

Assessment Report

On

Heliborne Magnetic Survey of the West and New Quads, Kwad South

and Akie-Sika North Claim Groups

Omineca Mining Division

Northeastern British Columbia

NTS Map Sheet 94F

BC Geological Survey Assessment Report 31648a

Prepared For

Rio Grande Mining Corp.

Suite 200 - 551 Howe Street, Vancouver, B.C. V6C 2C

Prepared By

I.A. Osmani, M.Sc., P.Geo.

Coast Mountain Geological Limited

620 – 650 West Georgia Street, Vancouver, B.C. V6B 4N9

August 06, 2010

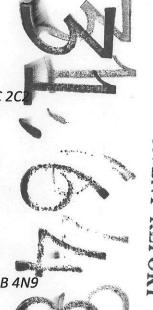




Table of Contents

-

Page No.
1.0 Introduction
1.1 Property, Location and Access
1.2 Local Resources
1.3 Climate5
1.4 Physiography, Plants and Animals8
2.0 Previous Work
3.0 Geological Setting9
3.1 Regional Geology9
3.1.1 Kechika Group
3.1.2 Road River Group14
3.1.3 Lower Road River Group14
3.1.4 Ospika Volcanic Rocks14
3.1.5 Silurian Siltstone14
3.1.6 Upper Road River Group14
3.1.7 Earn Group15
3.1.8 Gunsteel Formation15
3.1.9 Akie Formation15
3.2 Regional Structure15
3.3 Property Geology16
4.0 Aeromagnetic Survey18

5.0 Conclusions and Recommendations	18
6.0 References	.22
7.0 Statements of Qualifications	.25

List of Figures

Figure 1. Kechika Properties: Claims and Location4
<i>Figure 2</i> . Claim Blocks Covered by 2010 Airborne Magnetic Survey6
Figure 3. Location of the Rio Grande's Project Area and Tectonic Belts of
British Columbia
Figure 4 . Regional Geology – Kechika Properties11
Figure 4a. Legend For Figure 412
Figure 5. General Stratigraphy – Kechika Trough Area, B.C13
Figure 6. Geology of Kwad South, New and West Quad, Akie-Sika North17
and Adjacent Areas
Figure 7. Geology Superimposed upon the First Vertical Derivative Magnetic
Map - Yuen North Property
Figure 8. Geology Superimposed upon the First Vertical Derivative Map of 201020
Surveyed areas A and B
List of Tables
Table 1. Claim Information – Kechika Properties

Appendix

Appendix 1. Geophysical Reportand Map	s: Kechika Project26
---------------------------------------	----------------------

1.0 Introduction

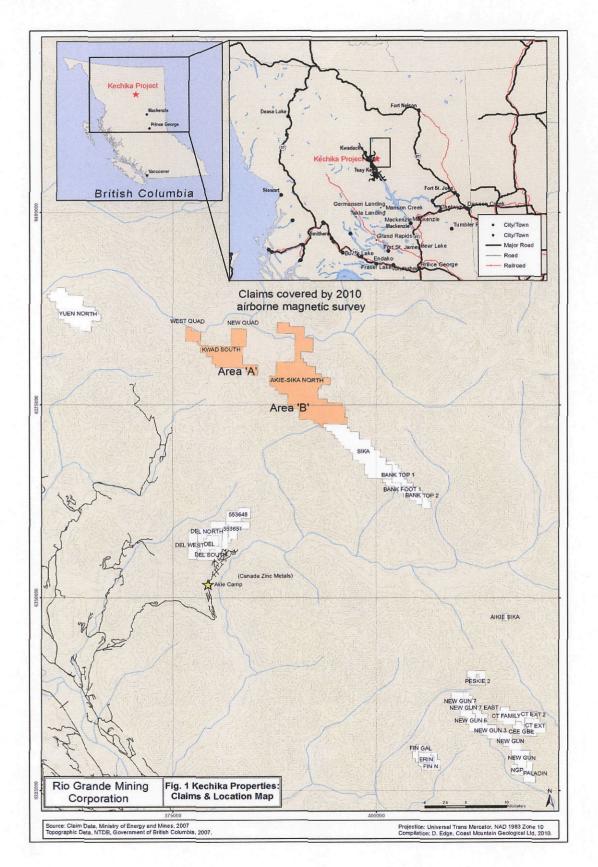
From March 23 to April 1, 2010, a helicopter-borne magnetic survey (the "Survey") was flown by MPX Geophysics Ltd. ("MPX") of Markham (Ontario) on behalf of Rio Grande Mining Corp. ("Rio") over selected claim blocks of Kechika properties ("Property") in northeastern British Columbia (BC). The survey was planned and supervised by Coast Mountain Geological Ltd. ("CMG"), a mineral exploration consulting company based in Vancouver, BC. The survey area is located approximately 420 km northeast of Prince George (Figure 1).

The survey area consists of two non-contiguous claim blocks, the Block 'A' and Block 'B' (Figure 2). The Block A comprised of three mineral claims: Kwad South, West Quad and New Quad, totalling 2,135 ha combined area. The Block B consists of Akie-Sika North claims, totalling 5,368 ha area. A total of 1,199 line-kilometres or 99 square km of data were acquired on these two blocks using high sensitivity cesium magnetometer (Scintrex CS-3) survey covering more than 7503 hectares.

For the purpose of filing assessment work credit, the cost of aeromagnetic survey flown over the surveyed area 'B' (Akie-Sika North claim block) is spread over to contiguous claim blocks Sika, Bank Top 1, Bank Foot 1 and Bank Top 2 since it is permitted under the mining laws of the Province of British Columbia.

The survey lines were flown at 100 metre spacing and tie lines at a separation of 1000 metres. All survey areas were flown at a nominal mean terrain clearance of 70 metres (40 metres for the magnetic sensor). A GPS navigation system was employed to ensure accurate positioning of the geophysical data with respect to the topographic base maps.

The purpose of collecting the airborne magnetic data was to produce various derived products (e.g., total magnetic field and second derivative maps) and utilized them as an exploration tool for locating major faults and structurally controlled perspective lithologies, such as Gunsteel Formation (black shale), a host lithology to most SEDEX-type lead-zinc-silver mineralization and deposits in the Kechika Basin. Historical geological data indicates presence of structurally controlled Gunsteel Formation with known mineralization within the surveyed areas but their precise location and continuity is currently not well constrained. The currently collected high quality magnetic data is expected to help in locating such prospective lithologies and structures of potentially significant SEDEX-type mineralization on surveyed claim blocks. The airborne magnetic data collected in 2008 by Rio Grande Mining Inc. on its Yuen North property approximately 10 km to northwest of currently surveyed area, resulted in locating areas of prospective lithologies (e.g., Gunsteel Formation) and structures on the property (Osmani and Wilkins 2009).



1.1 Properties, Location and Access

The two surveyed areas, the A and B blocks, are part of 11 segregated groupings of claims or properties that are collectively called the Kechika properties (Osmani and Wilkins 2009). These blocks are located approximately 420 km north-northwest of Prince George (Figure 1) and occur within the western ranges of the Northern Rocky Mountains physiographic region (NTS Map Sheet 94F) of the Omineca Mining Division in northeastern BC. The claims are distributed along the northwest-southeast trend of the Kechika Trough within the northern Rocky Mountain Belt. The location and status of the claims are shown in Figures 1 and 2 and also listed in Table 1.

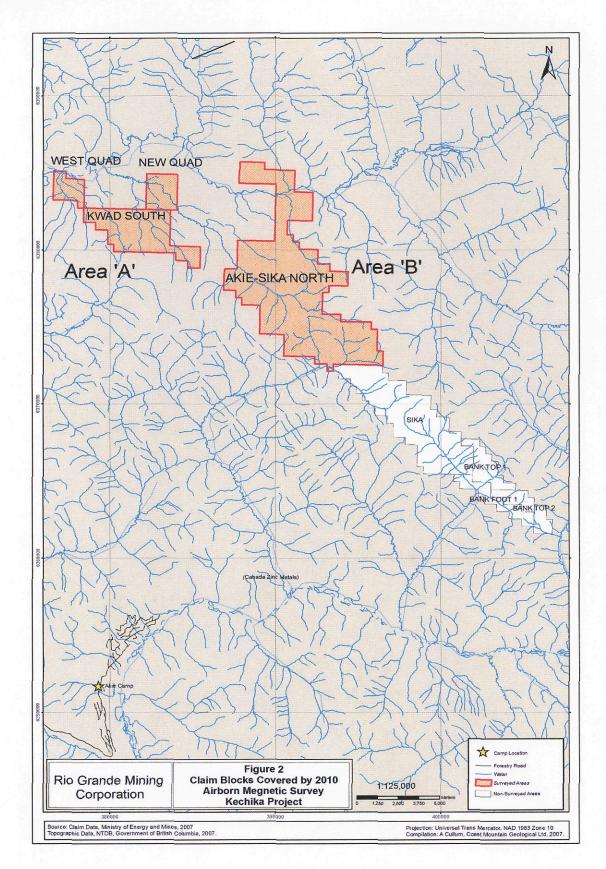
There is no road access to the surveyed areas and can only be reached by helicopter from nearby First Nations communities of Tsay Keh Dene and Kwadacha or helicopter-supported bush camps. The First Nations communities can be reached by both scheduled and charter flights, and by road from Prince George. From Prince George, the First Nations communities are easily reached by Provincial Highway 97 to Mackenzie, and from there by an all-weather gravel road.

1.2 Local Resources

Semi-skilled or unskilled labour and limited camp supplies are available from road-accessible local native communities. Highly skilled labour or technical manpower, and large quantities of food and camping supplies have to be brought in either via Forest Service Roads or by scheduled or charter flights from major northern centers, such as Prince George, Fort St. John or Mackenzie. At present, Northern Thunderbird Air has daily weekday flights to Tsay Keh Dene and Kwadacha except on statutory holidays.

1.3 Climate

The climate is cool with moderate rain and snowfall. Although higher elevations (2000 metres and up) may have some permanent snow cover all year round, the area does not begin to accumulate any significant amount until late September to early October. It is not until late May to early June that most of the snow melts away from lower and medium altitudes (<1500 metres). Temperatures vary from minus 5 to minus 40 degrees Celsius during the winter months and from 5 to 30 degrees Celsius with an average temperature around 18 degrees Celsius during the summer months.



6

.

Claim Group	Tenure Number	Claim Name	Current Expíry Date	Area	
Aikie-Sitka	522612	AIKIE SIKA	2018/feb/14	70.005	
Sika	545788	SIKA	2011/may/31	2,402.632	
Bank	563628	BANK TOP 1	2011/may/31	435.595	
u	563630	BANK TOP 2	2011/may/31	401.059	
u	563633	BANK FOOT 1	2011/may/31	400.986	
Kwad	549646	KWAD SOUTH	2011/may/31	1,388.886	
a	525848	WEST QUAD	2011/may/31	312.298	
u	545920	NEW QUAD	2011/may/31	433.755	
Akie-Sika North	549640	AKIE-SIKA NORTH	2011/may/31	5,368.539	
CT Ext	522617	CT FAMILY	2011/may/31	438.879	
u	525194	CT EXT	2011/may/31	438.987	
α	525195	CT EXT 2	2011/may/31	315.983	
u	545141	CEEGEE	2011/mar/31	281.006	
Del	522602	DEL	2017/dec/20	436.632	
u	525918	DEL NORTH	2017/dec/20	419.040	
u	525919	DEL SOUTH	2017/dec/20	401.828	
"	525920	DEL EAST	2017/dec/20	436.487	
u	525921	DEL WEST	2017/dec/20	419.193	
u	553648		2017/dec/20	436.219	
<i>u</i>	553651		2017/dec/20	436.413	
Erin	522614	ERIN	2015/jul/01	246.115	
u	564948	FINGAL	2011/mar/31	246.070	

Table 1. Claim Information – Kechika Properties

u	564950	FINN	2011/mar/31	316.493
New Gun-				
Pesika	525197	NEW GUN	2011/may/13	439.240
u	525198	NEW GUN 3	2011/may/13	403.973
"	525199	NEW GUN 5	2011/may/13	421.897
u	525201	NEW GUN 6	2011/may/13	438.974
u	525202	NEW GUN 7	2011/may/13	386.060
u	525891	NEW GUN 7 EAST	2011/may/13	421.241
u	525893	PALADIN	2011/may/13	316.548
u	566121	NGP	2011/mar/31	175.856
Yuen North	545790	YUEN NORTH	2013/jan/02	1,993.841
Peskie	545891	PESKIE 2	2011/mar/31	368.227

NOTE 1. Claim Groups Covered by 2010 Heliborne magnetic Survey.

NOTE 2. Cost of 2010 Heliborne Magnetic Survey Carried Over onto Contiguous Claim Groups.

1.4 Physiography, Plants and Animals

With the exception of some local variations, most of the surveyed claims and adjacent areas occur within a series of northwest trending mountain ridges, locally rising up to 2500 metres in elevation, transected by broad northeast trending drainage corridors. The northeast facing slopes are generally steep with good rock exposures while the southwest faces are generally moderately sloping and are covered with talus, moss, grass and shrubs.

Heavily timbered areas, populated with spruce trees and related species, are restricted to valleys and lower slopes. Broad valley bottoms contain major drainages such as the Akie and Pesika Rivers, and extensive swamps. Steeper slopes show landslide and avalanche scars. Above the tree line, the environment is sub-alpine, dominated by mosses and lichens. Alpine flowers can be seen abundantly in summer months. Animal species include abundant grizzly bear, black bear, caribou, moose, elk, mountain goats and marmots.

2.0 Previous Work

The surveyed areas have a complicated exploration history as many historical claims have since been amalgamated, expired, re-staked, or transferred. The current Kwad South, West Quad, New Quad and Akie-Sika North properties to a large extent were originally covered under the Wil Sub Group (Hodgson 1979, Murell 1981a). The Wil claims were staked in the late 1970's by Riocanex Limited and subsequently optioned by Cominco in 1981. The Aikie-Sika Group, staked in 1979 by Cominco, was located south of the Wil claims (Murell 1981b). Work completed on these historical claims included geochemical silt and soil sampling, geological mapping, airborne EM, and minor gravity surveying (Hodgson 1979, Murell 1981a, Murell 1981b). The land formerly covered by the aforementioned claims fell under the Kwadacha claim group of Ecstall Mining Corporation (Ecstall), a wholly owned subsidiary of CZM. CZM/Ecstall has recently dropped these claims. Megastar owns the Akie-Sika North, Kwad South and West Quad claims, and the Bank and New Qwad claims were owned by CZM. Since the Bank Top 1, Bank Top 2, Bank Foot 1 and New Qwad claims were staked after the date of option agreement, and were worked within area of mutual interest, CZM, after terminating the agreement with Megastar in May 2008, transferred ownership of these to Megastar.

For more detailed exploration work history of Rio Grande's Kechika properties, the reader is referred to NI 43-101 report by Osmani and Wilkins (2009) and other historical references listed in Section 6.

3.0 Geological Setting

3.1 Regional Geology

The Kechika Properties are located within the Rocky Mountain fold and thrust belt of northeastern British Columbia (Figures 3 and 4). The rocks occurring within this belt are of Paleozoic age and were deposited in miogeoclinal basins. One of the basins in which the Kechika Properties occur is the Kechika Trough, a southeastern extension of the Selwyn Basin. Within this belt, northeast-directed compression in Mesozoic time detached Paleozoic and older sedimentary strata from the cratonic basement and stacked these rocks as a series of southwest dipping imbricated thrust plates (McClay et al. 1989, Price 1986). The Kechika Properties occur along the margin of ancestral North America and represent a depositional environment of clastic and carbonate sedimentary rocks of Late Cambrian to Late Triassic age.

The Kechika Trough is bounded to the west and east by carbonates and shallow water clastic rocks of the Cassiar and MacDonald Platforms, respectively (Taylor and MacKenzie 1970). Rocks of the MacDonald Platform are host to Mississippi Valley type Pb-Zn deposits (MacQueen and Thompson (1978). The Kechika Trough itself is an area underlain by a thick succession of basinal facies clastic and subordinate carbonates rocks deposited during the Palaeozoic and Early Mesozoic. A generalized stratigraphic column for the Kechika Trough is presented in Figure 5. As noted on this Figure, at least three stratigraphic levels within the basinal succession are prospective for sedimentary exhalative (SEDEX) type Zn-Pb-Ag mineralization.

The basinal facies rocks occur in a number of southwest dipping, northeasterly vergent thrust fault panels, which repeat the stratigraphy. The following is a summary of the stratigraphic units present in the general area of the Kechika Trough. These descriptions are extracted mainly from MacIntyre (2005).

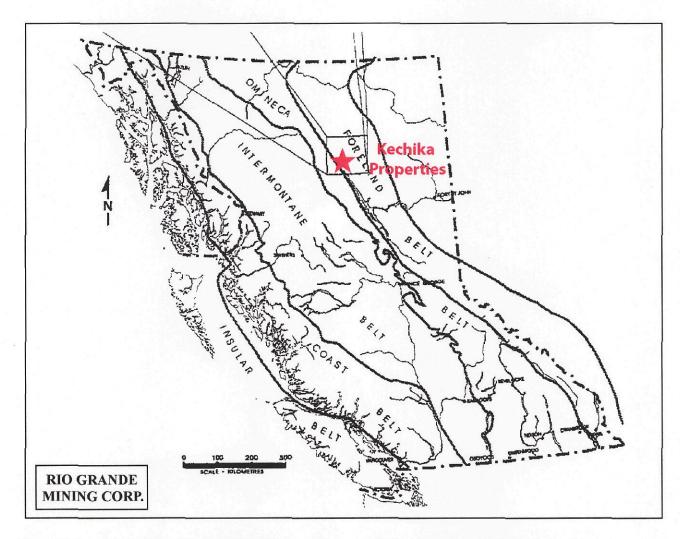


Figure 3. Location of the Rio Grande's Project Area and Tectonic Belts of British Columbia, Source Bulletin 103, Geological Survey of Canada.

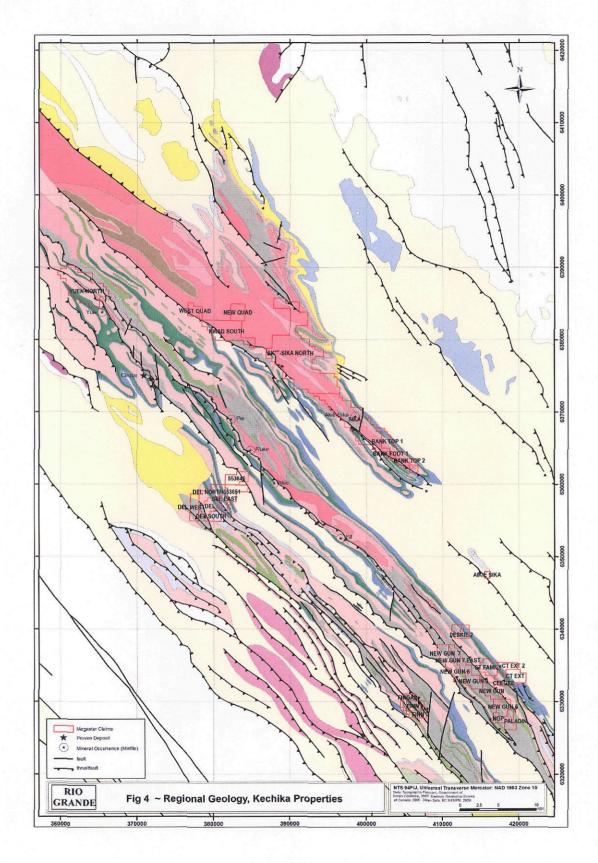


Fig. 4a: Legend for Figure 4



GENERAL STRATIGRAPHY -KECHIKA TROUGH AREA, BC

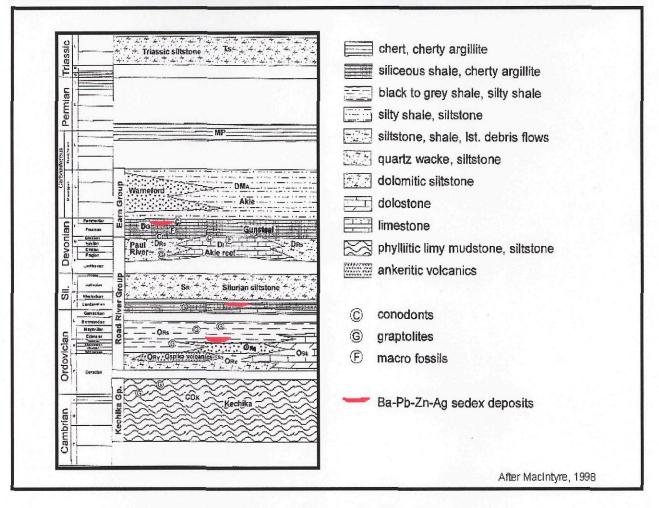


Figure 5. General Stratigraphy – Kechika Trough Area, B.C.

3.1.1 Kechika Group

The oldest rocks exposed in the area of the properties belong to the Kechika Group. Ferri et al. (1999) noted that this stratigraphic unit comprises mainly calcareous argillites and argillites of Late Cambrian to Early Ordovician age. The Kechika Group also includes limestone and rare tuffaceous strata. For example on the Erin property, this assemblage is present along the eastern margin of the Fingal claim and trends roughly northwest.

3.1.2 Road River Group (Ordovician to latest Middle Devonian)

The Road River Group, unconformably overlying the Kechika Group, comprises a succession of calcareous siltstones, shales, limestones and minor volcanic rocks. The unit was previously defined as a Formation of the same name (Taylor et al. 1979; Cecile and Norford 1979). This report uses the revised description of Road River Group recommended by MacIntyre (1998).

3.1.3 Lower Road River Group

The lower (Ordovician) part of the Road River Group includes a lower unit of thickly bedded limestone and thinly bedded limy mudstone which is overlain by black to gray carbonate rich graptolitic shale and mudstone. In other areas within the Kechika Trough, such as the Akie River area, this stratigraphic sequence includes a lower unit of thinly bedded cream, beige and reddish brown-weathering, laminated calcareous siltstone and shale with intercalated limestone turbidites and debris flows (Cecile and Norford 1979). The calcareous siltstones grade up section into a distinctive black shale unit containing abundant Middle to Late Ordovician graptolite fossils.

3.1.4 Ospika Volcanic Rocks (Late Ordovician)

Within the Kechika Trough, Late Ordovician volcanic rocks occur as discontinuous lenses and beds of green mafic flows or microdioritic sills and orange-weathering ankeritic crystal and lapilli tuffs (MacIntyre 2005). These rocks depart from the stratigraphic relationship indicated in Figure 4; they are listed in the BC government database (Massey et al. 2005) with an age range from Middle Ordovician to Middle Devonian in age. However, MacIntyre (2005) notes that (in the Akie River area) the volcanic rocks are interbedded only with the late Early to early Middle Ordovician black shale facies and time-equivalent platformal rocks, within an areal extent parallel to the central axis of the Kechika Trough. Their composition and linear distribution suggest they were erupted along trough-bounding rifts. These rocks have not been documented within or proximal to the Erin, Fin, and Fingal claims.

3.1.5 Silurian Siltstone Unit

The Ordovician graptolitic black shales of the Road River rocks are overlain unconformably by a basal Silurian thin-to-thickly bedded siltstone and variably bioturbidic dolostone beds. A second unconformity (Cecile and Norford 1979) separates the basal Silurian calcareous beds from the overlying tan to orange-brown weathering dolomitic siltstone interbedded with varying proportions of orange-weathering limestone and dolostone.

3.1.6 Upper Road River Group

The upper part of the Road River Group is Lower to Middle Devonian in age and disconformably overlies the Silurian siltstone (MacIntyre 1998). This upper part to the group exhibits considerable lateral variation in facies. It includes the carbonate rocks of the Akie reef and, in several areas, including the Erin property, Lower Devonian marine turbidites comprising interbedded black shale and limestone debris flows with rusty dark grey siltstone to silty shale (ibid.).

3.1.7 Earn Group (Late Devonian to Mississippian)

The contact between the top of the Road River Group and base of the conformably or paraconformably overlying Earn Group is probably diachronous. It is convenient, for the present, to infer that the contact lies at the transition from Givetian to Frasnian. MacIntyre (1998) and Pigage (1986) divided the Earn Group informally into three formations. From oldest to youngest, these are the Gunsteel, Akie, and Warneford formations. Rocks of the Gunsteel and the Akie formations occur on the Akie property (the latter should not be confused with the Akie Reef which is a facies of the Road River Group). Neither the Warneford formation nor rocks younger than Warneford have been identified in the general area of the property and are not described herein.

3.1.8 Gunsteel Formation

The Gunsteel formation is a thick, fairly homogeneous sequence of black, graphitic, generally massive, featureless shale, with a distinctive gunsteel blue weathering. These shales are locally weakly siliceous, with cherty, carbonaceous and silty beds. Angular to subrounded, somewhat flattened and often weakly calcareous clasts occur throughout the unit but appear to increase down section. MacIntyre (1998) suggests these clasts are derived from the crinoidal interbasinal reefs. Small, millimetric barite and calcite nodules often define bedding in otherwise featureless shale. At or near the base of the Gunsteel formation, the shales are richer in silt, more siliceous and, as noted above, contain greater amounts of reef-derived clasts and barite nodules, which decrease up section. The silty shales are thickly to thinly laminated. Pyritic banding with zinc-lead-silver mineralization decreases up section from the base of the Gunsteel formation. MacIntyre (2005) suggested that the pyritic bands are situated closer to the top of the Gunsteel formation. Barite beds with sulphide mineralization (pyrite, sphalerite and galena) are situated at the base of the Gunsteel formation. These beds are locally deformed and vary from massive to laminar. The barite beds are interbedded with black shale layers up to 5 m thick.

3.1.9 Akie Formation

Recessive, thick bedded, non-siliceous, rusty brown to tan weathering, medium grey aluminous shales of probable Late Devonian to Mississippian age conformably overlie Gunsteel rocks. These rocks comprise the informal Akie formation as first defined by Jefferson et al., (1983). The Akie formation correlates, in part, with the Besa River formation (Pelzer 1966) of the MacDonald Platform. These formations were deposited during a major, eastward advancing, marine transgression that occurred in Late Devonian to Mississippian time. The Besa River Formation comprises the youngest rocks mapped within the Erin property (Rhodes, 1985).

3.2 Regional Structure

The geology of the Kechika Trough is typical of the thin-skinned tectonic style of the Rocky Mountain Fold and Thrust Belt (MacIntyre 1998, 2005). Northeast-verging compression caused detachment of Palaeozoic strata from the rigid crystalline basement, partially stacking and also folding the relatively incompetent plates (composed of basinal facies rocks) along a series of imbricate thrust faults.

The structural style changes across the map area from west to east. In the west, imbricate, southwest dipping reverse faults bound asymmetric northeast-verging overturned folds; in the east, outwardly dipping reverse faults bound major synclinoria and truncate folds within overriding anticlinoria. These eastern synclinoria are characterized by large-scale upright folds and preserve the Devonian strata.

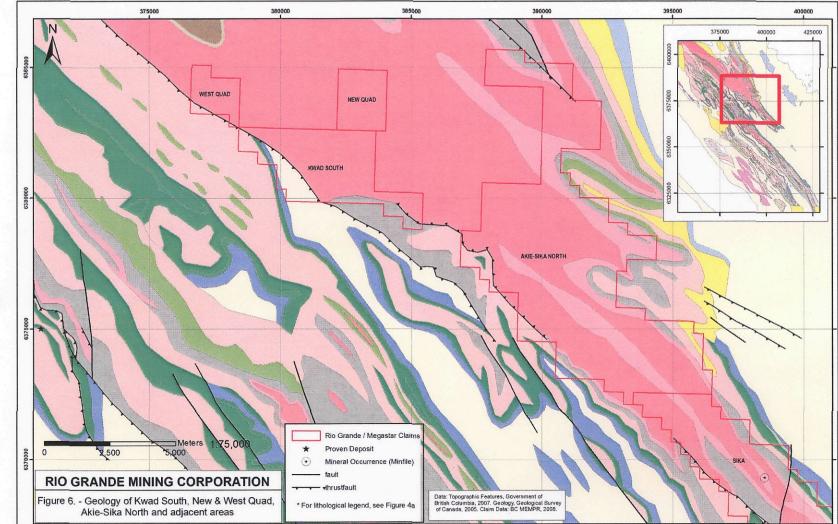
MacIntyre (1998, 2005) suggests that high-angle growth faults bounding the Devonian-Mississippian depositional troughs were reactivated to form major thrust faults during Tertiary compression. He cites the proximity of Palaeozoic rift-style volcanism, fracture-channelled mineralizing fluids, clastic fans and reef margins to the present thrust faults as evidence that these faults were active in Palaeozoic time, albeit with different dynamics.

Pigage (1986) recognised two coaxial phases of deformation at the Cirque deposit, the largest known Cu-Zn deposit within the Kechika Trough. The earlier ubiquitous (D1) phase includes northeast-verging tight asymmetric folds with gently dipping southwest limbs and steep to overturned northeast limbs; the latter are often offset by high angle reverse faults, juxtaposing Ordovician and Silurian strata against Devonian Gunsteel shales. The shales typically have a penetrative slaty cleavage that is axial planar to the S1 folds. At the Cirque deposit, a second (D2) phase of deformation folded the early slaty cleavage and developed a penetrative crenulation cleavage, axial planar to these late, open to upright, northeast-verging folds (Pigage 1986).

North to northeast trending high angle faults, some with a strike-slip component, is interpreted as synthetic shears related to an oblique compressional stress regime of inferred Tertiary age (MacIntyre 2005).

3.3 Property Geology

The surveyed and adjacent claims underlain by faulted and folded sedimentary rocks, consisting primarily of siltstones and shales of Cambrian to Silurian in age (Vanwermeskerken and Heft 2008a,b,c). The prospective Gunsteel Formation is exposed throughout much of the Akie-Sika North and Sika claim blocks (Figure 6). In the southeastern reaches of the claims, the entire easterly dipping stratigraphic sequence has been overturned, with clastic sedimentary rocks younging downwards from Ordovician to Devonian age. A strong base metal anomaly occurs within this overturned sequence (Vanwermeskerken and Heft 2008a,b,c).



4.0 Aeromagnetic Survey

MPX Geophysics Ltd. of Markham (Ontario) had flown a helicopter-borne magnetic survey from March 23 to April 1, 2010 over four claim blocks (Kwad South, New Quad, West Quad and Akie-Sika North) of the 11 Kechika properties.

A total of 1,199 line-kilometres or 99 square kilometres of data were acquired on these four claim blocks using high sensitivity cesium magnetometer (Scintrex CS-3) survey covering more than 7,503 hectares. The survey lines were flown at a 100-metre spacing and tie lines at a separation of 1000 metres. The nominal mean terrain clearance of 70 metres (40 meters for the magnetic sensor) was maintaind during the surveying. A GPS navigation system was employed to ensure accurate positioning of the geophysical data with respect to the topographic base maps. From the collected raw data, following products were produced: flight path map, digital elevation model, total magnetic field and calculated first vertical derivative maps. The details on equipment specifications, procedures, cost of airborne survey and related information are given in the report and map products prepared in April 2010 by MPX Geophysics Ltd. The report and map products accompanies this report (Appendix 1).

5.0 Conclusions and Recommendations

The purpose of this survey was to collect and utilized the data as an exploration tool for locating faults and structurally-controlled lithologies such as Gunsteel Formation (black shale), which is host to the majority of known SEDEX-type lead-zinc-silver deposits and prospects within the Kechika Basin. Similar airborne magnetic survey was also flown in 2008 by the Company on its Yuen North property, located approximately 10 km northwest of the current area, and the results of the survey were found useful in locating either new structures and/or extending the known regional faults, in particular, those bounding the Gunsteel Formation (Figure 7). However, these structures and Gunsteel Formation has yet to be ground-truthed for potentially SEDEX-type base metal mineralization. The 2010 survey has also shown relative good correlation between the known geology and magnetic signatures in the area particularly onto the Akie-Sika North claims where folded and fault-bounded Gunsteel Formation showing good correspondence with the airborne magnetic data (Figure 8).

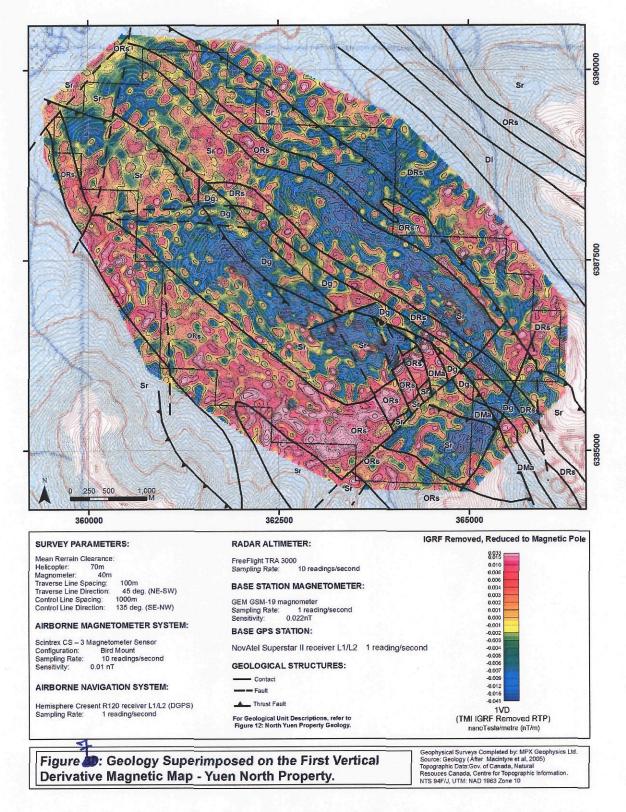
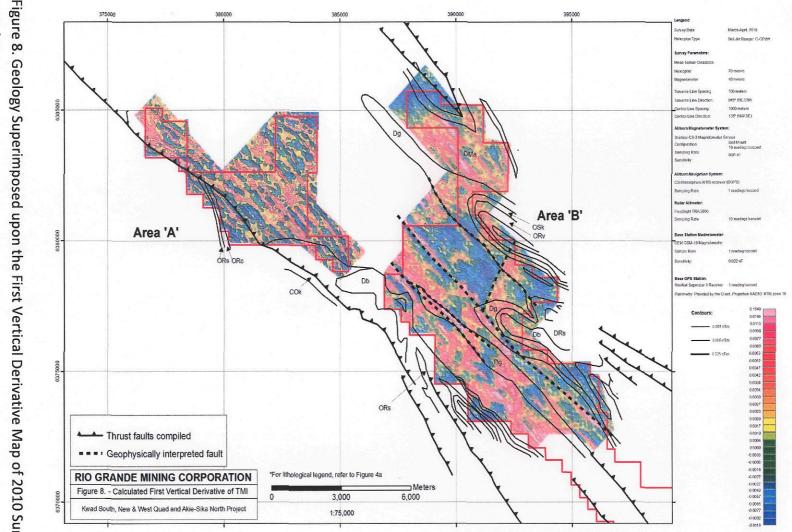


Figure 7. Geology Superimposed upon the First Vertical Derivative Magnetic Map – Yuen North Property.



A and B. Figure 8. Geology Superimposed upon the First Vertical Derivative Map of 2010 Surveyed areas

20

In summary, we now have a target lithology, the GunsteelFormation, both on the Yuen North and Akie-Sika North claims as a result of these surveys which warrant follow-up by groundtruthing methods such as prospecting, mapping, soil and lithogeochemal surveying.

Kechika Project 2010 Statement of Expenditures

Exploration Work type	Comment	Days		
Personnel		Days	Rate	Subtotal
Project Manager (Senor geologist)		11.8	\$800.00	\$9,468.75
Report Preparation	Project Manager (Senor geologist)	11.8	\$800.00	\$9,468.75
				\$9,468.75
Airborne Geophysics Survey	Total Distance (Kilometers)		Cost/Km	Subtotal
	1,199		\$168.05	\$201,489.81
				\$201,489.81
TOTAL Expenditures				\$210,958.56

6.0 References

Cecile, M.P. and Norford, B.S.

1979: Basin to platform transition, Lower Paleozoic strata of Ware and Trutch map areas, northeastern British Columbia; Current Research, Part A, Geological Survey of Canada, Paper 79-1A, p. 219.226.

Ferri, F., Rees, C., Nelson, J. and Legun, A.

1999: Geology and mineral deposits of the northern Kechika Trough between Gataga River and the 60th parallel, B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 107, 122p.

Hodgson, G.D.

1979: Wil Claims, Omineca Mining Division, Assessment report 7374.

MacIntyre, D.G.

1998: Geology, geochemistry and mineral deposits of the Akie River area, northeast British Columbia; British Columbia Ministry of Energy and Mines, Geological Survey Branch, Bulletin 103, 91p.

MacQueen, R.W. and Thompson, R.I.

1978: Carbonate-hosted lead-zinc occurrences in northeastern British Columbia with emphasis on the Robb Lake deposit, Canadian Journal of Earth Sciences, v. 15, p. 1737-1762.

Massey, N.W.D., MacIntyre, D.G., Desjardin, P.J. and Cooney, R.T.

2005: Digital geology map of British Columbia, B.C. Ministry of Energy and Mines, Open File 2005-2, DVD.

Murrell, M.R.

1981a: Geological and geochemical report on the Aikie-Sika Group, Akie River area; Assessment Report 9911 – Part I, prepared for Cominco Ltd., 6p. Accompanied with Appendices.

1981b: Geological and geochemical report on the Aikie-Sika Group, Akie River area; Assessment Report 9911 - Part II, prepared for Cominco Ltd., 4p. Accompanied with Appendices.

Osmani, I.A. and Wilkins, A.

2009: NI 43-101 technical report on the Kechika properties (Akie-Sika, Sika, Kwad, Bank, Akie-Sika North, CT Ext, Del, Erin, New Gun-Pesika, Yuen North and Peskie claim groups), Omineca Mining Division, Northeast British Columbia; posted on SEDAR.COM, 65p.

Pigage, L.C.

1986: Geology of the Cirque barite-zinc-lead-silver deposits, northeastern British Columbia; in Mineral Deposits of Northern Cordillera, J. Morin (editor), Canadian Institute of Mining and Metallurgy, Special Volume 37, p. 71-86.

Price, R.A.

1986: The southeastern Canadian Cordillera: thrust faulting, tectonic wedging and delamination of the lithosphere; Journal of Structural Geology, v. 9, p. 239-254.

Rhodes, D.

1985: Geological and geochemical report on the Del Group; Omenica Mining Division, British Columbia; Assessment Report 14,177, prepared for Cominco Ltd., 5p. Accompanied with Appendices.

1985a: Geological and geochemical report on the ERN Group, Pesika Creek area; Omenica Mining Division, British Columbia; Assessment Report 14,012, prepared for Cominco Ltd., 6p. Accompanied with Appendices.

Taylor, G.C., Cecile, M.P., Jefferson, C.W. and Norford, B.S.

1979: Stratigraphy of Ware (east-half) map area, northeastern British Columbia; Current Research, Part A, Geological Survey of Canada, Paper 79-1A, p. 227-231.

Vanwermeskerken, M.

2008: Preliminary summary report on the 2007 Megastar claims exploration program in the Kechika Trough (Akie-Sika, Akie-Sika North, CT Ext, Del, Ern, New gun-Pesika, Sika and Yuen claims); prepared for Megastar Development Corporation, Internal Report, 52p.

Vanwermeskerken, M. and Heft, K.

2008a: 2007 assessment report on the Aikie-Sika property; Omineca Mining Division, northeast British Columbia, prepared for Mantle Resources Inc., 28p. Accompanied with Appendices.

2008b: 2007 assessment report on the New Gun Pesika property; Omineca Mining Division, northeast British Columbia, prepared for Mantle Resources Inc., 30p. Accompanied with Appendices.

2008c: 2007 assessment report on the Sika-Kwad-Bank property; Omineca Mining Division, northeast British Columbia, prepared for Mantle Resources Inc., 23p. Accompanied with Appendices.

7.0 Statements of Qualifications

I, Ikramuddin (Ike) Osmani of 33-9088 Halston Court, Burnaby, British Columbia, do hereby certify that:

- 1. I am a graduate of University of Lucknow, Lucknow, India, with a Bachelor of Science Degree in Geology (1971).
- 2. I hold a Master of Science Degree in Geology from Aligarh Muslim University, Aligarh, India (1973).
- 3. I hold a Master of Science degree in Geology with major in Geophysics from University of Windsor, Ontario, Canada (1982).
- 4. I have been practicing my profession since 1981 both as research geoscientist and mapping geologist with government surveys and, as an exploration geologist with major/junior exploration and mining companies in Canada and internationally.
- 5. I am a member of the Association of Professional Engineers and Geoscientists of the Province Of Manitoba (#22870); a member of the Association of Professional Geoscientists of Ontario (#0609); a member of the Association of Professional Engineers and Geoscientists of British Columbia (#32050); a member of Prospectors and Developers Association of Canada; and a member of the Association of Mineral Exploration of British Columbia.

Dated this day, the 6 of August 2010, at Vancouver, British Columbia

Ikramuddin (Ike) Osmani, MSc., P.Geo.

APPENDIX 1

Geophysical Report and Maps: Kechika Project