have illuminated other ideas to be pursued within the Property itself. This optional activity may be undertaken at any time, but interspersing it through Phase one would be preferable.

This work, as recommended, is not necessarily intended to be conducted all at once or even in a single exploration season. It is expected, though, that the drilling not precede the initial field program as described. A hiatus at certain times, as deemed appropriate is entirely acceptable. These periods may include a waiting period for the return of assays or an examination of geophysical data before field work is resumed.

The Fox Property falls within the traditional territory of the Lower Nicola Indian Band.<sup>34</sup> No contact with any First Nation has yet been made by the claims owner, but that initiative is recommended in advance of new work planned on the Property.

Respectfully submitted,

J.David Williams, P.Eng. 27 April 2008.

JDW/jdw Fox\_AssessmentReport.doc



<sup>&</sup>lt;sup>34</sup> Contact information to the Lower Nicola Indian Band is provided on their web-site: <u>www.lnib.net</u>. The author has not verified whether the Property falls in the traditional territory of more than one First Nation or band.

# **ITEMIZED COST STATEMENT**

The fieldwork at the Fox Property in 2007 was carried out from from 27 July to 20 October, as Craig Lynes, assisted by William Nelson, prospected the Property over a period of 10 days. The sampling that is featured in this Report was conducted from 02-04 August when the author joined C.Lynes and W.Nelson for those three days.

Accommodations and meals were provided by C.Lynes with a tent and travel trailer at Helmer Lake Provincial Park located at the south end of its namesake lake.

Including wages and consulting fees, field and equipment costs as well as analytical costs, the total expenditures applicable to the sampling and prospecting at the Fox Project in 2007 amounted to \$14,917. The following table itemizes those expenditures.

I able 9: Summary of Project Costs	
Cost Item	Cost
Geologist - J.D.Williams - 3 days @ \$600/day	1,800.00
Prospector - Craig Lynes - 10 days @ \$375/day	3,750.00
Field Hand - William Neslon - 10 days @ \$325/day	3,250.00
Truck rental 10 days @ \$100/day	1,000.00
ATV rental 10 days @ \$75/day	750.00
Travel trailer rental 10 days @ \$50/day	500.00
Meals 23 person days @ \$30/day	690.00
Fuel and supplies (at cost)	240.00
Analytical costs (26 rocks, 2 soils)	1,137.00
Report Preparation - J.D.Williams - 3 days @ \$600/day	1,800.00
TOTAL Project Cost	\$ 14,917.00

Table 9: Summary of Project Costs
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# STATEMENT OF QUALIFICATIONS

*I, J.David Williams residing at 303 - 1225 Cardero Street in the City of Vancouver, in the Province of British Columbia* 

## **DO HEREBY CERTIFY;**

- 1. That I am a consulting engineer with a business address of 303 1225 Cardero Street, Vancouver, British Columbia, V6G 2H8.
- 2. That I am doing business under the name of INTEGREX ENGINEERING and that I am the sole proprietor of the company and that I hold a valid license issued by the City of Vancouver to conduct business at the above address.
- 3. That I am a graduate of the University of Toronto where I obtained a Bachelor of Applied Science degree in Geological Engineering (exploration option).
- 4. That I have actively practiced my profession as a geological engineer since graduating in 1978.
- 5. That I am a Professional Engineer registered with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 6. That the information, opinions and recommendations in the attached documents are based on my position as consulting geologist involved with fieldwork the Fox Project for Rich River Exploration Ltd. during the period 02August 2008 to 04 August 2008,
- That I have not received, directly or indirectly, nor do I expect to receive any interest, direct or indirect, in the property of Rich River Exploration Ltd., nor do I directly own any securities of Rich River Exploration Ltd. or any affiliate thereof known to me.
- 8. I am the author of this Report entitled "Prospecting, Trenching and Sampling Report on the Fox Property in 2007", dated 27 April 2008.
- 9. That I hereby grant to Rich River Exploration Ltd. authorization to include this report in any Prospectus, Statement of Material Facts or other public document.

J.David Williams, P.Eng.



dated at Vancouver, British Columbia this 27th day of April 2008.

# **REFERENCES & BIBLIOGRAPHY**

- Allen, Alfred, R. (1971): <u>Geophysical Magnetometer Survey, Nicola M.D., ST Group;</u> Richrock Mines Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 02811, 11 pages, 1 map, URL: www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm
- BC Geological Survey (2008): <u>MapPlace GIS Internet mapping system</u>; British Columbia Ministry of Energy, Mines and Petroleum Resources, MapPlace website, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/MapPlace</u>

CanMatrix (2008):

<u>Ashcroft</u>, 092I, 1:250,000 scale, edition 3, 1991 <u>Spences Bridge</u>, 092I/06, 1:50,000 scale, edition 3, 1991 <u>Mamit Lake</u>, 092I/07, 1:50,000 scale, edition 2, 1979 <u>Cherry Creek</u>, 092I/10, 1:50,000 scale, edition 3, 1991 <u>Ashcroft</u>, 092I/11, 1:50,000 scale, edition 3, 1991 GeoGratis, Natural Resources Canada, <u>http://geogratis.gc.ca/geogratis/en/index.html</u>

- Cathro, Michael S. (2001): <u>South Central Region</u>; *in* Cathro, M.S., Exploration and Mining in British Columbia – 2000, Ministry of Energy, Mines and Petroleum Resources, p.6, URL: www.em.gv.bc.ca/Mining/Geolsury/Publications/expl\_bc/2000/toc.htm
- Cathro, Michael S. (2002): <u>South Central Region</u>; *in* Cathro, M.S., Exploration and Mining in British Columbia – 2001, Ministry of Energy, Mines and Petroleum Resources, p.40, URL: <u>www.em.gv.bc.ca/Mining/Geolsurv/Publications/expl\_bc/2001/toc.htm</u>
- Cockfield, W.E. (1948): <u>Geology and Mineral Deposits of the Nicola map Area, British</u> <u>Columbia</u>; Geological Survey of Canada, Memoir 249, 164 pages, 1 map.
- Cukor, D. (1984): <u>Klara Property, Report on Ground Magnetic Survey</u>; Promina Development C. Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 12287, 13 pages, 1 map URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Duffel, S., McTaggart, K.C. (1952): <u>Ashcroft map Area, British Columbia</u>; Geological Survey of Canada, Memoir 262, 122 pages, 1 map.

Data Distribution Service (2008):

<u>EMPR – Mineral and Placer Claims,</u> <u>EMPR – Mineral Mining Divisions</u> <u>FADM – District (Forest Districts)</u> <u>FADM – Mountain Pine Beetle Area</u> <u>Forest Tenure Range – Grazing and Hay Cutting</u> <u>Parks and Protected Areas;</u> Raster TRIM 092I.026, .027, .028, .036, .037, .038, .046, .047, .048 Land and Resource Data Warehouse, Integrated Land Management Bureau, British Columbia Ministry of Agriculture and Lands, URL: http://aardvark.gov.bc.ca/apps/dwds/home.so [March 2008]

- Environment Canada (2008): <u>Canadian Climate Normals or Averages 1971-2000;</u> <u>http://climate.weatheroffice.ec.gc.ca/climate\_normals/index\_e.html</u> [06 March 2008]
- Foster, James R. (2004): <u>Assessment Work Report for Geological Mapping, VLF-EM</u> <u>Resistivity and MMI Soil Sampling Surveys of the Fox South Property</u> <u>comprising the Clap 1-7 and Terry 5 claims, Nicola Mining Division, British</u> <u>Columbia</u>; Gitennes Exploration Inc., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 27476, 47 pages, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- George, R.L. (1975): <u>Geology and Geochemistry of the Clap Claim Group</u>; Canadian Occidental Petroleum Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 05678, 69 pages, 7 maps, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Gitennes Exploration Inc. (2001a): <u>foxaerialphoto.ppt</u>; unpublished Microsoft PowerPoint file, 5 slides.
- Gitennes Exploration Inc. (2001b): <u>Fox Presentation#1.ppt</u>; unpublished Microsoft PowerPoint file, 33 slides.
- Gitennes Exploration Inc. (2001c): unpublished presentation booklet, 26 pages.
- Gitennes Exploration Inc. (2001d): Fox Property, Blacktop Showing, British Columbia, <u>Trench Sample Location</u>; unpublished map printed from source file Fox5a.dwg, drawing dated 08 Jan 2001, revised 18 Jan 2001, 'Rev No: DS04'.
- Kalhert, B.H., Grexton, P.L. (1993): <u>Genstar Property (Genesis 5, 9, 10-200, Silver Star, Blue Star, White Star, Dark Star, Ripple), Preliminary Mapping, Sampling, Magnetic Surveys;</u> British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 22992, 88 pages, 1 map, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Kim, H. (1989): <u>1989 Assessment Report on a Diamond Drilling Program on the Des</u> <u>Claim Group, Kamloops & Nicola Mining Division</u>; British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 19140, 48 pages, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Klein, Jan (1976): <u>Induced Polarization, Resistivity and Magnetic Survey, Helmer</u> <u>Property, Nicola M.D., B.C.</u>; Cominco Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 06119, 31 pages, 8 IP profiles, 1 map, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>

- Macdonald, Colin C. (1976): <u>Geology and Geochemistry of the Clap Claims</u>; Canadian Occidental Petroleum Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 06040, 69 pages, 7 maps, URL: <u>www.em.gov.bc.ca/Mining/Geolsury/ARIS/reportsonline.htm</u>
- Lammle, Charles A.R. (1972): <u>Geochemical Report, Des 1-98 Mineral claims</u>: Newco Ventures Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 04057, 15 pages, 2 maps, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Lefebure, David V., Church, B.Neil (2008): <u>Polymetallic Veins Ag-Pg-Zn+/-Au</u>; British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Mineral Deposit Profiles, URL <u>www.em.gov.bc.ca/mining/geolsurv/MetallicMineralDepositProfiles/</u> <u>profiles/i05.htm</u> [11 September 2007]
- Logan, James, M. (2000): <u>Plutonic-related Gold-quartz Veins in Southern British</u> <u>Columbia; British Columbia;</u> Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch, Geological Fieldwork 1999, Paper 2000-1, pages 193-206, URL, <u>www.em.gov.bc.ca/mining/geolsurv/Publications/Fieldwork/1999/toc.htm</u>
- MapPlace (2008): Geology and mineral deposits of Fox Property area, (NTS 092I); British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch MapPlace website, URL <u>http://webmap.em.gov.bc.ca/mapplace/minpot/bcgs.cfm</u>, [March and April, 2008].
- Mark, David G. (1972): <u>Geochemical Report on a Soil Sample Survey, El Rio, Vega,</u> <u>Fargo, Eagle and Vera Claim Groups, Surrey Lake, Nicola M.D., B.C.</u>; Largo Mines Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 03894, 26 pages, 1 map, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- McArthur, G.F., Foster, J.R. (2001a): <u>Report on Exploration of the Fox Property</u>, <u>October-December 2000</u>; Gitennes Exploration Inc, 36 pages, 5 appendices, 1 map, unpublished.
- McArthur, G.F., Foster, J.R. (2001b): <u>Report on Diamond Drilling, Fox Property, April</u> 2001; Gitennes Exploration Inc, 28 pages, 5, unpublished.
- McArthur, G.F. (2002): <u>Report on Diamond Drilling, Fox Property, March-April, 2001;</u> Gitennes Exploration Inc., 22 pages, available on SEDAR: <u>www.sedar.com</u>

 Meyers, R.E., Moore, J.M., Hubner, T.B., Pettipas, A.R. (1990): <u>Metallogenic Studies in</u> <u>South-Central British Columbia: Mineral Occurrences in the Nicola Lake</u> <u>Region (92I/SE)</u>; *in* Exploration in British Columbia 1989, Grant, Brian, Newell, John, eds, British Columbia Geological Survey Branch, British Columbia Ministry of Energy, Mines and Petroleum Resources, pages 119-134, URL:

http://www.em.gov.bc.ca/Mining/Geolsurv/Publications/expl\_bc/1989/toc.htm

- Meyers, R.E., Moore, J.M., Hubner (1990): <u>PART B Mineral Occurrences</u>; *in* Nicola Lake Region, Geology and Mineral Deposits, British Columbia Geological Survey Branch, British Columbia Ministry of Energy, Mines and Petroleum Resources, Open File 1990-29, pages 15-30, 2 map sheets, URL <u>www.em.gov.bc.ca/mining/geolsurv/Publications/OpenFiles/OF1990-29/toc.htm</u>
- Mineral Tenure Act (2006): <u>Mineral & Placer Legislation</u>; BC Ministry of Energy and Mines, URL: <u>www.em.gov.bc.ca/mining/titles/legislation/legislation.html</u> [07 March 2008].
- Mineral Titles (2008): <u>Mineral Titles Online Viewer</u>; BC Ministry of Energy and Mines, URL: <u>www.mtonline.gov.bc.ca</u> [17 April 2008].
- MINFILE (2008):

Afton 092INE023 last edit: 07 May 2007 Bertha-Molly 092ISE012 last edit: 12 June 2007 Craigmont 092ISE035 last edit: 09 March 2007 Fox 092ISE191 last edit: 24 October 2000, Lucky Mike 092ISE027 last edit: 12 December 1987 Old Alameda 092ISE094 last edit: 02 November 1989 Rey Lake 092IES160 last edit: 10 December 1987 Thelma (L4510) 092ISE101 last edit: 12 November 1987 Turlight (L4841) 092ISE055 last edit: 16 December 1987 Zone 3 092ISE129 last edit: 11 February 1988; BC Ministry of Energy and Mines, MINFILE digital data, URL http://minfile.gov.bc.ca/searchbasic.aspx

- Moore, John A., Pettipas, A. (1990a): <u>PART A Geological Studies in the Nicola Lake</u> <u>Region (92I/SE)</u>; *in* Nicola Lake Region, Geology and Mineral Deposits, British Columbia Geological Survey Branch, British Columbia Ministry of Energy, Mines and Petroleum Resources, Open File 1990-29, pages 1-13, 2 map sheets, URL <u>www.em.gov.bc.ca/mining/geolsurv/Publications/OpenFiles/OF1990-</u> <u>29/toc.htm</u>
- Moore, John A., Pettipas, Aaron R. (1990b): <u>Geology of the Swakum Mountain Area</u>, <u>Southern Intermontane Belt (92I/7)</u>; *in* Geological Fieldwork 1989, British Columbia Geological Survey Branch, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1990-1, pages 73-78, URL: <u>www.empr.gov.bc.ca/DL/GSBPubs/GeoFldWk/1989/073-078-moore.pdf</u>

Rich River Exploration Ltd. Fox Property

- Moore, John M. (2000): <u>Nicola Horst: southern British Columbia: window into the pre-</u> <u>Triassic margin of North America?</u>; Natural Resources Canada, Geological Survey of Canada, Current Research, 2000-A16, 8 pages, URL: <u>http://dsp-psd.pwgsc.gc.ca/Collection-R/GSC-CGC/M44-2000/M44-2000-</u> <u>A16E.pdf</u>
- Moore, M.J. (1997): <u>Kent 2 Claim Drilling Assessment Report, Nicola Mining Division;</u> International Skyline Gold Corp., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 25209, 84 pages, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Mortimer, N. (1987): <u>The Nicola Group: Late Triassic and Early Jurassic subduction-</u> <u>related volcanism in British Columbia</u>; Canadian Journal of Earth Sciences, vol. 24, pages 2521-2536.
- Natural Resources Canada (2008a): <u>Magnetic declination calculator;</u> <u>http://geomag.nrcan.gc.ca/apps/mdcal\_e.php</u>
- Paulter, Jean (1988): <u>Assessment Report, Geological, Geochemical, Geophysical Surveys</u> on the Clapper 1-4 Claims; Kerr Addison Mines Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 18042, 79 pages, including 5 profiles and 3 maps, URL: www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm
- Preto, V.A. (1977): <u>The Nicola Group: Mesozoic Volcanism Related to Rifting in</u> <u>Southern British Columbia</u>; *in* Volcanic Regimes in Canada, Baragar, W.R.A., Coleman, L.C., Hall J.M., eds., The Geological Association of Canada Special Paper Number 16, pages 39-57.
- Schiarizza, P., Church, N. (1996): <u>Digital Geology Data, Thompson Okanagan (East Part)</u>; British Columbia Ministry of Energy, Mines and Petroleum Resources, Open File 1996-20, Geology of 92 I (262K), URL <a href="http://www.em.gov.bc.ca/Mining/Geolsurv/Publications/OpenFiles/OF1996-20/toc.htm">www.em.gov.bc.ca/Mining/Geolsurv/Publications/OpenFiles/OF1996-20/toc.htm</a>
- Scott, Alan (1978): Induced Polarization Geophysical Survey and Linecutting on Portions of the Helmer Property, Merritt Area, Nicola Mining Division; Cominco Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 07016, 7 pages, 4 IP profiles, 1 map, URL: www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm
- Smith, Paul A. (2001): <u>DIGHEM<sup>V</sup> Survey for Gitennes Exploration Inc.</u>, Fox Property, <u>B.C.</u>; unpublished report for Gitennes Exploration Inc., Fugro Airborne Surveys Corp, Report #2037, 108 pages.
- Stadnyk, M.P. (1970): <u>Report on Geochemical and Geophysical Surveys on the Smokie</u> <u>Aca and Con Mineral Claims, Helmer , British Columbia</u>; Ronrico Explorations Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 02715, 41 pages, 6 maps, URL: www.em.gov.bc.ca/Mining/Geolsury/ARIS/reportsonline.htm

- Sweeney, Douglas F. (2005): <u>Annual Report of the Chief Inspector of Mines, 2005</u>: Mining and Mineral Division, British Columbia Ministry of Energy, Mines and Petroleum Resources, 32 pages, available at: <u>www.em.gov.bc.ca/Subwebs/mining/Healsafe/CI\_Annual\_Reports/default.htm</u>
- Uunila, Lars (2007): <u>Nicola River Watershed</u>, <u>Present and Future Water Demand Study</u>, <u>Final Report</u>; <u>Summit Environmental Consultants Ltd. for Nicola Watershed</u> <u>Community Round Table</u>; 236 pages, available at: <u>http://www.nicolawump.ca/downloads/4660102FinalReportJune1907.pdf</u>
- Walker, James T. (1973): <u>Induced Polarization and Resistivity Survey on the Leo 1 25</u> <u>inclusive Mineral Claims</u>; Noranda Exploration Co. Ltd., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 04765, 8 pages, 4 maps, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>
- Walcott, Peter E. (2001): <u>A Geophysical Report on Magnetic, Electromagnetic and</u> <u>Induced Polarization Surveying, Fox Grid</u>; Gitennes Exploration Inc., British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report 26660A, 26 pages, 43 maps & profiles, URL: <u>www.em.gov.bc.ca/Mining/Geolsurv/ARIS/reportsonline.htm</u>

# APPENDIX

## Assay Certificates & Assayer's 'Methods and Specifications' Sheets – 9 pages

Series of assayer's certificates from Acme Analytical Laboratories of Vancouver, BC, related to the sampling completed on the Fox Property in August 2007. Also, series of assayer's 'Methods and Specifications' sheets issued from the same laboratory for the four procedures that were used in the analysis of the 26 rocks samples and 2 soil samples submitted for assay.

## Acme Certificates:

CERTIFICATE A705736: ROCK – ICP [GROUP 1DX]	1 page
CERTIFICARE A705736: ROCK – FIRE ASSAY AU [GROUP 6]	1 page
CERTIFICATE A705736R: ROCK – OVERLIMIT RERUNS [GROUP 7AR]	1 page
CERTIFICATE A705737: SOILS – ICP [GROUP 1DX]	1 page
CERTIFICATE A705737: SOILS FIRE GEOCHEM AU [GROUP 3B]	1 page

## Acme Methods and Specifications

ANALYTICAL PACKAGE GROUP 1D & 1DX	1 page
ANALYTICAL PACKAGE GROUP 3B & 3B-MS	1 page
ANALYTICAL PACKAGE GROUP 6	1 page
ANALYTICAL PACKAGE GROUP 7AR	1 page

PHONE (604) 253-3158 FAX (604) 253-1716 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

GEOCHEMICAL ANALYSIS CERTIFICATE





Integrex Engineering PROJECT FOX File # A705736 303-1225 Cardero Street, Vancouver BC V6G 2H8 Submitted by: J. David Williams

G-1	1	2.8	9.5	61	< 1	4.0	4.2	545	1.88	< 5	2.2	< 5	4.1	57	.1	<1	1	36	.49	076	7	10 .60	225	133	<20 1	.05 .0	166 .	50	1 <	01 1	.9	.4 <	.05	5 <	.5
675426	24.7	844.0	>10000	>10000	>100	1.5	14.7 2	2093	1.14	3.9	.1	313.8	.1	223	305.3	1.8	.2	7	1.33	.043	2	4	38	.002	<20	18 .0	104	09	1 34	45 1	2 <	1 2	.50	2 1	.5
675477	18.3	143.9	1496.3	>10000	2.3	2.2	9.3	185	53	8.7	.2	414.5	34	18	184.0	6.0	1.0	7	.32	.099	5	7 .04	455	.003	<20	.32 .0	105	18 <	1 3	11 1	1 <	.1	.24	1	.8
675428	21.6	1873.1	4233.4	>10000	8.3	4.2	14.8	484	1.71	16.4	.1	1576.3	.1	33	138.4	163.2	5.0	4	1.13	.036	1	17 .03	57	.001	<20	17.0	104	11 1	7 3	.21	7	.2 1	.96	1	.1
675429	14.0	1033.6	5488.6	>10000	4.5	2.7	11.4	371	1.16	9.1	.1	966.7	.1	19	333.7	98.2	2.1	5	.60	.044	I	11 .08	123	.001	<20	18 .0	104 .	11	.1 5	78 1	.0	2 1	.69	1	9
675430	3.4	2422.7	990.8	2393	9.8	4.1	9.5	289	.81	101.5	.1	51.3	.3	47	29.5	881.7	.2	3	.74	.051	6	17 .02	891	.001	<20	30 .0	104	22 1	1 1	.67	.8	.1	16	<1	5
675431	.7	>10000	21.8	67	.8	16.9	11.0	591	2.48	4.4	.3	5.0	1.1	104	7	1.0	<.1	139 1	3.10	110	5	31 .90	105	109	37 3	1.18 .0	151	66	2 <	.01 4	5 <	1	.41	18 <	5
675432	.1	14.2	14.7	146	.1	23.2	18.7 1	1025	3.68	2.7	.1	<.5	3	173	.5	2.5	<.1	84	4.95	.078	6	32 2.18	47	.001	<20 2	2.62 .0	115	10	1 <	01 9	.8	1 <	.05	7	.6
675433	10.5	1861.0	264.8	>10000	7.3	17.7	13.3	990	3.46	4.4	.3	23.6	.3	145	72.8	.9	.1	41	3,98	.059	2	15 1 52	60	.001	<20 1	. 56 .0	113 .	13 <	.1 3	.24 5	.9	.2 1	.27	4 1	.3
675434	.4	57.4	10.1	354	.2	7.6	8.1 1	1071	2.94	1.3	.1	<.5	.4	157	.6	.6	<.1	23	3.94	.050	3	8 1.52	1585	001	<20	.29 .0	117 .	12	3 <	.01 4	.4	1 <	.05	2 4	.5
RE 675434	.4	54.4	9.3	317	.1	7.4	7,7 1	1056	2.86	1.1	.1	<.5	.3	148	.6	.6	<.1	22	3.83	.047	3	91.4	1438	001	<20	26 .0	017 .	12	3 <	.01 4	1	.1 <	.05	2 -	5
675435	66.4	>10000	5841.2	>10000	61.7	21.5	12.2	744	4.25	5.7	.8	286.5	.3	84	747.7	3.1	1.4	19	2.33	.047	<1	5 1.03	25	.001	<20	.86 .0	. 801	14 <	1 36	.47 3	.2	.5 7	.59	3 9	.4
675436	55.4	8841.4	2928.7	>10000	64.3	21.5	10.4 1	1025	3.49	17.6	2.0	287.4	.3	159	569.5	8.4	1.6	30	4.15	.041	<1	5 1.00	10<	:.001	<20	57 .0	110 .	12	.1 16	.67 4	.9	9 6	.31	4 8	.1
675437	7.2	515.8	205.6	4889	14.1	11.3	10.1	1153	3.48	6.8	.5	40.4	.5	140	21.6	2.2	.1	27	3.93	.102	1	5 1.57	394	.001	<20 1	.41 .0		16	.2 1	.15 6	.5	.9	.47	3 1	.4
675438	2.2	257.7	92.4	2816	1.4	18.8	19.2 1	1073	3.83	3.6	3	5.0	.8	403	12.1	.3	.1	53	5.48	.109	2	19 1.87	889	002	<20.1	.70 .0	014	22	1	36 11	.0	100	.23	4	.5
675439	112.0	>10000	7012 7	>10000	>100	32.3	6.4	193	5.04	28.4	1.9	623.7	1	120	661.6	45.8	6.0	9	.78	.009	<1	1 .18	54	001	<20	.11 .0	03	04	1 43	.91	.7	.3	>10	8 16	4
675440	2	87.4	10.0	232	4	33.1	27.9 1	1106	5.11	2.7	2	.9	5	73	.7	.3	<.1	114	4.62	.113	5	37 2.33	109	.004	<20	.77 .0	131	10	1 <	.01 12	7	.1 <	.05	2	,5
675441	101.5	4881.4	1585.5	>10000	27.8	28.0	20.3 1	1165	5.24	106.3	1.4	313.2	.4	80	231.6	3.7	.8	30	4.89	.064	1	8 1.84	10	001	<20	.46 .1	016	12 <	17	21 5	.1 25	5.1 6	5.37	24	.5
675442	52.4	1573.3	31.5	>10000	8.4	9.8	7.4	817	3.60	27.8	1.8	65.8	.5	45	86.1	1.1	.5	7	2.36	.034	1	5 .93	554	.001	<20	.34 .0	M1 .	16	.6 5	.90 2	5 4	1.9 3	88.8	1 1	.3
675443	92.1	1307.2	>10000	>10000	29.2	11.1	5.9	430	2.31	14.5	3.4	338.7	.2	96	165.8	1.3	.3	9	1.19	.032	1	3 .2	23	001	<20	.40 .0	011	11 <	.1 27	.90 ]	7 4	5 3	.79	1 7	.4
675444	94.5	122.2	169.9	768	74.2	35.2	15.5	312	3.96 :	378.5	3.9	638.4	5	132	2.5	11.1	.2	32	1.06	048	2	5 .43	25	.001	<20	.99 .0	006	18	5 4	22 3	.4 86	.7 2	.08	2 15	.8
675445	65.0	660.1	173.3	5266	11.6	27.6	15.1	412	4.41	42.2	1.9	100.1	.6	50	22.4	.8	.2	47	.85	.080	1	13 1.68	53	.001	<20	. 98 .0	006	12 <	.1 1	.76 5	7 8	7 1	.93	4 3	.1
675446	5.9	57.6	54.7	377	2.1	6.1	7.7	670	2.57	11.2	3	14.3	5	132	1.5	.3	.1	37	2.41	.061	5	8 79	1180	001	<20	35 .0	019	14	.4	.14 4	.6 3	2	21	3	8
675447	6.1	166.7	149.8	1989	2.1	6.3	7.6	615	1.80	8.2	.2	9.4	.4	131	9.8	.1	.1	17	2.85	.048	1	3 .88	417-	001	<20	.56 .0	011	15 <	1.1	.61 5	0.1	.6	.53	1 1	.7
675448	18.2	26.4	20.1	370	.6	1.2	4.7	878	1.79	2.1	1	10.3	4	110	1.4	1	.1	8	3.33	_070	7	Z 51	271	001	<20	.85 .1	014	18	.2	14 2	.5	_3	15	1	5
675449	89.7	>10000	403.0	>10000	41.1	44.2	7.0	426	6.45	10.0	1.9	553.5	2	52	557.9	1.7	2.6	4	1.94	.001	<]	3 3	54	001	<20	.13	003	07	.1 50	.33	3	5 8	.74	1 20	0
675450	1.7	14.3	1.8	116	<.1	30.5	12.8-10	0000 3	5.66	.5	21.6	< 5	.6	43	.3	<.1	.1	92	2.13	.013	29	16	551	017	<20	.43 .1	017	03 <	c.1	.01 20	.7	.2	14	2 .	5
751001	9	1861.8	11.1	466	.9	173.8	32.2 1	1432	3.84	23.1	.2	3.6	1	143	2.1	31.7	<.1	.99 1	2.61	.066	<1 1	122 5.6	84	001	<20	.76	006	10 1	1	.25 17	.5	.1 <	. 05	2	5
STANDARD DS7	20.6	116.9	71.1	426	.9	57.2	9.8	671	2.52	49.4	4.6	111.2	4.9	81	6.5	5.1	5.3	87	1.00	.082	14 2	209 1.14	408	138	44	111	097	47 4	0.4	.16 3	7 4	.6	.21	5 4	.1

AUG 2 4 2007

Data FA DATE RECEIVED: AUG 7 2007 DATE REPORT MAILED:....

Raymond C

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#### ASSAY CERTIFICATE

Integrex Engineering PROJECT FOX File # A705736 303-1225 Cardero Street, Vancouver BC V6G 2H8 Submitted by: J. David Williams



	SAMPLE#	Au** S gm/mt	kg	
	G-1 675426 675427 675428 675429	<.01 .37 .56 1.26 .57	3.72 2.31 2.68 2.16	
	675430 675431 675432 675433 675433	.09 .01 <.01 .04 .01	2.98 3.16 1.49 1.15 1.02	
	RE 675434 675435 675436 675437 675438	.01 .38 .37 .16 .01	1.81 1.12 1.83 1.09	
	675439 675440 675441 675442 675443	.74 .01 .36 .08 .25	2.11 2.02 2.05 2.76 2.22	
	675444 675445 675446 675447 675448	.49 .13 .03 .02 .01	1.68 2.10 2.19 1.63 2.02	
	675449 675450 751001 STANDARD SL20	.96 .01 .01 5.90	2.36 2.79 2.08	
- SAMPLE TYPE: ROCK R15 Samples beginning 'RE'	LS BY FIRE ASSAY FROM 1 A.T. 0 are Reruns and 'RRE' are Reje 7 2007 DATE REPORT MAI	ct Reruns.		
Data DATE ADDITED. AND				

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

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#### ASSAY CERTIFICATE



Integrex Engineering PROJECT FOX File # A705736R 303-1225 Cardero Street, Vancouver BC V6G 2H8 Submitted by: J. David Williams



675426       .084 1.86       6.50       163         675428       .178       .41       1.40       3         675429       .104       .54       2.65       4         675431       2.339 <.01       .02       <2         675433       .187       .03       1.69       6         875435       1.302       .55       15.56       55         675436       .888       .29       12.85       52         675439       2.510       .80       35.97       136         675442       .152       .01       2.00       8         675443       .124       1.25       3.70       23         675443       .124       1.25       3.70       23         675443       .124       1.25       3.70       23         675443       .124       1.25       3.70       23         1.376       .05       13.71       38       .812       1.93         GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HN03-H20) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.       Samples beginning 'RE' are Reject Reruns.       SCED - 2 2007	675426       .084 1.86       6.50       163         675427       .013       .15       1.40       3         675428       .178       .41       1.45       7         675429       .004       .54       2.65       4         675431       2.339 < .01       .02       <2         675433       .187       .03       1.65       7         675435       1.302       .55       15.56       55         675436       .201       .202       <2         675439       2.510       .80       35.97       136         675443       .122       .01       .200       8         675443       .122       .01       .200       8         675443       .124       .25       .07       .23         675443       .122       .03       .66       .94         .124       .25       .01       .200       8         675443       .124       .25       .01       .200         675443       .122       .03       .96       196         GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HN03-H20) DIGESTION TO 100 ML, ANALYSED BY ICP-ES.         - SAMPLE TYPE: ROCK PULP	SAMPLE#	Cu Pb	Zn	Ag	
GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP - SAMPLE TYPE: ROCK PULP - SAMPLE AUG 25 2007 DATE REPORT MAILED:	GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-HZO) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP GROUP 7AR - 1.000 GM SAMPLE, AUG 25 2007 DATE REPORT MAILED:			% वा		
675441       .493       .16       4.77       25         675442       .152       .01       2.00       8         675443       .124       1.25       3.70       23         675449       .376       .05       13.71       38         STANDARD R-3       .812       1.93       3.96       196         GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.         Data	675441       .493 .16 4.77 25         675442       .152 <.01 2.00 8	675427 675428 675429	.084 1.86 .013 .15 .178 .41 .104 .54 2.339 <.01	1.40 1.45 2.65	163 3 7 4 <2	
GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u> Data <u>FA</u> DATE RECEIVED: AUG 25 2007 DATE REPORT MAILED: <u>SEP - 3 2007</u>	GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u> Data <u>FA</u> DATE RECEIVED: AUG 25 2007 DATE REPORT MAILED: <u>SEP - 3 2007</u>	RE 675433 675435 675436 675439	2.510 .80 3	35.91	6 7 55 52 136	
GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u> Data <u>FA</u> DATE RECEIVED: AUG 25 2007 DATE REPORT MAILED: <u>SEP - 3 2007</u>	GROUP 7AR - 1.000 GM SAMPLE, AQUA - REGIA (HCL-HNO3-H2O) DIGESTION TO 100 ML, ANALYSED BY ICP-ES. - SAMPLE TYPE: ROCK PULP <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u> Data <u>FA</u> DATE RECEIVED: AUG 25 2007 DATE REPORT MAILED: <u>SEP - 3 2007</u>	675441 675442 675443 675449 STANDARD R-3	.493 .16 .152 <.01 .124 1.25 1.376 .05 1 .812 1.93	4.77 2.00 3.70 13.71 3.96	38	
						Clarence Leong

ACME	ANAI	LYTICA	AL LABORATORIES	LTD.	852
	(TSO	9001	Accredited Co.	)	

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GEOCHEMICAL ANALYSIS CERTIFICATE

E. HASTINGS ST. VANCOUVER BC V6A 1R6



Integrex Engineering PROJECT FOX File # A705737 303-1225 Cardero Street, Vancouver BC V6G 2H8 Submitted by: J. David Williams



SAMPLE#	Mo ppm									As ppm	U ppm	Au	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Сг ррт	Mg Ba % ppm	Ti B % ppm	al 1 %	Na %	K %	W ppm p	Hg ppm p	Sc 1 opm pp	rt s om f	S Ga ‰ppr	Se ppm
G-1 SOILO1	20.0	74 7	30	17/5	2	70	8 1	1026	23 04	14 3	13	73	3	103	.6	2.4	<.1	103	4.61	.082	- 3	40	.63 220 .26 367 .18 742	.023 <20	.23	.022	.02	1.4 .	.10 4	+.2 .		2 1	
SOILO2 STANDARD	21.3	24.9	77.7	398	.2	61.4	12.5	630	2.43	49.8	5.5	58.5	4.9	69	6.6	5.2	4.9	92	.92	.086	13	189	1.12 386	.130 34	1.03	.087	.45	3.6	.22 2	2.7 4	.4 .2	1 5	3.2

Standard is STANDARD DS7.

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS. (>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY. - SAMPLE TYPE: SOIL SS80 60C



852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHON

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GEOCHEM PRECIOUS METALS ANALYSIS



**A**A

Integrex Engineering PROJECT FOX File # A705737 303-1225 Cardero Street, Vancouver BC V6G 2H8 Submitted by: J. David Williams

			SAMPLE#	Au** ppb	
			G-1 SOIL01 SOIL02 STANDARD OXD	<1 5	
	GROUP 6 AU RE - SAMPLE TYPE	ECOMMENDED IF >10PPM FOR 3 E: SOIL SS80 60C	30 GM, >5PPM FOR 50 GM.	REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.	
Data	FA	DATE RECEIVED:	AUG 7 2007 DATE REPORT MAIL	ED: AUG 2 3 2007	
				1916 - Q16 - COM	
				Sh	ED.A
				Raymond Chan	3





# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1D & 1DX – ICP & ICP-MS ANALYSIS – AQUA REGIA



## Comments

### Sample Preparation

All samples are dried at 60°C. Soil and sediment are sieved to -80 mesh (-177  $\mu$ m). Moss-mats are disaggregated then sieved to yield -80 mesh sediment. Vegetation is pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100  $\mu$ m) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are weighed into test tubes, 15 and 30 g splits are weighed into beakers.

## Sample Digestion

A modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO<sub>3</sub> and de-mineralised H<sub>2</sub>O is added to each sample to leach for one hour in a hot water bath (>95°C). After cooling the solution is made up to final volume with 5% HCl. Sample weight to solution volume is 1 g per 20 mL.

## Sample Analysis

*Group 1D*: solutions aspirated into a Jarrel Ash AtomComp 800 or 975 ICP or Spectro Ciros Vision emission spectrometer are analysed for 30 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

*Group 1DX*: solutions aspirated into a Perkin Elmer Elan 6000/9000 ICP mass spectrometer are analysed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, *Ga, Hg*, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, *S*, Sb, *Sc*, *Se*, *Tl*, Sr, Th, Ti, U, V, W, Zn.

### **Quality Control and Data Verification**

An Analytical Batch (1 page) comprises 36 samples. QA/QC protocol incorporates a sample-prep blank (G-1) carried through all stages of preparation and analysis as the first sample, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), a reagent blank to measure background and an aliquot of in-house Standard Reference Materials like STD DS7 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client.

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# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 3B & 3B-MS - PRECIOUS METALS BY FIRE GEOCHEM



# Comments

### Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh ASTM (-177 m). Rocks and drill core are crushed and pulverized to 95% -150 mesh ASTM (-100  $\mu$ m). Splits of 30 gm (client may select 50 gm option) are weighed into fire assay crucibles. Quality control samples comprising blanks, duplicates and reference materials OxF41 or FA-100S (Rocklabs CRM and inhouse standard reference materials) added to each batch of 34 samples monitor background, precision and accuracy, respectively.

## Sample Digestion

A fire assay charge comprising fluxes, litharge and a Ag inquart is custom mixed for each sample. Fusing at 1050°C for 1 hour liberates Au, Ag, Pt, Pd and Rh. The Pb button is recovered after cooling and cupeled at 950°C to render a Ag  $\pm$ Au  $\pm$ Pt  $\pm$ Pd  $\pm$ Rh dore bead. After weighing, the bead is parted in HNO<sub>3</sub> leaving Au ( $\pm$  PGE) sponge. Adding concentrated HCl dissolves the sponges.

## Sample Analysis

Solutions are analysed by ICP-ES (Jarrel Ash AtomComp model 800 or 975) analysis of the solutions to determine Au, Pt, and Pd. Group 3B-MS analyses the same solutions by ICP-MS (Perkin Elmer Elan 6000) to determine Au, Pt, Pd and Rh to much lower detection limits. Owing to the limited solubility of Rh in a Ag inquart, results are qualitative.

## Data Evaluation

Data is inspected by the Fire Assay Supervisor then undergoes final verification by a British Columbia Certified Assayer who signs the Analytical Report before release to the client.





# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 6 – PRECIOUS METALS ASSAY



### Comments

#### Sample Preparation

Rock and drill core are jaw crushed to 70% passing 10 mesh (2 mm), a 250 g riffle split is then pulverized to 95% passing 150 mesh (100  $\mu$ m) in a mild-steel ring-and-puck mill. One assay ton aliquots (29.2 g) are weighed into fire assay crucibles. Option for 2 assay-ton aliquots is available on request. Smaller aliquots of ¼ or ½ assay ton may be required with difficult ore matrices.

*Metallics Assay:* A 500 g reject split (or optional 1000 g) is pulverized to 95% passing 150 mesh. Screening the pulp gives a fine and coarse fraction (containing any coarse gold) for assaying.

### Sample Digestion

The sample aliquot is custom blended with fire assay fluxes, PbO litharge and a Ag inquart. Firing the charge at 1050°C liberates Au, Ag  $\pm$  PGEs that report to the molten Pb-metal phase. After cooling the Pb button is recovered placed in a cupel and fired at 950°C to render a Ag  $\pm$  Au  $\pm$  PGEs dore bead. The bead is weighed and parted (i.e. leached in 1 mL of hot HNO<sub>3</sub>) to dissolve Ag leaving a Au sponge. Adding 10 mL of HCl dissolves the Au  $\pm$  PGE sponge.

#### Sample Analysis

Solutions are analysed for Ag, Au, Pt and Pd on a Jarrel-Ash Atomcomp model 975 ICP emission spectrometer. Au in excess of 30 g/t forms a large sponge that can be weighed (gravimetric finish). Ag in excess of 100 g/t is reported from the fire assay, otherwise a separate split is digested in aqua regia and analysed by ICP-ES (Group 7AR).

*Metallics Assay:* The coarse fraction is assayed in total. An aliquot of the fine fraction is assayed. Results report the total Au in the coarse fraction, the fine-fraction Au concentration and a weighted average Au concentration for the entire sample.

#### **Quality Control and Data Verification**

An Analytical Batch (1 page) comprises 34 samples. QA/QC protocol incorporates a sample-prep blank (G-1) as the first sample carried through all stages of preparation to analysis, a pulp duplicate to monitor analytical precision, a -10 mesh rejects duplicate to monitor sub-sampling variation (drill core only), two reagent blanks to measure background and aliquots of Rocklabs Certified Reference Materials like SL20 to monitor accuracy.

Raw and final data undergo a final verification by a British Columbia Certified Assayer who signs the Analytical Report before it is released to the client.







# METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 7AR – MULTI-ELEMENT ASSAY BY ICP-ES • AQUA REGIA DIGEST



# Comments

## Sample Preparation

Assaying is warranted for representative well-mineralized samples (eg. Cu > 1%). Samples are dried at 60°C. Soil, sediment and moss mats (after pounding) are sieved to -80 mesh (-177  $\mu$ m). Vegetation is dried (60°C) and pulverized or ashed (475°C). Rock and drill core is jaw crushed to 70% passing 10 mesh (2 mm), a 250 g aliquot is riffle split and pulverized to 95% passing 150 mesh (100  $\mu$ m) in a mild-steel ring-and-puck mill. Aliquots of 1.000 ± 0.002 g are weighed into 100 mL volumetric flasks. Acme's QA/QC protocol requires one pulp duplicate to monitor analytical precision and a blanks and aliquot of in-house reference material sush as STD R3 or GC7 to monitor accuracy in each batch of 36 samples. Trench and drill core programs will also include a pulp made from a 2<sup>nd</sup> crushed fraction split (rejects duplicate) to measure method precision.

## Sample Digestion

30 mL of Aqua Regia, a 1:1:1 mixture of ACS grade concentrated HCl, concentrated HNO<sub>3</sub> and de-mineralised H<sub>2</sub>O, is added to each sample. Samples are digested for one hour in a hot water bath (>95°C). After cooling for 3 hrs, solutions are made up to volume (100 mL) with dilute (5%) HCl. Very high-grade samples may require a 1 g to 250 mL or 0.25 g to 250 mL sample/solution ratio for accurate determination. Acme's QA/QC protocol requires simultaneous digestion of a regent blank inserted in each batch.

## Sample Analysis

Sample solutions are aspirated into a Spectro Ciros Vision ICP emission spectrograph to determine 21 elements: Ag, Al, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, W, Zn.

## Data Evaluation

Raw and final data from the ICP-ES undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client.