

MAR 20080016: JEANETTE MARIE DIAMOND

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PART B

AND

PART C

ASSESSMENT REPORT
Metallic and Industrial Mineral Permit Number
9306031155

JEANETTE MARIE DIAMOND PROJECT
NTS: 84D

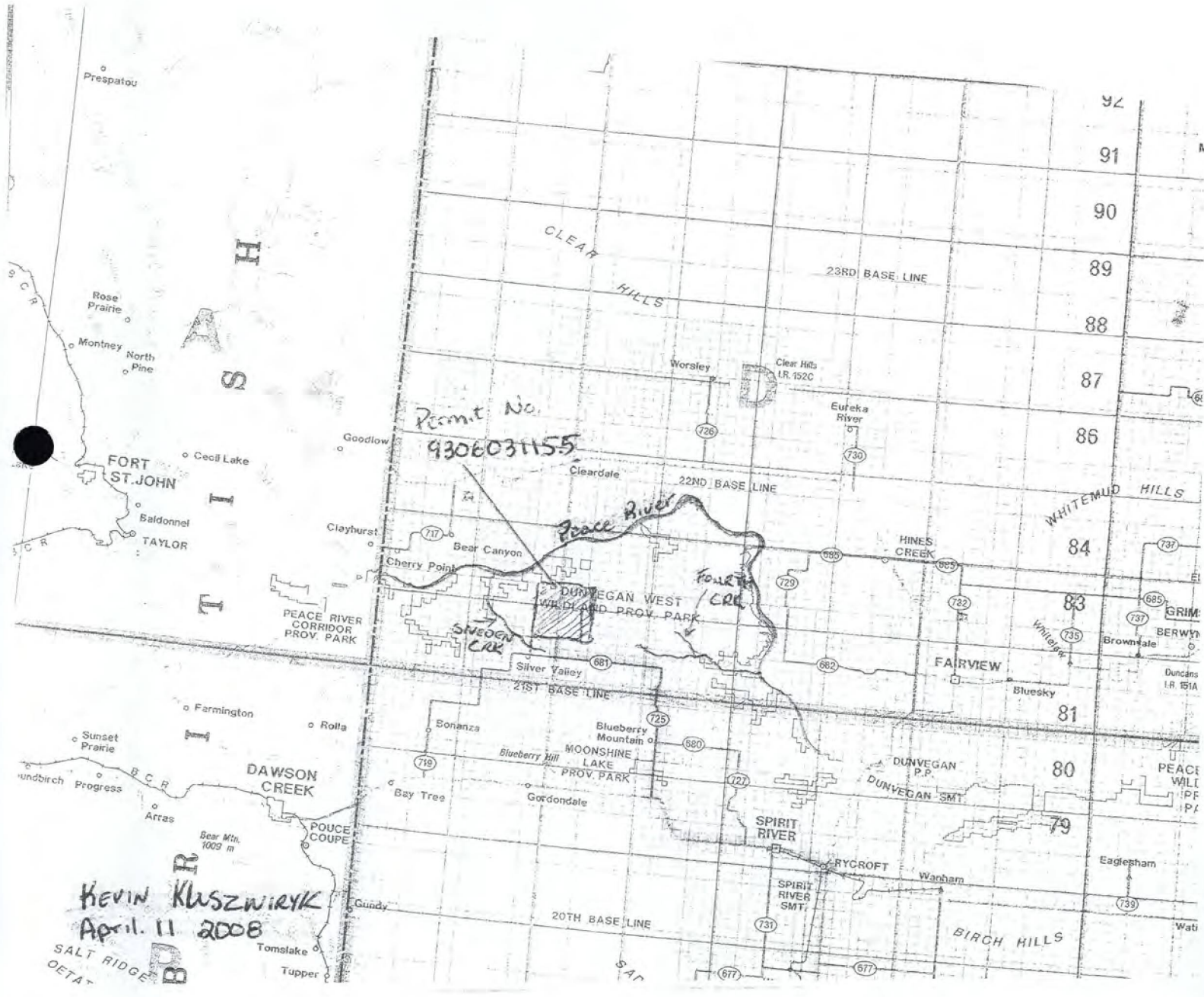
Submitted by
Kevin Kuszniiryk, Prospector

June 30, 2008

PART B – TECHNICAL REPORT.....	3
Map of Current Permits and Boundaries	3
Summary	4
Introduction.....	5
Permit Location and Description	5
Accessibility, Climate and Local Resources.....	5
Breakdown Statement of Project Work	6
Regional Geology	7
Precambrian	7
Phanerozoic.....	8
Cenozoic	9
Exploration.....	10
SUMMARY OF PREVIOUS EXPLORATION	10
Sampling	10
Geophysics.....	11
Results.....	11
Conclusion	12
Qualifications.....	13
References.....	14
LIST OF TABLES AND FIGURES.....	17
TABLE 1.....	17
GENERALIZED STRATIGRAPHY	17
PART C – APPENDICES	18
APPENDIX 1 LEGAL DESCRIPTIONS	18
APPENDIX 2 MAGNETIC MAPS.....	19
APPENDIX 3 SAMPLES LOCATIONS	20

PART B – TECHNICAL REPORT

Map of Current Permits and Boundaries



Summary

During the work period Kevin Kuszniiryk carried out a detailed satellite image investigation revealing an aerial physical anomaly. Drilling records of an area well, Talisman 1-15-82-10 , were viewed at the Core research facility ,in Calgary, were reviewed. And a total of four field visits were performed on the permit, hand samples were sifted and returned with the exception of a sample of carbonate crystals recovered from the anomaly area which is still awaiting analysis.

Federal Government Geo-physical maps were studied for the permit and surrounding areas. Historical data on the permit was compiled, reviewed and interpreted, yielding a report by Apex Geoscience Ltd., which included a HRAM survey of the permit area. The HRAM survey indicates possible kimberlite targets on the south half of the permit.

Follow-up on the permit will consist of analysis of drill cuttings from area well in an effort to outline an exploratory drill program for the 2008-09 seasons.

Introduction

Permit Location and Description

This permit is located approximately 40 km north-west of the Town of Spirit River in north-western Alberta (Figure 1). A legal description of the permit held is provided in Appendix 1. The permit is within the 1:250,000 scale National Topographic System (NTS) map area 84D.

Accessibility, Climate and Local Resources

The Spirit River permit can be accessed via Highway 2 and gravel roads. Numerous oil and gas roads exist throughout the property. Cut-lines and /or farm-grazing land exist where roads do not. Portions of the permit area may be accessed by four-wheel drive vehicles, quads and/or by foot. Accommodation, food, fuel and supplies can be obtained in the neighbouring towns of Rycroft, Spirit River and Fairview.

The terrain of the permit area is predominantly farm land with large expansive swampy areas.

Breakdown Statement of Project Work

Project Name: Jeanette Marie Diamond Project

	<u>Amount</u>
Prospecting	\$ 20,080.00
Geological Mapping & Petrography	\$
Geophysical Surveys	
Airborne	\$
Ground	\$
Geochemical Surveys	\$
Trenching and Stripping	\$
Drilling	\$
Assaying & whole rock analysis	\$
Other Work: Historical Review and Interpretation of data	\$ 12, 700
Subtotal:	\$ 32,780.00
Administration (up to 10% of subtotal)	\$
TOTAL:	\$32, 780.00

Kevin Kuszniyrk
Submitted by (Print Name)

June 30/08
Date

Regional Geology

Precambrian

The Spirit River Property lies within the Western Canada Sedimentary Basin, north of the Peace River Arch (PRA). The property is underlain predominantly by the Ksituan near the eastern boundary and centered over the Peace River Arch, near the Chinchaga Low (Dufresne et al., 1996). Precambrian rocks are, however, not exposed within the Spirit River area/Naylor Hills region (NTS 84E).

The Chinchaga Low curves in a northeasterly pattern, is attenuated within the Great Slave Lake Shear Zone (GSLSZ) and is truncated by the Hay River Fault (Figure 2). The Chinchaga Low comprises an area of low magnetic relief with a poorly developed aeromagnetic and gravity gradient fabric (Villeneuve et al., 1993). Precambrian rocks intersected in drill core from the Chinchaga Low comprise meta plutonic and meta sedimentary gneisses (Villeneuve et al., 1993). The Chinchaga Terrane was accreted between 2.4 and 1.8 billion years (Ga) ago and, along with the BHT, forms the Buffalo Head Craton (Ross et al., 1991, 1998). Due to the relatively stable history of these terranes since accretion, the Buffalo Head Craton and its margins are currently the focus of extensive diamond exploration in northern Alberta.

The Kitsuan Magmatic Arc (2.0 – 1.8 Ga) is a prominent magnetic high that forms a convex arc west and north of the Chinchaga Low. The internal magnetic fabric of the Kitsuan High is characterise by moderately elongated, positive domains separated by narrow lows (Villeneuve et al., 1998). A low gravity gradient signature characterises the arc (Dufresne et al., 1996). The sharpness of the boundaries suggests that the contact is likely magmatic rather than structural in origin. Drill core samples indicate that the Kitsuan is similar in age to the BHT and Chinchaga Low.

The eastern portion of the property lies in close proximity to the BHT which is host to diamondiferous kimberlites, including the Buffalo Hills kimberlite field. Part of the Churchill Structural Province's Rae Sub province (Dufresne et al., 1996), the BHT may represent Archean crust that has been thermally reworked during the Hudsonian (Proterozoic) Orogeny (Burwash et al., 1962; Burwash and Culbert, 1976; Burwash et al., 1994). Alternatively, it may be part of an accreted Proterozoic terrane that may or may not have an Archean component (Ross and Stephenson, 1989; Ross et al., 1991; Villeneuve et al., 1993). Numerous eclogitic garnets, eclogitic pyroxenes and chromium-bearing corundums along with kimberlites or related ultramafic intrusions are common in northern Alberta. The occurrence of these minerals may indicate the presence of a significant volume of accreted and subducted oceanic basalt and sedimentary potolith in the lower crust and/or upper mantle beneath the Ksituan, BHT, and Chinchaga Terranes (Dufresne et al., 1996). Seismic refraction and reflection studies indicate that the crust in the Spirit River region is likely between 35 to 40 km thick, a favourable characteristic for the formation and preservation of diamonds in the upper mantle (Dufresne et al., 1996).

Phanerozoic

Overlying the basement in the Spirit River region is a thick sequence of Phanerozoic rocks comprised mainly of Cretaceous sandstones and shales near surface (Glass, 1990). Bedrock exposure within the permit block is limited primarily to river and stream cuts and topographic highs. Table 1 describes the upper units found in the region. Further information pertaining to the distribution and character of these and older units can be obtained from well log data in government databases, and various geological and hydro geological reports (Green et al., 1970; Ozoray, 1982; Glass, 1990; Mossop and Shetsen, 1994).

In general, the Cretaceous strata underlying the Spirit River Property comprise alternating units of marine and non-marine sandstones, shales, siltstones, mudstones and bentonites. The oldest documented units exposed in the vicinity of the permit area belong to the Smoky Group, a sequence of Late Cretaceous, calcareous and noncalcareous shales.

The Late Cretaceous Shaftesbury Formation comprises marine shales with fish-scale bearing silts, thin bentonitic streaks and ironstones. The upper contact is conformable and transitional with the Dunvegan Formation. The Shaftesbury Formation may be exposed along river and stream cuts. Evidence of extensive volcanism during deposition of the Shaftesbury Formation exists in the form of numerous bentonitic horizons throughout the formation, especially within and near the Fish Scales horizon (Leckie et al., 1992; Bloch et al., 1993). The deposition of the Shaftesbury Formation is also contemporaneous with the deposition of the Crowsnest Formation volcanics of southwest Alberta (Olson et al., 1994; Dufresne et al., 1995) and with kimberlitic volcanism near Fort a la Corne in Saskatchewan (Lehnert – Thiel et al., 1992; Scott Smith et al., 1994)

Deltaic to marine, feldspathic sandstones, silty shales and laminated carbonaceous siltstones characterise the Dunvegan Formation. Where present, the unit is conformably overlain by shales of the Kaskapau Formation (Smoky Group). It should be noted that the Ashton pipes occur at or above the contact between the Kaskapau and the Dunvegan formations (Dufresne et al., 1998).

The Smoky Group is Late Cretaceous in age and is comprised of thinly bedded, marine, silty shale with occasional ironstone and clay-stone nodules and thin bentonite streaks. The group is divided into three formations; (a) a lower shale unit, Kaskapau, which includes the Second White Specks (SWS) marker unit, Kaskapau, which includes the Second White Specks (SWS) marker unit; (b) a middle sandstone, named the Bad Heart; and, (c) an upper shale and sandstone, Puskwaskau, which contains the First White Specks (FWS) marker unit. The Kaskapau and the Puskwaskau formations both contain abundant ammonite fossils and ironstone concretions. Foraminifera are common in the lower arenaceous units of the Kaskapau (Glass, 1990). The Bad Heart Formation comprises medium to coarse-grained sandstone with interbedded shale and ironstone. Bad Heart Formation outcrops at about the 800 m asl mark along river and stream cuts throughout the area. The overlying Puskwaskau Formation is likely exposed in the upland regions and may be capped by sediments of the Wapiti Formation. The upper portion of the Smoky Group is correlative with the Lea Park Formation.

There is strong evidence of volcanism associated with the deposition of the Smokey Group in the vicinity of the PRA (Auston, 1998; Calson et al., 1998). Ashton's recently discovered Buffalo Head Hills kimberlites (Figure 4) intrude the Kaskapau, yielding emplacement ages of 86 to 88 Ma (Auston, 1998; Carlson et al., 1998). In addition, recently discovered kimberlites in the Birch Mountains (Figure 4) by Kennecott Canada Exploration Inc. (Kennecott) in a joint venture with Montello Resources Ltd. (Montello) and Redwood Resources Inc. (Redwood) are reported to yield emplacement ages of about 82 Ma (Northern Miner, 1998).

The youngest bedrock unit in the Spirit River area is the Wapiti Formation of Late Cretaceous age. The unit comprises non-marine, thinly bedded to massive sandstone with minor coal seams and thin conglomerate lenses. Exposures of the Wapiti Formation appear to be restricted to upland regions forming caps of variable thickness. The upper surface of the Wapiti Formation, when present, has been eroded by both glacial and fluvial processes.

Cenozoic

Data and information about the Tertiary and early Quaternary geology in north-western Alberta are sparse and regional in nature. Prior to continental glaciation during the Pleistocene, most of Alberta, including the Spirit River region, had reached a mature stage of erosion. Extensive preglacial gravels related to the preglacial Peace River exist with the Spirit River property.

Large, broad paleochannels and their tributaries drained much of the region, flowing in an east to northeasterly direction (Dufresne et al., 1996). No paleochannel is documented to exist within the Spirit River area. However, several topographic highs within the Clear Hills just northeast of Halverson Ridge are capped with sand and gravel deposits. The age of these units has not been verified and they may have been deposited during the late Tertiary or early Quaternary based upon their stratigraphic position and elevation (Edwards and Scafe, 1995; Dufresne et al., 1996). Alternatively, the units may be glacial in origin with a much younger, Late Wisconsinan age.

During the Pleistocene, multiple southerly glacial advances of the Laurentide Ice Sheet across the region resulted in the deposition of ground moraine and associated sediments (Klassen, 1989; Dufresne et al., 1996). The advance of glacial ice resulted in the erosion of the underlying substrate and modification of bedrock topography. Several of the upland regions in the Clear Hills appear to be streamlined, forming south and southwest trending ridges and drumlinoids. This pattern of movement is reflected in the distribution of diamond indicator minerals.

Glacial ice is believed to have receded from the area between 15,000 and 12,000 years ago (Klassen, 1989). After the final glacial retreat, lacustrine clays and silts were deposited in low-lying regions along with extensive organic sediments. Rivers previously re-routed due to glaciation, re-established easterly to north-easterly drainage regimes similar to that of the pre-Pleistocene. Extensive colluvial sediments accompanied post-glacial river and stream incision.

The majority of the Spirit River area is covered by drift of variable thickness, ranging from discontinuous veneer about 5 to 10 m thick in the upland regions to more than 15 m along the Spirit River (Pawlowicz and Fenton, 1995a, b). Local drift thickness for the properties can not be easily delineated due to the scarcity of publicly available data for the region. Limited general information regarding bedrock topography and drift thickness in northern Alberta is available from the logs of holes drilled for petroleum, coal or ground water exploration and from regional government compilations (Ozoray, 1982; Mossop and Shetsen, 1994; Pawlowicz and Fenton, 1995a, b; Dufresne et al., 1996).

Exploration

SUMMARY OF PREVIOUS EXPLORATION

Sampling

The property was staked in early 1998 by Grizzly Gold Inc. on a basis of abundant chrome diopsides recovered from a prior sample collected during 1997 in the region. Prior diamond exploration work was conducted during the early 1990's by TUL Petroleum who reported the existence of numerous indicator minerals in the region.

The Alberta Geological Survey (AGS) conducted limited sampling in the region with the collection of 8 till samples from 1993 and 1994 in NTS 84D. Two of the samples each yielded a chrome diopside and a third sample yielded 2 chromites. One of the chrome diopsides recovered yielded high Cr (1.73 wt %) and low Fe and is likely derived from kimberlite or related intrusion.

Two creek sediment samples collected by TUL from near the confluence of the Montagneuse River and the Peace River that were processed and analyzed by the AGS yielded a G9 chrome Pyrope and two chrome diopsides (both with high Cr and low Fe). The sample sites are located on or immediately adjacent to the northeast boundary of this property.

Grizzly Gold Inc. collected two samples during late 1997 from a travel pit south of the Peace River and near the northern boundary of the property. The samples were each about 50 lbs. in size. Both samples were processed for diamond indicator minerals and recovered, were 7 pyrope garnets, 86 clinopyroxenes (likely chrome diopsides), 10 orthopyroxenes and 95 olivines in one sample and 28 clinopyroxenes (likely chrome diopsides), 10 orthopyroxenes, and 48 olivines in a second sample.

A two-day field visit during March 31 and April 1, 200 was conducted by APEX. Three samples (0MDP007 to 0MDP009) were collected from two gravel pits in the southeast corner of the property. The second gravel pit sampled (0MDP008 and 0MDP009) was the pit originally sampled by Grizzly Gold Inc.

Geophysics

During the period March 31 to May 31 a high resolution fixed wing airborne magnetic (HRAM) survey was conducted by Spectra Exploration Geoscience Corp. (Spectra) The HRAM survey yielded a number of discreet magnetic anomalies that are the result of (a) culture such as oil wells, farms and towns, (b) accumulations of magnetic minerals in preglacial sand and gravel deposits, and (c) 6 unexplained point anomalies that could be the result of kimberlites or related intrusions including magnetic lows, which represent excellent targets for possible kimberlites were identified by the HRAM survey. Sampling by APEX Geoscience Ltd. Personnel confirmed the presence of diamond indicator minerals in preglacial sand and gravel deposits indicating that the area is highly prospective for the presence of kimberlites.

Results

Sample 1 processed by Kennecott yielded 7 pyrope garnets, 86 clinopyroxenes (likely chrome diopsides), 10 orthopyroxenes and 95 olivines. Sample 2 yielded 28 Clinopyroxenes, 10 orthopyroxenes, and 48 olivines. These samples results appeared to be anomalous and suggest that the body that yielded these indicator minerals is likely a kimberlite or related intrusion that sampled the mantle and therefore may have diamond potential. The number of indicator minerals obtained from two samples, particularly coming from a river gravel, is highly suggestive that source for the indicator minerals is proximal to the sample site.

The check portion of the sample submitted to the SRC yielded a number of possible chromites but no silicate indicator minerals. A total of 16 of the 18 oxide grains that were submitted for microprobe analysis were confirmed as chromites. Several of the chromites yielded high concentrations of Ti and Cr likely indicative of derivation from a kimberlite or closely related intrusion.

The presence of abundant possible chrome diopside and possible olivine is highly suggestive that the source rocks for these indicator minerals are nearby, possibly within 10 to 15 km. Olivine and chrome diopside do not usually survive for any great distance in drainage systems. The gravel deposits are preglacial in nature and were formed from the Peace River prior to glaciation. The gravels display cross bedding and pebble imbrications that clearly indicate a south-easterly directed channel flow in the Paleo Peace River. As a result, the source for the indicator minerals is likely somewhere to the west or northwest of the gravel pit in the area, which was targeted for HRAM surveys.

The HRAM survey for the area yield a number of discreet magnetic anomalies that are the result of (a) culture such as oil wells, farms and towns, (b) accumulation of magnetic minerals in preglacial sand and gravel deposits, and (c) unexplained point anomalies that could be the result of kimberlites or related intrusions.

A total magnetic intensity map outlining these anomalies is included in Appendix 3.


Conclusion

In consideration of the supporting data including; an aerial physical anomaly, and the HRAM survey of the permit. The next course , and the recent Diamond discoveries in the area. Follow-up on the permit will consist of analysis of drill cuttings from area well in an effort to outline an exploratory drill program for the 2008-09 seasons.

Qualifications

I, Kevin Kuszniiryk, residing at Edmonton, Alberta, Canada do hereby certify that:

1. I am an independent prospector
2. I have been an active prospector in Alberta, Canada for 7 years.


Kevin Kuszniiryk, Prospector

Signed at Edmonton, Alberta, Canada

JUNE 30 / 08
Date

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LIST OF TABLES AND FIGURES

TABLE 1

GENERALIZED STRATIGRAPHY

SYSTEM	GROUP	FORMATION	AGE* (MA)	DOMINANT LITHOLOGY
PLEISTOCENE			Recent	Glacial till and associated sediments
LATE CRETACEOUS		Wapiti	70 to 80	Sandstone, minor coal seams and conglomerate lenses
	Smoky	Puskwaskau	75 to 86	Shale, silty-shale and ironstone, First White Specks
		Bad Heart	86 to 88	Sandstone
		Kaskapau	88 to 92	Shale, silty-shale and ironstone; Second White Specks
		Dunvegan	92 to 95	Sandstone and siltstone
	Fort St. John	Shaftesbury	95 to 98	Shale, bentonites, Fish-Scale Member

*Ages approximated from Green et al. (1970).

PART C – APPENDICES

APPENDIX 1 LEGAL DESCRIPTIONS

Permit Number	Commencement of Term	Permit Holder	Area (Ha)	Legal Description
9306031155	Dec 7, 2005	Kevin Kuszniiryk	4500	6-10-082:1-16n

APPENDIX 3 SAMPLES LOCATIONS

