

MAR 20110002: CALLING LAKE

Calling Lake - Diamond and gold exploration near Athabasca, central Alberta.

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ASSESSMENT REPORT

CALLING LAKE PROJECT, ALBERTA

2009 – 2011 MINERAL EXPLORATION SUMMARY

Metallic and Industrial Minerals Permit

NO. 9307010912

Money Rock Resources

Submitted by Money Rock Resources
January 24, 2011

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SUMMARY

Money Rock Resources's and Halmco Inc's diamond exploration at Calling Lake, AB

Previous exploration (1992-2002) of the Calling Lake Area of Alberta, Canada resulted in the discovery of anomalous numbers of diamond indicators located along the west and south shores of Calling Lake and along the Calling River. These "diamond indicator location sites" are significant because of the quality, the quantity and the variety of diamond indicators identified. Diamond Indicators identified include: diamond inclusion high pressure megacryst eclogitic garnets, chrome diopsides, pyroxenes, olivines, chromites, magnesium picroilmenites, a complete suite of pyrope garnets (G1 to G12), rubies, sapphires and a gem quality macro diamond discovered in basal till at one site along the Calling River. To date (2008) the Calling River and Calling Lake area have historically yielded some of the best known diamond indicator geochemistry in Alberta; including the largest concentration (seventy) of Gurney "G-10" pyropes observed in the province.

Previous exploration of the Calling Lake/River area (600 grid sampling sites and up-ice drilling) appears to provide a Northern cut-off to the highly anomalous diamond indicator sites located along the Calling River and on the south and west drainage beaches at Calling Lake.

In 2004, Halmco Inc. implemented an exploration project specific to finding the source of the anomalous diamond indicator sites. A program was designed to test significant resistive, magnetic and seismic anomalies that are at or south of the Northern cut-off to the diamond indicator sites. (Target Areas 1,2&3) Previous geophysical surveys (1995 -2000) identified over 150 magnetic anomalies and over 55 resistive anomalies in the Calling Lake area. Halmco Inc prioritized these anomalies according to the following criteria: (1) proximity to anomalous diamond indicator sites; (2) proximity to diamond indicator site drainages; (3) ground surveys to eliminate culture and vice-versa;

These remaining anomalies were then further prioritized: (1) anomalies with multiple geophysical signatures became **priority targets** and (2) priority targets with geophysical signatures indicating vertical structure became **High Priority Targets**. (ERT surveys/electrical resistive tomography: VLF surveys/very low frequency electromagnetic; and/or seismic diffractions with vertical disrupted reflectors) **Eight High Priority Targets** (anomalies showing vertical structure) have been discovered to date (2009)

Target Area I (Calling River East) ..2 resistive/magnetic anomalies with ERT-VLF structure
Target Area 2..(West drainage into Calling Lake)...3 resistive/magnetic with ERT and seismic structure
Target Area 3..(South drainage into Calling Lake)...3 resistive/magnetic with ERT structure

A Dighem High Priority anomaly (CL9) with coincidental seismic/ resistive/ERT signatures was drilled in December 2006. This structure is in Target Area 2, an area that drains onto the significant diamond indicator beaches on the southwest side of Calling Lake. Brecciated rock was encountered in said hole. Samples of breccia core (country rock/crustal fragments) were sent to: Calgary Rock and Materials for thin section preparation and X-ray diffraction.; and to CF Minerals lab for indicator identification and to Saskatchewan Research Center for indicator identification. To date, diamond indicator processing has identified: picroilmenites, kimberlitic chromite, diamond inclusion pyrope garnets, eclogitic pyroxene.

In June 2007, WorleyParsons Komex conducted an ERT survey on Halmco's Mineral Permit 9305070817. This geophysical survey identified 4 resistive anomalies with vertical structure being noted on each structure. In December 2007, WorleyParsons Komex conducted one ERT survey and one ground magnetic survey on Mineral Permit 9305070817 and two ERT surveys and one ground magnetic survey on Mineral Permit 9306060989. In July/08, review of the data from the ERT and Mag surveys on permit 9305070817; resulted in Halmco deciding that more geophysical data was needed regarding the four vertical structures discovered on Mineral Permit 9305070817. In June 2009, Money Rock Resources / Halmco, sighted and flagged three lines for ERT and VLF surveys on permit 9305070817.

Assay results from anomaly CL9 core identified highly anomalous gold and silver values.

In 2009, Money Rock began a review of all Calling Lake area geophysical and geochemical data. Money Rock also began a surface sampling program specific to gold, silver and boron. The diamond exploration drill program planned for 2010 was put on hold. These geochemical surveys are ongoing

Calling Lake Area History of Work (prospecting-geophysical-geochemical surveys 1952 to 2011)

Money Rock Resources Halmco Inc.	2008 to present	geochemical surveys identified highly anomalous gold and silver values in core and surface samples
	2007	Electrical resistivity surveys (4)
	2006	Diamond drilling Hole CL9 180m Hole CL7 9.5m
	2004-2007	Staked twelve permits
Buffalo Diamonds Ltd. (±New Claymore Resources Ltd)	2002	BHP Billiton logged and sampled 2000 diamond drill core Holes: CLK001 to CLK010
	2000	10 diamond drillholes (1,041.5 m): holes CLK001 to CLK010
	1999-2000	High Sense Geophysics Ltd. Helicopter airborne magnetic survey 1,374 line-km, interpretation by Intrepid Geophysics Ltd (10 priority drill targets) - identified 10 priority target to drill
	1999	Terraquest Ltd. Fixed Wing Airborne Magnetic Survey, 11,507 line-km (200 m spacing): 978 line-km (100 m spacing), Interpretation by Intrepid Geophysics Ltd. One diamond drillhole CL9902 (52.4 m) Cost shared by Alberta Geological Survey and Buffalo Diamonds Ltd. Ground magnetic survey over SPECTRA/Dighem airborne targets - targets A41, A91 and CL-25M Overburden Drilling Program (71 holes, 2,204 m) - Hollow Stem Auger (55 holes, 1,922 m): 9BAH001-9BAH051 & 9BAH053-9BAH056 - Vibrating Sonic Drilling (14 holes, 137 m): 9BSH001-9BSH014 - Rotary Drilling (2 holes, 145 m): 9BAH052-9BAH057
	1998	Glacial Till, Stream Sediment, Beach Sand and Lake Sediment Sampling Program 584 samples+30 stream sediment samples, KIM analyses Interpretation of glacial history and ice direction using well data, air photos and LandSat Imagery
	MACRO DIAMOND DISCOVERY Calling River-Calling River East Target Area	
	Ground ERT, Magnetic, VLF-EM Surveys - Surveyed by Komex International Ltd. (ERT lines CL01-03)	
	Geoterrex-Dighem Helicopter Airborne EM and Magnetic Survey: 4,764 line-km - Interpretation by Intrepid Geophysics Ltd. in 1999	
Raymond Haimila , Dr. N. Haimila, Dr. T. Yoshida and 656405 Alberta Ltd.	1997	SPECTRA Aeromagnetic Survey (666 line-km) 9 "High Priority" targets identified for kimberlite exploration
	1995	Ground magnetic survey
	1994-1997	7-30 kg sand samples (KIM analyses); 44 thin sections of rock grab samples
Raymond Haimila	1993	Staked four permits (Calling Lake beaches and river)
Alberta Geological	1992-95	10-25kg samples in region – one on property
Dr. N. Haimila	1992-93	Magnetic contouring of 1952 Aeromagnetic data (regional)
Geological Survey of Canada	1991-92	Till sampling program south of property
	1952	Aeromagnetic Survey

Work Specific to Money Rock Resources Permit No. 9307010912
(January 2009 to January 2011)

At a December 2009 meeting, it was decided by Money Rock Resources to review all the old geophysical/geochemical data bases specific to anomaly CL9/CL10 and the surrounding area including Mineral Permit No. 9307010912 . This data had been reviewed for information that is specific to the discovery of diamonds and kimberlites. This data had never been reviewed from the perspective of data specific to a mineral deposit. This added direction was initiated by Assay results from two samples of CL9 core that identified anomalous values of gold.

This review of data identified a large resistive anomaly -possible mineral halo - that extended into the south boundary of Mineral Permit No. 9307010912.(see Appendix 2; page 2:1 and 2:2; Flight Line 10300 a 335Hz Differential Resistivity with Topographical Contours). This review also identified a gas well log that identified multiple layers of abundant pyrite. This well is located between anomaly CL9 and Permit No.9307010912.

In the spring of 2009 (June), Money Rock Resources prepared for an ERT (electrical resistivity tomography) and a Ground Mag survey over anomaly CL9 and Permit No. 9307010912. This included tagging the two seismic lines associated with CL9 (see Appendix 2; page 2:5). The survey was scheduled for the winter of 2010-11.

In January, 2011, Money Rock Resources surface sampled the two seismic lines that overlie Mineral Permit No. 9307010912.(see Appendix 1; page 1:2 for sample location sites) The sites were accessed by snowmobiles. Each sample site was hand auger to depth of 1.5 m to 2m. Each sample weighed approximately 2kgs.

The four samples were couriered to Loring Labs in Calgary for analysis.
(see results of the four fire assays for Gold and Silver -Appendix 1; page 1:3;
and the results of two 32 element ICPs- Apendix 1; page 1:4)

Introduction and Terms of Reference

The following report was prepared to describe exploration activities that took place On the Calling Lake Project's Mineral permit No:930307010912 during 2009 – 2011. This report has been structured to meet assessment requirements of Alberta Resource Development and was not written to National Instrument Policy 43-101.

Property Location and Description

Metallic and Industrial Mineral Permit No: 9307010912 is located on the west side of Calling Lake and about 50kms north of the Town of Athabasca within the Pelican River, 1:250,000 scale National Topographical System (NTS) map sheet 83P.

Metallic and Industrial Mineral Permit No: 9307010912

Term of Commencement Date January 24, 2009

Aggregate Area: 256 Hectares (640 acres)

Description of Location and Permitted Substances

4-23-072: section 10 (north half) and section 11 (north half)

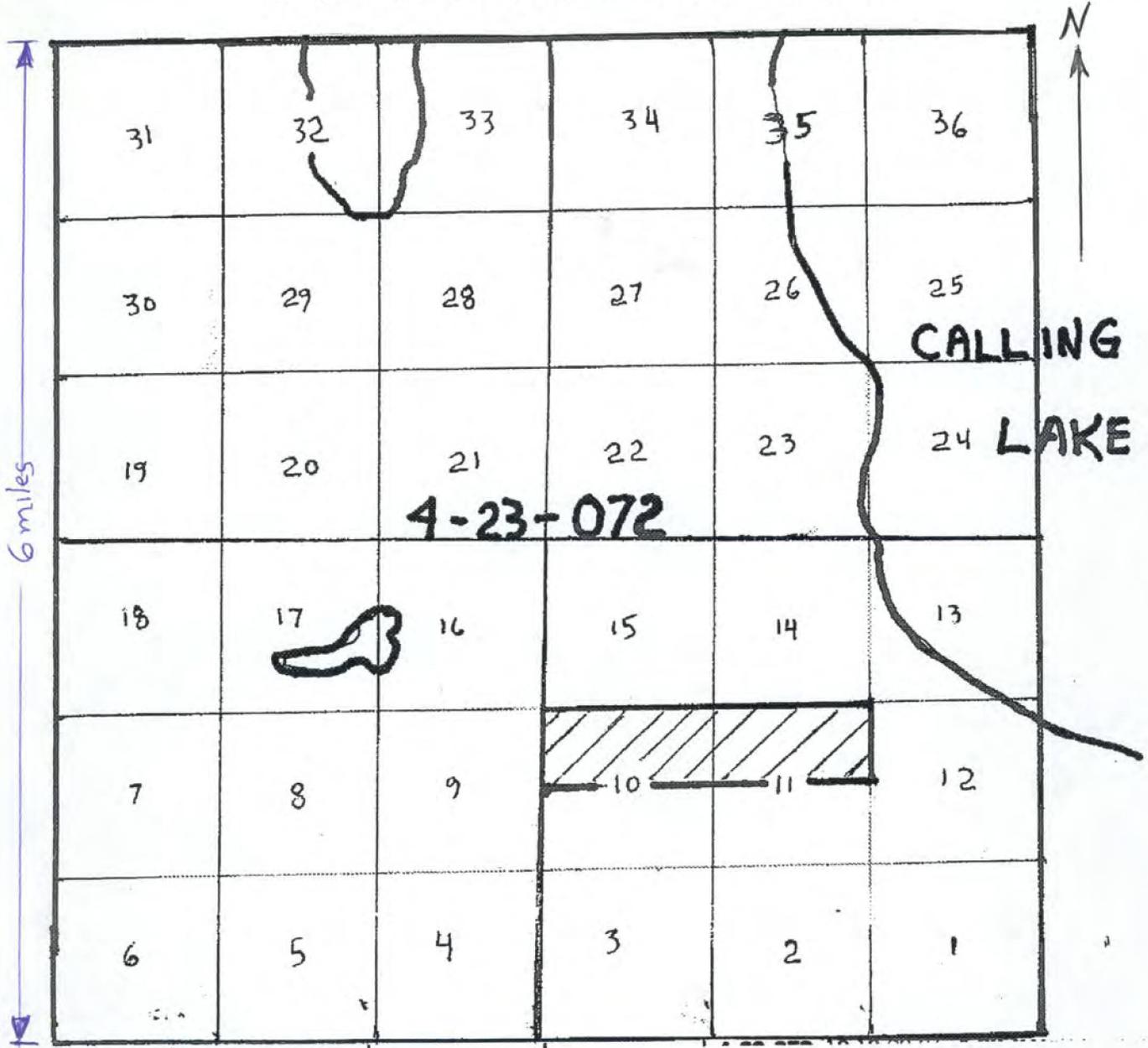
Descriptions and References that follow are from previous Calling Lake are Assessment Reports filed by: R Haimila, 656405 Alberta Ltd., Buffalo Diamonds. Apex Geoscience, Halmco / Money Rock Resources (1994 to 2011)

Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Calling Lake property may be accessed via Highway 813, gravel roads, trails and seismic lines. Portions of the permit area may be accessed by four-wheel drive vehicles or quads. There are two small airfields within the Calling Lake area, one near Orloff Lake and the second north of Calling Lake. Accommodation and food can be obtained at Calling Lake Lodge but fuel and supplies are best obtained in Athabasca. Camping facilities may be available in Calling Lake Provincial Campground.

The Calling Lake property is situated near the northern boundary of the Alberta Plain physiographic zone and the southern border of the Alberta Plateau (Klassen, 1989). Relief is low-lying. Elevation in the region varies from 590 to 700m above sea level

Money Rock Resources Location Map
 for Metallic and Industrial Minerals Permit No. 9307010912
 (Twp 72 Rge 23 W4, North half of Secs: 10 and 11)



Claim Group	Permit	Owner	Term Date	Description
Calling Lake	9307010912	Money Rock	24/01/2009	4-23-072: 10N:11N

FIGURE 1

(asl.), except along the Athabasca and Calling river valleys which drop steeply to approximately 480 m asl. Major topographic features in the region include: Calling Lake, situated in the centre of the property; Pelican Mountains to the northwest of the property; and the Athabasca and Calling rivers. Numerous streams and creeks drain the region, flowing into Calling Lake, which in turn drains into the Athabasca River via the Calling River or directly into the Athabasca River which wraps around the west, south and east borders of the property. In addition to the numerous small lakes and ponds, most of the property is covered by swamps, marshes and fens. A boreal forest containing mainly spruce and jack pine covers the property. Annual temperatures range from -40°C in January to 25°C in July.

Regional Geology

The Regional Geology description and references remains unchanged and has been reproduced from "Diamond Potential of Buffalo Diamonds Ltd's Calling Lake Property, Alberta" by Dufresne and Copeland (1999).

Precambrian

The Calling Lake permits lie in the Western Canadian Sedimentary Basin along the southern flank of the Peace River Arch (PRA). However, Precambrian rocks are not exposed within the Calling Lake area (NTS 83P). The basement underlying the PRA is comprised of several terranes including the Buffalo Head and the Chinchaga, both of which collectively form the Buffalo Head Craton (Ross *et al.*, 1991, 1998). The Buffalo Head Craton was accreted to the western edge of the Churchill Structural Province (Rae Subprovince) approximately 1.8 to 2.4 billion years ago (Ga). Due to their relatively stable history since accretion, the Buffalo Head and Chinchaga terranes are currently the focus of extensive diamond exploration in northern Alberta.

The basement underlying the Calling Lake permits borders the Buffalo Head Terrane (BHT), the Talston Magmatic Zone (TMZ) and an unnamed domain (Figure 3). Basement underlying the northeast portion of the Calling Lake Permits is part of the Talston Magmatic Zone (TMZ), a 2.0 to 1.8 Ga aged terrane that represents a magmatic arc related to collisional orogeny during the Proterozoic. The TMZ is characterised by a highly corrugated internal fabric comprised of extremely high relief, north-trending sinuous magnetic anomalies. The northwestern portion of the Calling Lake permits is underlain by basement of the BHT, an area of high positive magnetic relief with a north to northeasterly fabric (Villeneuve *et al.*, 1993). The area of Ashton Mining of Canada Inc.'s (Ashton) Buffalo Head Hills kimberlite discovery is underlain by basement of the BHT.

The bulk of the basement underlying the Calling Lake permits is part of an unnamed domain (Figure 3). The gravity and magnetic signatures of the unnamed domain are very similar to those of the BHT and Wabamun Terrane and, therefore, may in fact be an extension of either one of these terranes. The Wabamun Terrane is geologically and magnetically similar to the BHT and was likely accreted to the western edge of the Churchill Structural Province between 2.4 to 1.8 Ga. The BHT and the Wabamun Terrane are thought to represent either Archean crust that has been thermally reworked during the Hudsonian (Proterozoic) Orogeny (Burwash *et al.*, 1962; Burwash and Culbert, 1976; Burwash *et al.*, 1994) or accreted Proterozoic terranes that may or may not have an Archean component (Ross and Stephenson, 1989; Ross *et al.*, 1991; Villeneuve *et al.*, 1993). Precambrian rocks which have been intersected in drill core from the BHT and the Wabamun Terrane comprise felsic to intermediate metaplutonic rocks, felsic metavolcanic rocks and high-grade gneisses (Villeneuve *et al.*, 1993). The presence of a large number of eclogitic garnets and eclogitic pyroxenes in association with kimberlites or related intrusions in northern Alberta may indicate the presence of a significant volume of subducted basaltic and sedimentary protolith in the upper mantle and lower crust beneath the Buffalo Head Craton. The Calling Lake permits lie within an area with an intermediate to high residual gravity signature. Seismic refraction and reflection studies indicate that the crust in the Calling Lake region is likely around 35

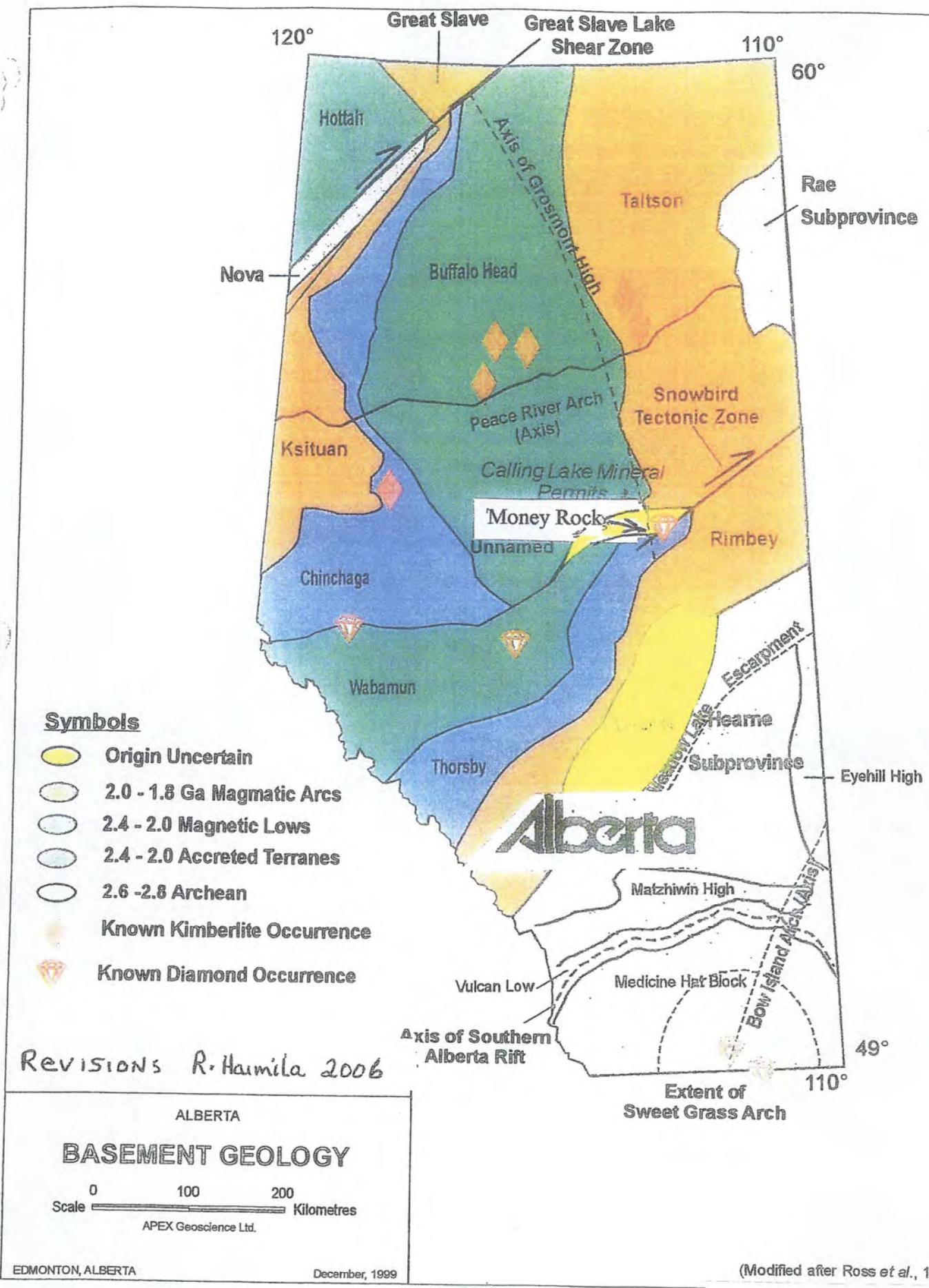


FIGURE 2

to 40 km thick, a trait favourable for the formation and preservation of diamonds in the upper mantle (Dufresne *et al.*, 1996). In addition, studies by Lithoprobe have indicated that a deep mantle root, as illustrated by Figure 25 in Helmstaedt (1993), exists proximal to the area (Haimila, 1997).

Directly south of the Calling Lake permits, the basement is part of the Proterozoic Thorsby Magnetic Low (2.4 – 2.0 Ga), which merges into the Snowbird Tectonic Zone to the northeast (Figure 3). The Thorsby Low is a narrow northeasterly trending, curvilinear aeromagnetic low that is similar in character to the Chinchaga Low. It is collinear with a gravity gradient between the adjacent domains and contains numerous basement faults that extend into the overlying Paleozoic and Mesozoic succession (Edwards and Brown, 1994). The Snowbird Tectonic Zone (STZ) is a major northeast-trending crustal lineament that is a prominent lineament on both the aeromagnetic and the gravity maps of Canada (Geological Survey of Canada, 1990a, b). The STZ separates the Churchill Structural Province into two distinct basement domains, the Rae and Heame Subprovinces, and extends to the northeast as far as Baker Lake, Nunavut (Ross *et al.*, 1991).

Phanerozoic

Overlying the basement in the Calling Lake region is a thick sequence of Phanerozoic rocks comprised mainly of Cretaceous sandstones and shales near surface and Mississippian to Devonian carbonates and salts at depth (Glass, 1990). Bedrock exposure within the permit blocks is limited primarily to river and stream cuts and topographic highs. Table 1 shows 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 hydrogeological reports (Carrigy, 1971; Green *et al.*, 1970; Glass, 1990).

Underlying the near surface Cretaceous units in the Calling Lake area is a thick succession of Devonian to Mississippian carbonates, calcareous shales and salt horizons (Mossop and Shetson, 1994). Several of the Devonian carbonate units are part of the Grosmont Reef Complex, a large structure that extends in a northwesterly direction from the Calling Lake area to the N.W.T. (Bloy and Hadley, 1989). The Grosmont Reef Complex is likely the result of tectonic uplift during the Devonian along this trend (the Grosmont High on Figure 4). This structure in conjunction with the PRA could have played a significant role in the localisation of faults and other structures that could have provided favourable pathways for kimberlite volcanism.

In general, the Cretaceous strata underlying the Calling Lake permits is composed of alternating units of marine and nonmarine sandstones, shales, siltstones, mudstones and bentonites. The oldest documented units exposed in the permit area belong to the Smoky Group, a sequence of Upper Cretaceous calcareous and noncalcareous shales (Figure 4). However, older units from the base of the Fort St. John and/or the top of the Colorado groups may be exposed in river and stream cuts.

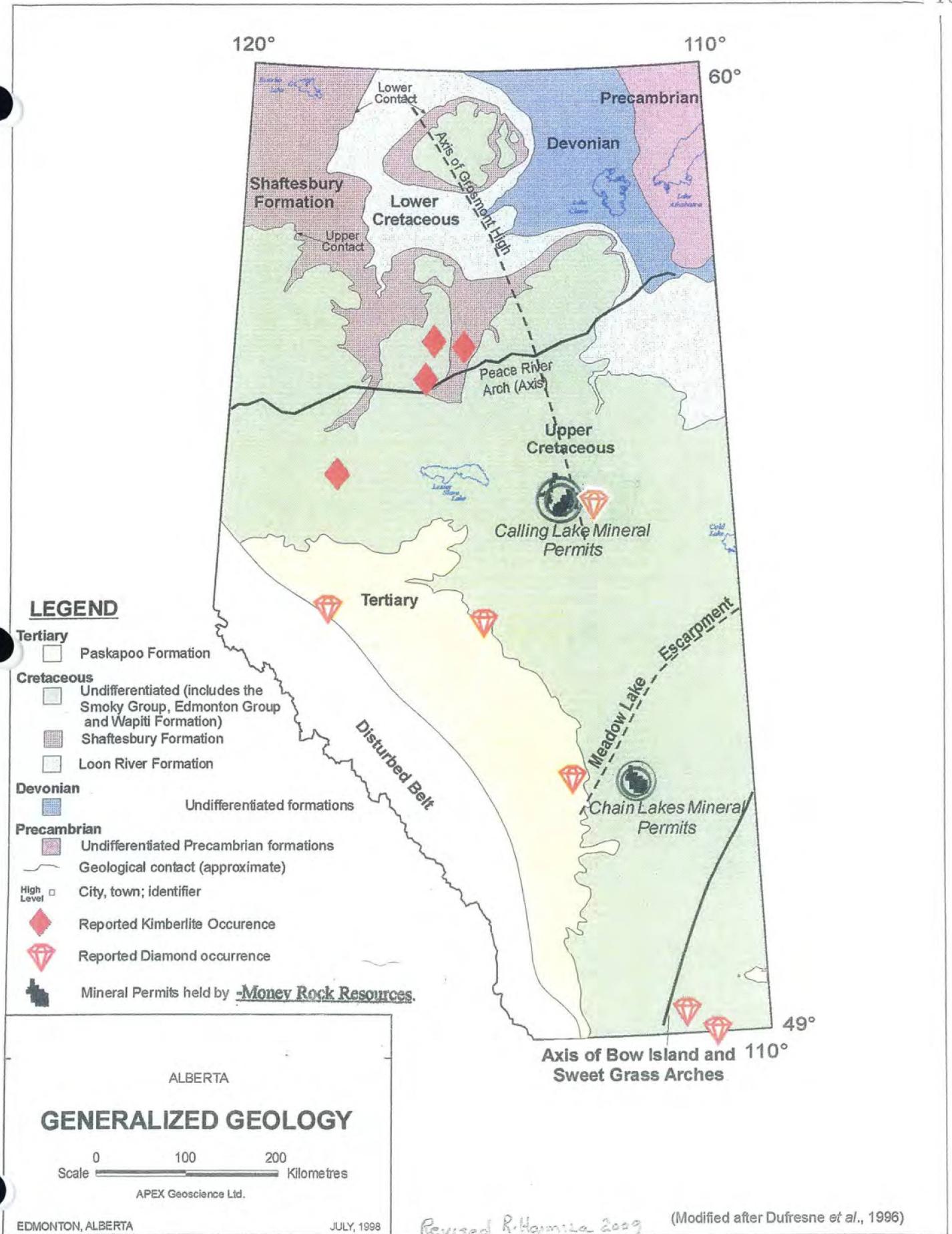


FIGURE 3

**TABLE 1:
GENERALIZED STRATIGRAPHY
CALLING LAKE PERMIT AREA**

SYSTEM	GROUP	FORMATION	AGE* (MA)	DOMINANT LITHOLOGY
PLEISTOCENE			Recent	Glacial till and associated sediments
TERTIARY			6.5 to Recent	Preglacial sand and gravels
UPPER 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 Fm.
LOWER CRETACEOUS	Colorado	Pelican	98 to 100	Glauconitic sands, siltstone, mudstone and conglomerate
		Joli Fou	100 to 103	Shale, glauconitic sandstone and bentonite

*Ages approximated from Green *et al.* (1970), Glass (1990), Dufresne *et al.* (1996) and Leckie *et al.* (1997).

The Colorado Group is Lower Cretaceous in age and contains numerous formations, including the Joli Fou and the Pelican formations, which are correlative with the Peace River Formation of the Fort St. John Group further west (Dufresne *et al.*, 1996). The Joli Fou Formation is comprised of shale with interbedded, bioturbated to glauconitic sandstones and minor amounts of bentonite, pelecypod coquinas, nodular phosphorite and concretionary layers of calcite, siderite and pyrite (Glass, 1990). The Pelican Formation disconformably overlies the Joli Fou Formation and is gradational with the overlying Shaftesbury Formation (shales of the Colorado Group) and is correlative with the Cadotte and Paddy Sands of the Peace River area (Fort St. John Group). The Pelican Formation is comprised of glauconitic sands, interbedded siltstone and mudstone with minor amounts of conglomerate. Coalified plant fragments and bioturbated sandstones are locally abundant.

The La Biche Formation is a frequently incorrectly used term correlative to units of the Shaftesbury Formation and other formations within the Smoky and Colorado groups (Glass, 1990). In the Calling Lake permit area, the term Shaftesbury Formation (Fort St. John Group) is more commonly used. This unit is correlative with the shales overlying and underlying the Fish Scale unit in the Colorado Group. The Shaftesbury Formation is lower Upper Cretaceous in age and is comprised of marine shales with fish-scale bearing silts, thin bentonitic streaks and ironstones. The upper contact is conformable and transitional with the Dunvegan Formation, however, the Dunvegan Formation may be absent in the Calling Lake region. The Shaftesbury Formation may be exposed along deep river and stream cuts. Evidence of extensive volcanism during deposition of the Kaskapau and the Shaftesbury formations exists in the form of

bentonites of variable thickness, distribution and composition. Numerous bentonitic horizons exist throughout the Shaftesbury Formation, especially within and near the Fish Scales horizon across much of Alberta (Leckie *et al.*, 1992; Bloch *et al.*, 1993). The time span of deposition of the Shaftesbury Formation is also chronologically correlative 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 à la Corne in Saskatchewan (Lehnert-Thiel *et al.*, 1992; Scott Smith *et al.*, 1994). In addition, there is documented igneous activity associated with the Steen River Anomaly, a possible impact structure, which formed in northwestern Alberta about this time (Carrigy, 1968; Dufresne *et al.*, 1995).

The Smoky Group is Upper Cretaceous in age and is comprised of thinly bedded, marine, silty shale with occasional ironstone and claystone nodules and thin bentonite streaks. The group is divided into three formations: (a) a lower shale unit, Kaskapau, which includes the Second White Specks marker unit; (b) a middle sandstone, named the Bad Heart; and, (c) an upper shale, Puskwaskau, which contains the First White Specks marker unit. The Smoky Group is conformably and transitionally overlain by the Wapiti Formation. Ammonite fossils and concretions are present in both the Puskwaskau and the Kaskapau formations. In addition, foraminifera are present in the lower arenaceous units (Glass, 1990). The upper formations of the Smoky Group are correlative with the Lea Park Formation. The lower portions of the Smoky Group are correlative with the middle to upper units of the Colorado Group, including the First and Second White Speckled Shale marker units (Glass, 1990). Bedrock exposures in the Calling Lake permits are likely comprised of the Kaskapau Formation, in particular, the Second White Specks unit or lower, since most of the upper portions of the Smoky Group have been eroded away by glacial and/or post-depositional processes. However, areas, where the Smoky Group is overlain by the Wapiti Formation, may still have most of the Bad Heart and/or Puskwaskau formations still intact with minimal erosion. In general, exposures of the Smoky Group are limited to river and stream cuts, topographic highs, and regions with thin drift veneer. There is strong evidence of volcanism associated within the depositional time span of the Smoky Group in the vicinity of the PRA (Auston, 1998; Carlson *et al.*, 1998). Ashton's recently discovered Buffalo Head Hills kimberlites intrude Kaskapau shale and yield emplacement ages of 86 to 88 Ma (Auston, 1998; Carlson *et al.*, 1998).

The youngest bedrock unit in the Calling Lake area is the Wapiti Formation of Upper Cretaceous age, comprised of non-marine, thinly bedded to massive sandstone with minor coal seams and thin conglomerate lenses. The upper surface of the Wapiti Formation is generally erosional. Thickness of the unit may exceed 100 m (Glass, 1990). The Wapiti Formation is exposed in the northwestern portions of the Calling Lake permits west of Calling Lake. In addition, smaller outliers or remnants of the Wapiti Formation are known to be present south and east of the permits (Green *et al.*, 1970). The Mountain Lake Kimberlite near Grande Prairie intrudes the Wapiti Formation sediments and yields an emplacement age of 75 Ma (Leckie *et al.*, 1997).

Quaternary

Data and information about the surficial geology in central to northern Alberta is sparse and regional in nature. Prior to continental glaciation during the Pleistocene, most of Alberta, including the Calling Lake region, had reached a mature stage of erosion. Large, broad paleochannels and their tributaries drained much of the region, flowing in an east to northeasterly direction (Dufresne *et al.*, 1996). In addition, Late Tertiary to Quaternary fluvial sand and gravel was deposited preglacially over much of the region.

During the Pleistocene, multiple southwesterly and southerly glacial advances of the Laurentide Ice Sheet across the region resulted in the deposition of ground moraine and associated sediments (Figure 5 in Dufresne *et al.*, 1996). In addition, the advance of glacial ice resulted in the erosion and glaciotectionism of the underlying bedrock. Ice thrust bedrock has been documented just south of the Athabasca River (Klassen, 1989) and smaller occurrences of

glaciotectonism within the Calling Lake permits are possible. Remnants of preglacial sands and gravel have been documented on topographic highs, including the Pelican Mountains just northwest of the Calling Lake permits (Dufresne *et al.*, 1996). Glacial sediments infilled low-lying and depressional areas, draped topographic highs and covered much of the Calling Lake area as veneers and/or blankets of till and diamict. Localised pockets of deposits from glacial meltwater and proglacial lakes infill the numerous spillway channels present near the area.

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

The majority of area within the Calling Lake permits is underlain by drift of variable thickness, ranging from less than 2 m to likely over 45 m (Pawlowicz and Fenton, 1995a,b). Drift thickness decreases considerably outside of infilled depressions and meltwater channels and in areas of high topographic relief, in particular near the Pelican Mountains. However, local drift thicknesses can not be confirmed without detailed compilation of available drill hole data. Information regarding bedrock topography and drift thickness in northwest Alberta is available from the logs of holes drilled for petroleum, coal or groundwater exploration and from regional government compilations (Pawlowicz and Fenton, 1995a,b; Dufresne *et al.*, 1996).

Structural Geology

In north-central Alberta, the PRA is a region where the younger Phanerozoic rocks which overlie the Precambrian basement, have undergone periodic vertical and, possibly, compressive deformation from the Proterozoic into Tertiary time (Cant, 1988; O'Connell *et al.*, 1990; Dufresne *et al.*, 1995, 1996). This pattern of long-lived, periodic uplift and subsidence has imposed a structural control on the deposition patterns of the Phanerozoic strata in northern Alberta. In addition, this periodic movement has resulted in a rectilinear pattern of faults that not only is responsible for structurally controlled oil and gas pools, but may have provided potential pathways for later deep-seated intrusive kimberlitic magmas.

During the mid-Cretaceous and Early Tertiary, compressive deformation occurred as a result of the orogenic event that eventually led to the formation of the Rocky Mountains. The PRA was emergent during this period resulting in the reactivation of many prominent basement faults. The Phanerozoic rocks beneath the Calling Lake permits lie within the southeastern edge of the PRA and are underlain by and proximal to basement faults related to the STZ and the underlying Grosmont Reef Complex, which was formed over the Grosmont High (Bloy and Hadley, 1990; Dufresne *et al.*, 1996). Basement faults may have controlled the emplacement of the Mountain Lake Kimberlite and the Buffalo Head Hills kimberlites northwest of the Calling Lake permits (Dufresne *et al.*, 1996; Leckie *et al.*, 1997). Therefore, structures in the Calling Lake area resulting from tectonic activity associated with movement along the PRA, the Grosmont High, the STZ or even along contacts between different basement terranes could be pathways for kimberlitic volcanism.

Previous Exploration

Alberta Geological Survey website under the heading – Reports
(ags.gov.ab.ca/publications)

For Calling Lake

... see Mineral Assessment Reports Nos: 19950029, 19960018, 19970001, 19970013, 19980010, 19980017, 19980023, 20000010, 20000016, 20060033 and 20070022 (one other report still confidential)

Overview and Conclusion

The principals of MRR have used Satellite Imagery, Seismic Profiles, Airborne Geophysics, Ground Surveys and Geochemical Surveys to prospect for minerals in Western Canada for more than 15 years with some success. Using data from these various surveys, MRR identified a series of high priority pipe-like structures in the Calling Lake Area of Alberta. Since the original mineral permits were acquired in 1993-94 by two of the principal owners of MRR, there has been expended in excess of \$2.6M CDN dollars to stake, survey and perform further research to maintain a series of mineral permits in the area.

Exploration of the Calling Lake Area of Alberta has resulted in the discovery of anomalous numbers of diamond indicators located along the west and south shores of Calling Lake and along the east Calling River. A gem quality macro diamond and fifteen diamond fragments were discovered at two sites along the east Calling River. Grid sampling of the Calling Lake area identified: diamond inclusion high pressure/high sodium eclogitic garnets, chrome diopsides, pyroxenes, unaltered olivines, diamond inclusion chromites, microilmenites, rubies, sapphires, and a complete suite of pyrope garnets (G1 to G12); including over seventy "Gurney" G10 garnets.

Equally interesting are the anomalous Silver, Boron and Gold values identified in core samples and surface samples from the Calling Lake Project. (see Appendix 1 - page 1:5 -for values and sample locations.) The high Boron values suggest a possible hydrothermal event. The Gahnites identified in surface sampling along the Calling River and the west side of Calling Lake also suggest a possible hydrothermal event associated with the Calling Lake area.

The locations of the anomalous Silver, Boron and Gold appear to be coincidental with identified high priority, pipe-like, geophysical anomalies located along the East Calling River (anomalies CL6 and CL7) and located on the west side of Calling Lake (anomalies CL9 and CL10)

Anomalies CL9 and CL10 appear to be two pipe-like structures and/or one very large multi-phase structure. This structure is approximately 1.2 kilometers in diameter and has a depth of at least 700 meters with a possible volume of several hundred million tons. The inferred volume is based on the interpretation of the seismic, magnetic, EM and ERT (Electrical Resistive Tomography ground surveys) located over CL9/CL10. These surveys show the possibility of anomalies CL9/CL10 extending into Mineral Permit No. 9307010912. (see Appendix 2; pages 2:1 to 2:5). This possibility is high lighted on page 2:2; which shows a cross section of Flight Line 10300 (335 Hz Differential Resistivity with Topographical Contours). This shows Anomaly CL9 extending into the south portion of Mineral Permit No.9307010912.

Two of four surface samples located on Permit No. 9307010912 (Appendix 1; page 1:2) identified anomalous gold (9ppb) / boron (2973ppm) values (Appendix 1; pages 1:3 and 1:4)

Background median values for Gold and Silver for selected rock types in Alberta (ERCB / AGS Open File 2011-01..... page 6)

Sandstone/quartzite.....	0.6ppb gold and 0.1ppm silver
Shale/Siltstone/Bentonite.....	2.ppb gold and 0.1ppm silver
Carbonates.....	0,4ppb gold and 0.1ppm silver
Mafic and Alkaline Igneous.....	2.5ppb gold and <0.1ppm silver

The Gold, Silver and Boron values identified in core (124m to 170m depth) from anomaly CL9, are highly anomalous. Eighteen - 30 element ICP'S and 18 fire assays identified the following Peak Values: 575 ppb Gold; 18ppm Silver; and 5007ppm Boron.

The 18 assays averaged 3.5gms/ton Silver and 3776 gms/ton Boron

The last two meters of core averaged 6.4 gms/ton Silver and 150ppb Gold.

The anomalous Gold values identified in samples from the Calling Lake Project area (see Appendix 1; page 1:5) raises the question of where is the source?

In 1997, Dr. Hugh Abercrombie and Dr. R. Feng published a paper..." geological setting and origin of Microdisseminated **Au - Ag - Cu**...of Northeastern Alberta. Geological Survey of Canada Bulletin 500..."Exploring for Minerals in Alberta."

" The Genetic Model for microdisseminated polymetallic minerals, northeaster Alberta.

Brines originating in the Prairie Formation descend by density drive where they are oxidized by reaction with hematite and anhydrite, at which point they are capable of scavenging and transporting metals. Present and past fluid flow has dominantly been updip to the east and has resulted in focused discharge of metal-bearing brines along collapse structures associated with salt dissolution and karsting at the sub-Cretaceous unconformity. Possible sites of gold precipitation -at regional or structurally controlled, microbial mediated redox boundaries." Site highlighted in presentation are collapse structures associated with Athabasca River.

Money²Rock Resources concludes that the Calling Lake area may be a possible site of Gold and Silver precipitation. This precipitation of metals may have been enhanced through a system of intrusive structures and collapse structures. Exploration, geochemical surveys and research of existing data bases are ongoing.

As co-author of this report, I, Raymond Haimila; consent to the use of this report by Halmco Inc. and Money Rock Resources' for assessment purposes only.

Background in Earth Sciences

1963-64: Integrated Velocity Services (Oil and Gas well-log interpretation)

1977 to present: Researching for industrial and metallic minerals in western Canada. This is a continuing project based on: remote sensing (geotechnical interpretations of satellite imagery developed by Dr. N. Haimila as well as reviewing and interpreting seismic/magnetic/gravity data bases of western Canada.)

1991-92: Gained Intervenor Status between the Alberta Governments Natural Resources Conservation Board and Three Sisters Golf Resorts. Presentation was oral/visual showing the geotechnical hazards associated with abandoned underground mining operations.

1993: Term Paper (The Environmental Geology of the Canmore Mine Site) for Geology 1159, Mount Royal College, Calgary

1993: The Natural Resources Conservation Board recommended the Town of Canmore (3 Sisters Decision Report) utilize my geotechnical expertise. Appointed as a committee member of the Town of Canmore's Geotechnical Advisory Group. The mandate was to develop a set of undermining guidelines that would allow for safe development on undermined lands. The province of Alberta adopted these guidelines in 1997.

1994-98: Co-owner of 656405 Alberta Ltd. (diamond exploration company). Discovered the highly anomalous diamond indicator sites in the Calling Lake area-1993- with partner Dr. T. Yoshida

1996-98: Authored Alberta Mineral Assessment reports For Dr. Yoshida/DR. Haimila and co-authored assessment reports for Buffalo Diamonds

1998-2002; Co-founder/director/president of Buffalo Diamonds (Public Company)

2003: Thesis Paper (Rheology and the Genesis of Diamonds) Theory demonstrates the mechanics of rocks and the rheological response of rock initiates a primary force that allows for a single species/element (carbon) to be converted to and/or deposited as the allotropic form of pure carbon- diamond

2004 to present: Designed and implemented a diamond exploration program in the Calling Lake area of Alberta for Hamco Inc and Clarion Mining, Money Rock Resources

Designed and implemented a gold and silver exploration program in the Calling Lake area of Alberta

Box 8264 STN MAIN
CANMORE ALBERTA T1W-2V1

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Physical Characteristics of Canadian Kimberlites—Katsube, T. and Kjarsgaard, B.

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ACTUAL EXPENDITURE STATEMENT OF WORK BREAKDOWN

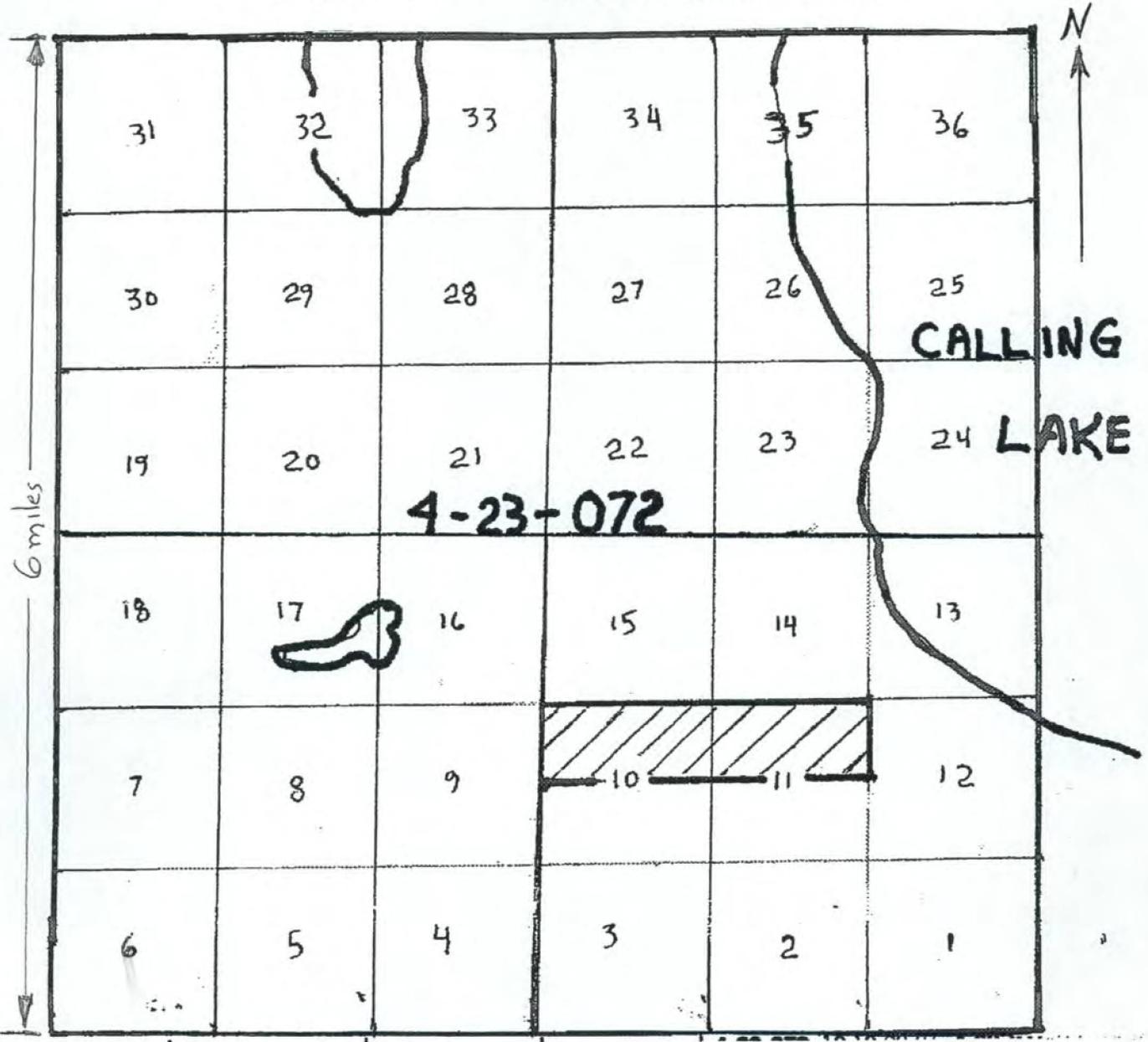
	Amount Spent
1. Prospecting	\$ _____
2. Geological mapping and petrology	\$ _____
3. Geophysical Surveys	
a. Airborne	
b. Ground	\$ 1500.00
4. Geochemical Surveys	\$ 2850.00
5. Trenching and Stripping	\$ _____
6. Drilling	\$ _____
7. Assaying and whole rock analysis	\$148.16
8. Other Work <u>consulting, meeting with consultants,</u> <u>courier costs, report costs</u>	\$900.00
<u>Subtotal</u>	<u>\$5348.16</u>
9. Administration (10% of subtotal)	\$534.81
TOTAL	\$5882.97

Signature

Raymond Haimila
PRINT NAME

Coal & Mineral Development, Department of Energy

Money Rock Resources Location Map
for Metallic and Industrial Minerals Permit No. 9307010912
(Twp 72 Rge 23 W4, North half of Secs: 10 and 11)



Claim Group	Permit	Owner	Term Date	Description
Calling Lake	9307010912	Money Rock	24/01/2009	4-23-072: 10N:11N

HIGH PRIORITY ANOMALIES - are priority anomalies with multiple geophysical signatures suggestive of vertical structure (ERT and/or Seismic)

TARGET AREA 2

mineral permit.9307010912

North/South Seismic line
Shows vertical disruption in reflectors coincidental with Anomaly CL 9

- #1
- #2
- #3
- #4

CL9
Drill site #9

West

ERT LINE 2

East

Geotrex-dighem Airborne Survey 1998
7500 Hz resistivity High Priority Anomaly

Line	Location	Shape	Mag	Size (m)	Description
10280	345220E/6120641N	Ovoid	-	400	22' ohm-m resistivity low in over 40 ohm-m background

Mineral Permit No: 9307010912
Sample site Location Map

Samples:

- 11 North # 1 (113' 25" 26.5W 55' 13" 21.4N)
- 11 North # 2 (113' 25" 23.1W 55' 13" 23.1N)
- 11 North # 3 (113' 25" 57.5W 55' 13" 15.3N)
- 11 North # 4 (113' 25" 59.1W 55' 13" 30.7N)

SEISMIC LINE

Dighem / Fugro flight line 10300

Handwritten signature and date: 07



Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 403- 274-2777 Fax:403- 275-0541
loringlabs@telus.net

ISO9001:2008 Certified

TO: Ray Haimila
Box 8264 Str. Main
Canmore, Alberta T1W 2V2
Tel: 403-609-0153, Fax: 403-678-9488

File No : 5 3 9 6 6
Date : Jan. 17, 2011

Certificate of Assay

Sample No.	Au ppb	Ag ppm
<u>"Assay Analysis"</u>		
11 North # 1	9	<0.5
11 North # 2	<5	<0.5
11 North # 3	<5	<0.5
11 North # 4	5	<0.5
<p>Methodology: Au Fire Assay with AA finish Ag Nitric Acid Digestion with AA finish</p> <p>Received Date: Jan. 11/2011</p>		

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:



Assayer: Alex Tamaian

Rejects and pulps are retained for one month unless specific arrangements are made in advance.



ISO9001:2008 Certified

Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel: 403-274-2777 Fax: 403-275-0541
loringlabs@telus.net

FILE: 5 3 9 6 6

DATE: Jan. 17, 2011

TO: Ray Haimila
Box 8264 Str. Main
Canmore, Alberta T1W 2V2
Tel: 403-609-0153, Fax: 403-678-9488

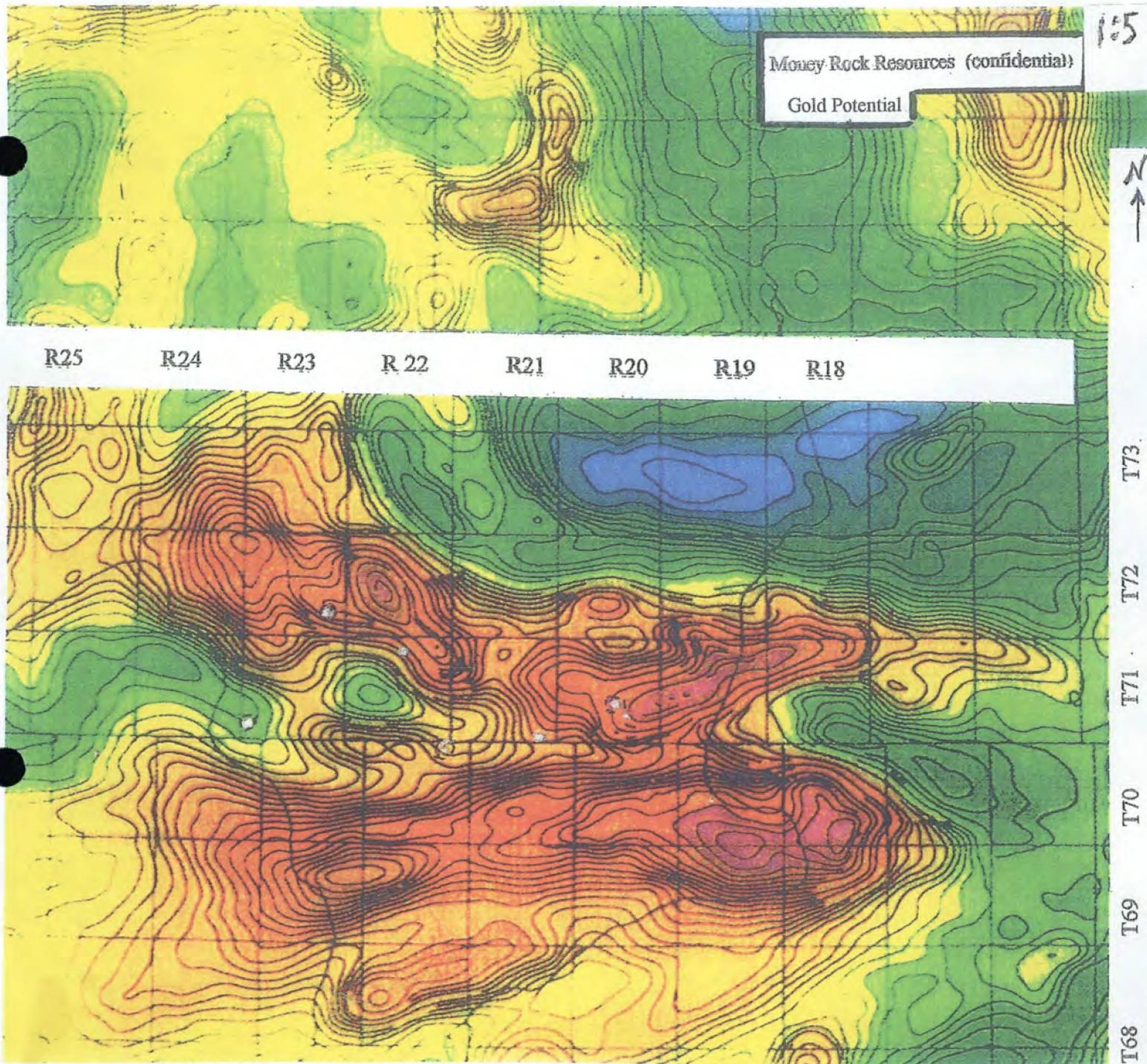
32 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppb	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
11 North # 1	<0.5	6.25	10	9	2554	634	<1	<1	0.49	2	11	141	27	2.71	1.35	18	0.62	293	3	0.73	27	0.05	18	4	118	27	0.21	<1	127	2	71	113
11 North # 3	<0.5	6.51	10	<5	2973	602	<1	<1	0.40	2	13	154	17	2.87	1.42	20	0.66	298	4	0.64	26	0.04	18	5	106	25	0.23	<1	121	2	68	109

0.500 gram sample is total digested with multi acid and bulked to 25 ml, ICP finish.
Au-30gram Fire Assay with AA finish
Ag-0.5 gram Nitric Acid Digestion with AA finish
Sample received on Jan. 11, 2011

Certified by





Alberta Aeromagnetic Map

1. Twp 71 R23W4 sec: 6 (Tomato Creek)....5 holes hand auger depth 1m to 2m
5 samples - 30 Element ICP; 2 samples fire assayed for Gold (440ppb Au and 152ppb Au)
2. Twp 72 R23W4 sec: 2... Anomaly CL9, drill ended in breccia; 20 ICP analysis and 18 fire assays identified anomalous Gold, Silver and Boron. Peak values: 573ppb Au/ 18ppm Ag/ 5007ppm B.
Two of the ICP results (30ppm Au) may be an artifact and/ or nugget effect.
3. Twp 71 R22W4 secs: 25, 33 ...several fine gold particles in pan (beach concentrate)
4. Twp 70 R22W4 sec: 35...several fine gold particle in pan (from bottom of borrow pit)
5. Twp 71 R21W4 sec: 3... several fine gold particles (in 25litre sample-side of road)
6. Twp 71 R20W4 sec: 15...particles of gold identified in a 1.7kg rock sample from Anomaly CL6,
a conglomerate outcrop along Calling River (analysis of particles 95% Au and 5% Ag)
...Anomaly CL7, fire assay of core: 365ppb Au / 2ppm Ag / 3290ppm B

HIGH PRIORITY ANOMALIES – are priority anomalies with multiple geophysical signatures suggestive of vertical structure (ERT and/or Seismic)

TARGET AREA 2

mineral permit.9307010912

North/South Seismic line
Shows vertical disruption in reflectors coincidental with Anomaly CL 9

- # 1
- # 2
- # 3
- # 4

CL9
Drill site #9

West

ERT LINE 2

East

NORTH

Dighem / Fugro flight line 10300

Geotrex-dighem Airborne Survey 1998
7500 Hz resistivity High Priority Anomaly

Line	Location	Shape	Mag	Size (m)	Description
10280	345220E/6120641N	Ovoid	-	400	22 ohm-m resistivity low in over 40 ohm-m background

Mineral Permit No: 9307010912
Sample site Location Map

- Samples:
- 11 North # 1 (113' 25" 26.5W 55' 13" 21.4N)
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 - 11 North # 4 (113' 25" 59.1W 55' 13" 30.7N)

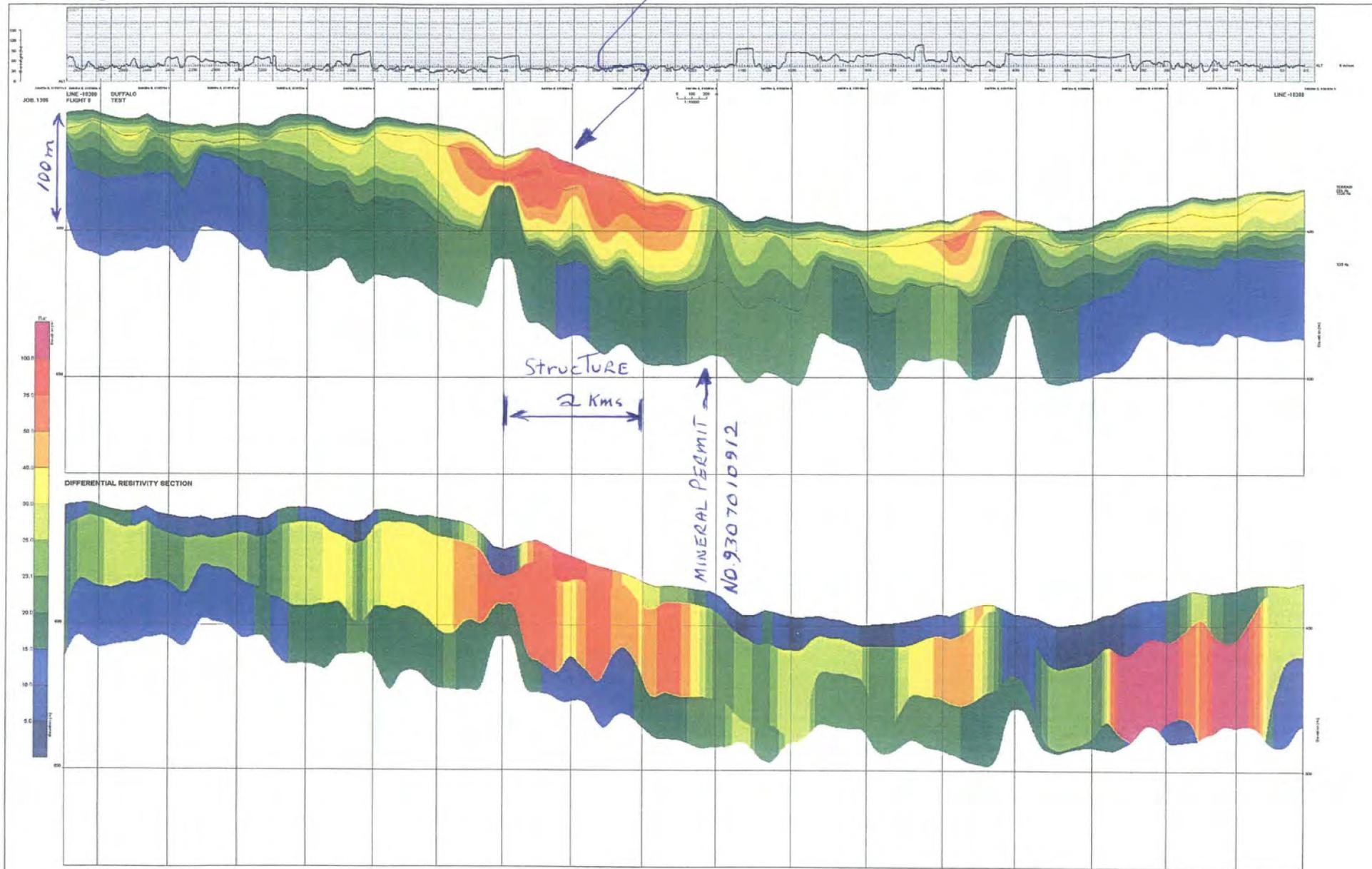
SEISMIC LINE

DIGHEM AIRBORNE SURVEY

ANOMALY CL9 + CL10

NORTH →

line 10300



FUGRO AIRBORNE SURVEYS
REVISED 2007
MODIFIED 2010



339000 340000 341000 342000 343000 344000 345000 346000 347000 348000

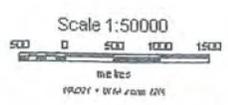
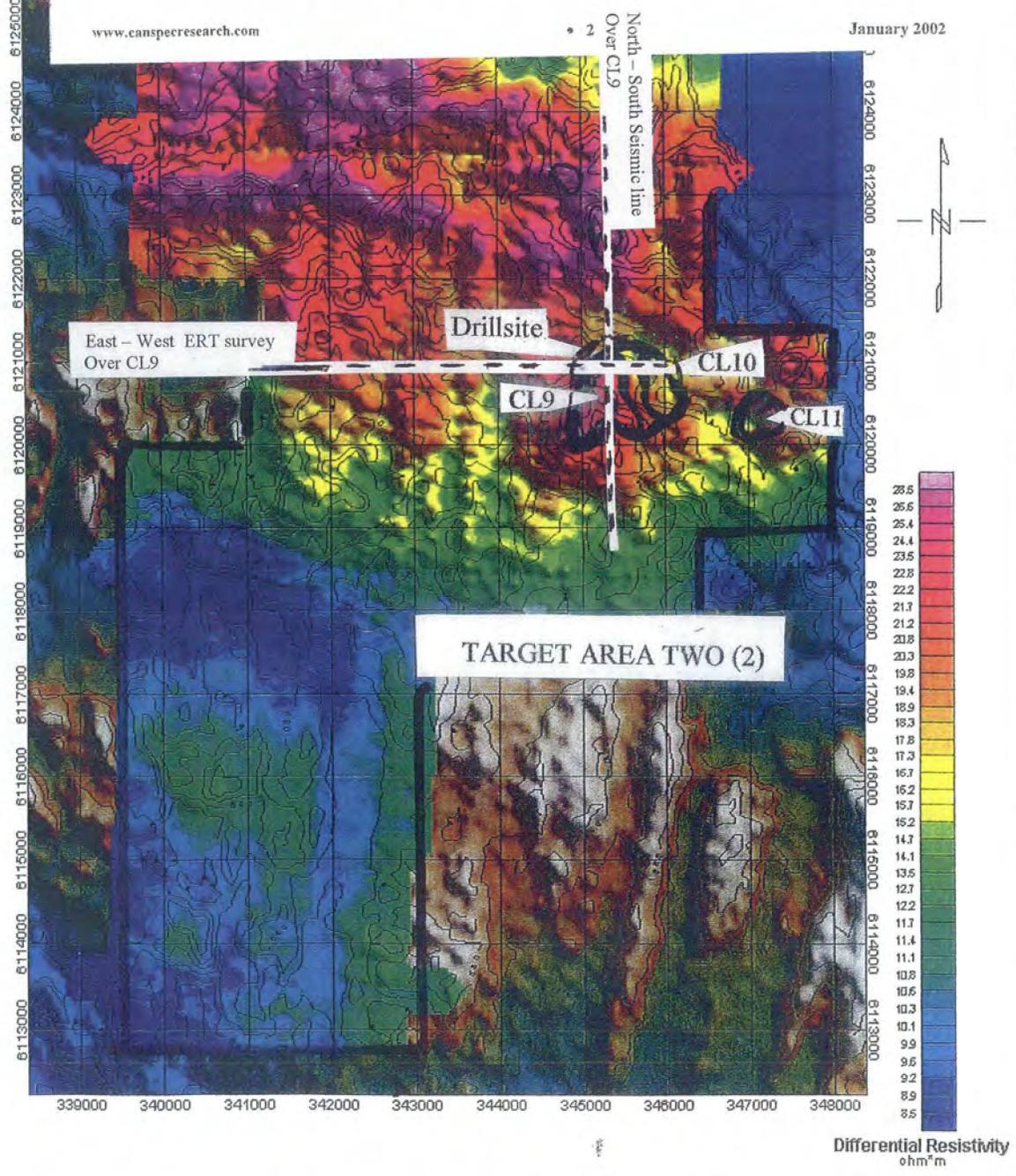
Tonnage Estimates for Craters and Diatremes

Surface Area			Crater Depth (m)			Diatreme Depth (m)		
Ha	acres	Diameter	100	200	300	100	200	300
1	2.5	113	1,675,000	3,350,000	5,025,000	2,500,000	5,000,000	7,500,000
2	4.9	160	3,350,000	6,700,000	10,050,000	5,000,000	10,000,000	15,000,000
5	12.4	252	8,375,000	16,750,000	25,125,000	12,500,000	25,000,000	37,500,000
10	24.7	357	16,750,000	33,500,000	50,250,000	25,000,000	50,000,000	75,000,000
20	49.4	505	33,500,000	67,000,000	100,500,000	50,000,000	100,000,000	150,000,000
30	74.1	618	50,250,000	100,500,000	150,750,000	75,000,000	150,000,000	225,000,000
50	123.5	798	83,750,000	167,500,000	251,250,000	125,000,000	250,000,000	375,000,000
100	247.0	1128	167,500,000	335,000,000	502,500,000	250,000,000	500,000,000	750,000,000

Use this table to estimate a circular pipe's size potential. Note that the crater numbers assume angled walls while the diatreme assumes a cylindrical shape. If you know the diameter (metres) of a circular target, calculate the hectare area as follows: 0.8 x diameter squared divided by 10000, or use the diameter column in the table.

www.canspecresearch.com

January 2002



R. Haimila
 Calling Lake Area, Alberta
 335 Hz Differential Resistivity with Topographic Contours
 TEST
 June 2007
 Fugro Airborne Surveys

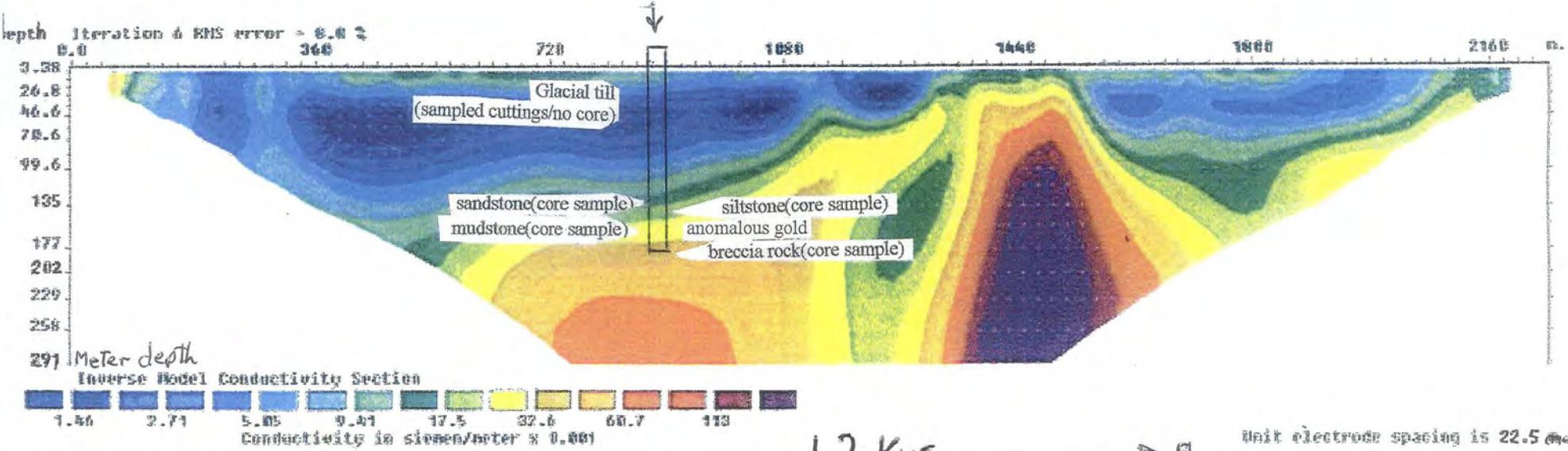
Anomaly CL 9

N:6121331
E:345260

Drillsite offset 50meter south over seismic anomaly

West ←

East →



1.2 Km

Calling Lake, Area B Line 2

Raw output from inversion software

Environment & Water Resources

WorleyParsons Komex
resources & energy

ERT SURVEY FOR KIMBERLITE EXPLORATION
CALLING LAKE, ALBERTA 2007

TIME	V. M/S
0.000	1500
0.120	1725
0.240	1950
0.360	2175
0.480	2400
0.600	2625
0.720	2850
0.840	3075
0.960	3300
1.080	3525
1.200	3750
1.320	3975
1.440	4200
1.560	4425
1.680	4650
1.800	4875
1.920	5100
2.040	5325
2.160	5550
2.280	5775
2.400	6000

TIME	V. M/S
0.000	1500
0.120	1725
0.240	1950
0.360	2175
0.480	2400
0.600	2625
0.720	2850
0.840	3075
0.960	3300
1.080	3525
1.200	3750
1.320	3975
1.440	4200
1.560	4425
1.680	4650
1.800	4875
1.920	5100
2.040	5325
2.160	5550
2.280	5775
2.400	6000

SEISMIC ANOMALY COINCIDENTAL WITH RESISTIVE ANOMALY

NORTH

Anomaly CL 9

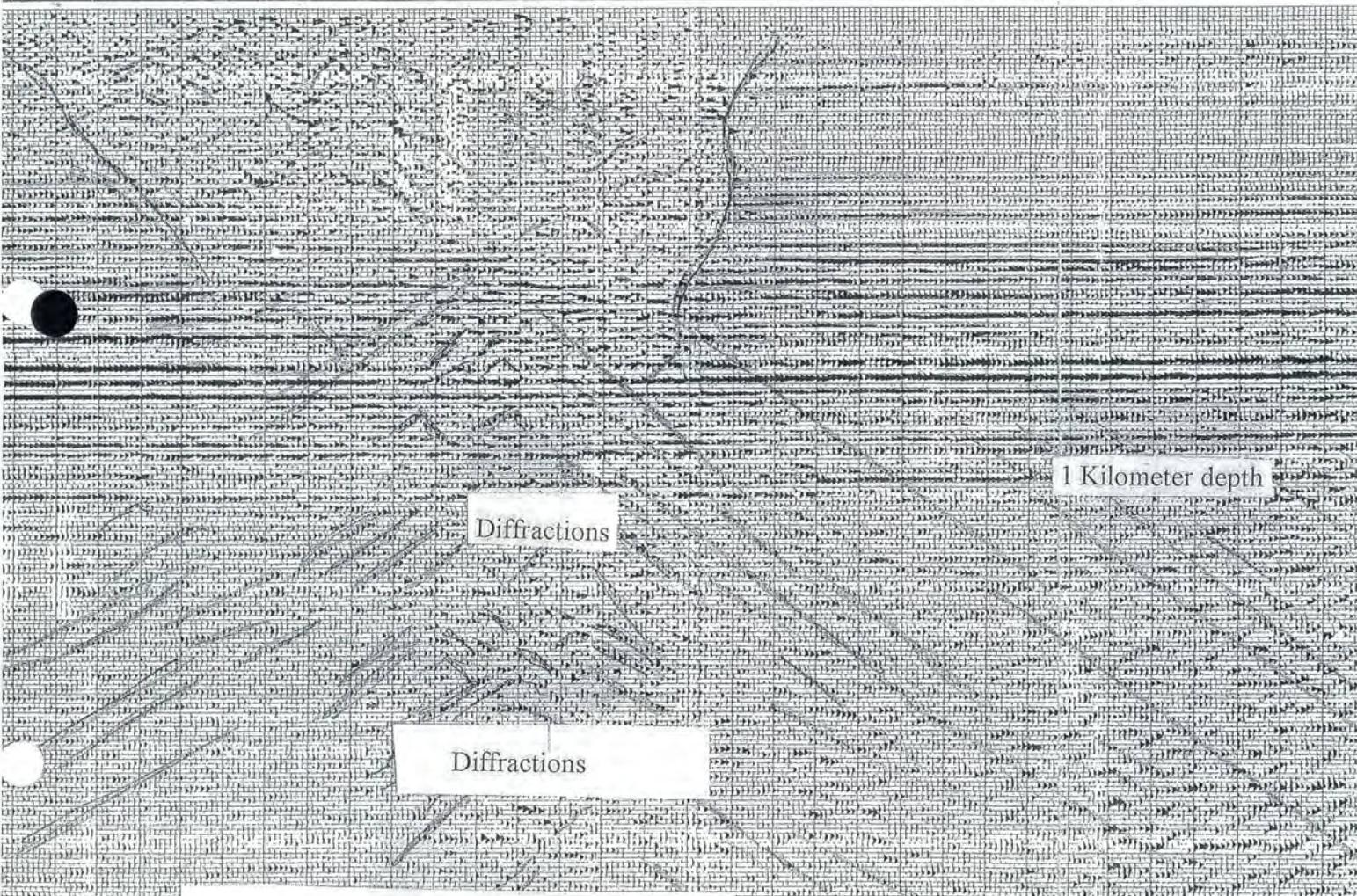
drill site CL9

LINE TP-23-16
STN. 237

Broken to 0.8 sec

Typical Sedimentary Layering

295 293 269 265 281 277 273 265 265 261 257 253 249 245 241 237 233 229 225 221 217 213 209 205 201 197 193 189 185 181 177 173 169



1 Kilometer depth

Diffractions

Diffractions

Pipe-like vertical structure

2 Kilometer depth

1.2 Kilometers

diffractions