ASSESSMENT REPORT

CORRIGAN AREA PROJECT

Spectral Analysis Study and Field Work
On the
CRYSTAL 2 Claim

Tenure #530029

EVENT #
4208650

Alberni Mining Division
NTS 092F02E
92F.007
UTM Zone 10 N (NAD 83)
Northing: 5431858
Easting: 379885

(Minfiles: 092F 381; 092F459; 092F460)
(Previous Assessment Report ARIS File numbers: 12696; 13668; 13723; 13857; 14928; 14930)

For
James Watt FMC# 128397 and Jim Newman FMC# 119637

By
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March 2008

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EXECUTIVE SUMMARY

In 2007 Jim Newman asked Auracle Geospatial Science Inc. to conduct exploration by undertaking Spectral analysis and field work to form a basis for continued exploration on the Crystal and Crystal 2 tenures

Geologically this area consists of Karmutsen Volcanic basalts, Island Plutonic Suite granodioritics, Bonanza Group Calc-Alkaline volcanics, and Vancouver Group sedimentary rocks with two mapped faults, one trending north and the other trending North East and converging north of the Crystal 2 claim. Work was commenced in July of 2007 and completed in September of 2007. This program involved the acquisition of satellite spectral data available from NASA, pre-processing the data into a workable format, orthorectifying and georeferencing to TRIM map data, atmospheric correction, and noise reduction with rigorous and extensive classification of the data in search of indicators, or relationships that might lead to the discovery of metallic mineralization. While Spectral Analysis is still young, this program was not meant to be a research project but rather to apply recently developed technologies and methodologies together with the latest computer software available for spectral analysis as a tool for mineral exploration.

The spectral analysis program was highly labour and computer intensive. Tenure files were subject to classification and analysis resulting in numerous images for examination. These Classification images were examined for correlation to known or mapped contacts and surface geology. Spatial correlation was not considered to be conclusive however there are several resulting alteration signatures and mineral end members were identified. It is therefore advised that follow up ground truthing and PIMA Spectral study be carried out to examine these relationships.

Field work during this period consisted of sample collection for further spectral and chemical analysis to be used in comparative spectral analysis for refined field work.

Auracle Geospatial Science Inc.
March 2008

INTRODUCTION

The Crystal and Crystal 2 tenures were staked by R. Krivensky, James Watt and Jim Newman in 2004 and amalgamated to form the existing tenure in 2005. This prospective ground hosts several known Au Ag Cu Zn mineralized quartz veins. The rising demand for these metals on the world market was added incentive for these acquisitions and their development.

In 2007 Jim Newman asked Auracle Geospatial Science Inc. to conduct exploration by undertaking Spectral analysis and field work to form a basis for continued exploration on the Crystal and Crystal 2 tenures.

Spectral analysis is a recent and still developing exploration tool. David McLelland has gained valuable experience in the use of spectral data as part of his Post Graduate Diploma, Master of Science, and industry training and certification programs.

Alteration and surface mineralization mapping by remote sensing have become accepted methods in mineral exploration. This work program has provided further information and insight into the surface constitution of this mineral tenure.

LOCATION AND ACCESS (See Figures 1 and 2 - Location Maps)

The Crystal tenures are located 28 kilometres southeast of the City of Port Alberni on the west Coast of Vancouver Island British Columbia. The Crystal 2 is immediately north of the Crystal Tenure and is contiguous to it. Access to the general area is by the Port Alberni- Bamfield Road which roughly follows the south shore of Barclay Sound. Proceeding approximately 21 kilometres south west to Corrigan Main Logging Road, turn left (east) and continue for 7.5Kilometres. A spur road with a bridge crossing the Corrigan Creek signifies that you are 230 metres into the Crystal tenure. Corrigan Main Logging Road diagonally transects the tenure from North to South entering at the northwest corner and exiting the south east corner.

PHYSIOGRAPHY (See Figure 3)

This prospect area is situated on the north side of the Corrigan Creek which forks in the west central area of the Crystal claim. Several small tributaries feed the Corrigan Creek. Corrigan Creek rarely flows through the summer months above Pool creek. The elevations above 600 metres are extremely steep consisting of cliffs and rugged mountains including Mount Olsen. Elevation ranges from 400 to 1380 metres. The tenure mountainsides are treed with mature second growth Fir, Balsam, Hemlock and Cedar timber. Ground cover is thick salal and blackberry in the lower elevations with wetlands in the northwest corner.

MINERAL CLAIM STATUS (See Figure 3 and cover confirmation sheet)

This Claim is held in Good standing by James Watt and Jim Newman. The Crystal claim includes 211.813 hectares of mineral tenure. James Watt has 49.95% and Jim Newman holds 50.05% unencumbered interest in this claim, and they hold the Crystal 2 (tenure# 530029) adjacent to the northern boundary. Please refer to the cover confirmation sheet for further information.

PREVIOUS WORK (Minfiles: 092F 381; 092F459; 092F460) (See Figure3)

(Previous Assessment Report ARIS File numbers: 12696; 13668; 13723; 13857; 14928; 14930)
1984 Geological Mapping and Rock sampling work Conducted by MPH Consulting for Ladysmith Minerals included the April Claim which covers part of the Crystal 2 tenure. This report discusses the Golden Slipper and Golden Rule as having been possible Au Quartz vein type occurrence. While mineralization in the area is further reported, there was no location of either of these made apparently due to deep snow coverage at the time. A zone of anomalous copper was detected. A simple four day prospecting program was conducted in 1986 with only lower elevations discussed again due to deep snow. It seems that while work has been attributed to this area most of the work was performed on occurrence to the north.

GEOLOGY (See figure 4)

According to provincial geological survey mapping, this area is an area of complex geology underlain by Middle to Upper Triassic Karmutsen Volcanic Basalts and middle to upper Triassic Vancouver Group sedimentary rocks intruded by Early to Middle Jurassic Island Plutonics and overlain by Cal-Alkaline rocks of the Lower Jurassic Bonanza Group which outcrop in the north-eastern portion of the claim. The western part of the tenure is mapped as intruded by Island Plutonic Granodioritics.

MINERALIZATION (See added table pages 9 and 10)

Mineralization on the Crystal 2 claim consists of several mineralized veins to a total strike length of approximately1 kilometre. According to filed assessment reports on these properties, Chalcopyrite, pyrrhotite, bornite malachite, sphalerite and molybdenite have been identified.

2007 SPECTRAL ANALYSIS

Remote sensing techniques and spatial data analysis through Geographic Information
Systems (GIS) have been jointly applied in the mineral exploration context to identify mineral rich potential areas in a number of locations throughout the world including alteration zones. The Spectral Analysis work associated with this project is not intended to research and develop new spectral analysis methods or to develop new software. The aim is to utilize a combination of Spectral image data and sophisticated analysis software along with geological and other exploration data from the project target area as an exploration tool in search of mineral deposition, alteration, geological or other features which may result in the location of new locations of vein type mineralization. Any other mineralized deposits that may be identified as a result of this work will also be given due attention if time allows.

A wide range of Image analysis techniques were applied to spectral data from this project area. Supervised signature classification was not employed in this exploration due to the lack of an established mineralized zone within the exploration area. Other methods used to try to extract useful spectral maps were the hard classification operators (Principal Components Analysis, Fisher or Linear Discriminant Analysis, Maximum Likelihood, Minimum Distance Parallelepiped, Canonical Components Analysis, and Neural Network Texture Classification) and the soft classification operators (Bayesian Analysis, Dempster-Shafer Weighting and Fuzzy Classification). These procedures although able to produce spectral images, the results often did not provide obvious or even subtle indications of a relation to underlying geology or mineralization. The procedure which did produce data that was most frequently considered to be co relatable to underlying geological features, although at times tenuous, was the technique called Unsupervised Classification. This procedure and related methodology is described in the following analytical steps.

ANALYTICAL STEPS:

1. Compilation - The first step included an extensive geological, mineralogical and mineral deposit research and compilation from historical sources in search of features which could be used as spectral targets. These features, which are identified and described in the geology and mineralization sections of this report, were digitized where possible into map overlays.
2. Base Maps - Acquisition of Trim Maps for each area to form base maps.
3. Spectral Data Acquisition - Selection and acquisition of spectral image Granules for each area. Images can be chosen from a variety of satellite passes over a wide range of time. In this case ASTER LIB data set: AST_L1B00306032003193133_20060620222025_3647 in HDF format was acquired which is 0% cloud cover
4. Data Quality Assessment - The images selected were then checked to ensure they adequately covered the subject areas and were of suitable quality. For example if there was too much cloud cover or if the images were of poor resolution they were rejected and replaced with new granules.
5. Geo-referencing - Spectral Images were then linked or geo-referenced to the UTM grid system by overlaying on Trim Map bases then a Digital Elevation Model (DEM) and a Digital Terrain Model (DTM) were derived.
6. Image Fusion – Image data is orthorectified, and the first band of the ASTER data set which is 15m per pixel resolution is fused to the third band data which contains the short wave infrared data. This data fusion produces an image dataset that contains both sets of spectral data, and increases the spectral data visual spatial recognition by a factor of 4.
7. Spectral Data Noise Correction - Unwanted responses (noise) from features such as water, vegetation, topography, shade, cloud cover etc were filtered or screened out as part of the image analysis process. At times this spectral noise may still be present in the images used and must be recognized as such when making interpretations.
8. Purified - Through an iterative process (15,000 iterations) data are projected repeatedly onto a random vector. Pixels that exceed an imposed threshold are collected as extreme and therefore representative of the data set.
9. n-Dimensional Visualization representative data points are projected into n-Dimensional space where individual representative data points are selected as data corners which represent unique endmembers to reduce analysis to those members which are discrete groups.

10. Data Classification - This data is then subjected to a number of analytical techniques designed to isolate the target minerals and/or their pathfinders, associations or emmittances. Spectral libraries were selected for suitability and imported. Comparative analysis was performed against these spectral library signatures established for known minerals, rock types and expected alteration products of the various rock units. The comparative analysis was done using the following classification methods:

• Spectral Angle Mapping (SAM)
• Spectral Unmixing
• Mixture Matched Filtering

11. Output - Spectral Classifications were then displayed for visual analysis as:

• Greyscale Quantification Images - When displayed in grayscale for specific classifications, the system identifies relative abundances of specified end members (e.g. minerals or rocktypes). These concentrations normally show up in white (light grey) when there is high co-relation and in dark grey to black if there is a low coefficient of co relation (i.e. when none of the specific components are present). False color composite images can then be used to highlight specific minerals and mineral assemblages representing classifications or groups with vector data layers. Spectral comparison tests were then made using the one of the material suites listed below selected from the various spectral libraries.

a) Metamorphic Rock Types
b) Intrusive Rock Types
c) Minerals
d) Vegetation
e) Soils

However one must use some caution in accepting these classifications. Just because a given pixel is classified as a specific mineral doesn't make it so. Classifications are a measure of similarity and not necessarily definitive identifiers. Ground truthing is important to check and test the apparent results. RGB – Some of the data were also subject to RGB (Red-Green-Blue) analysis. This is a very simplified chromatic expression of spectral relationships. Pure colors in these images represent areas where the mineralogy is relatively pure. Mixed colors indicate spectral mixing, with the resultant colors indicating how much mixing is taking place and the relative contributions of each endmember.

12. Post Processing - Classified images require post-processing to evaluate classification accuracy and to generalize classes for export to image-maps and vector GIS. Greyscale, false colour and colour symbology responses were overlayed along with the base geological features gathered in Step 1 and were reviewed visually to see if any spectral anomalies, e.g. bright or dark spots overlying these features could be identified or colour patterns reflecting underlying geology could be found. A selection of the resulting spectral signatures which most closely reflected real or apparent underlying geological features were then displayed as color coded maps.

FIELD WORK 2007 (Please refer to figure 5)

Prospecting and rock sample collections were undertaken by James Watt, and Jim Newman between Mid July and September 2007 Work included the collection of 5 rock samples for further analysis, and spectral correlation.

RESULTS

The primary objective of this analysis of the Crystal and Crystal 2 tenures was to explore for signal correlation to know or established mineral occurrences and to work toward developing a recognizable spectral signature and subsequent exploration target. The Spectral Analysis was done on a portion of one spectral data granule. This is an area where there is appropriate satellite spectral coverage. The image used in this analysis covers the entire claim. Several iterations of this process were done starting with the broader geological features, typically rock types including igneous and metamorphic suites and finally classifications were done for specific minerals. Matching results were identified, often including several duplicate responses. Duplicates were either displayed collectively or left out if no additional useful information was evident by their inclusion. The results of the classification procedure were viewed as spectral maps. These classifications have generally been identified by the name of the “mineral” or “rock type” that shows the greatest proportion of positive co relation or if not the greatest, is the identity which more reasonably fits the geological picture. These IDs may however only reflect an apparent co-relation and should not be relied upon to infer any direct relationship. Spectral data management specialists always recommend using local experience and if possible ground truthing as a check on what is really being spectrally measured. Results of the spectral plot reviews are as follows:

Class Mean #	Spectral Library	Mineral/rock name	match
1	USGS mineral	Galena	.818
		Ilmenite	.773
	JPL 1 mineral	Talc	.831
2	USGS mineral	Ferroaxinite	.788
	JHU Igneous fine	Mafic Basalt	.732
3	USGS mineral	Axinite	.811
	JHU Igneous fine	Lamprophyre	.732
4	USGS mineral	Topaz	.960
	JHU mineral	Pyrophillite	.914
	JHU Igneous fine	Basalt	.276
	IGCP 5	Pyrophillite	.807
5	USGS mineral	Pigeonite	.687
	JPL 1 mineral	Galena	.576

	JHU Igneous fine	Diabase	.537
6	JPL 1 mineral	Oligioclase	.627
	JHU mineral	Orthoclase	.629
	JHU Igneous Coarse	Granodiorite	.584
7	USGS mineral	Goethite	.421

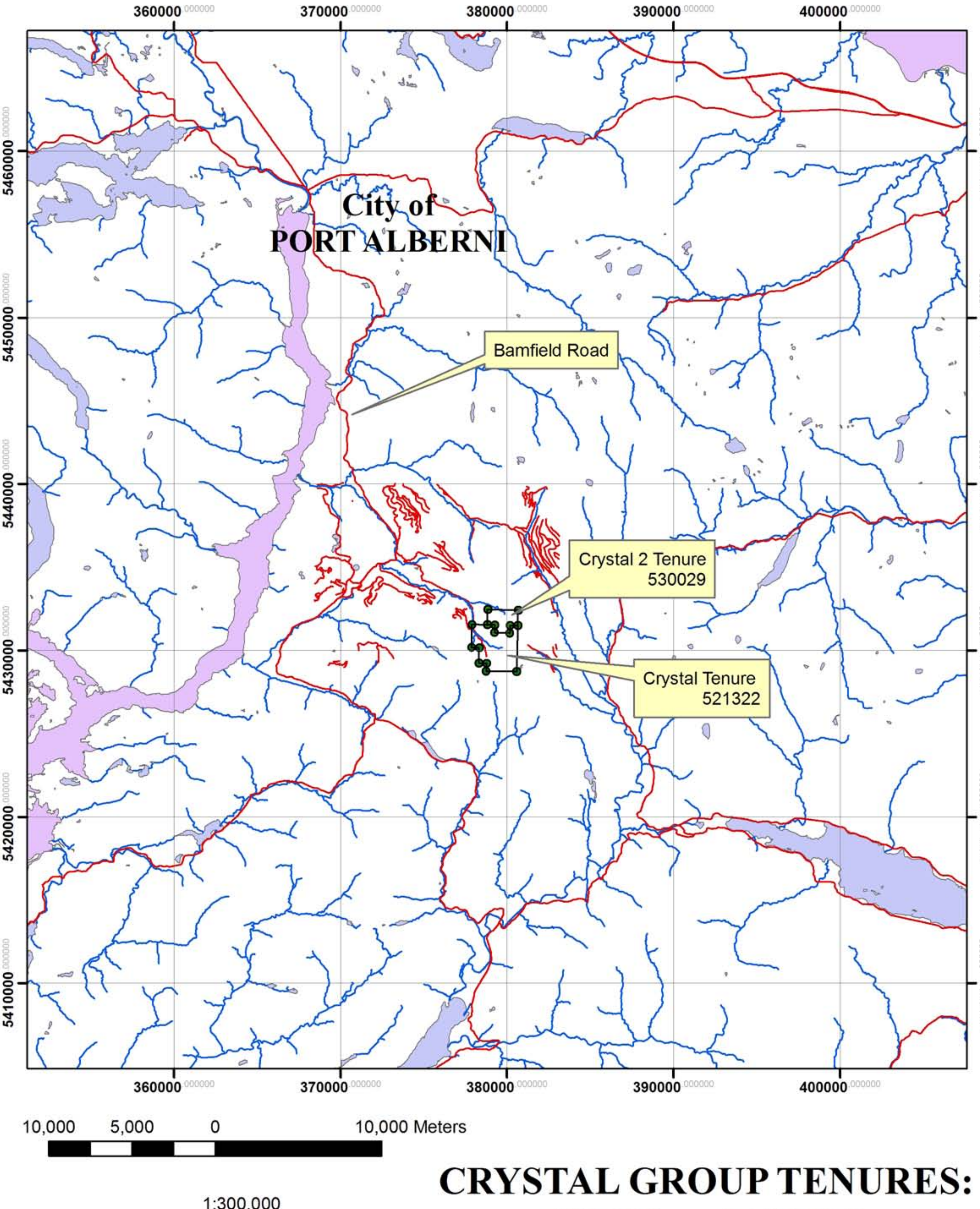
The mapped rocks in the area are predominantly of three groups: volcanic basalts, granodiorite intrusives and sedimentary limestone. Metal sulphide quartz vein mineralization in the area is thought to be of hydrothermal origin. A suite of igneous rocks and minerals and associated alteration products should produce the most likely and detectable spectral association. These rocks and associated minerals have strong signal responses in areas of road cuts, recent logging and sparse vegetation, as well as cliff and talus exposures. Limestone, sulphide distribution, and basalt recognition correlate to established mapping. The resulting spectral maps rendered by these processes display strong relation to the mapping published as the Mapplace 2005 geology, (figure 4) and the province of British Columbia “Geofile 2005-3: Digital Geology Map of British Columbia” (Massey, N.W.D., Macintyre D.G., Desjardins, P.J. and Cooney, R.T.). While the mapped contacts are persistent in general location and shape, there is some evidence that the precise locations and designations of these units may be improved by more intensive larger scale investigation. There is evident correlation of the mapped intrusive contact between Karmutsen Volcanics and Island Plutonics (see figure 6………..Class 5) there is further evidence of alteration within spectral class 5 which presents as Ferroaxinite and A-Chlorite (see figure 7………..Class 2). Zones of Pyrophillite (see figure 8…… Class 4) are detected as ‘core’ zones within spectral indications of Mafic Basalt (see figure 19…Class 3)

CONCLUSIONS

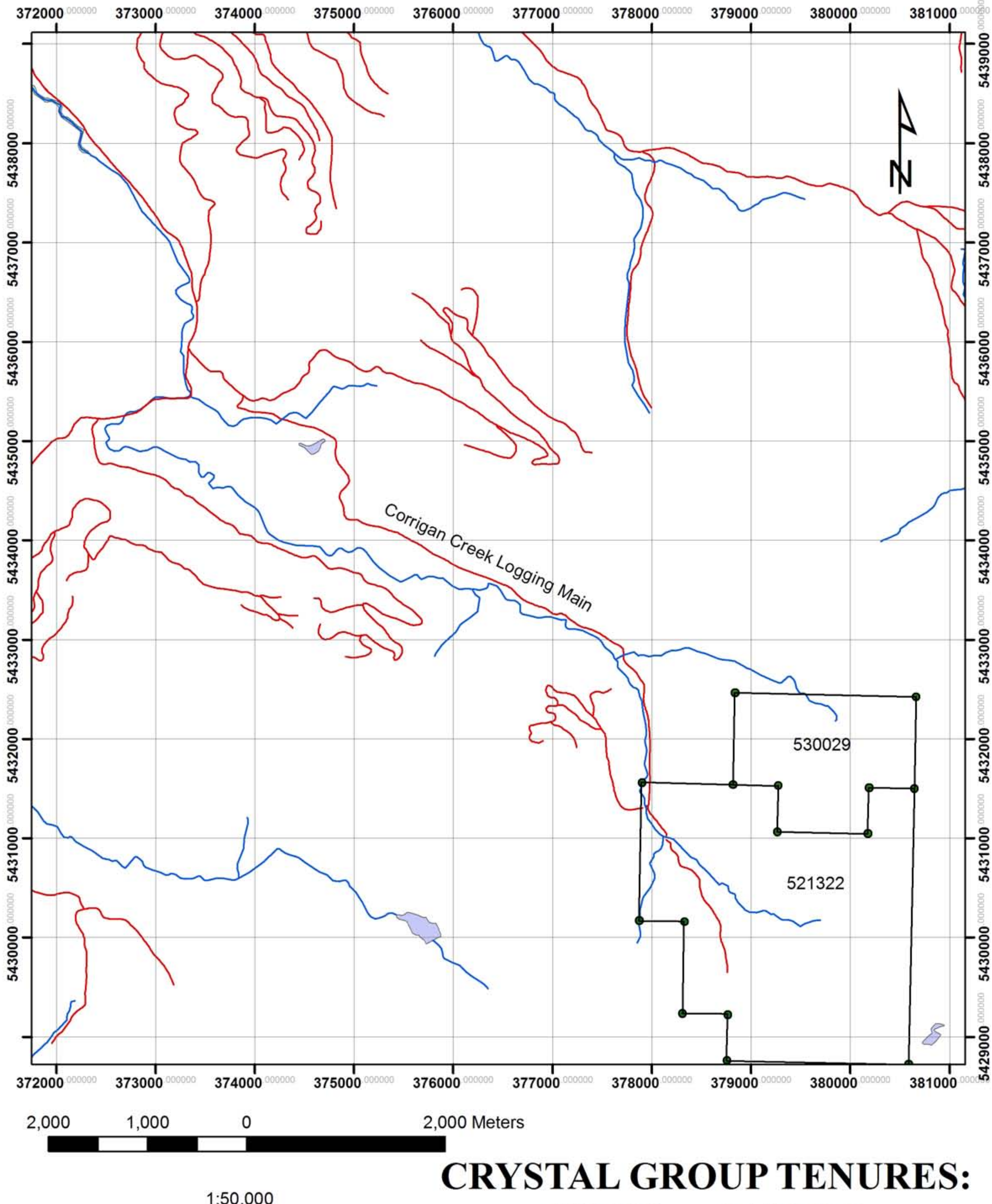
This Tenure lies amidst 12 well documented mineral occurrences, and has only recently benefited by two extensions to existing logging roads. It is recommended that the tenures be further explored using CDGPS controlled ground truth SWIR portable spectrometry to explore for further indications of copper skarns in the upper (north west) valley.

STATEMENT OF WORK AND COSTS

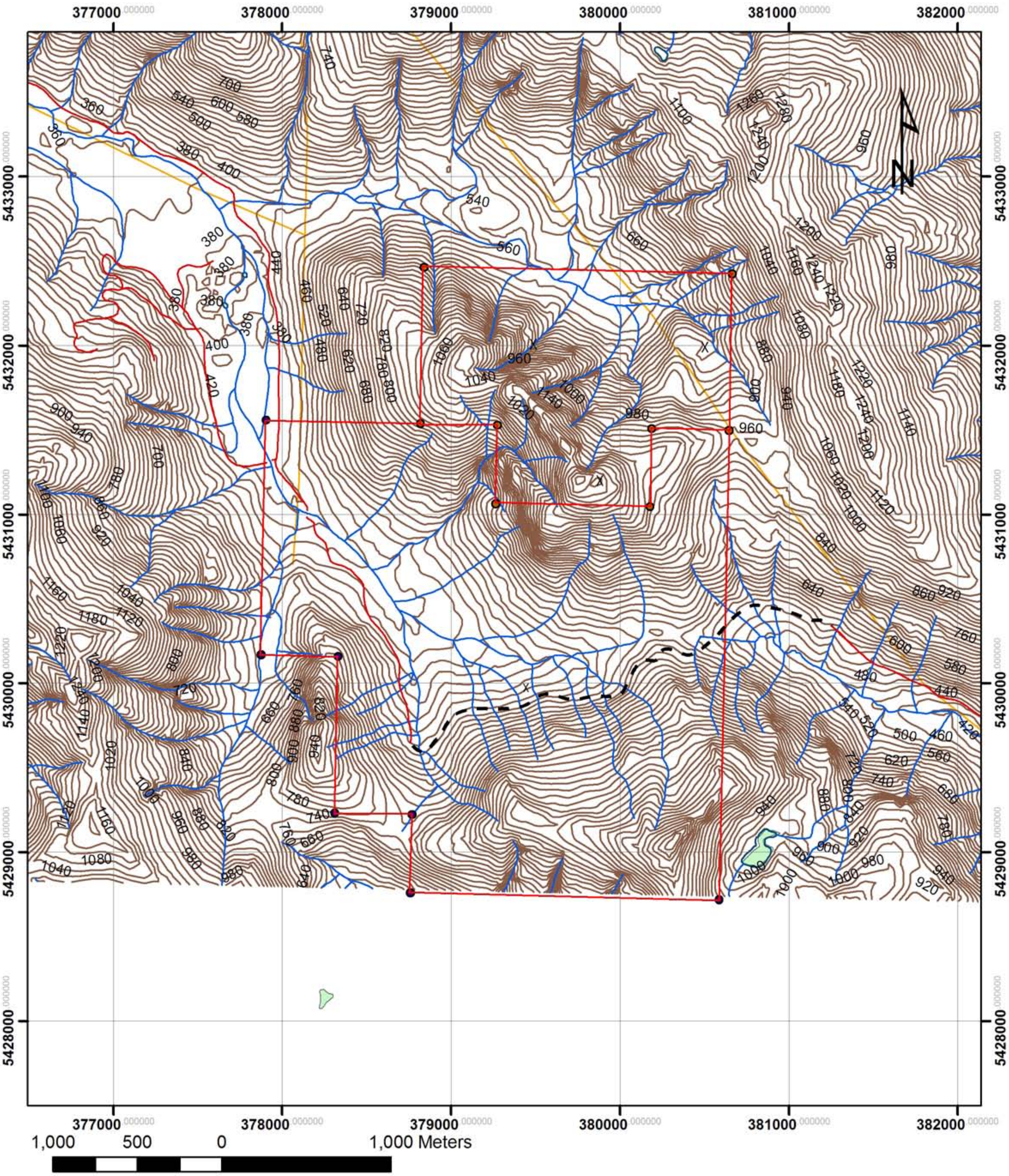
This work was carried out by Auracle Geospatial Science Inc. for James Newman and James Watt between July10th 2007 and September 22nd 2007 and fulfils the requirements of assessment work on the Tenure shown. Work is as disclosed on the following table of costs, where costs were reduced from $2989.20 (actual time and expense) to the budget amount of $2759.95.



CRYSTAL GROUP TENURES: 521322 and 530029 General Location

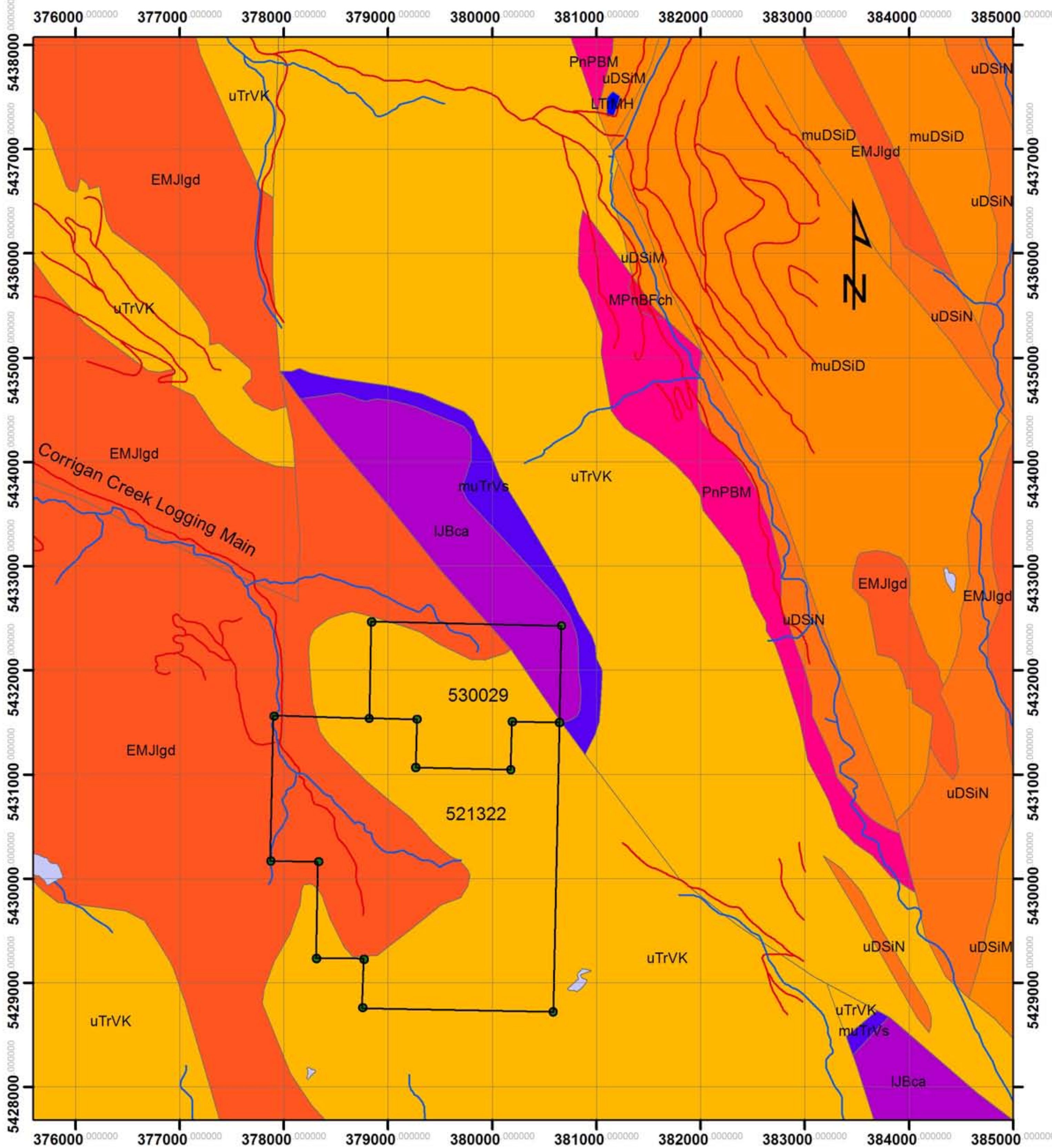


CRYSTAL GROUP TENURES: 521322 and 530029 General Access



1:30,000

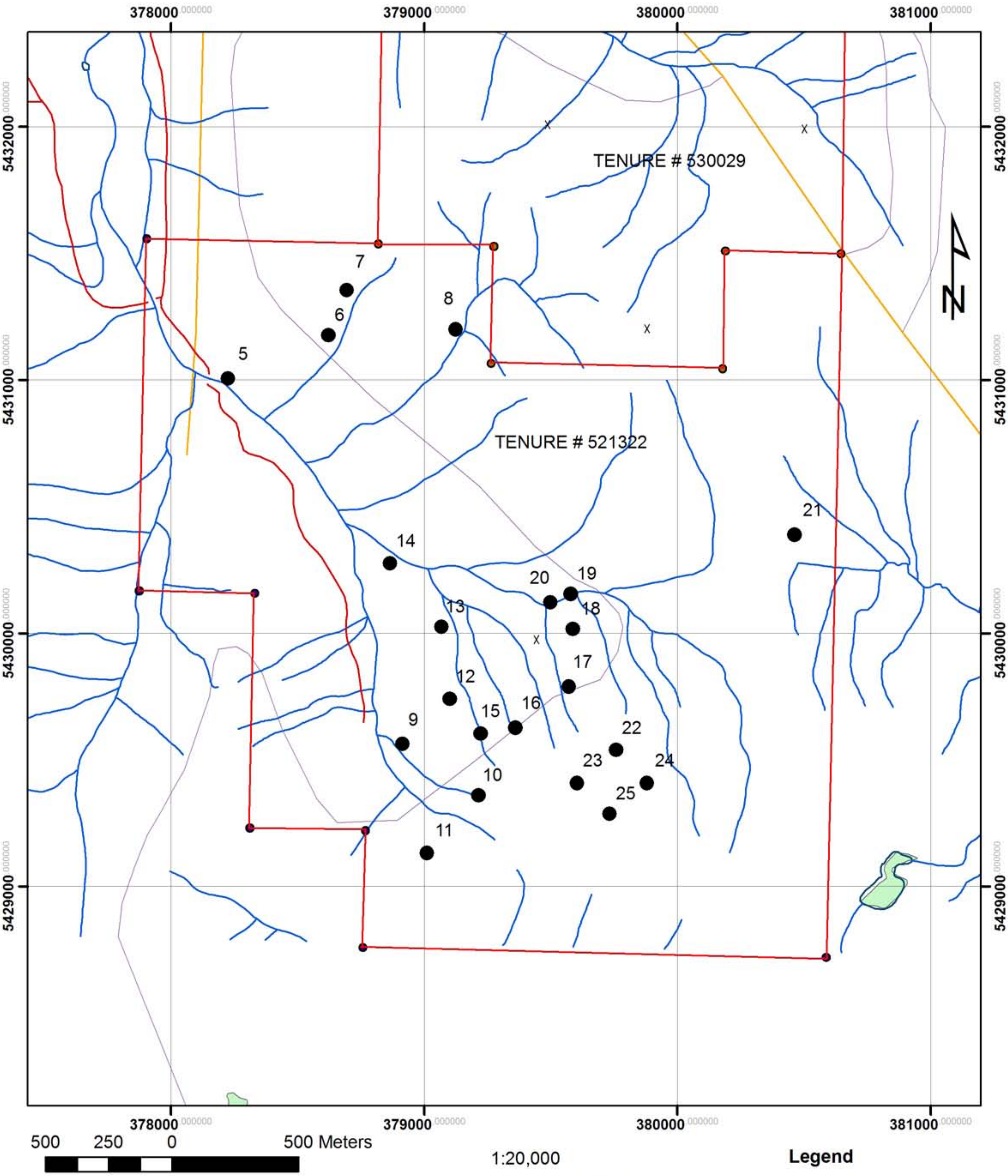
CRYSTAL Tenure
Topography



2,000 1,000 0 2,000 Meters

1:50,000

CRYSTAL GROUP TENURES: 521322 and 530029 Regional Geology

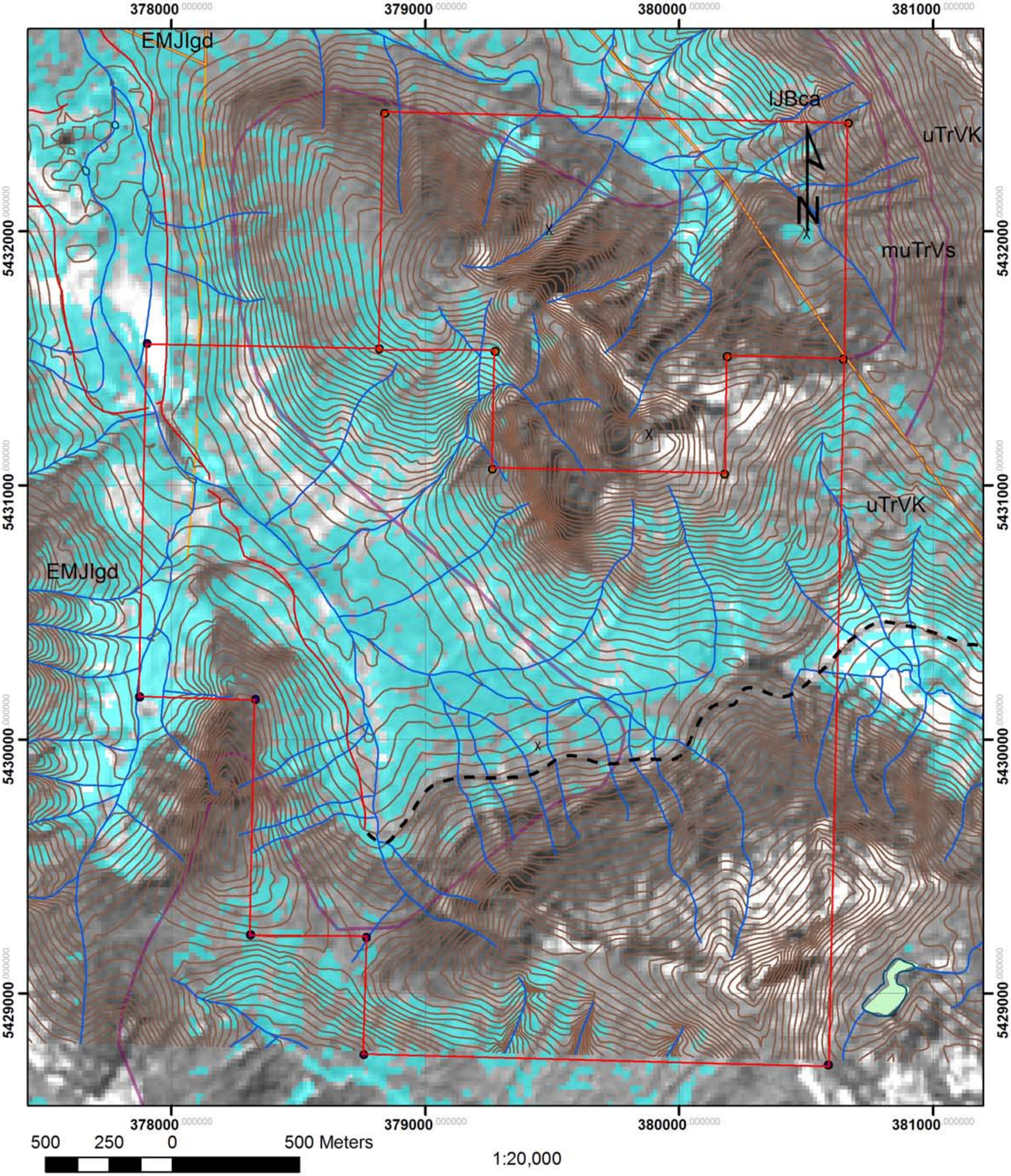


1:20,000

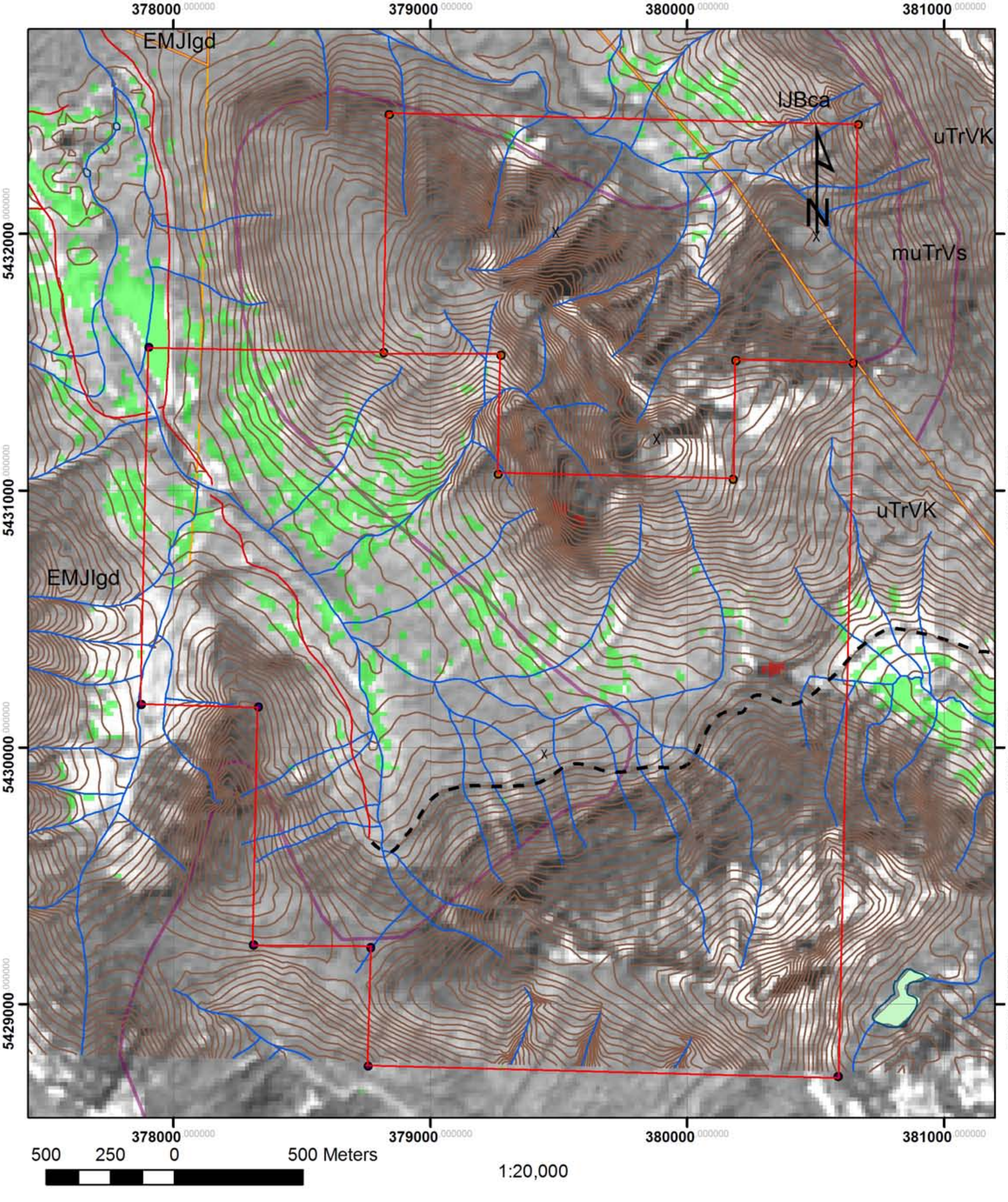
CRYSTAL GROUP
Geological Contacts
and
Traverse Sample Locations

Legend

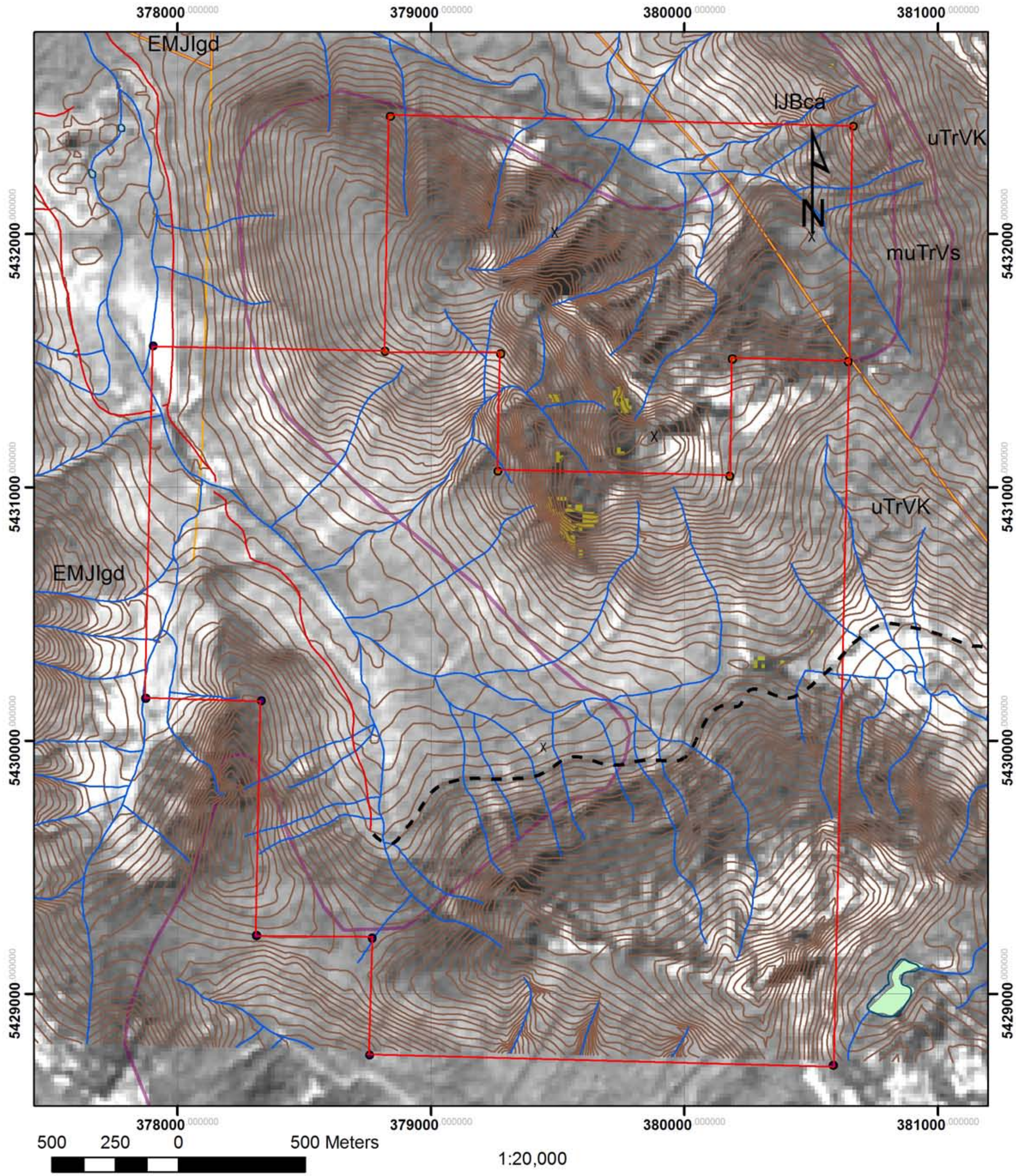
- X 530029Minfiles
- X 521355Minfiles
- troad_Project
- trivr_Project
- tlake_Project
- NM10_fltlns_utm_Project
- NM10_geology_utm



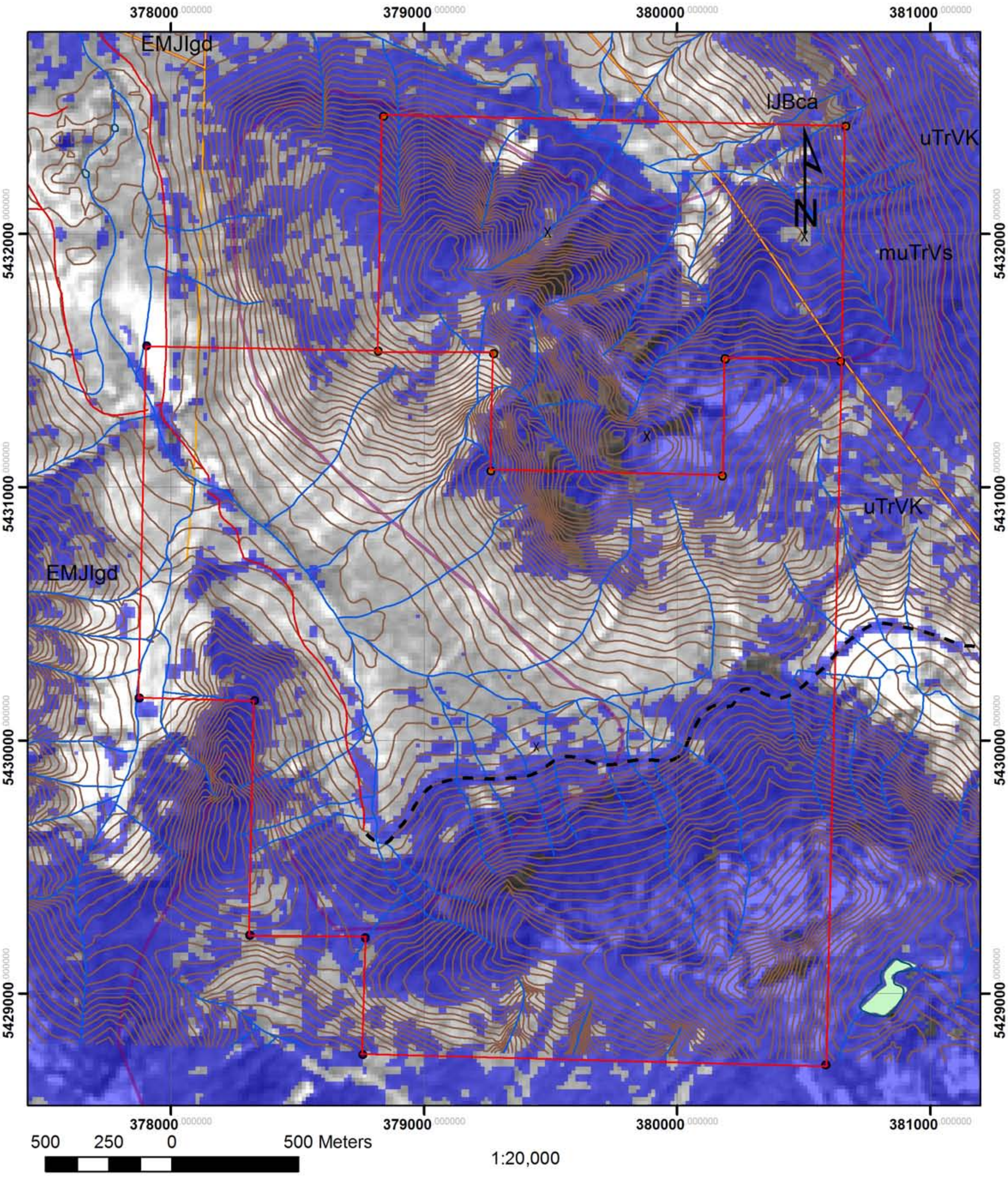
CRYSTAL GROUP
Geological Mapping of Island Plutonic Rocks and Spectral Mapping of Diabase (Class5)



CRYSTAL GROUP
Geological Mapping of Island Plutonic Rocks
and Spectral Mapping of Ferroaxinite and chlorite (Class2)



CRYSTAL GROUP
Geological Mapping of Island Plutonic Rocks
and Spectral Mapping of Baslt/Pyrophillite (Class4)



CRYSTAL GROUP
Geological Mapping of Island Plutonic Rocks and Spectral Mapping of Mafic Basalt (Class3)

SW BC
Crystal 2 tenure# 530029 Project
2007Work Budget
Project Area: ***CRYSTAL MINERALTITLE GROUP***

Cost Categories		**Type**	**Descripti**	**Units**	**Rate**	**number**	**Qty**	**extended**
Personnel								
	Project Manager	Field Verify		$/Day(8hr.)	$550.00	1	0	$0.00
	QP	Field Verify		$/Day(8hr.)	$650.00	1	0	$0.00
	Field Assistants			$/Day(8hr.)	$350.00	2	2	$1,400.00
	Other			$/Day(8hr.)				
Travel								
	Lodging	R and Board		$/Day/Perso	$100.00	2	2	$400.00
	Lodging Short Sta	R and Board	QP	$/Day/Perso	$120.00	0	1	$0.00
	Meals		travel	$/Day/Perso	$30.00	0	0	$0.00
	Vehicle QP			$/Diem	$240.00	0	0.4	$0.00
	Vehicle		travel	$/Kilometre	$0.51	120	1	$61.20
	Vehicle		prediem	site use	$100.00		2	$200.00
	Fuel	Unimog					0	$0.00
	Fares	Ferry			$88.00	2	0	$0.00
		Ferry Passenger			$8.80	2	0	$0.00
Misc Costs								
	Materials							
	Supplies							
	Misc.							
Communications								
	Satellite			$/Week	$30.00	1	0	$0.00
	Sat Phone			$/month	$275.00	1	0	$0.00
	Radio			$/Week				
Field Equipment Rental								
	Unimog			$/Day	$200.00	1	0	$0.00
	Generator			$/Week	$250.00	1	0	$0.00
	Dryer heater			$/Month	$98.00	1	0	$0.00
	ATV			$/Day	$100.00	1	0	$0.00
	Aircraft	J Ranger		$/Hour				
		Mob & Demo	fuel inc	$/Minute	$18.89	150	0	$0.00
		Daily	fuel inc	$/Minute	$378.00	4	0	$0.00
		L Ranger						
Tech Equipment Rental								
	Field Equipment	JH		$/Day	$60.00	1	0	$0.00
	Computer			$/Day	$25.00	1	0	$0.00
	CDGPS			$/Day	$30.00	1	0	$0.00
	Gamma Ray Spectrometer			$/Week	$500.00	1	0	$0.00
	SWIR Spectrometer			$/Week	$850.00	1	0	$0.00
Sampling equipment Rental								
	Soil Probe		portable	$/Week	$1,550.00	1	0	$0.00
	Tips		wet cuttin	$each	$144.19	1	0	$0.00
	Core Tubes	36"	clr vinyl	$ per set of 1	$26.75	2	0	$0.00
SampleAnalysis								
	Integrative analyses			$/Hr.	$68.50	6	0	$0.00
	C/Processing			$/Hr.	$50.00	4	0	$0.00
	micro prep							

	microscopy			$/diem	$600.00	1	0.15	$90.00
	Sample prep							
	Drying		onsite	$/week				
	Sample Bags			$each	$0.30	15	0	$0.00
	Assays	JH		total				
	Chemical analysis		Uassay	$perSample	$12.15	15	0	$0.00
Fuel								
	ATV			$/Day	$10.00	2	0	$0.00
	Probe			$/Day	$20.00	1	0	$0.00
	Heater		dryer	$Day	$10.00	1	0	$0.00
Data Acquisition								
	Data selection			$hr	$68.50	2	0	$0.00
	L1B	rectified	156	Units	$156.00	1	0	$0.00
	TRIM						0	
Mapping and Reporting								
	Spectral analysis			$hr	$68.50	16	0.5	$548.00
	co-processing			$hr	$50.00	8	0.35	$140.00
	Geological interpretation			$hr	$81.25	30	0	$0.00
	Mapping							$150.00
	Geo report			cost			0	$0.00
	Priniting and copying							
Licences and Permits								
	Exploration Permit							$0.00
	Bond							$0.00
	WCB	inc						$0.00
	Insurances	Equipment						$0.00
		Liability					0	$0.00
	ATV	in rental						
Office and Admin								$2,989.20
							Total	$2,989.20

Reduced from $2989.20 to $2759.95 for reporting purposes

Statement of Qualification

I, David J. McLelland, do hereby certify that:

1. I am a Principal in:
Auracle Geospatial Science Inc,
325 Dorset Road Qualicum Beach,
British Columbia, Canada V9K 1H5

2. I am a post graduate student of Earth and Environmental Science and have completed the postgraduate certificate in applied and theoretical GI Science at Simon Fraser University, and completed the academic component of the MSc. program requirement.

3. I have completed the B.C.I.T. B.C.Y.C.M. Mineral Exploration program, and Completed the B.C.I.T.1 B.C.Y.C.M. Advanced field School.

4. I am the Project Manager and I am responsible for the collection and management of data and execution of analysis.

5. This report was prepared on behalf of Auracle Geospatial Science who has been engaged by James Watt and Jim Newman to complete a work program on these properties.

6. I have no material or financial interest in the subject properties or the companies that own them.

7. This report has been prepared in accordance with generally accepted Scientific Principles and is based upon the best information available at the time of preparation. I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report.

Date: March 15 2008
Qualicum Beach, British Columbia

____
David McLelland