


Ministry of Energy and Mines  
BC Geological Survey

**ASSESSMENT REPORT  
TITLE PAGE AND SUMMARY**

<b>TITLE OF REPORT [type of survey(s)]</b>		<b>TOTAL COST</b>
2011 Geological Mapping Report on the Angus Property		18,167.00
AUTHOR(S) John DeGrace (P.Eng/P.Geo) Bethany Jacobson (GIT)	SIGNATURE(S) 	
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)	YEAR OF WORK 2011	
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) 5003887		
PROPERTY NAME ANGUS		
CLAIM NAME(S) (on which work was done) 604334, 604335, 828882, 828942, 828982		
COMMODITIES SOUGHT		
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN		
MINING DIVISION Cariboo NTS		
LATITUDE 54 ° 23 ' 49 " LONGITUDE 122 ° 25 ' 23 " (at centre of work)		
OWNER(S)		
1) Stikine Energy Corp 2)		
MAILING ADDRESS		
490 - 1122 Mainland St Vancouver BC V6B 5L1		
OPERATOR(S) [who paid for the work]		
1) 2)		
MAILING ADDRESS		
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):		
Sandstone, Quartz arenite, Conglomerate		
120/45 S		
Mirsinchinka Group		
REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS		

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
<b>GEOLOGICAL (scale, area)</b>			
Ground, mapping _____	170 ha	604334, 604335, 828882, 828942, 828982	18,162.00
Photo interpretation _____			
<b>GEOPHYSICAL (line-kilometres)</b>			
Ground			
Magnetic _____			
Electromagnetic _____			
Induced Polarization _____			
Radiometric _____			
Seismic _____			
Other _____			
Airborne _____			
<b>GEOCHEMICAL</b>			
(number of samples analysed for ...)			
Soil _____			
Silt _____			
Rock _____			
Other _____			
<b>DRILLING</b>			
(total metres; number of holes, size)			
Core _____			
Non-core _____			
<b>RELATED TECHNICAL</b>			
Sampling/assaying _____			
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
<b>PROSPECTING (scale, area)</b> _____			
<b>PREPARATORY/PHYSICAL</b>			
Line/grid (kilometres) _____			
Topographic/Photogrammetric			
(scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
<b>TOTAL COST</b>			18,162.00

2011  
GEOLOGICAL MAPPING REPORT  
ON THE  
ANGUS PROPERTY

CARIBOO MINING DIVISION, BRITISH COLUMBIA

BCGS MAPS  
LATITUDE 54.396908°N & LONGITUDE 122.423091°W  
STATEMENT OF WORK EVENT: 5003887

Prepared for: Stikine Energy Corp  
490 – 1122 Mainland Street  
Vancouver, BC Canada V6B 5L1

Prepared by: John Degrace, PEng/PGeo,  
and Bethany Jacobson, GIT  
Plateau Minerals Corp

Date: December 4, 2011

BC Geological Survey  
Assessment Report  
32549

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## **1 SUMMARY**

Stikine Energy Corp (Stikine) recognizes the need for a northeast British Columbia source of frac sand for the region's developing unconventional gas exploration and production sector. Frac sand is a fine-grained pure quartz material that is used in the hydraulic fracturing process. Hydraulic fracturing (fracking) was developed in the 1940s as a method of improving hydrocarbon flow from near-depleted hydrocarbon deposits. In the 1970s the process was further improved and became an important procedure in the exploitation of unconventional, shale-hosted oil and gas accumulations. Fracking involves the pumping of large quantities of a mixture of water (commonly), and quartz sand with other chemicals, together referred-to as the "proppant," under high pressure into a completed gas well. This expands existing (or creates new) cracks in the rock into which it is being pumped. Once the pressure is released, the sand grains remain lodged in the cracks, improve overall permeability in the rock and enhance hydrocarbon flow. The economics of most current gas projects are in part determined by the success of hydraulic fracturing.

Stikine completed an initial reconnaissance of the Angus property and identified a northwest-trending belt of principally medium- to coarse-grained quartz arenite that has been assigned to the Upper Proterozoic Misinchinka Group. The favourable units have a strike length of more than 3.3 km and a thickness of more than 700 m. Initial observations and positive results from preliminary testing of samples from the property determined it to be a priority for focused follow-up exploration. The 2010 exploration program comprised helicopter-supported reconnaissance and was conducted to verify the geographic extent of the Misinchinka quartzites and quartz arenites. Representative samples for petrographic description, and as appropriate for analysis and thin-sectioning, were collected from accessible exposures.

Follow-up in 2011 included diamond drilling, detailed mapping and thin sectioning for petrographic description. A bulk sample was collecting for testing in Stikine's Abbotsford pilot plant, and results are pending. Also pending is the outcome of particle size distribution analyses on 2011 thin sections. This report is restricted to the mapping program itself.

## **2 INTRODUCTION**

This summary report has been prepared at the request of Stikine Energy Corp. (Stikine) to summarize results from a mapping program conducted in 2011 on the Angus property. The fieldwork was conducted by John Degrace, PEng/PGeo, and Bethany Jacobson, GIT, of Plateau Minerals Corp.

Staking and initial reconnaissance of the property took place in 2009. Limited helicopter-supported traverses conducted in 2010 outlined a sizeable area of quartz pure sandstone whose characteristics, after bench scale processing, were found to conform to the requirements of frac sand as defined by the American Petroleum Institute (API) and International Organization for Standards (ISO). In 2011 a series of traverses were conducted to record outcrops and geologic structure, to understand better the nature of the deposit.

### **2.1 LOCATION AND ACCESS**

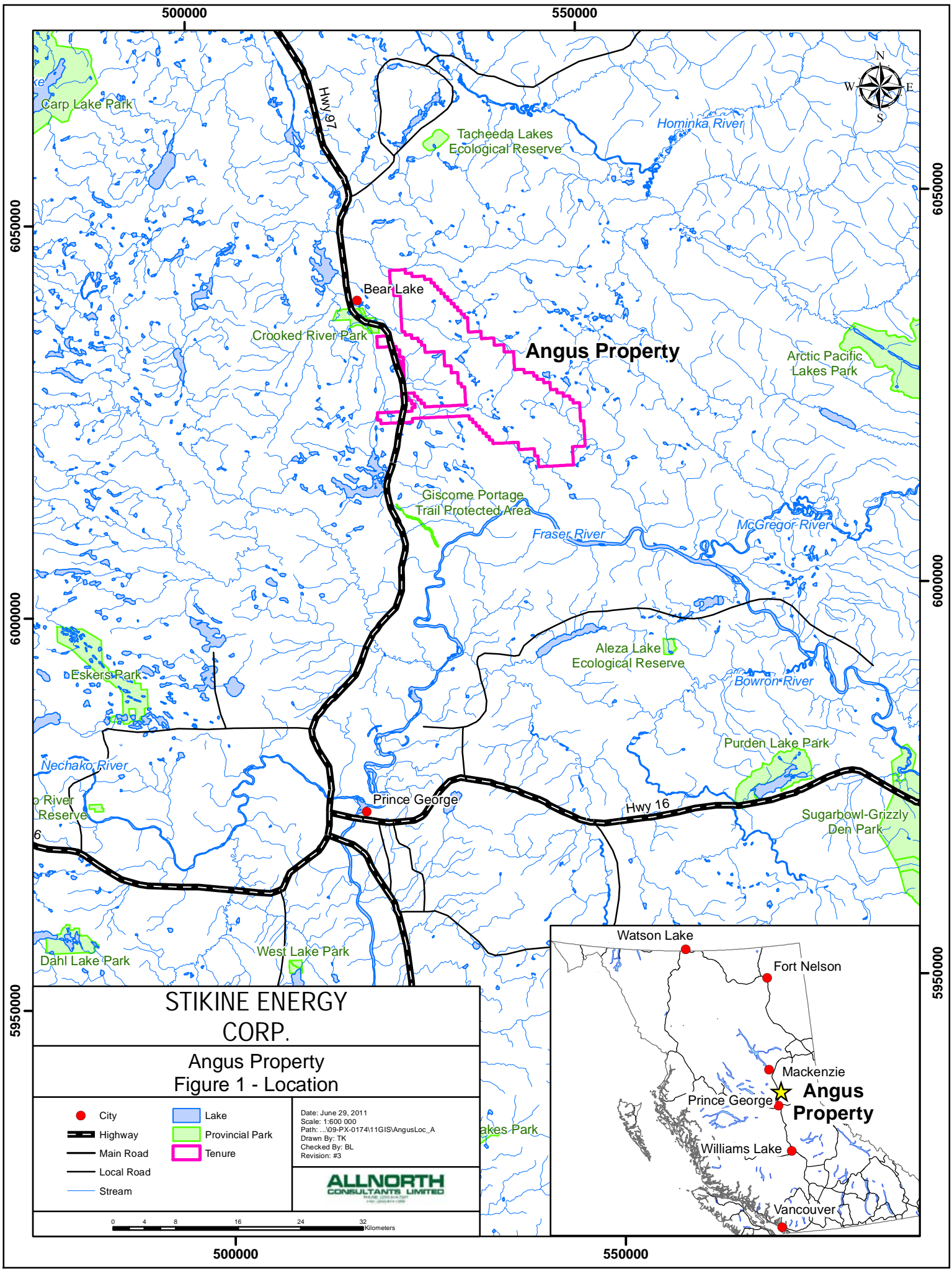
The Angus property encompasses Mount Averil in central British Columbia and is centered 19 km southeast of the community of Bear Lake in the Cariboo Mining Division. The property is approximately one-half hour by air north of Prince George (Figure 1), representing a distance of 59 km. It is centered at Latitude 54.396908° N and Longitude 122.423091° W.

Road access to the property is provided by Highway 97 and by the partly-decommissioned Darby Forest Service Road (FSR) which extends from Highway 97 eastwards for 19 km to the property. Alternative access to the Darby FSR, which is partly flooded during spring freshet, is via a gravel road which follows a major power line south from the dormant Winton Global softwood lumber mill near Bear Lake.

### **2.2 PHYSIOGRAPHY AND CLIMATE**

The Angus property lies in the Interior Plateau physiographic region. Elevations within the claim group range from about 1095 to 1310 meters. The Angus property covers a sparsely-treed subalpine ridge and well-forested lower elevation valleys. Vegetation consists of mature stands of hemlock, spruce and pine with local areas of thick underbrush, including alder and devil's club.

The main physiographic feature on the property is Mount Averil, which is the high point of a main northwest-trending ridge. Mount Averil ridge is comprised of inclined slabby rock outcrops, undulating ground with broken outcrop and sections of felsenmeer. Climate on the property is similar to that recorded for the town of Mackenzie, located about 60 km north of Bear Lake. Mackenzie experiences average daily maximum temperatures of -9.8° C for January, and 21.7° C for July. Average daily minimum temperatures for the same two months are -18.7° C and 8° C. Average annual rainfall and snowfall for Mackenzie are 37.5 cm and 337.1 cm respectively.

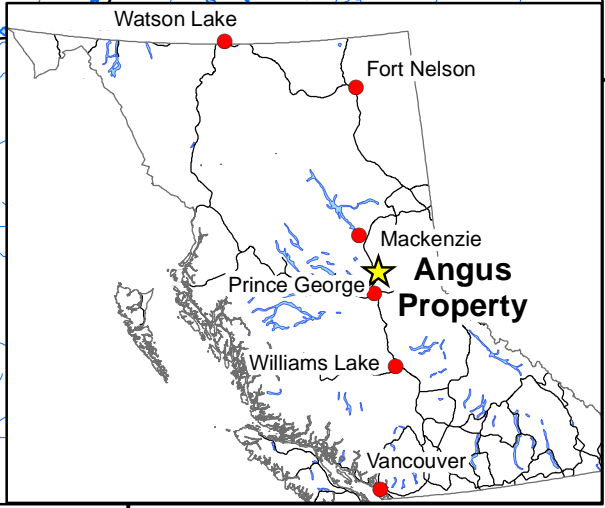


**STIKINE ENERGY  
CORP.**

**Angus Property  
Figure 1 - Location**

- City
- Highway
- Main Road
- Local Road
- Stream
- Lake
- Provincial Park
- Tenure

Date: June 29, 2011  
 Scale: 1:600 000  
 Path: ...09-PX-0174\11GIS\AngusLoc\_A  
 Drawn By: TK  
 Checked By: BL  
 Revision: #3



### **2.3 MINERAL TENURE OWNERSHIP AND STATUS**

The Angus property consists of 57 mineral claims that cover 25,379 ha of land (Table 1; Figure 2). All of the mineral tenure has been acquired by staking and are 100%-owned by Stikine. The claims are not subject to any underlying interests. The Angus property is not encumbered by any provincial or national parks, or other protected areas.

### **2.4 EXPLORATION HISTORY**

Prior to Stikine's interest, the Angus property had not been the subject of any recorded mineral exploration, and no historical record of mineral exploration exists for the general area of interest.

The Angus property was staked in 2009 to cover a sequence of Upper Proterozoic Misinchinka Group sedimentary rocks that were suspected to include quartz arenite (quartz-rich sandstone) or quartzite (Lane, 2010). These quartz-rich lithologies are regarded to be potential economic sources of high-value frac sand.

In 2010 an exploration program comprised of helicopter-supported reconnaissance was conducted to verify the geographic extent of the Misinchinka quartzites and quartz arenites, and to collect representative samples for analysis and thin-sectioning from accessible exposures.

## **3 REGIONAL GEOLOGY**

The mineral tenure that comprises the Angus project covers parts of the Cariboo/Cassiar terrane and the adjoining North American plate. In the project area, the contact between the two geologic units is marked by a northwest-trending fault that brings Upper Proterozoic to Cambrian Misinchinka, Gog, Boulder Creek and Cariboo groups into contact with Ordovician to Silurian Monkman Quartzite (and locally the Cambrian to Ordovician Kechika Group).

The regional geology of the Angus project area is shown in Figure 3 (Struik, 1994; Massey, 2005). The oldest rocks in the area are metasedimentary and clastic sedimentary rocks of the Upper Proterozoic to Cambrian Misinchinka, Gog, Boulder Creek and Cariboo groups. These rocks extend to the northwest from the southeast corner of the map area. To the south and west of the property is a fault-bound block of metamorphic rocks that are assigned to the Cretaceous to Paleogene Wolverine Metamorphic Complex. Further west are basaltic volcanic rocks of the Carboniferous to Permian Slide Mountain Complex and Triassic to Jurassic Takla Group.



**Table 1: Angus Property – List of Mineral Claims**

Tenure Number	Claim Name	Owner	Tenure Type	Tenure Sub Type	Map Number	Issue Date	Good To Date	Status	Area (ha)
604328		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	470.03
604329		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	451.30
604330		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	451.39
604331		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	451.49
604332		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	469.89
604333		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	469.86
604334		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	451.62
604335	ANGUS	145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	470.50
604336		145114 (100%)	Mineral	Claim	093J	2009/may/11	2014/oct/30	GOOD	432.69
828842		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	471.03
828862		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	395.54
828882		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	320.09
828942		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	470.81
828982		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	470.64
829002		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	225.81
829022		145114 (100%)	Mineral	Claim	093J	2010/jul/27	2014/oct/30	GOOD	469.83
833499		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	451.95
833500		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	470.90
833501		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	471.03
833502		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	471.19
833504		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	471.21
833505		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	452.61
833506		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	469.71
833509		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	469.63
833510		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	469.52
833511		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	469.40
833512		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	450.71
833513		145114 (100%)	Mineral	Claim	093J	2010/sep/14	2014/oct/30	GOOD	469.34
834389	BOB	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	469.88
834391	BOB3	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.23
834392	BOB4	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.05
834394	BOB5	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	452.33
834395	BOB6	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	452.46
834396	BOB7	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	452.36
834397	BOB8	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.34
834398	BOB9	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	452.65
834399	BOB10	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.52
834405	BOB11	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	452.87
834406	BOB12	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.72
834407	BOB13	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.49
834408	BOB14	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.47
834409	BOB15	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.40
834410	BOB16	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.07
834411	BOB17	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.54
834412	BOB18	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.69
834413	BOB19	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	470.84
834415	BOB20	145114 (100%)	Mineral	Claim	093J	2010/sep/27	2014/oct/30	GOOD	471.02
836476		145114 (100%)	Mineral	Claim	093J	2010/oct/22	2014/oct/30	GOOD	301.44
845903		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	471.07
845904		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	452.22
845905		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	471.12
845906		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	131.91
845908		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	452.30
845909		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	471.26
845910		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	452.57
845922		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	470.72
845962		145114 (100%)	Mineral	Claim	093J	2011/feb/09	2014/oct/30	GOOD	319.70
Total Claims: 57							Total Hectares: 25,378.98		

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# STIKINE ENERGY CORP.

## Angus Property Figure 2 - Mineral Claims

— Road	— Stream
- - - Limited Use Road	— Contour
— Pipeline	■ Lake
— Railway	■ Wetland
— Transmission Line	■ Tenure
	--- Study Area

50k Mapsheets: 93J01,02,07,08,09,10  
 Date: 10/31/2011  
 Projection: UTM10N, NAD83  
 Scale: 1:150 000  
 Path: ...09-PX-0174\1\GIS\AngusClaim\_A  
 Drawn By: TK  
 Checked By: BL  
 Revision: #5



6040000

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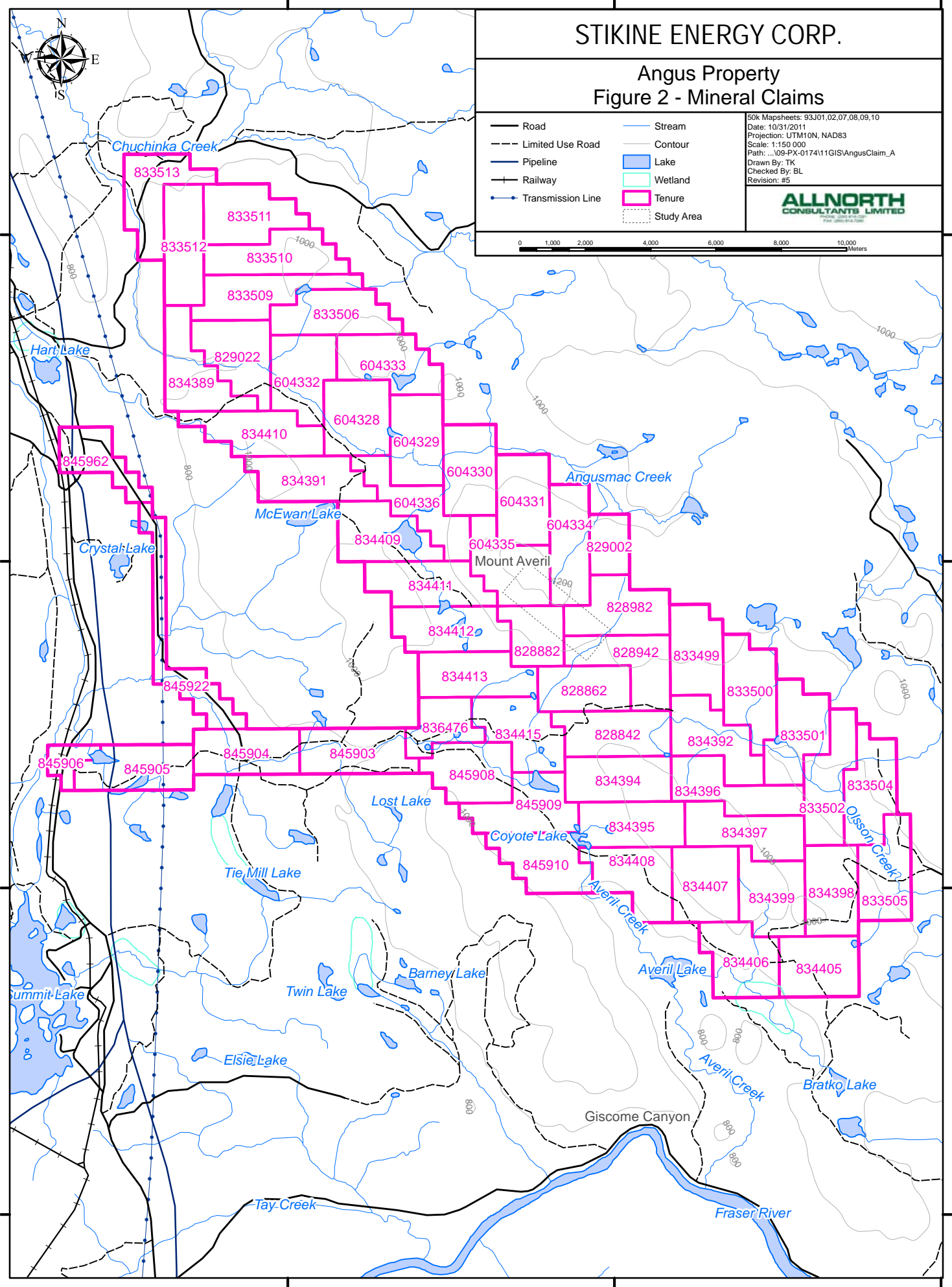
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North of the property, and flanking the Misinchinka Group, are quartzite and quartz-rich clastic rocks of the Ordovician to Silurian Monkman Quartzite, and limestone and associated limy sediments of the Cambrian to Ordovician Kechika Group. Further north, numerous northwest-trending faults, and eastward-directed thrust faults, have generated several structural panels that repeat Ordovician through Triassic stratigraphy.

#### **4 PROPERTY GEOLOGY**

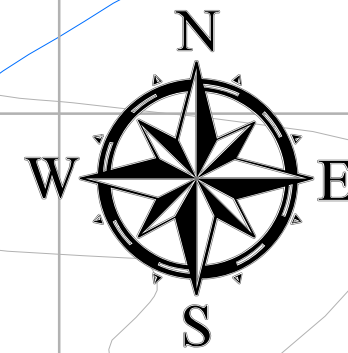
Provincial government geological maps indicate that the Angus property is underlain principally by phyllite, schist, quartzite, quartz arenite and clastic sedimentary rocks that are assigned to the Upper Proterozoic to Cambrian Misinchinka, Gog and Boulder Creek groups (Figure 4).

In fact, the Mount Averil ridge area itself is underlain almost entirely by quartzite and quartz arenite of the Misinchinka Group. These sedimentary rocks strike about 120 degrees and dip variably to the south at about 045 degrees. The monocline has been modified locally by very low-amplitude, long-wavelength F2 folds, represented locally by small parasitic folds (Plate 1).

The central part of the property, including the top of Mount Averil, is comprised principally of slabby outcrop, blocky sub-outcrop and felsenmeer of quartzite and quartz arenite. Within the quartz arenite unit, a persistent quartz pebble conglomerate bed, at least three metres thick, serves as a marker unit along the entire strike length of the exposed deposit (Plate 2). The persistence and homogeneity of the sedimentary beds along strike suggests a littoral environment of deposition for this arenite deposit. Cross-bedding is seen rarely, and may indicate the location of intermittent channels between baymouth bars. Jointing is pervasive; and older joints are closed, having been healed by quartz (Plate 3).

Petrographic examination of samples collected in 2010 is recorded in Lane and DeGrace (2010). Generally, the Misinchinka Group in the study area consists of a fine- to medium-grained subangular to subrounded quartz sandstone and quartzite, with rare detrital zircons and lithic clasts. Generally, larger grains are more rounded.

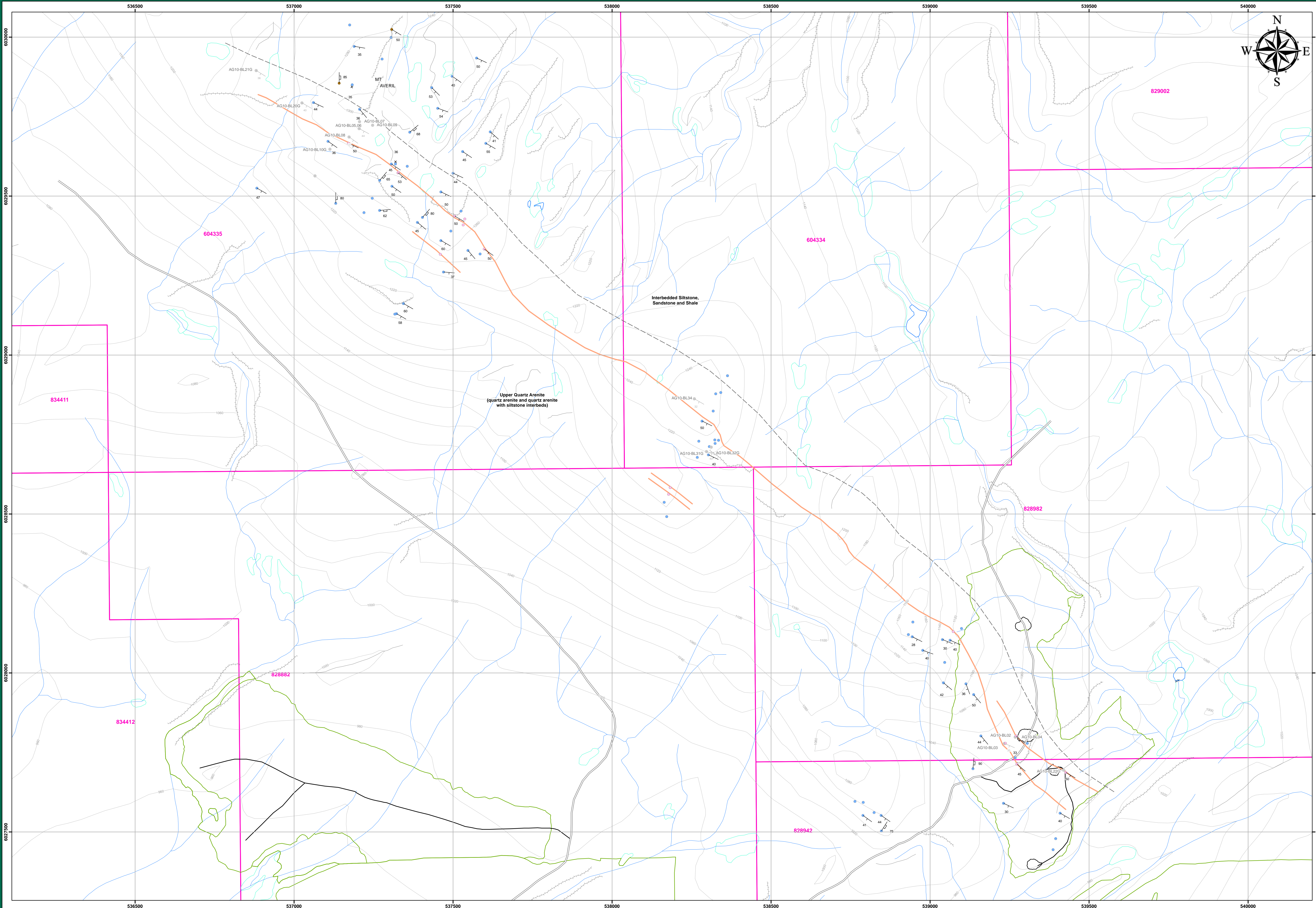
Limestone, marble and shale of the Cambrian to Ordovician Kechika Group occur in the southern part of the property and are in fault contact with the older rocks. The northern edge of the property is underlain by quartzite, quartz arenite and clastic sedimentary rocks of the Ordovician to Silurian Monkman Quartzite. Metamorphic rocks assigned to the Wolverine Metamorphic Complex occupy the western extremities of the property.



- Legend**
- Bedding
  - x Fold Axis
  - Jointing
  - Quartz Arenite Outcrop - 2010
  - Quartz Arenite
  - Quartz Pebble Conglomerate
  - Shaley Sandstone
  - Surface Trace of Quartz Pebble Conglomerate
  - Gradational Contact
  - Planned Road Rehabilitation
  - Road
  - Limited Use Road / Trail
  - Cut Block
  - Log Landing
  - Cliff or Terrain Dropoff - Definite
  - Esker
  - Ridge - Definite
  - Lake
  - Stream
  - Beaver Dam
  - Swamp
  - Contour
  - Mineral Tenure



20k Mapsheets: 093, 038, 039, 048, 049  
 Date: 12/2/2011  
 Projection: NAD 1983 UTM Zone 10N  
 Scale: 1:5,000  
 Author: Switkowski  
 Last Modified By: Switkowski  
 Checked By: BL  
 Revision #:



**Plate 1: Parasitic F2 fold modifying the regional Misinchinka Group monocline**



**Plate 2: Conglomerate unit on Angus Ridge. Note subrounded clasts, and presence of rare lithic fragments**



**Plate 3: Early joint set healed by quartz**



## **5 MINERALIZATION AND GEOLOGICAL MODEL**

The Angus property covers a sequence of Upper Proterozoic Misinchinka Group sedimentary rocks that include high-quartz arenite (sandstone) and quartzite. These quartz-rich lithologies are very persistent along strike, making them potential economic sources, after processing, frac sand.

## **6 2011 EXPLORATION PROGRAM**

Exploration in 2011 consisted of geological mapping to understand better the potential of the tenured area for frac sand. The area of more detailed study covers 170 hectares in the approximate centre of the claim group on mineral tenures 604334, 604335, 828882, 828942 and 828982.

A total of six traverses were conducted in June, 2011, to map the rock exposures as completely as possible given time constraints. Attitudes were measured where possible and samples collected as appropriate. Location control was by handheld GPS unit.

## **7 RESULTS**

Whole rock and trace element analyses were completed on three sets of samples that were collected in 2010 and 2011. The two sets of samples collected in 2011 were from related work programs on the property, but are not discussed in this report, which is restricted to the mapping program.

The 15 bedrock samples collected in 2010 all came from exposures of quartz arenite and provide an estimate of the geochemical characteristics of that unit over the length of the area mapped. The resulting analyses showed consistency over the study area, with silica (SiO<sub>2</sub>) contents ranging between 94.80-98.82% (average: 96.69% SiO<sub>2</sub>), alumina (Al<sub>2</sub>O<sub>3</sub>) ranging between 0.21-2.61% (average: 1.25% Al<sub>2</sub>O<sub>3</sub>), iron oxide (Fe<sub>2</sub>O<sub>3</sub>) ranging between 0.34-1.34% (average: 0.66% Fe<sub>2</sub>O<sub>3</sub>) and potassium (K<sub>2</sub>O) ranging between 0.06-0.82% (average: 0.39% K<sub>2</sub>O).

Total sulphur is typically less than detection (<0.02%) and there are no highly elevated levels of trace elements. Zirconium (14.6 – 513.2 ppm) and barium (3 – 718 ppm) are the two most elevated trace elements. The modestly elevated levels of zirconium are explained by the presence of detrital grains of zircon have been identified in thin section as rare constituents of the quartz arenite. No barite minerals have been identified in thin section, but the weakly elevated levels of barium may be associated with locally identified carbonate matrix.

## **8 INTERPRETATION AND CONCLUSIONS**

In 2011, outcrop mapping was completed, encompassing approximately 170 ha in the central part of the Angus property. The study area is characterized by broken bedrock, blocky sub-outcrop and felsensmeer of (principally) quartz arenite of the Upper Proterozoic to Cambrian Misinchinka Group.

The stratigraphic section is very persistent along strike and extends beyond the limit of the study area to the northwest. It forms a northwest-trending, southwest-dipping monocline that measures at least 3300 m along strike, and is up to 1 km in apparent thickness as measure across strike as exposed. This translates into a stratigraphic thickness of at least 700m. It includes occasional thin lenses of pebble conglomerate, coarse sandstone, and siltstone and, towards its base, a very persistent 3+m thick quartz pebble conglomerate bed.

Subject to the outcomes of pilot plant testing by Stikine, the quartz sandstone and quartzite unit underlying Angus Ridge constitutes a very large, well-exposed and readily accessible frac sand resource.

## **9 RECOMMENDATIONS**

If, based in these results, the diamond drilling outcomes, and pilot plant studies, Stikine determines that development of the deposit is warranted, then very detailed mapping of the proposed initial quarry area, both before and after overburden stripping, is warranted.



**10 ITEMIZED COST STATEMENT**

<b>ANGUS - 2011 Outcrop Mapping Expenditures</b>					
<b>Personnel (Name) / Position</b>	<b>Field Days</b>	<b>Days</b>	<b>Rate</b>	<b>Subtotal</b>	
B Lane, Geologist	May 23/11, June 2/11	1.5	\$750.00	\$1,125.00	
J DeGrace, Peng/Pgeo	June 2, 6, 8, 14, 16-17/11	6	\$650.00	\$3,900.00	
B Jacobson, GIT	June 6, 8, 14, 16-17/11	5	\$350.00	\$1,750.00	
				\$6,775.00	\$6,775.00
<b>Office Studies</b>					
		<b>Days</b>	<b>Rate</b>	<b>Subtotal</b>	
B Lane	Project Preparation	0.75	\$750.00	\$562.50	
Allnorth Consultants	Map Preparation	1	\$560.00	\$560.00	
				\$1,122.50	\$1,122.50
<b>Geochemical Surveying</b>					
	<b>Number of Samples</b>	<b>No.</b>	<b>Rate</b>	<b>Subtotal</b>	
<b>Other Operations</b>					
		<b>Units</b>	<b>Rate</b>	<b>Subtotal</b>	
Report Preparation	Plateau Minerals Corp.	1.5	750.00	\$1,125.00	
Maps for Reports	Allnoth Consultants Ltd	1	817.50	\$817.50	
				\$1,942.50	\$1,942.50
<b>Transportation</b>					
		<b>Units</b>	<b>Rate</b>	<b>Subtotal</b>	
Fuel for Vehicles	One 4x4 Pickup	6	\$95.00	\$570.00	
Kilometre Charges – Vehicles	One 4x4 Pickup	1,440	\$0.65	\$936.00	
				\$1,506.00	\$1,506.00
<b>Food (per diem)</b>					
		<b>Units</b>	<b>Rate</b>	<b>Subtotal</b>	
Twelve mandays		12	\$20.00	\$240.00	
				\$240.00	\$240.00
<b>Helicopter</b>					
		<b>Units</b>	<b>Rate</b>	<b>Subtotal</b>	
Hours Flown For Angus Project	Interior Helicopters	5.2	\$1,205.00	\$6,266.00	
				\$6,266.00	\$6,266.00
<b>Equipment &amp; Supplies</b>					
		<b>Units</b>	<b>Rate</b>	<b>Subtotal</b>	
Rice Bags, Poly Bags, Zip Ties,	IPL - Prince George	1	\$200.00	\$200.00	
Crack Hammers, Chisels, PPE, FA					
Communication Rentals	Plateau Minerals Corp.	1	\$110.00	\$110.00	
				\$310.00	\$310.00
<b>TOTAL Expenditures</b>					<b>\$18,162.00</b>

## **11 REFERENCES**

Lane, R.A. (2010): 2009 Assessment Report on the Angus Property; *BC Ministry of Energy and Mines*; Assessment Report 31622, 30 p.

Lane, R.A. and DeGrace, J.R. (2011): 2010 Geological and Geochemical Report on the Angus Property; *BC Ministry of Energy and Mines*; Assessment Report 32326, 51 p.

Struik, L.C. (1994): Geology of the McLeod Lake Map Sheet (93 J); Energy, Mines and Resources Canada, Open File 2439.

Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T. (2005): Geology of British Columbia (compilation); *BC Ministry of Energy and Mines*; Geoscience Map 2005-3.

## 12 STATEMENTS OF QUALIFICATIONS

I, John R. DeGrace, PEng/PGeo, residing in Prince George, B.C., do hereby certify that:

1. I am currently employed as a consulting geologist by Plateau Minerals Corp, located at #7 – 1750 S. Quinn Street, Prince George, British Columbia, Canada, V2K 1X3.
2. I obtained a Bachelor of Science in Engineering (Geological) from Queen’s University at Kingston, Ontario, in 1969; and a Master of Science degree in Geology in 1971 from Memorial University of Newfoundland.
3. I have worked as a geologist for more than 20 years since my graduation from university.
4. I am a Professional Engineer (PEng) and a Professional Geoscientist (PGeo) registered with the Association of Professional Engineers and Geoscientists of British Columbia, Registration #31528, and have been a member in good standing since 2007.
5. I led the geologic mapping program that took place June 2011. This report presents, summarizes and interprets the data acquired during the 2011 field season.
6. I am the co-author of this report, entitled “2011 Geological Mapping Report on the Angus Property, Cariboo Mining Division, British Columbia” dated December 2, 2011

Dated this 4<sup>th</sup> day of December, 2011, at Prince George, British Columbia.

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John R. DeGrace, PEng/PGeo

A circular blue ink seal for the Association of Professional Engineers and Geoscientists of British Columbia. The seal features a signature in the center, the text "ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS OF BRITISH COLUMBIA" around the perimeter, and "PENG/PGeo #31528" in the middle. Below the signature, it says "BRITISH COLUMBIA GEO SCIENTIST".

I, Bethany Jacobson, GIT, residing in Prince George, B.C., do hereby certify that:

1. I am currently employed as a consulting geologist by Plateau Minerals Corp, located at #7-1750 S. Quinn Street, Prince George, British Columbia, V2N 1X3
2. I have worked as a geologist for 3 years.
3. I am a Geologist in Training (GIT) registered with the Association of Professional Engineers and Geoscientists of British Columbia, license #151525.
4. I am the co-author of this report on the Angus project entitled "2011 Geological Report on the Angus Property, Cariboo Mining Division" dated December 2, 2011.



Dated this 4<sup>th</sup> day of December, 2011, at Prince George, British Columbia.

  
Bethany Jacobson, GIT

APPENDIX A


REGIONAL GEOLOGY LEGEND

## Regional Geology


-  Fault
-  Thrust Fault

## Stratified Rocks


### Neogene to Holocene

-  Chilcotin Group (MIPIcVb) Basaltic volcanic rocks



### Triassic to Jurassic

-  Takla Group (TrJTvb) Basaltic volcanic rocks


### Ordovician to Triassic

-  Unnamed (Trim) Coarse clastic sedimentary rocks


### Devonian to Permian

-  Unnamed (Pvf) Rhyolite, felsic volcanic rocks
-  Unnamed (CPlc) Carbonates, slate, siltstone


### Carboniferous to Permian

-  Slide Mountain Complex (IMPSM) Basaltic volcanic rocks

### Ordovician to Devonian


-  Unnamed (mODdo, Odo) Carbonate, slate, siltstone

### Silurian to Devonian


-  Tapioca Sandstone (SDTs) Undivided sedimentary rocks

## Stratified Rocks


### Devonian

-  Unnamed (Ddo) Dolomitic carbonate rocks


### Ordovician to Silurian

-  Monkman Quartzite (IOM) Quartzite, quartz arenite, clastic sedimentary rocks


### Cambrian to Ordovician

-  Kechika Group (CmOK, CmOKIm, CmOKIc) Limestone, marble, shale



### Silurian

-  Unnamed (Slc) Limestone, slate, siltstone, argillite


### Ordovician

-  Unnamed (Ozq) Quartzite, quartz arenite sedimentary rocks

### Upper Proterozoic to Cambrian


-  Misinchinka Group (uPrCmMqz) Quartzite, quartz arenite
-  Gog & Boulder Creek Groups (ICmG, ICmGlc) Quartz arenite, clastic sedimentary rocks

### Upper Proterozoic to Cambrian

-  Cariboo Group (Dome Creek Formation) (CmCD) Limestone, Slate, Siltstone, Argillite

## Metamorphic Rocks

### Cretaceous to Paleogene

-  Wolverine Metamorphic Complex (uKEWpg) Paragneiss

Source: Digital Geology Map of British Columbia, BC Ministry of Energy and Mines, Geofile 2005-2