

# MAR 20110012: DIAMOND

Diamond - A report on diamond exploration near Pearless Lake, northcentral Alberta.

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**PART B**  
**Administrative Documents**

&

**Part C**  
**Appendices**

Assessment Report  
On  
Metallic and Industrial Mineral Permit 9309060274

*Diamond Project Assessment Report  
for the year 2011*

NTS Map (1:250,000) 84B

for

Ditter Holdings Ltd.

Submitted by  
Hugh J. Willis

June 25, 2011

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## Part B

### Introduction

Ditter Holdings Ltd. acquired Metallic and Industrial Mineral Permit 9309060274 ("Permit") on June 3, 2009. The permit has an area of 512 hectares and requires expenditures of \$5.00 per hectare to advance it to its second anniversary of June 3, 2011. Sandswamp Exploration Ltd. of Dapp, Alberta was hired to conduct exploration on the permit. Aggregate expenditures of 2,688.00 were incurred in preliminary assessment. The extreme forest fire hazard in Slave Lake and around Red Earth Creek forced the truncation of exploration. Activities had to be delayed until the fire situation was under control. The focus of this initial program was to investigate the location of a 1998 Ashton Mining of Canada Anomaly referred to as BM-6. The goal of the exploration program is to discover a kimberlite volcano ("kimberlites") which have been known to contain diamonds.

### Background

The permit area was held by Ashton Mining of Canada Inc. ("Ashton") from 1997 to 2008. The area was an isolated "postage stamp" region separate from the bulk of Ashton's other permits. In 2008 the area was sold to Diamondex Resources Ltd. (Diamondex). Diamondex held the area until 2009 when it was subsequently surrendered to the provincial land bank.

A search of the Ashton mineral assessment reports revealed that a ground geophysical survey was conducted on the property in 1998. The survey revealed a small isolated magnetic high measuring 200 meters by 100 meters. The magnitude of the anomaly is approximately 10 nanoteslas. The survey parameters for the 1998 Ashton ground magnetic survey are detailed in Assessment Report Min\_19990011. A copy of the Ashton ground Survey is included in Appendix "A".

During the late 1990's and early 2000's Ashton Mining of Canada Inc. ran several successful exploration campaigns and discovered upwards of 35 different kimberlites, many of which contain diamonds. None of the kimberlites have been proven economic to date.

### Permit Location

The permit is located approximately 50 kilometers northeast of the Hamlet of Red Earth Creek. A map illustrating the permit area in relation to the Alberta township grid is attached in Appendix "B". Additional location information is presented below in bullet format

#### Alberta Township Legal Description

- Section 18, Township 91, Range 4, West of the 5<sup>th</sup> Meridian
- Section 13, Township 91, Range 5, West of the 5<sup>th</sup> Meridian

#### National Topographic System

- 1:250,000 Map 84B
- 1:50,000 Map 84B/15

Coordinate (UTM, NAD 83, Zone 11V)  
Approximate Centre = 643,600mE, 6,308,500mN

### **Physiography - Natural Features**

The MIMP is located in the boreal forest. The forest consists mainly of deciduous poplar trees with some willows, alder and birch. Coniferous spruce trees are also within the permit area but significantly less common. Patches of muskeg dot the property and there are a few small creeks.

### **Physiography - Man-Made Features**

Oil field access roads and wells sites are common in the vicinity of the permit. Seismic lines are also common and were used as a means of access in the BM-6 anomaly. A significant portion of the permit including the ground survey location was contained within a forestry cut-block. Overgrown woody debris piles are common in the cut-block area.

### **Surficial Geology**

The surficial geology of the area is mapped as Pleistocene aged glaciolacustrine deposits consisting of fine grained sand, silt and clay (AGS Map 269 ).

### **Bedrock Geology**

The bedrock geology of the permit is mapped as the upper cretaceous age Smoky Group. It is described as a dark grey and silty shale possibly containing concretionary ironstone (AGS Map 236).

### **Basement Geology**

The basement geology of the permit is mapped as the Buffalo Head Terrain. The Buffalo Head Terrain is described as an accreted terrane 2 to 2.4 billion years old (AGS Map 236).

### **Kimberlite Geology**

Kimberlite volcanoes are ultramafic igneous intrusive. Two kimberlites occur approximately 12 kilometers directly west of the BM-6 geophysical anomaly.

### **Exploration Work**

Sandswamp Exploration Ltd. was contracted to conduct an exploration program on the permit. The main theme of the exploration work was site access and reconnaissance. Appendix "C" contains photos and maps of the exploration work. Appendix "D" contains an expenditure breakdown. Specific objectives for the expedition are listed in bullet form below;

- Locate property via network of old oilfield roads & cutlines

- Determine location of “BM anomaly # 6” (Magnetic target)
- Explore and Determine the best useable route into the Magnetic target location
- Try to maintain a route away from environmentally sensitive areas
- Try to maintain as much of proposed route in previously disturbed areas.
- Cut an ATV trail to center of Magnetic target or as close as possible
- Ground truth Magnetic target and check for culture that may have been missed by Ashton
- Attempt to find and re-establish the old Ashton base-line of ground magnetic grid
- Determine soil / till type and suitability for a 25 Kg till KIM sample
- If suitable material, take a 25 Kg till sample for KIMs
- Scout and GPS nearby accessible water sources that may be used for a future drill program
- If time permitting, scout access on other portions of Ditter’s 512 Ha property

### **Desktop Study**

Airphotos were purchased from the Alberta Government airphoto service. Photos were then compared to regional base-maps to determine location, access routes and terrain type.

### **Site Access & Accommodations**

The permit was accessed using a combination of highways, oilfield access roads and seismic lines. From Slave Lake take highway 88 north to the Peerless Lake Road. Follow the Peerless Lake Road to coordinate 644,420mE 6,293,030mN (11V, NAD83) and turned north for 10 kilometers to a “well travelled” right at coordinate 644,920mE 6,303,670mN (11V, NAD 83). The road was followed northwest to a bridge over a creek. An abandoned well site near the bridge was used as a staging area and campsite. The site is approximately 250m east of the permit’s western boundary.

An east-west cutline at coordinate 641,470mE 6,307,510mN (11V, NAD83) was used to access the permit. All terrain vehicles (“ATV”) were used on the cutline and could get within 300 meters of the BM-6 anomaly center. It was necessary to walk the remaining 300 meters to the anomaly centre. Once there a trail was flagged back to the cutline avoiding logging debris. The flagged route was cut with chainsaws (1.3 meters wide) to provide ATV access. The cut trail avoided large trees and took advantage of natural clearings. Total trail length is approximately 250 meters. The cutline and the ATV trail intersect at coordinate 643,140mE 6,308,350mN (11V NAD83).

### **Site Prospecting & Ground Truthing**

The centre of the BM-6 anomaly (643,170mE 6,308,110mN 11V NAD83) was marked with a flagged stake. The surrounding area was then prospected for kimberlite outcrop and any non-kimberlite surficial explanations for the anomaly. Man made items such as old well heads, buried heavy equipment or natural items such as meteorites or gravel deposits.

Prospecting/ground-truthing was done in concentric circles radiating out from the centre of the anomaly. Prospecting circles started with radii of 50 meters and increased in increments of 50 meters to a maximum of 250 meters. The maximum radius extended beyond the maximum extent of the ground magnetic anomaly.

Remnants of the original Ashton 1998 survey baseline were found with some of the original pickets. The line is overgrown and will not be of any use if any future surveys are completed.

Nothing was found to explain the BM-6 anomaly.

### **Sampling**

An auger hole and a test pit were completed to search for material suitable for kimberlite indicator mineral analysis.

### **Auger Hole**

An 2.5 inch diameter auger hole was completed using a handheld Stihl auger. The auger hole, at coordinate 643,160mE, 6,308,045mN (11V NAD83) was excavated to 130 centimeters. Material from the first 50 centimeters is outwash clay with sandy stringers and no clasts. Material from 50 centimeters to the end of the hole is ablation till. The hole was terminated due to an impenetrable rock.

### **Test Pit**

A 120cm deep test pit was excavated at coordinate 643,160mE 6,308,045mN (11V NAD83). The first 50 centimeters of till is an outwash clay with sandy stringers and no clasts. From 50 centimeters to 120 centimeters is a clay based ablation till. A 25 kilogram sample with unique identification number D-T11-01 was taken from the bottom of the hole and stored in a clean 20 litre pail. The sample may be processed at a future date.

### **Site Preparations**

A helicopter landing area was cleared in an open meadow on the BM-6 anomaly. The landing area is anticipation of future exploration programs.

A water source was scouted in anticipation of a future drill program. A large flowing creek with beaver pond is located at coordinate 642,330mE, 6309230mN.

An eastern access to the permit was attempted. Fear of forest fire hazards halted the attempt prior to achieving success.

## **Conclusions and Recommendations**

The program objectives were achieved during the short exploration program. The access route to the permit and BM-6 anomaly was found and recorded for future visits. The centre of the BM-6 anomaly was marked and the surrounding area was thoroughly prospected for kimberlite or other features that could cause an anomalous magnetic response. No explanations were found for the BM-6 anomaly. Two test holes were excavated (auger and shovel) to determine if material suitable for kimberlite indicator mineral analysis was present. A 25 kilogram sample of material was taken for possible future analysis. Finally the permit was scouted and prepared for future field work. Remnants of the original Ashton baseline were found, a water source for a future drill program was noted and a helicopter landing pad was prepared in a meadow close to the anomaly centre.

Future work should involve a new ground magnetic survey to improve control between the surface and the BM-6 anomaly

### Statement of Qualifications

I Hugh James Willis certify that

- 1) I am the president of Ditter Holdings Ltd.
- 2) I am a business man interested in the non-energy mineral potential of Alberta
- 3) I am an amateur prospector with 2 years experience.

Signed

A black rectangular box redacting the signature of the declarant.

Date:

June 25/11

## References

Map 269, Surficial Geology of the Peerless Lake Area, published by the Alberta Geological Survey in 2006. Authors R.C. Paulen, M.M Fenton and J.G Pawlowicz

Map 236, Geological Map of Alberta, published by the Alberta Geological Survey in 1999. Authors

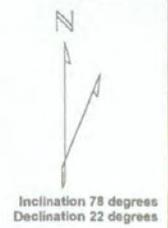
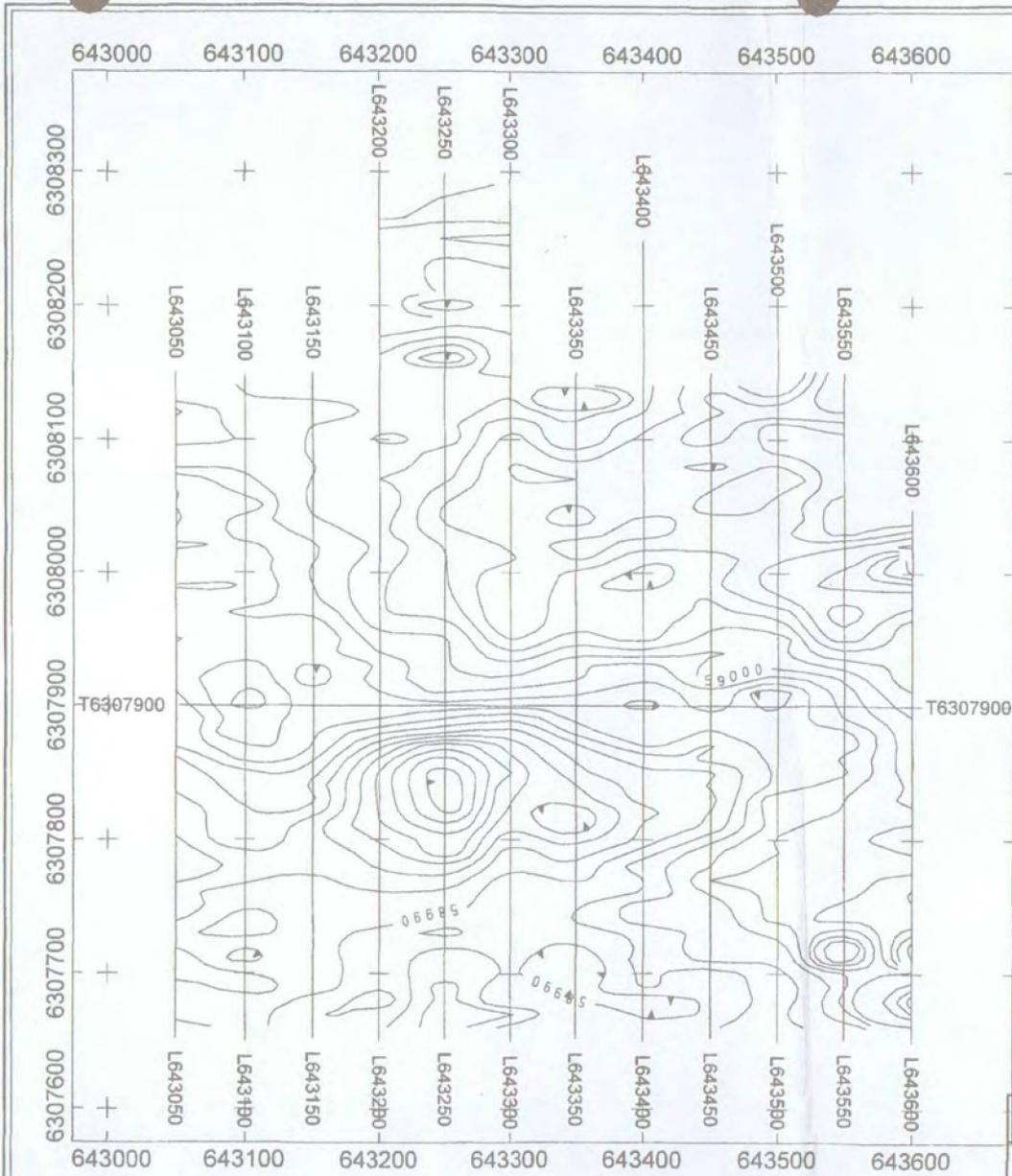
MIN\_19990011, produced by Ashton Mining of Canada Inc. in 1999. (Authors unavailable at time of writing due to inaccessibility of Assessment files on line.

Bulletin 63, The Diamond Potential of Alberta, published by the Alberta Geological Survey in 1996. Authors M.B Dufresne, D.R. Eccles, B. McKinstry, D.R. Schmitt, M.M. Fenton, J.G. Pawlowicz and W.A.D. Edwards.

Field notes, Sandswamp Exploration Ltd. June 2011.

**Appendix "A"**

**Ashton Ground Magnetic Survey Map of BM-6 Anomaly**



Legend

Line Spacing: 50 metres  
 Grid Interval: 10 metres  
 Contour Interval: 2, 10 nT

Datum: NAD 27 UTM zone 11

Data Acquisition:

Field Mag: GEM Systems GSM19 GW (#68588)  
 Base Mag: GEM Systems GSM19 W (#67577)  
 Operator: B. Chore  
 Date: November 11, 1998  
 Kilometres: 7.0

*AR. MIN-19990011*  
*P. 699*



Ashton Mining of Canada Inc.

 Detailed Ground Magnetic Survey  
 Birch Mountain - Anomaly 6  
 Total Field Contours

Non-Linear(2x2), Low Pass(10pt)

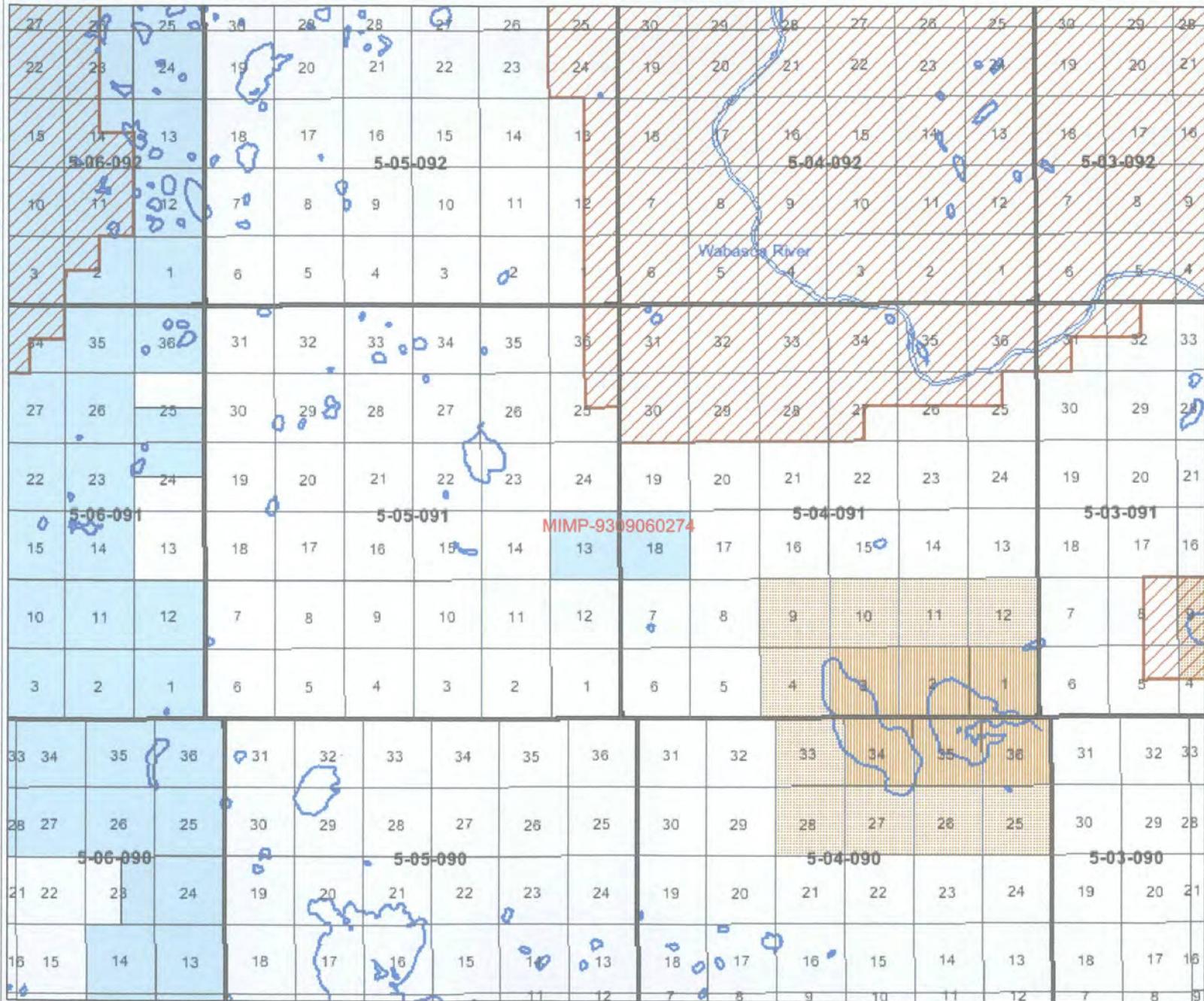
Data is stored in  
 \Geophysics\Birch Mountain\Ground\Anomaly 6

**Appendix "B"**

**Permit Alberta Township Location**

# MIMP-9309060274

Alberta



- ### Legend
- 30 Day Reserved
  - Alberta Boundary
  - Meridian
  - Section
  - Township
  - Major River
  - Major Lake
  - Major Road
  - Reserved/Withdrawn - Restrictions
  - No Surface Access - Restrictions
  - Subject To - Restrictions
  - Other - Restrictions
  - Municipality
  - 037 - Special Mineral Lease
  - 069 - Phosphate Exploration
  - 093 - Met & Ind Permit
  - 042 - Other
  - 036 - Natural Gas Storage
  - 094 - Met & Ind Lease
  - A37 - Application Special Mineral Lease
  - A69 - Application Phosphate Exploration
  - A93 - Application Met & Ind Permit
  - A42 - Application Other
  - A36 - Application Natural Gas Storage
  - A94 - Met & Ind Application Lease
  - Mineral Ownership Under Review
  - Minerals Not Owned by the Alberta Crown
  - Parks and Protected Areas
  - National Park

June 26, 2011

Map center: 56°54' N, 114°39' W

DISCLAIMER: Information presented on this map originates from various sources and is for general use only. Please be advised that some information may have been added, amended and deleted since this map was created.

Base Data Provided by Spatial Data Warehouse Ltd. Copyright of Government of Alberta.

Notes: Map of Current Boundaries for MIMP 9309060274

**Appendix "C"**

**Exploration Photos and Maps**



Figure 1: Auger hole



Figure 2: East-West Cutline to BM-6 ATV Trail



Figure 3: New Trail Access to BM-6 Anomaly



Figure 4: Centre of BM-6 Anomaly



Figure 5: Clear-cut logging on MIMP

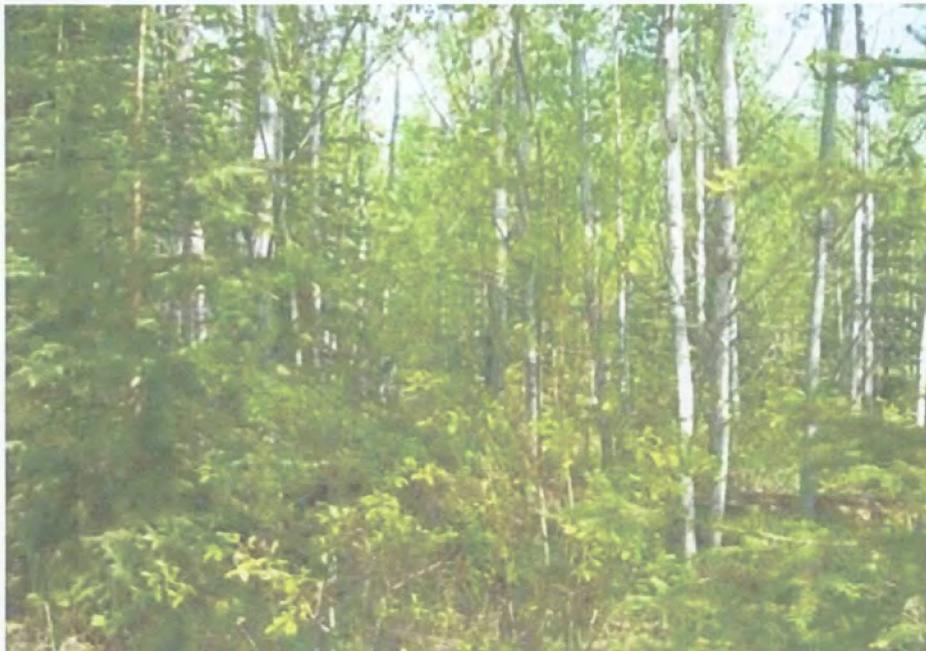


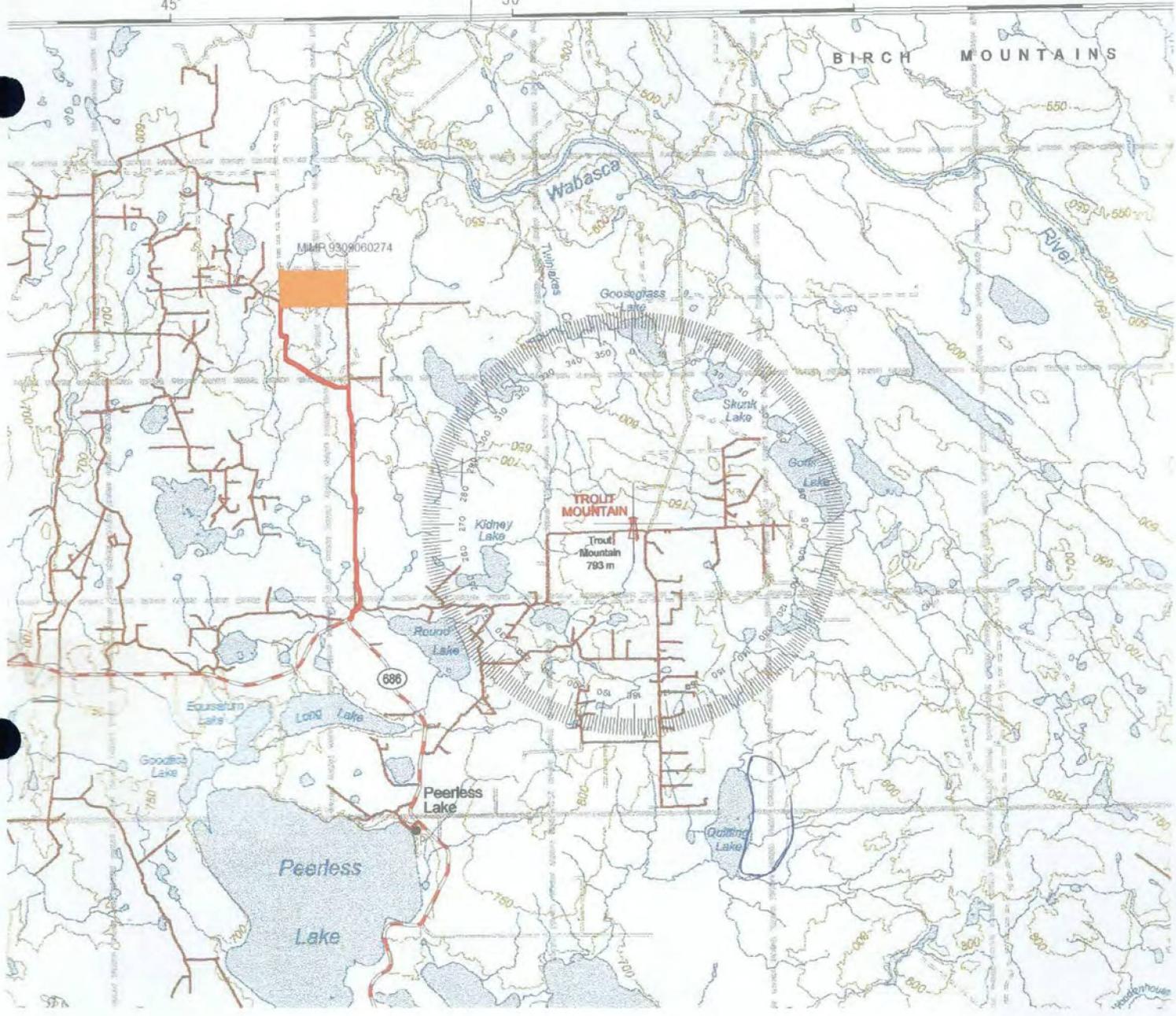
Figure 6: Logging re-growth on BM-6 Anomaly



Figure 7: Gas Powered Stihl Auger

R5 45' R4 650 000 30' R3 R2 15' R1

BIRCH MOUNTAINS



MMP 9309060274

TROUT MOUNTAIN

Trout Mountain  
793 m

686

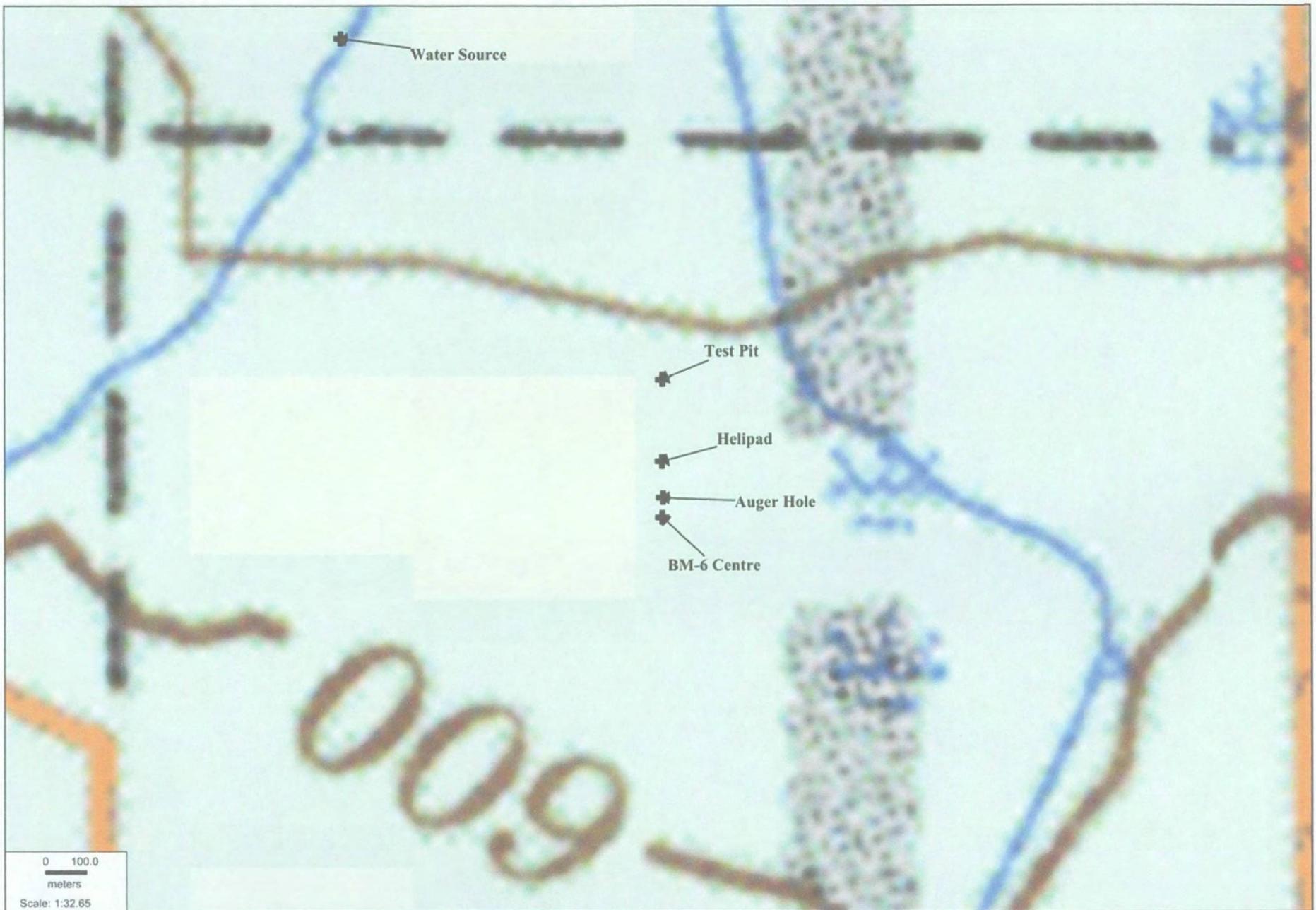
Peerless  
Lake



East-West  
Cutline

BM-6  
Anomaly  
Centre

Prospecting  
Area



**Appendix "D"**

**Expenditure Breakdown**

# SandSwamp Exploration Ltd.

Box 241, Site 1, RR 1 Dapp, Alberta T0G 0S0

Phone: (780) 910-7059

[LBV.SandSwamp@hotmail.com](mailto:LBV.SandSwamp@hotmail.com)

## Invoice

GST # : 863789749 RT 0001

Invoice # : 2011-05

Invoice Date : June 6, 2011

**Attention : Accounts Payable**  
**Hugh Willis**  
**Ditter Holdings Ltd.**  
**7850 Jasper Ave NW**  
**Edmonton, Alberta T5H 3R9**  
**Phone : 1 (780)436-3957**

**Number of Final Reports: 1 USB St**  
**Maps / Data: Air-photos**  
**Samples for Client: 1 KIM till**

Area	Mineral Permit #	Days	Representative	Service
512 Ha	9309060274	2.5	Lester Vanhill (Geo. Tech.)	Field Exploration
AB Client ID #		Company		Location Area
8096258		Ditter Holdings Ltd.		Peerless Lake, Alberta

Dates (mm/dd/yy)	Service Description	Days / km	Rate	Total
05/27/11 - 06/06/11	Day Rate	2.5	\$375.00	\$937.50
05/30/11 - 05/31/11	ATV	2	\$75.00	\$150.00
05/30/11 - 05/31/11	Chainsaw	2	\$25.00	\$50.00
05/30/11 - 05/31/11	Shadow Creek Outfitters	2	\$250.00	\$500.00
05/30/11 - 05/31/11	Subsistence Surcharge	0	\$50.00	\$0.00
05/30/11	Travel from Dapp, AB to Site	400	\$1.00	\$400.00
05/31/11	Travel to Dapp, AB from Site	400	\$1.00	\$400.00
05/30/11 - 05/31/11	Sampling Consumables	1	\$14.50	\$14.50
Expenses	Air Photographs X9		\$12.00 ea	

<b>Subtotal</b>	<b>\$2,452.00</b>
<b>5 % GST</b>	<b>\$122.60</b>
<b>Expenses</b>	<b>\$113.40</b>
<b>Total</b>	<b>\$2,688.00</b>

One Copy Sent Via Email

All prices are in Canadian dollars

Thank You For Your Business

Payable To : Sandswamp Exploration Ltd.