MAR 20080021: ZAMA LAKE

Received date: Jul 17, 2008

Public release date: Jun 08, 2009

Alberta Mineral Assessment Reporting System

Assessment Report Covering the

Zama Lake Pb -Zn Property

For Ivany Mining Inc.

Bistcho Lake Area, Alberta

May 16, 2008.

This report covers the 92,160 hectares (227,732.3 acres) in ten Metallic and Industrial Minerals Permits held by Mr. Richard G. Walker, in trust for Star Uranium Corp. under Option to Ivany Mining Inc., centered on 57° 28' N 127°22' W in NTS Map Sheet 84M.

Permit Nos.

9306050838
9306050891
9306050892
9306050893
9306050896
9306050899
9306050900
9306050901

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Report #2008-217-3

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Assessment Report Covering the Zama Lake Pb -Zn Property For Ivany Mining Inc.

1.0.0 Executive Summary

The exploration potential of the Zama Lake Pb-Zn property lies in the recognition that the discovery of sphalerite, galena, and barite grains in heavy mineral concentrates are indicative of the metal bearing hydrothermal fluids ascending through a sedimentary package which hosts carbonates and shale where they could have formed economic Pb-Zn deposits. The occurrence of these grains has been confirmed follow-up sampling documented in this report. An orientation survey conducted near Pine Point shows that the indicators present down ice of the known mineralization are significant different than those recovered in the Zama Lake area. The geochemistry of the clay size fraction of the tills at Zama Lake is dramatically different than tills at Pine Point. The presence of the classical Pb – Zn – Mo anomalous geochemistry on a regional basis in the surficial environment in the clay silt fraction of till within the Zama Lake area indicates proximal source and not a far traveled transported anomaly.

A total of nineteen till sample were collected in the project area for indicator mineral analysis, a further four samples were collected at Pine Point as part of an orientation survey and an additional five regional samples were collected between Pine Point and Zama Lake. A total of 1676 line km of HeliGEOTEM survey was flown over the eastern four permits of the property.

Available airborne magnetometer data was examined for the area to define a structural framework for the property. Lineaments on the property are dominated by NE-SW which sub-parallel the MacDonald / Hay River Fault which are crosscut by orthogonal NW-SE features. The property level HeliGEOTEM surveys provides much more detailed and defines a number of anomalous features.

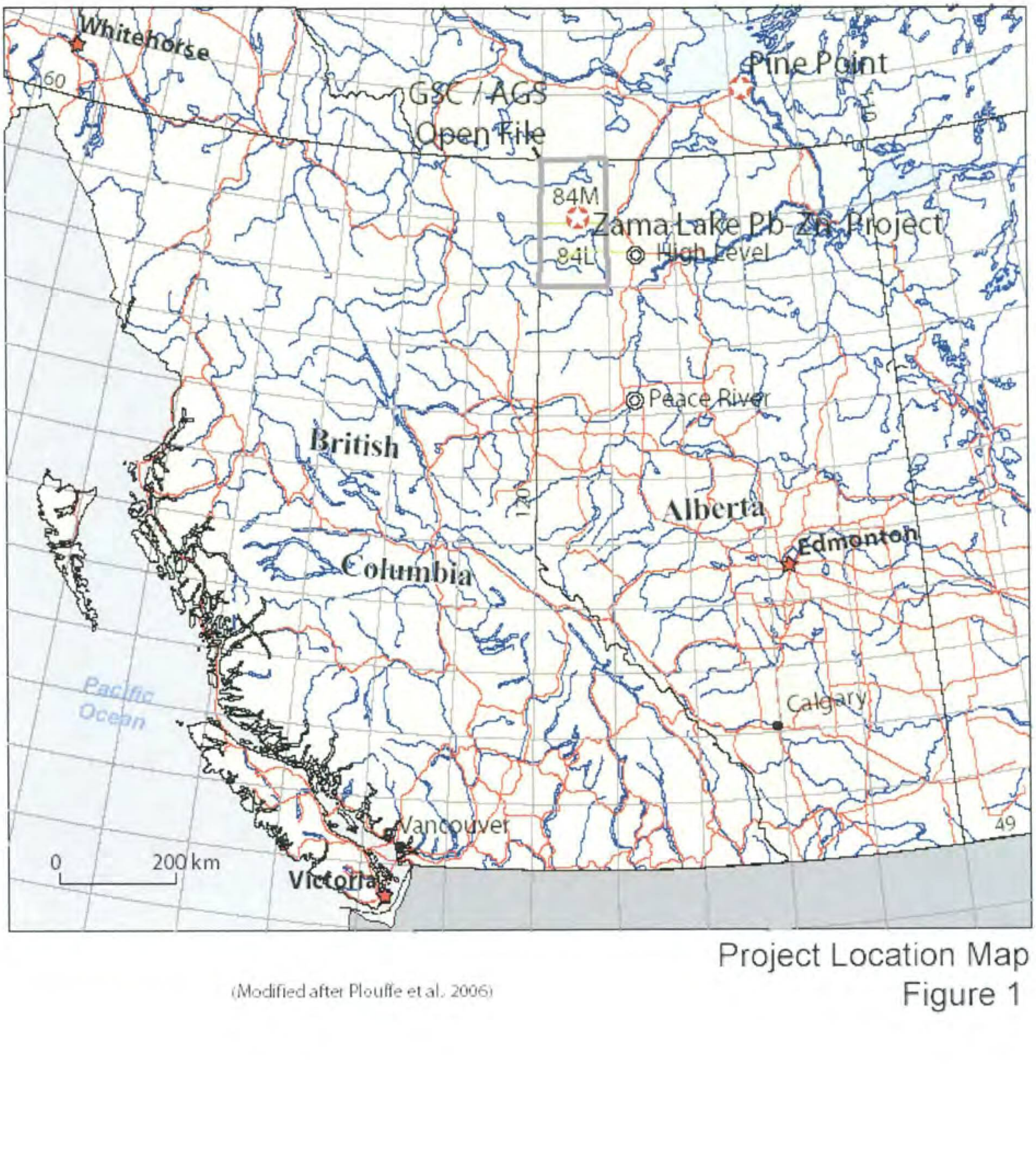
The Pb-Zn potential of northern Alberta has largely been unrecognized because of the dominant focus on petroleum resources and the lack of knowledge of the possible occurrence of metallic minerals within the same geological formation. Total Budget for the recommended two-phase program is estimated at $1,400,000 and is warranted to test this grass roots Pb-Zn property in northern Alberta.

1.1.0 Introduction and Terms of Reference

In September 2007, Derek Ivany, CEO of Ivany Mining Inc. ("Issuer") requested Paul A. Hawkins & Associates Ltd. to continue to conducted exploration. Till samples, were collected to verify previous sampling. An orientation survey was conducted near the Pine Point Mine and regional samples were collected to determine the extent of the down ice dispersion of metallic mineral indicators between Pine Point and the property. The author is independent of Star Uranium and Ivany Mining Inc.

Star Uranium Corp. acquired the property by staking, upon the release of GSC Open File 5121 (Plouffe et al., 2006). The Open File announced the discovery of anomalous concentrations of sphalerite and galena grains within the course sand fraction of bulk till samples in a regional program originally designed to assess the regional occurrence of kimberlite indicator minerals within NTS map sheets 84L and 84M as shown on Figure 1. The number of grains recovered was the highest ever reported in a till sample in Canada (Plouffe et al., 2006). This report documents assessment work conducted on the property to May 16, 2008.

These report uses NAD83 based UTM co-ordinates, while location maps use NAD27 based base maps. Control during sampling was maintained using Garmin iQue M5 and / or a Garmin GPSmap 76CSx hand held GPS units.



(Modified after Plouffe et al. 2006)

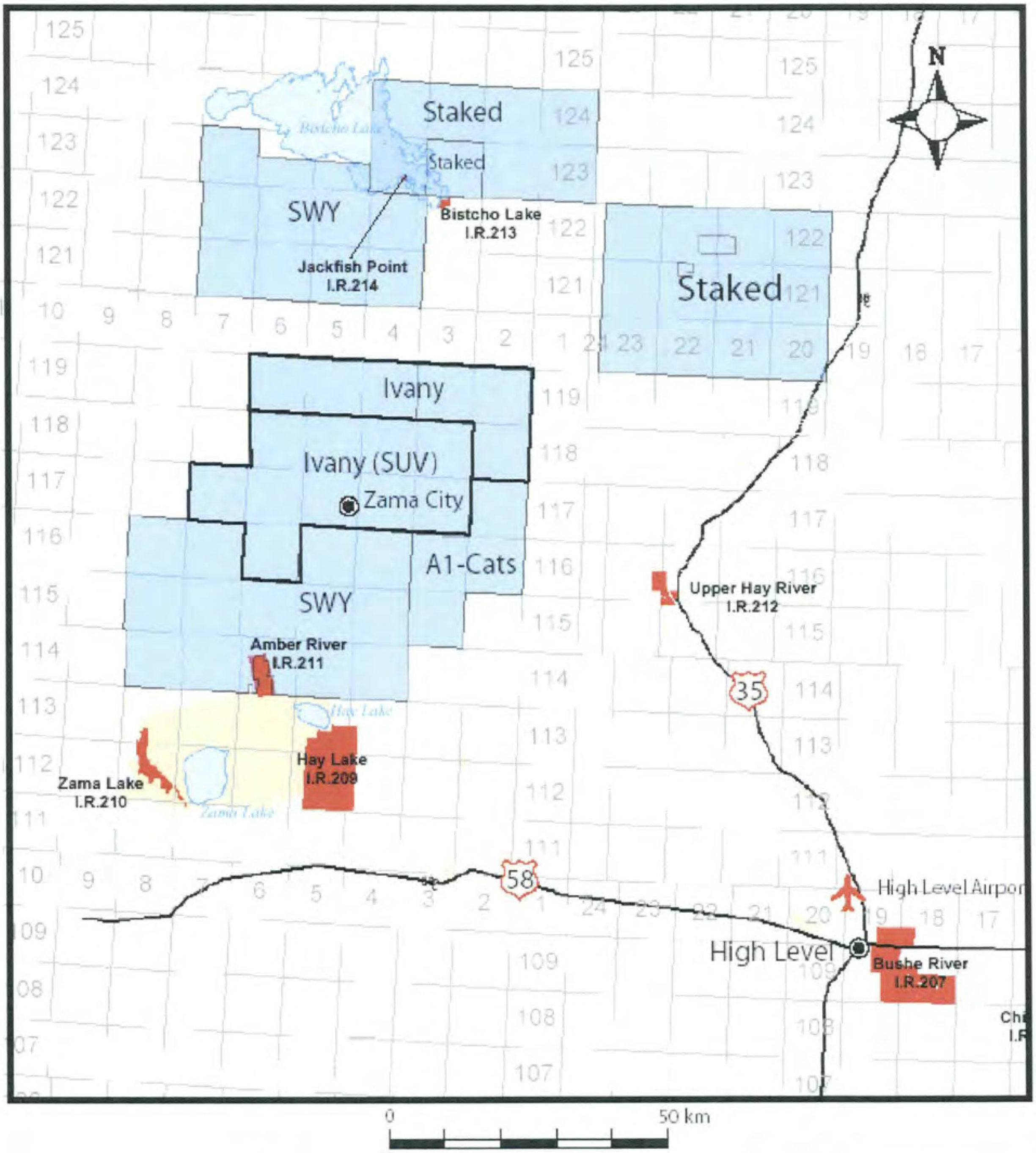
Project Location Map
Figure 1

2.0.0 General Property Description and Location

The Zama Lake Pb-Zn consists of ten metallic mineral permits covering 92,160 hectares (227,732.3 acres) located 700 km north northwest of Edmonton Alberta. The property is a grass roots Pb-Zn Play staked as the result of the discovery of anomalous sphalerite and galena grains found in till samples collected during diamond exploration. The property area is forested and hosts parts of the Zama Lake Oil and Gas field. Zama Lake and Zama City are oil industry support bases and are located within the property. The First Nation Dene Tha' (Assumption-Habay-Chateh) settlement exists to the south of the property.

2.1.0 Property Location

The property is located in the Bistcho Lake Area of northern Alberta within the Municipal District of Mackenzie No. 23, approximately 700 km (435 miles) north northwest of Edmonton (Figure 1). The property lies on the southern margin of the Cameron Hills in N.T.S. 84M and is centred on 57° 28' N 127° 22' W. The nearest supply point to the project is the town of High Level, which is 130 km to the southeast. The town of High Level, is 800 km by road from Edmonton, has an estimated population of 4,200. The ten permits, which make up the property, are shown on Figure 2. Access onto the property is possible from the east off of the Mackenzie Highway #35 and from the south off of the Rainbow Lake Highway #58. Ivany Mining holds a 100% undivided interest in six permits which adjoin the property to the northeast.



Zama Lake Pb-Zn
Permit Location

Figure 2.

2.2.0 Mineral Tenure

The Metallic Minerals and Industrial Minerals Permits ("Permits") covered by this report were staked under the terms of the Mines and Minerals Act – Metallic and Industrial Minerals Tenure Regulation (AR 145/2005). The permits grants the holder:

- *(a) the non-exclusive right to explore for metallic and industrial minerals on the surface of the location,*
- *(b) the exclusive right to explore for metallic and industrial minerals in the subsurface strata within and under the location, and*
- (c) *the right to remove samples of metallic and industrial minerals from the location for the purposes of assaying and testing and of metallurgical, mineralogical and other scientific studies.* (AR 145/2005)

The regulations require that the recorded holder of permits shall perform, or have performed, exploration and development work (assessment work) on the permits to a per hectare value of $5 in the first assessment period. A permit assessment period is two years. In the second and third assessment periods this increases to $10 per hectare. In the fourth to seventh assessment period this increases to $15 per hectare. No filing fees are associated with filing assessment work. These assessment work requirements are calculated from the date of issue of the current permit.
A permit may be held for fourteen years and can vary in size from a minimum of 16 hectares to a maximum of 9,216 hectares. Permit boundaries are defined by the Alberta Township Survey system. Permit locations are therefore defined by a township, range, section, and legal subdivision. A township is 9,216 hectares in size while a section is 256 hectares. A legal survey division ("LSD") is 16 hectares in size. Permits may be grouped for application of assessment work provided they are contiguous.

The holder of a permit may after two years apply for a lease provided the first year's rent for the lease is paid in advance and the Minister of Energy has been provided evidence that a deposit exists on the location applied for. The lease has a term of fifteen years and may be extended a further fifteen years upon approval of the Minister of Energy. The lease permits the holder to hold the ground fee simple without further assessment work requirements.

Prospecting for Crown minerals using hand tools is permitted throughout Alberta without a licence, permit, or regulatory approval, as long as there is no surface disturbance (AR 213, 1998). Prospecting on privately owned land or land under lease is permitted without any departmental approval, however, the prospector must obtain consent from the landowner or leaseholder before starting to prospect. Unoccupied public lands may be explored without restriction, but as a safety precaution prospectors working in remote areas should inform the local Sustainable Resource Development (forestry) office of their location.

When prospecting, the prospector can use a vehicle on existing roads, trails and cut line. If the work is on public land, the prospector can live on the land in a tent, trailer, or other shelter for up to fourteen days. For periods longer than fourteen days, approval should be obtained from the Land Administration Division. If the land is privately owned or under lease, the prospector must make arrangements with the landowner or leaseholder. Exploration approval is not needed for aerial surveys or ground geophysical and geochemical surveys, providing they do not disturb the land or vegetation cover.

If mechanized exploration equipment is to be used and/or the land surface disturbed, the prospector or company must obtain the appropriate approvals and permits, as required under the Metallic and Industrial Minerals Exploration Regulation. Most projects require an Exploration Licence, Exploration Permit, and Exploration Approval. The following sections describe the criteria and procedures for each of these.

An Exploration License must be obtained before a person or company can apply for, or carry out an exploration program. The license holder is then accountable for all work done under this exploration program. However, the licensee cannot carry out any actual exploration activity until the Alberta Sustainable Resource Development issues an Exploration Approval for each program submitted under that licence. A fee of $50 must accompany the license application. The license is valid throughout Alberta and remains in effect as long as the company is operating in the province. If a license holder wants to use exploration equipment, such as a drilling rig, an Exploration Permit must be obtained. A fee of $50 must accompany the permit application. The permit is valid throughout Alberta and remains in effect as long as the company is operating in the province.

Approval must be obtained if an exploration project involves environmental disturbance such as drilling, trenching, bulk sampling or the cutting of grids that involves more than limbing trees and removing underbrush. Samples up to 20 kg in size may be taken for assay and testing purposes, but larger samples must be authorized by the Department of Energy. The licensee does not need to hold the mineral rights for an area to apply for an Exploration Approval.

Project approval is through the Land and Forest Service of Alberta Sustainable Resource Development. If an application has been completed and the appropriate field staff has copies of the program, approval can usually be obtained in about ten working days. Each application for exploration approval must be accompanied by a fee of $100. After receiving exploration approval, the prospector or exploration company may conduct the approved activity. However, if they modify their program, the designated field officer must be contacted to review and approve the changes. A final report must be submitted to Land and Forest Service of Alberta Sustainable Resource Development within sixty days following completion of the exploration program. The report must show the actual fieldwork, and include a map showing the location of drilling, test pits, excavations, constructed roads, existing trails utilized and all other land disturbances.

The Zama Lake property consists of a single contiguous group of ten metallic minerals permits covering 92,160 hectares (227,732.3 acres) as listed below in Table 1 and shown on Figure 2. All the permits making up this property are full townships whose boundaries are determined by township boundaries. None of the townships in the area have been fully surveyed. Good survey control does exist in the area with the large amount of oil and gas development in the area. GPS technology enables good survey control in the field.

Table 1 - Permit Listing

Permit #	Legal Description	Date of Issue	Area (Hectares)	1st Term Requirement	2nd Term Requirement
9306050838	6-06-116: 1-36	16-May-2006	9,216	$46,080	$92,160
9306050891	6-03-117: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050892	6-04-117: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050893	6-05-117: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050896	6-06-117: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050897	6-07-117: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050898	6-03-118: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050899	6-04-118: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050900	6-05-118: 1-36	19-May-2006	9,216	$46,080	$92,160
9306050901	6-06-118: 1-36	19-May-2006	9,216	$46,080	$92,160
Total=			**92,160**	**$460,800**	**$921,600**

Under the terms of the option agreement, the issuer acquires a 100% interest in the property by making payments of $100,000 and issuing $75,000 in stock to Star Uranium. Star Uranium retains a 2% NSR which can be reduced to a 1% NSR with a $1 million payment. Star Uranium also retains the diamond rights to the property. The agreement also requires the issuer to complete $400,000 of exploration and development work by May 16, 2008. As of May 1st, Ivany Mining had made both payments and completed the work requirement.

Star Uranium, prior to optioning the property to Ivany Mining had spend $95,341.86 exploring the property not including acquisition costs of $7,562.50 for staking. Ivany acquisition costs for the Star Uranium property were $175,000 with field exploration expenses of $452,117.70.

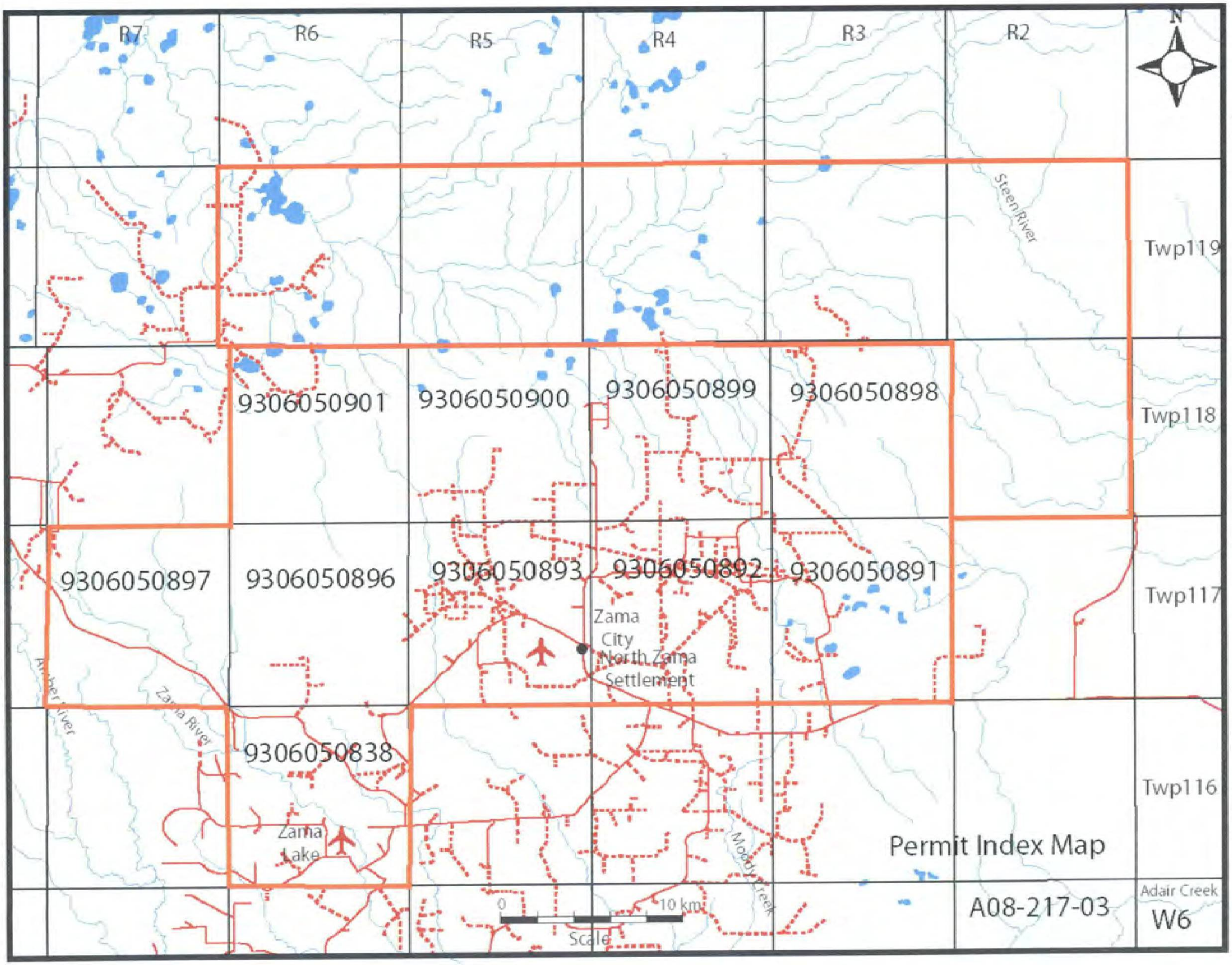
Six of the adjoining permits to the north have been vended into the issuer under a separate option agreement. They are indicated on Figure 2 as "Ivany." All these property expenditures are summarized below in Table 2. Permits are located on Figure 3 (Drawing A08-217-03)

Table 2 - Property Expenditures (pre-GST)

Star Uranium Corp.	
Acquisition Cost	$ 7,562.50
Exploration Expenditures*	$ 32,961.86
Non-Exclusive Airborne Data	$ 62,380.00
Total	**$102,904.36**
Ivany Mining Inc.	
Acquisition Cost	$175,000.00
Exploration Expenditures (SUV Option)*	$ 85,441.90
Airborne Data*	$360,145.50
Acquisition of Additional Permits (out of pocket)	$ 3,750.00
Other Exploration Expenditures	$ 7,148.63
Total	**$631,486.03**

* denotes valid Assessment Work

Figure 3.


R7
R6
R5
R4
R3
R2
N
Twp119
Twp118
Twp117
Twp116
Steen River
9306050901
9306050900
9306050899
9306050898
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9306050896
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9306050892
9306050891
9306050838
Zama
City
North Zama
Settlement
Zama River
Zama
Lake
Moody Creek
0
10 km
Scale
Permit Index Map
A08-217-03
Adair Creek
W6

2.3.0 Accessibility, Local Resources, and Infrastructure

The Zama Lake Pb-Zn property is accessible by road from either the Mackenzie Highway just north of Meander River or from the south off the Rainbow Lake Highway. Both the Mackenzie Highway and the Rainbow Lake Highway are paved well-maintained provincial highways.

Access from the east originates off the Mackenzie Highway #35 about 80 km north of High Level, then 67 km west along a relatively straight all weather improved gravel road to Zama City. This road was completed in 2000, by the M.D. of Mackenzie and replaced a private road built by the oil companies who operated in the area. Access from the south originates off of the Rainbow Lake Highway #58 about 87 km west of High Level, them north towards Hay Lake and avoiding Assumption / Chateh P.O., then about 90 km northwest along gravels roads to Zama City. The road is relatively well marked but is longer, windier, and involves several turns.

Local resources on the property at Zama City with a permanent population of 250 are limited given the focus on infrastructure serving the oil and gas industry. Several open camps exist to house a temporary workforce which numbers in the winter months up to 4,000 in size. A large gas plant is operated by Apache Canada at Zama Lake. Apache also operates a 4,200 ft long paved airstrip near the plant.

The Zama Lake property has undergone significant oil & gas exploration since the Keg River Formation discovery in 1976. Numerous wells now dot parts of the property. Several oil & gas pipelines cross the property. These developments provide access into a lot of the property however most exploration drilling is done during the winter months. Granular aggregate is in short supply in the region and most roads are surfaced with fine-grained till that is used for their foundation. Only roads that are surfaced with gravel can be used during wet weather conditions. A wealth of subsurface data is available for the area but it is largely focussed on deeper oil and gas pools at 500 – 1600 m depth.

Most services are available in the town of High Level with a population of 4,200 people. The town boasts provincial government offices, a number of hotels, banks, schools, a college and hospital. A number of oil drilling contractors, construction companies and heavy equipment companies have offices in High Level. High Level has daily direct turbo-prop service to Edmonton and Calgary. The area also has courier, Greyhound bus and rail service. Fixed wing and rotary wing charter aircraft are available locally. Other industries present include farming and two forestry mills. A wide spectrum of services is provided locally, while most other services are available in Edmonton. Winter is usually the busy season for forestry and the oil & gas industry.

2.4.0 Climate and Physiography

The climate of the Zama Lake area is classified as microthermal (Cool Continental). Based on data from the High Level Airport, no summer month has an average temperature above 22°C but at least four months, average 10°C or higher. Temperatures during the summer range from 7 to 35°C while temperatures during the winter range from -10 to -40°C. Snow usually arrives in October and is gone by the end of May. Mean annual precipitation is 394 mm with mean annual snowfall at 1.55 m.

Parts of the Zama Lake area have discontinuous permafrost and typically underying peat accumulations and other bog deposits. The permafrost is easily distributed and vulnerable to melting from terrain disturbance caused by road construction, seismic lines, and drill pad construction. Much of the property is covered with muskeg and has very poor drainage. Stunted trees are common; some rare stands of commercial timber are present in better-drained areas. Trees species of the area are white spruce, trembling aspen and balsam poplar. Most formation waters are saline while some water wells north of Hay Lake / Zama Lake drilled into surficial sediments yield better water.

The Zama Lake property is located on the southern margin of the Cameron Hills within the Fort Nelson Lowland, which are subdivisions of the Alberta Plateau. Many of the soils of the area are saline as ground water in many areas is close to the surface. Many burrow pits fill quickly after excavation. Most of the area covered by a clayey till. Most exploration work because of this is conducted during the winter months from winter roads. Elevations on the property range from 670 m in the north on the margin of the Cameron Hills to 360 m in the relatively flat Hay River Valley to the south.

2.5.0 Environmental Matters

Wildlife in the area consists of woodland caribou, wood bison, white tail deer, elk, cougar, mule deer, black bear, wolf, moose, grizzly bears, and coyote. Birds in the area consist of ducks, snow geese, gulls, terns, bald eagles, horned owls, and woodpeckers. Management of the woodland caribou is the major environmental issue for the area as they have been listed under the Alberta Wildlife Act as threatened. "*This status reflects continuing declines in caribou population size and distribution, small population size, the dependency of woodland caribou on older forest, and the sensitivity of this species to human activities. Key factors directly or indirectly affecting woodland caribou population size and distribution include habitat change as a result of wildfire or human land use activities, predation, hunting, poaching, and vehicle collisions.*" (Alberta Woodland Caribou Recovery Team, 2005) Parts of townships 6-04-118, 6-05-118, and 6-06-118 have surface access restrictions on them to protect caribou range.

Any major work program will require consultations with the First Nations people of the area. The property area has had significant oil and gas development in the past. Many producing oil and gas wells dot the area. Apache Corporation operates a three gas plants, 240 km of gas gathering pipelines, and seven crude oil processing plants at Zama Lake with approximately 70 million cubic feet (MMcf) of gas and 6,000 barrels of liquid hydrocarbons per day. The area is therefore by any means pure wilderness.

2.6.0 History Property

Star Uranium acquired the property by staking on March 1, 2006, as a result of release of a GSC/AGS open file (Plouffe et al., 2006) on that date. The open file detailed the discovery of anomalous train of sphalerite (ZnS) and galena (PbS) grains in the course sand fraction from tills from the Zama Lake area. The till samples, were originally collected as part of a federally funded regional diamond exploration program. The number of sphalerite grains present in the heavy mineral sample concentrate is the highest ever detected in Canada in an exploration till sample – in excess of 1,000 grains in a 20 kg sample (Plouffe et al., 2006). Given the grain size, compaction of the till and till composition, it is likely that the source of the lead zinc is proximal to the property.

As follow-up to the GSC / AGS open file, Star Uranium conducted sampling June 23-26 (twelve till samples) and October 13-16, 2006 (seven till samples). The Ivany has assumed ongoing responsibility for these samples and associated program.

Area has previous been staked for diamonds and likely has been subjected to diamond exploration but no work has been filed. Stornoway Diamond Corporation holds fourteen permits 126,252 hectares (312,000 acres) immediate south of the property and has conducted an aeromagnetic survey over the property exploring for kimberlite pipes. A1-Cats of Grande Prairie Alberta holds four permits to the east of the property but has done no work on the property. A further six permits to the north and east of the property, are held by the issuer.

The property area hosts several oil and gas pools at depth, principally in the Keg River Formation. There are no historical Pb / Zn Mineral Resources or Mineral Reserves on the property. The Zama Lake property is a grass roots Pb-Zn play. "*As a result of hydrocarbon exploration, Pb-Zn occurrences are known to occur in subsurface carbonate deposits from central and northwest Alberta, but can be at depths exceeding 1000 m.*" (Rice et al., 2006) Several oil wells in the adjacent areas to the property host occurrences of Pb-Zn mineral (Pana, 2006).

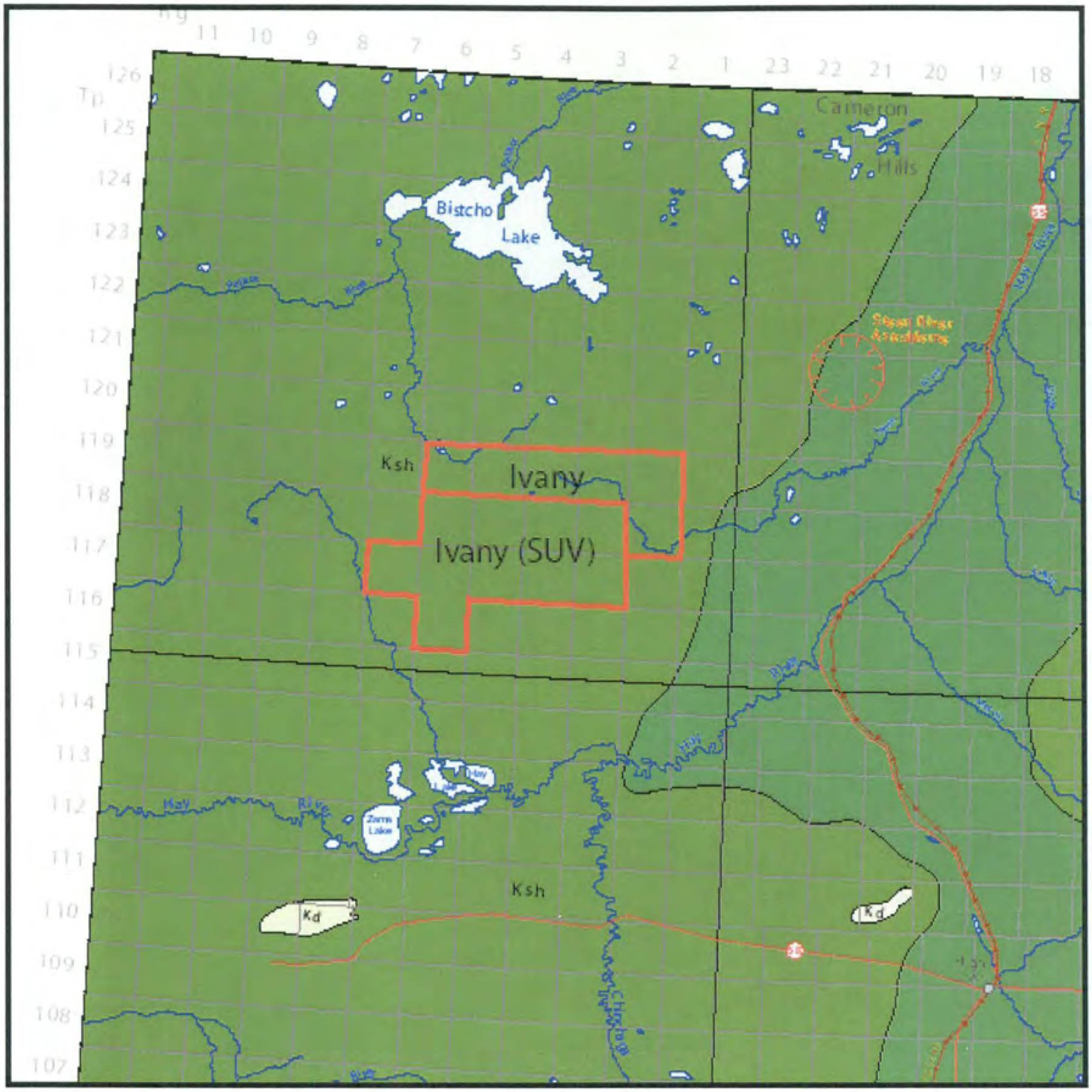
3.0.0 Geological Setting

The property is located within the Western Canadian Sedimentary Basin. The sub-crop below this nearly continuous glacial till cover consists of largely Cretaceous Shaftesbury Formation shale, which is overlain by the younger Dunvegan Formation sandstone. Underlying the Shaftesbury Formation are shales, sandstones and other strata of the Fort St. John Group, then a Late Carboniferous to Early Cretaceous unconformity, followed by Late and Middle Devonian shale, siltstone and limestone strata (Hamilton et al., 1999; Morrow et al., 2006). The limestone units include Slave Point, Sulphur Point, Muskeg, and Keg River Formations. The top of the Middle Devonian Slave Point Formation (the uppermost limestone unit) underlying the project area is at a depth of about 1000 m. Local well reports indicate depths of the Keg River Formation exceeding 1700 m (Pana, 2006). The regional basement is the Paleo-proterozoic Hottah terrane (Hoffman, 1989; Gehrels and Ross, 1989). The Great Slave Share Zone extends SW from the Pine Point area to just southeast of the property area. Several sets of northwest and northeast trending faults also occur in the property area.

3.1.0 Property Geology

The property area is relative flat as a result of the horizontal to gently dipping sedimentary bedrock, which consists largely of the Shaftesbury Formation (Ksh) as shown on Figure 3. The region is poorly drained, secondary streams are not deeply incised, and most areas are covered with muskeg. Few bedrock outcrops are apparent and most geological data comes from oil and gas drilling records. Information on the shallow parts of these drill holes is seldom recorded.

The uppermost unit in the property area is the Kaskapau Formation of Upper Cretaceous age consisting of dark grey silty shale, thin concretionary ironstone beds, inter-bedded in lower part with thin concretionary ironstone beds, inter-bedded in ferruginous oolithic mudstone of marine origin. Dunvegan Formation of Upper Cretaceous age consists of grey, fine-grained, feldspathic sandstone with hard calcareous beds, laminated siltstone and grey silty shale; deltaic to marine. The Shaftesbury Formation of Upper and Lower Cretaceous age is composed of dark grey, fish-scale bearing shale, silty in upper part, numerous nodules and thin beds of concretionary ironstone, bentonite partings, lower part with thin silty and sandy intervals; marine. The Loon River Formation consisting of a dark gray, fossiliferous, silty shale and laminated siltstone may be cut by buried channels, which cut deeply into bedrock. A table of geological formations for the property area is as shown in Table 3. Many other units occur at depth in the stratigraphic column of the area but only occur in oil and gas wells.



Regional Geology (modified after Hamilton et al, 1999)

Figure 4.

Drawing A08-217-4

Table 3.
Zama Lake Area

Table of Geological Formations

Age	Symbol	Formation Name / Group	Age	Member	Description
Pleistocene	Qsg		Recent		Unconsolidated sands and gravels, glacial till
Tertiary			65		Pre-glacial sand and gravel
Cretaceous	Ks Kpw 1WS	Smoky Group Smoky Group Paskwaskau Formation		1st White Spec	Dark gray fossiliferous shale and silty shale, ironstone partings and concretions
	Kbh Kk	Colorado Group Bad Heart Formation Kaskapau Formation	90-92	2nd White Spec	Brown SST, medium to fine grained, fossiliferous, marine. Shale, dark to black, thin bedded, some sandstone
	Kd	Fort St. John Group Dunvegan Formation	92 – 95		Grey fine grained feldspathic SST, alternating SST/shale
	Ksh Kshu Kshl	Shaftesbury Formation	95 - 98	Upper Base of fish scales?? Lower	Dark gray fish scale bearing shale, silty in upper part Numerous nodules with thin beds of Fe Silty and sandy shale
	Kp Kpc Kph Kpn	Peace River Formation	98 - 100	Paddy Cadotte Harmon Notikewia	Massive SST Fluvial deposits Quartzose SST, Shale, conglomerate Dark gray silty shale Fine grained glauconitic SST
	Kl Bfsc	Loon River Formation		Falher Wilrich Base of the Fish Scales	Dark grey fossiliferous, silty shale and laminated siltstone; nodules and thin beds of concretionary ironstone
	Kb	Mannville / Bull Head Group Cadomin Gething Formation Bluesky	106	Basal Cretaceous	Conglomerate SST, Shale, oil sands Sandstone, shale, oil sands

(Modified after Green, 1972)

Within the project area, a blanket of unconsolidated quaternary sediments, cover the underlying nearly horizontal and poorly indurated cretaceous sediments. This blanket of unconsolidated glacial and non-glacial sediments, vary greatly in thickness from 0 – 450 m (Pawlowicz et al., 2005, 2007). "*These sediments were deposited during glacial and interglacial periods of the Quaternary. For the most part, the surficial materials and present day landforms are the result of the last glacial event, the Late Wisconsin*", (25,000 to 10,000 years before present). "*Ice derived from Keewatin Sector of the Laurentide Ice Sheet flowed west and southwest across northern Alberta towards the Rocky Mountains*" (Paulen et al., 2007). Ice flow was likely topographically confined as ice lobes advanced into the area. At the glacial maximum, the ice sheet likely abutted the Cordilleran Ice Sheet.

Ice retreated from the area between 12,000 and 11,000 radiocarbon years before present (Dyke, 2004), at which time extensive glacial lakes developed over the lowland areas as a result or damming of the regional eastward drainage by retreating glaciers. Thus, fine-grained glacial lake sediments overlie till in the lower portions of the Hay and Peace River drainages basins. These finer sediments are called glaciolacustrine deposits. Glacial sediments laid down by rivers or streams are called glaciofluvial deposits.

The till covers most of the area except in rare gullies incised into the slopes of the Cameron Hills. The till consists of a mantle fine grained clay rich till derived from reworking of weakly indurated Cretaceous Shaftesbury Formation shale of the area below the advancing ice sheet. Till is derived directly from the glacial ice sheet. Erratics found in the till include Canadian Shield granitic and metamorphic lithologies, Devonian limestones & dolostones, and Proterozoic Athabasca sandstone. These far traveled erratics are generally rare and most clasts within the till are locally derived. The till is very clay rich with clasts making up only 5 to 15%. The higher elevations in the northern part of the property reflect bedrock topography but are still covered with a blanket of till between 1 - 10 m in thickness. In the flatter lowland near Hay Lake till is at least 8 m thick.

Within the region at lower elevations, a discontinuous thin layer of fine glaciolacustrine sediment veneer covers the till. The veneer varies in thickness from 1 to 4 m and consists of massive silt and clay with contorted beds of sand, silt, and clay. These deposits represent glacial lake sediments from a larger Hay Lake.

The property is blanketed by a nearly continuous till sheet, which consists of a fine-grained matrix consisting of on average 27% sand, 60% silt, and 12% clay with <5% clasts. Up ice direction for the property area is ENE from the Caribou Mountains and not from the Pine Point area. Surficial mapping for the area has recently been completed by the AGS / GSC (Paulen et al., 2006; Kowalchuk et al., 2006; and Smith et al., 2007). A recent update of Alberta geology was produced in 1998 (Hamilton et al., 1999).

No economic mineralization has been found on the property. Indicator minerals consisting of sphalerite (ZnS), galena (PbS), and gold (Au) have been recovered from heavy mineral concentrate obtained from basal / lodgment till obtained from burrow pits on the property. Barite ($BaSO_4$) grains in large numbers are also present in the concentrates. At many of the burrow pits, where the till samples were obtained, also contain Gypsum ($CaSO_4 \cdot 2H_2O$). The presence of these minerals indicates the presence of low to moderate temperature hydrothermal activity in the property area. At least two (perhaps three) ages of events are known for the area.

The hydrothermal fluids associated with this activity could have led to the deposition of mineralization as sedimentary exhalative (SEDEX) or stratabound (MVT) within carbonate rocks as they ascended through the geological section along major and minor structures and came in contact with the reducing conditions of the Zama Lake area. These same hydrothermal fluids also likely precipitated sphalerite, galena, and barite near the present surface, which were recovered in heavy mineral concentrates obtained in the Zama Lake area. Whether these fluids are related to the same event as Pine Point in unclear, but both areas have somewhat similar lead isotopic signatures (age dates) and basement geology. Given the age of the kimberlite emplacement (Cretaceous) in the Buffalo Head Hills 300 km to the southeast, a much younger date may be possible. Levels encountered to date for Pb, Zn, and Au are only geochemically anomalous. They are only indicators of the possible presence of as yet undiscovered mineralization on the property. Examples of known Pb-Zn deposits in Western Canada are shown in Figure 5. Such potential has been further confirmed by follow-up work conducted by the AGS/GSC (Paulen et al, 2007 & 2008). The Zama Lake property is a grass roots Pb-Zn Play.

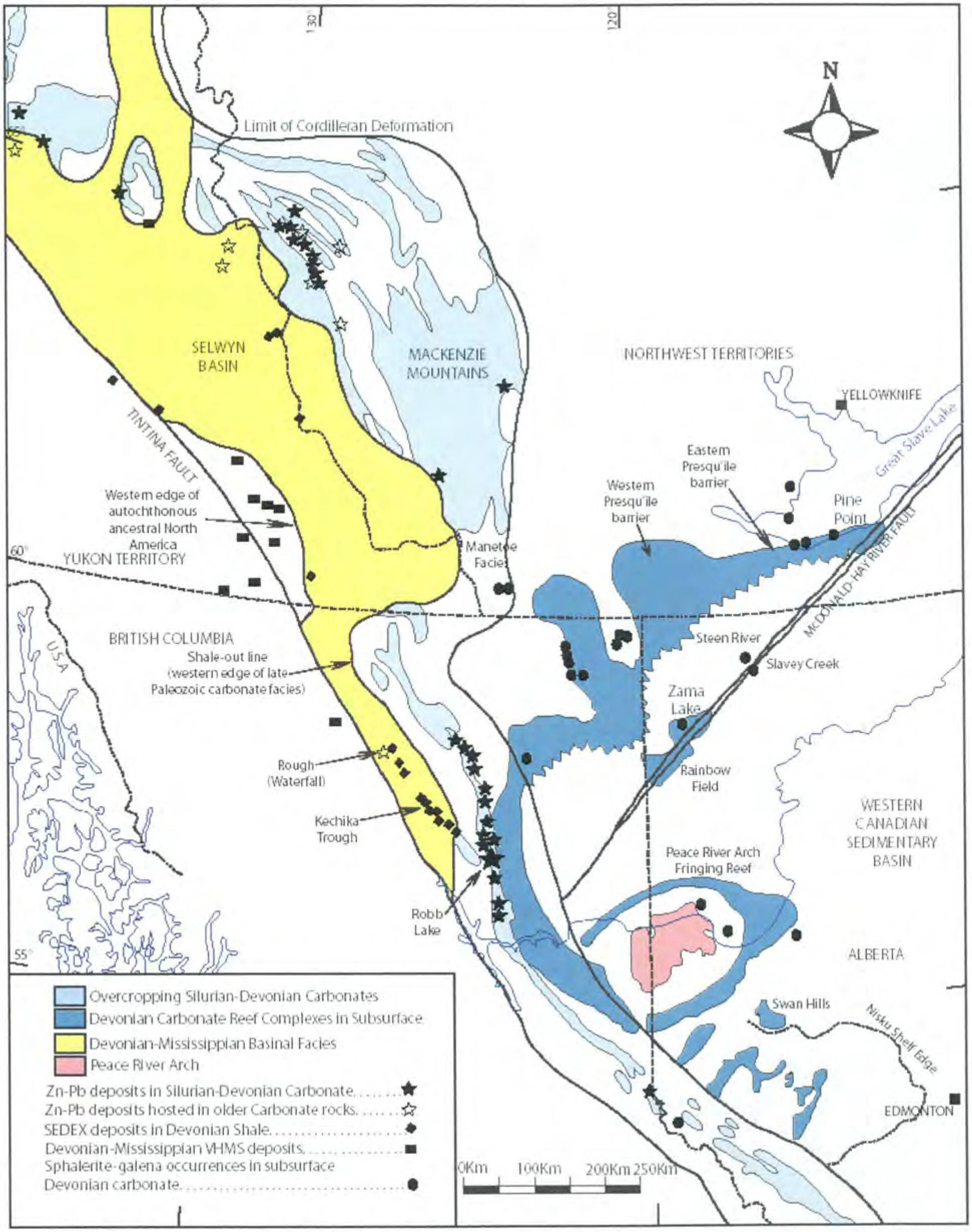


Figure 5. Location of Western Canadian Carbonate – Hosted Pb-Zn Deposits (Modified after Paradis et al., 2006)

4.0.0 Previous Exploration and Development

The property area has undergone limited metallic minerals exploration principally for diamond exploration. Significant oil and gas has been undertaken in the area and numerous producing wells occur in the general area. Several gas plants are also present.

4.1.0 GSC/ AGS Sampling

The Geological Survey of Canada ("GSC") and the Alberta Geological Survey ("AGS") collected 71 till samples for heavy mineral processing and a further 175 samples for soil geochemistry as part of a regional study. Results from the study were released in GSC Open File 5121 (Plouffe et al., 2006). Results from a further 19 samples were released in GSC Open File 5692 (Plouffe et al., 2008). This study was undertaken as part of a collaborative project between the AGS and the GSC originally designed to assess the regional occurrence of kimberlite indicator minerals ("KIM") in glacial deposits.

Access for GSC / AGS sampling of glacial sediments was by truck, all terrain vehicles, and helicopter. Samples were predominantly till but also included a few glaciofluvial samples. Samples were collected on road exposures, natural bluffs, hand-dug pits, and borrow pits dug for road construction or oil and gas drilling operations. In hand-dug pits, samples were collected below the most intensely oxidized soil horizons at an average depth of about 1 m. In deep pits dug by excavators, samples were taken from the lowest portion of the pit, often below 4 m. Two sizes of bulk glacial sediment samples were collected: large samples filling a 5-gallon pail (~25 kg) and smaller 1-2 kg bagged samples. In areas with reasonably good road access, large samples were collected on average 10 km apart, and smaller ones every 5 km. However, most of the large GSC / AGS study area has minimal or no road access, so sampling density was typically much less.

For the original study (Plouffe et al., 2006), a limited number of large (~25 kg) samples (50), from the region, were sent for heavy mineral and gold grain analyses to provide a preliminary overview of the mineral potential for the region. Glaciofluvial samples were prioritized along with a regional selection of basal till samples. They were shipped to Overburden Drilling Management ("ODM") Ltd. laboratories (Nepean, Ontario) for heavy mineral separation and identification in two batches (March and November 2005).

Following the discovery of anomalous concentrations of sphalerite grains in till samples (spring 2005), the original sites (five in total) with high sphalerite counts were resampled in the summer of 2005. Samples were collected from the same borrow pit and the same depth. In order to further confirm the magnitude of the elevated grain counts and to constrain the geographic extent of the anomaly, additional samples were collected in proximity to the original sphalerite anomaly. These samples, along with regional samples near the anomaly that had not been analyzed previously (21 in total), were submitted for analysis. These additional samples were submitted for the same type of analyses at ODM, plus a count of metamorphosed/magmatic massive sulfide indicator minerals ("MMSIM"). The distribution of Sphalerite grains is shown on Figure 6 and Galena grain on Figure 7.

As follow-up to the original study results and to better define the extent of the sphalerite dispersal train in the till, an additional 19 till samples were collected within the region of the sphalerite anomaly were processed to recover indicator minerals. These results were released in January 2008 (Plouffe et al., 2008).

The heavy mineral fraction was isolated in a two-step process involving a shaking table and heavy liquids (specific gravity 3.2). Kimberlite indicator minerals, gold grains and other heavy minerals were identified in the 0.25 – 2 mm sized fraction under binocular microscopes, by ODM staff mineralogists at the laboratory.

Only till samples were submitted for geochemical analyses because of the general lack of fines in glaciofluvial sediments. The smaller bagged till samples (1-2 kg) were prepared at the Alberta Geological Survey laboratory where the silt and clay-sized fraction (<0.063 mm or –250 mesh) was separated by dry sieving. Duplicate and analytical standard samples were introduced, and then the material was sent for analyses at Acme Analytical Laboratories Limited (Vancouver, B.C.) in two batches (March and November, 2004). Three analyses were conducted on the <0.063 mm sized fractions:

1) 15 g sub-samples were submitted for inductively coupled plasma mass spectrometry (ICP-MS) analysis for a suite of 37 minor elements following an aqua regia digestion, and
2) 0.2 g sub-samples were analyzed for major elements by ICP emission spectrometry (ICP-ES LiBO2 fusion)
3) minor elements by ICP-MS (ICP-MS LiBO2 fusion) after a dilute nitric acid digestion.

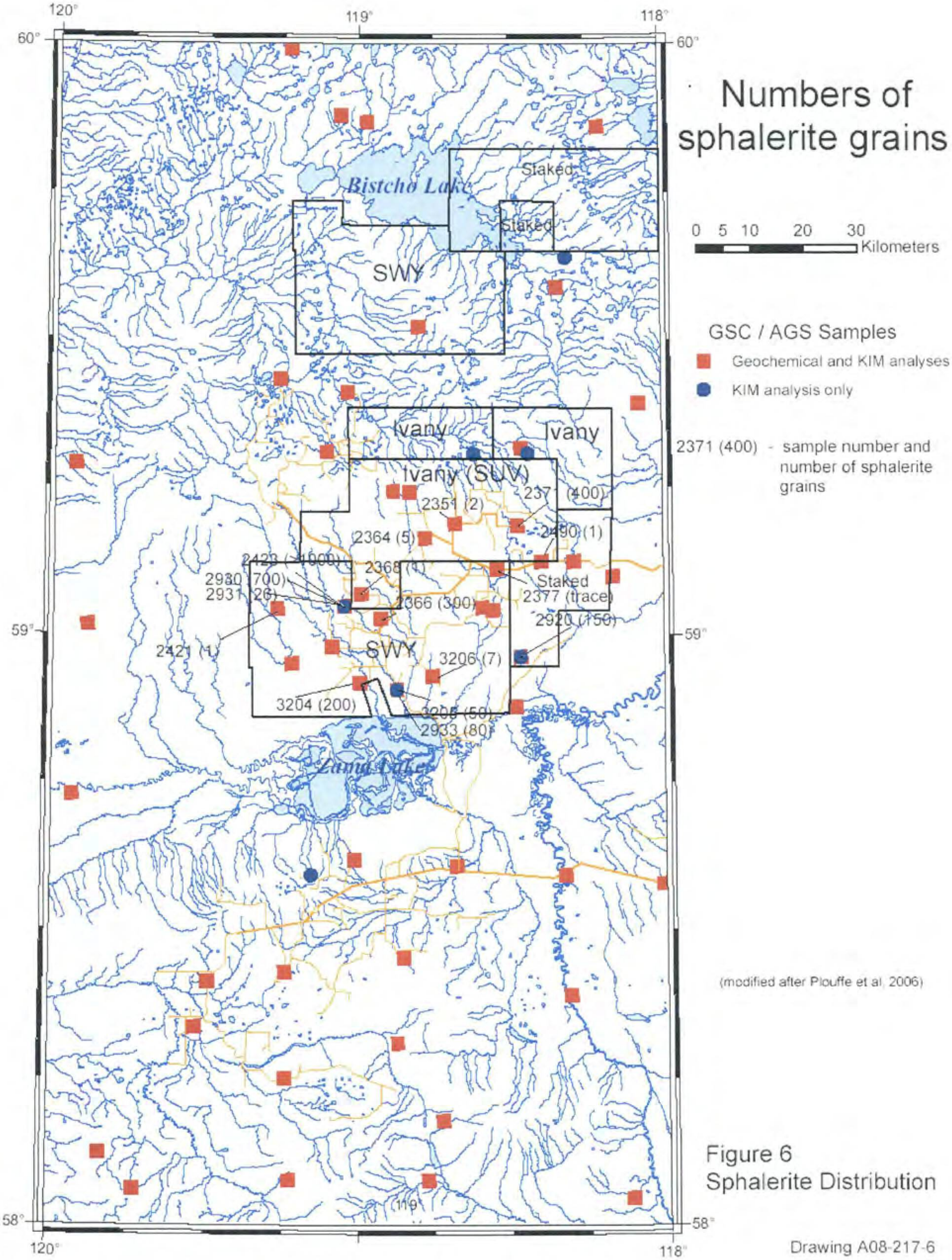
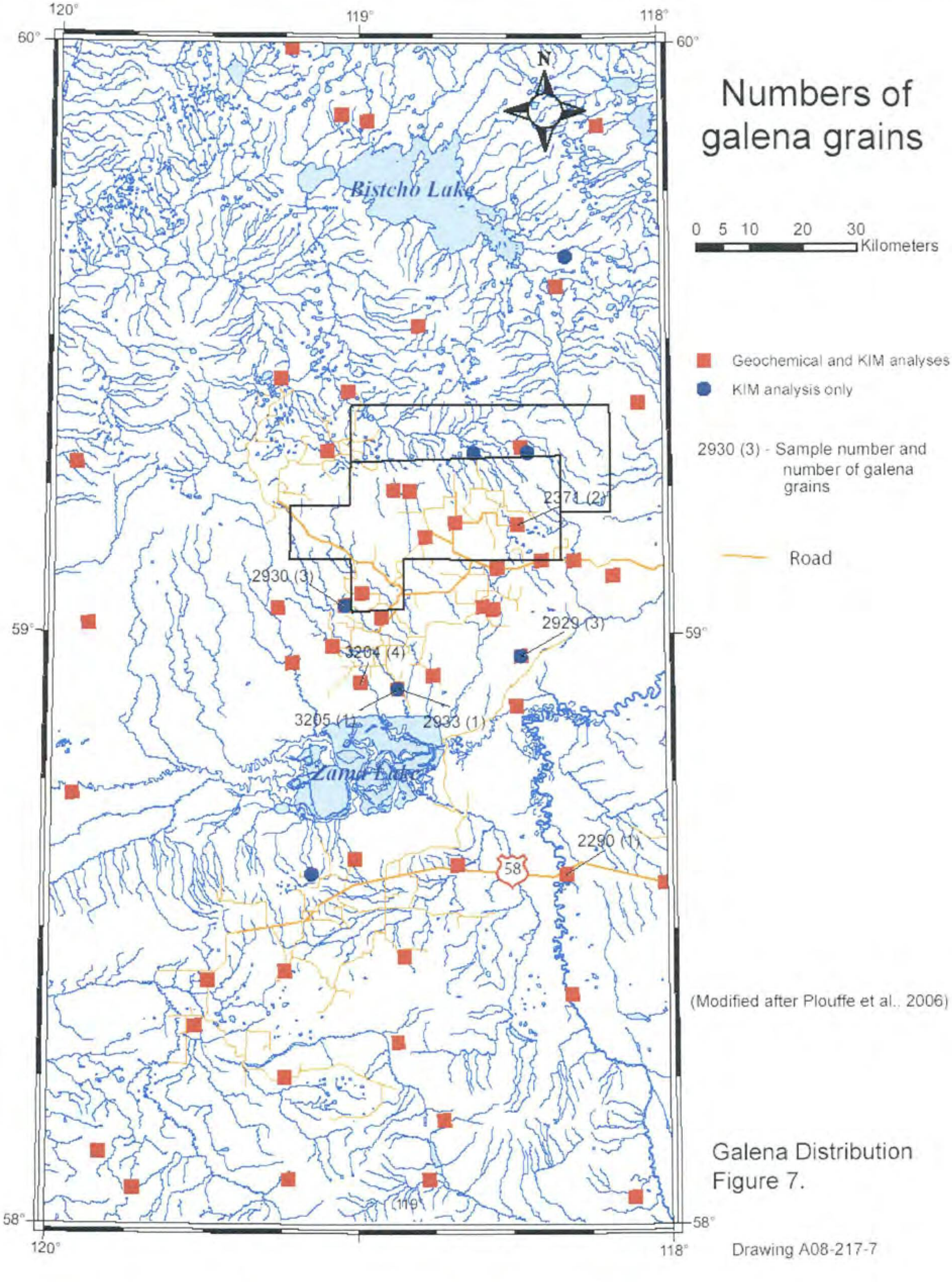


Figure 6
Sphalerite Distribution

Drawing A08-217-6


120°
119°
118°
60°
59°
58°
N
Bistcho Lake
Zama Lake
2371 (2)
2930 (3)
2929 (3)
3204 (4)
3205 (1)
2933 (1)
2290 (1)
58
119
Numbers of galena grains
0 5 10 20 30
Kilometers
Geochemical and KIM analyses
KIM analysis only
2930 (3) - Sample number and number of galena grains
Road
(Modified after Plouffe et al., 2006)
Galena Distribution
Figure 7.
Drawing A08-217-7

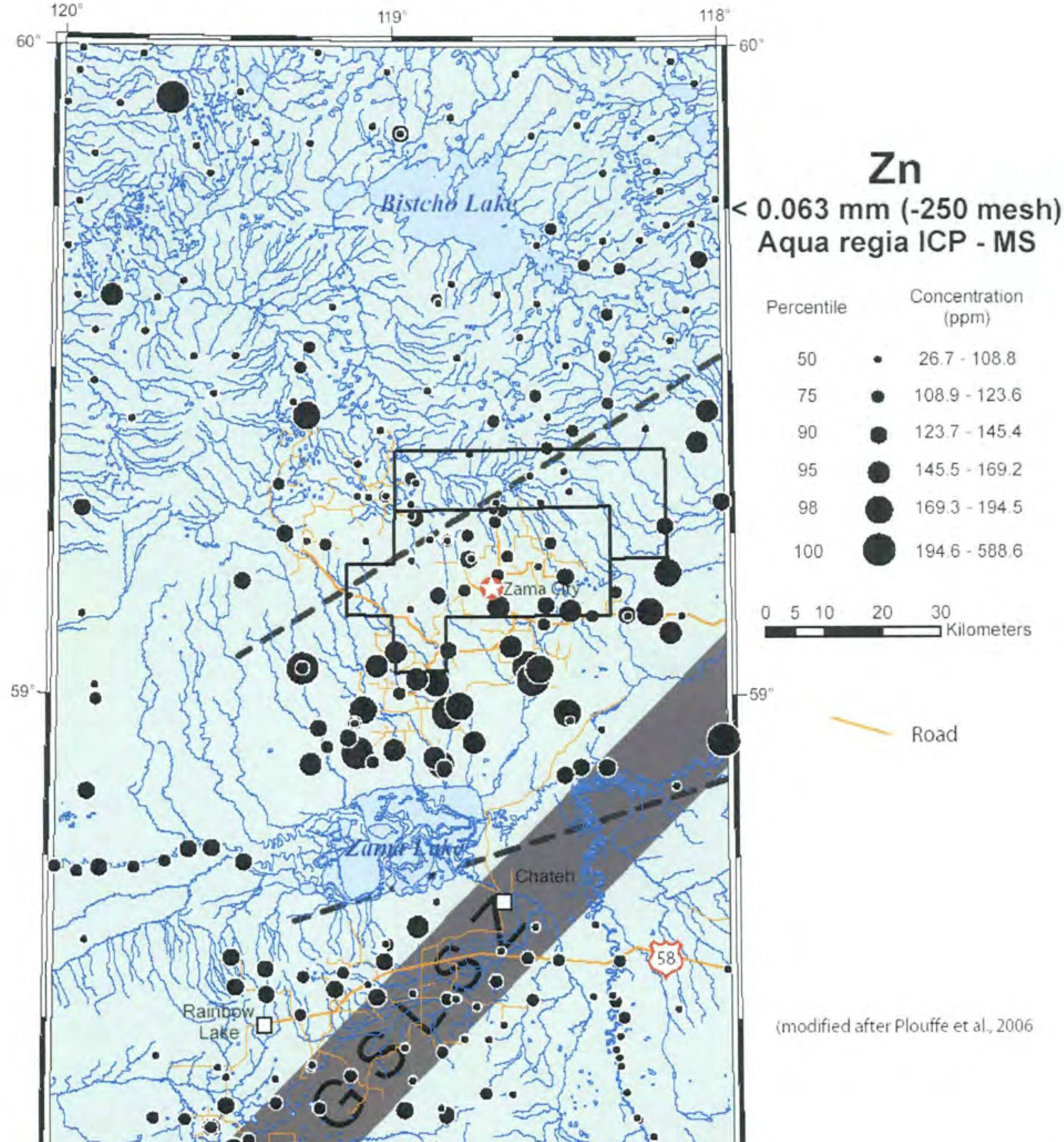
4.2.0 GSC / AGS Till Results

The general assemblage of heavy minerals, concentrated from the 2 – 0.25 mm size fraction, was evaluated as part of the KIM picking process for the samples analyzed in March 2005 and as part of a MMSIM analysis for the samples analyzed in August 2005. An anomalously large number of sphalerite (ZnS) grains (>1000) were identified in GSC/AGS till sample 2423 dominantly in the 0.25 to 0.5 mm size fraction. This is the highest concentration of sphalerite grains ever detected in a till sample by ODM (Plouffe et al., 2006). The sphalerite is found in association with abundant barite ($BaSO_4$), marcasite (FeS_2), and smaller amounts of siderite ($FeCO_3$). Sphalerite grains (up to 400 grains) are also present in seven other till samples from the same region (2368, 2366, 2371, 2377, 2421, 2920, and 3205). The number of sphalerite grains has not been normalized to the bulk sediment weight because for a number of samples the number of sphalerite grains only represents an estimate. Galena (PbS), often found in association with sphalerite in certain types of mineral deposits (e.g., MVT & SEDEX types deposits), was detected in trace amounts in till samples 2290, 2371, 2929, 2930 , 2933, 3204, and 3205, but not in sample 2423.

Till samples with the largest number of sphalerite grains were collected from the deepest portion of borrow pits in un-oxidized till at a depth exceeding 3 m. Given the high compaction of the till in the lower part of the pits and the strong clast fabric present, it most likely reflects transport and deposition at the base of the ice sheet (i.e. basal till), rather than long-distance glacial transport.

Zinc concentrations in the silt and clay-sized fraction of the till samples range from 26.7 to 588.6 ppm with an average concentration of 114 ppm and a standard deviation of 39 ppm. Geochemical results are shown in Figure 8 for zinc and Figure 9 for lead. Till samples with high sphalerite content in the sand-sized fraction did not yield high zinc concentrations in the silt and clay-sized fraction. For example, sample 2423 with a sphalerite grain content exceeding 1000 grains only contains 150 ppm zinc which is well within the zinc background concentrations in tills from this region estimated to be 153 ppm (mean plus 1 standard deviation). Only the sulphur level in sample 2423 is slightly elevated (1.73 %) compared to the rest of the samples (mean: 0.34 %). Regional zinc concentrations in till are elevated in a broad band oriented NE-SW (> 95^{th} percentile) extending from north of Zama Lake to the southeastern sector of 84M map sheet. This band is sub-parallel and in proximity to the Great Slave Lake Shear Zone (Burwash et al., 1994).

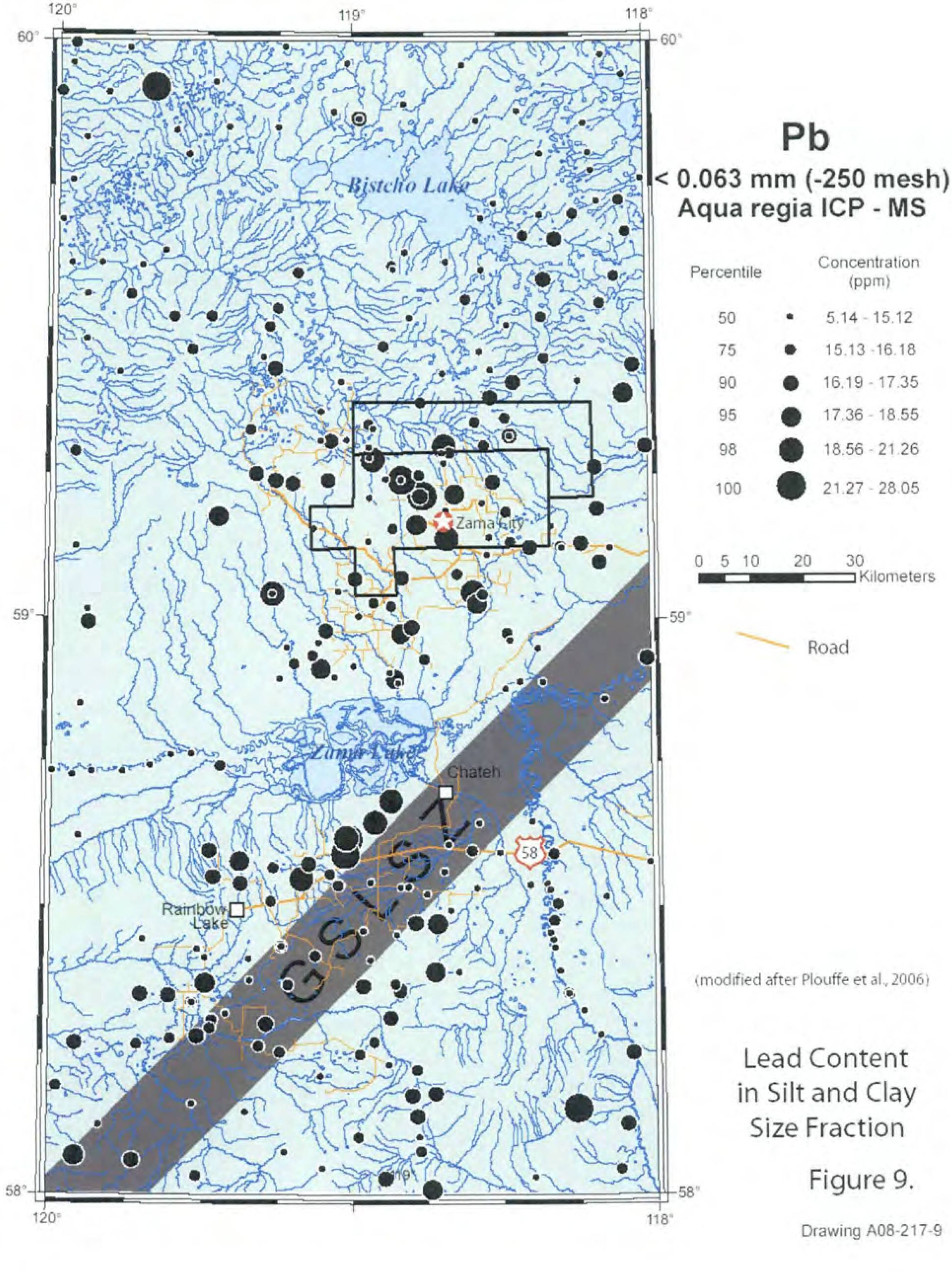
Lead concentrations in the silt and clay-sized fraction of the till samples range from 5.1 to 28.0 ppm with an average concentration of 15 ppm and a standard deviation of 2 ppm. Samples with trace amounts of galena in the heavy mineral picks do not contain high lead levels in the silt and clay-sized fraction. For example, sample 3205 with one galena grain yielded a lead concentration of 14 ppm which is close to the average lead concentration of 15 ppm in the rest of the till samples. Elevated lead concentrations (> 98_{th} percentile) principally occur in a region extending from south of Zama Lake to approximately 30 km north of the hamlet of Zama City. There is some overlap between the region with high lead and zinc levels.



Zinc Content in Silt and Clay Size Fraction

Figure 8.

A08-217-8



Lead Content in Silt and Clay Size Fraction

Figure 9.

Drawing A08-217-9

The absence of geochemical anomalies in the silt and clay-sized fraction of till samples that contain abundant sphalerite and galena in the medium sand-sized fraction might be related to the proximity of a bedrock source and the lack of glacial comminution of the sphalerite and galena into particles smaller than sand size. Sphalerite and galena in the host bedrock are most likely in the sand-sized range with no geochemical enrichment in fine-grained minerals. In addition, the un-oxidized nature and elevated carbonate content in some of the till samples (0 to 30% carbonate in the silt and clay-sized fraction) might have prevented the leaching of zinc and lead from the sulfide minerals and the scavenging of these metals by fine grained phyllosilicates, oxides, and hydroxides (Shilts, 1984). Understanding why this anomaly is only reflected in the mineralogy of the sand-sized fraction of tills and not in the geochemistry of the silt and clay-sized fraction will be the subject of future GSC/AGS research. These results indicate that a soil and glacial sediment geochemical survey alone, commonly used in exploration for sulfide deposits, would not yield satisfactory results within the study area. Any follow-up surveys will need to include heavy mineral analyses of glacial sediments collected from the "C" zone soil horizon as opposed to simply conducting drift geochemical analysis.

5.0.0 SUV Initial Follow-up Program

In order to confirm the GSC / AGS discovery of sphalerite and galena grains in till in the Zama Lake area, Star Uranium undertook to resample some of the borrow pits where anomalous samples were taken. In June 2006, the Author visited the property area and located a number of the burrow pits. Sample locations were determined by using the GPS UTM co-ordinates of the sites. Many of the pits were water filled making duplicating samples from the centre of the burrow pit difficult to obtain. Eventually only two of the most anomalous sites were sampled. The area around the pits was prospected and glacial till examined for clasts composition. Other burrow pits were sampled to increase sample density. Active or more recently active burrow pits proved to be the most accessible since the pits have the tendency to fill with water over time.

Regional data was also compiled to assess the geological setting of the property and surrounding area. Examples of the actual sphalerite grains recovered were examined at the AGS offices in Edmonton. In October 2006, a second visit to the property was made to collect a further seven samples on previously sampled sites and test adjacent areas, where no sampling had been undertaken.

5.1.0 SUV Till Sampling

A total of nineteen bulk till samples were collected in 5-gallon plastic pails, labeled and sealed with taper proof lids in the field. Samples were unscreened except for large boulders. Sample weights were generally less than 17 kg. Samples were limited to less than 20 kg because of Alberta Energy regulations, which require permits for samples of 20 kg or more. Samples were obtained using pick and hand shovel in the center of burrow pits dug by oil and gas operators for building roads and well sites. Typically this resulted in sample depth of between 3 to 4 m in depth below surface. The clayey till was very compacted, likely representing basal / lodgment till. Sample location maps and data are provided in Appendix 1 and Appendix 2.

A further 0.5 kg for geochemical sample was also placed in a Kraft paper soil sample bag for 30-element ICP geochemical analysis. Bulk till samples, for indicator mineral processing were shipped, directly from the field to the either SRC or ODM by Purolator Courier Ltd. Sample details were recorded on a Garmin iQUE-M5 pocket PC.

5.1.1 Kimberlitic Indicator Minerals

Of the nineteen samples picked for kimberlitic indicators at either SRC or ODM only five samples produced kimberlitic indicator grains. Sample location maps and sample data is provided in Appendix 1 and 2. Sample preparation conducted at SRC followed their standard sample preparation for Kimberlitic Indicator minerals supplemented by further density media heavy liquid separation (specific gravity >3.2) of sulfides. Picking of sulfide grains at SRC is not normally done. Inspection of the grains under microscope confirms the occurrence of sphalerite in the SRC samples. This procedure differs significantly from the ODM procedure and provides further confirmation the occurrence of the indicator minerals.

The first batch of samples (PH51 to PH59) sent to SRC produced only one sample with kimberlitic indicators. Sample PH51 taken 6 km SE of the Adair forestry tower, returned five pyropes and one olivine grain. Four of the pyropes from PH51 were confirmed by microprobe analysis to be similar to other G-9 garnets found in or near Alberta kimberlites. The one-olivine grain was also similar in composition to other olivines grains found in or near Alberta kimberlites.

Of the ten samples processed at ODM, four returned kimberlitic indicators. Sample PH54D west of Zama Lake and the Apache Gas Plant in Twp117R6W6 produced 2 chromites, 4 ilmenites and 1 olivine. Sample PH61 located 5 km to the west in Twp116R7W6 produced only 1 chromite. Sample PH63 taken in Twp117R6W6 about 6 km to the north produced 1 chromite and 1 ilmenite. Sample PH67 located 9 km to the NW in TWP117R7W6 returned 1 chrome diopside. None if these indicators picked at ODM have been probed.

5.1.2 Metallic Mineral Indicators

At ODM, the heavy mineral fraction was isolated in a two-step process involving a shaking table and heavy liquids (specific gravity 3.2). Kimberlite indicator minerals, gold grains and other heavy minerals were identified in the 0.25 – 2 mm sized fraction under binocular microscopes, by ODM staff mineralogists at the laboratory. Sample originally processed at SRC are awaiting reprocessing at ODM for metallic indicator minerals.

The smaller bagged till samples were prepared at Loring Laboratories where the silt and clay-sized fraction (<0.063 mm or –250 mesh) was separated by dry sieving. Blind duplicate and our own analytical standard samples were introduced into sample sequence then sent for analysis. Samples were analyzed for 30 element ICP analysis on the –250 mesh fraction using an aqua regia digestion. Duplicates from the same burrow pits produced somewhat erratic results in some elements likely representing erratic distribution of some elements. Replicates produced better results. Standards returned values within 5% of expected range for geochemical analysis.

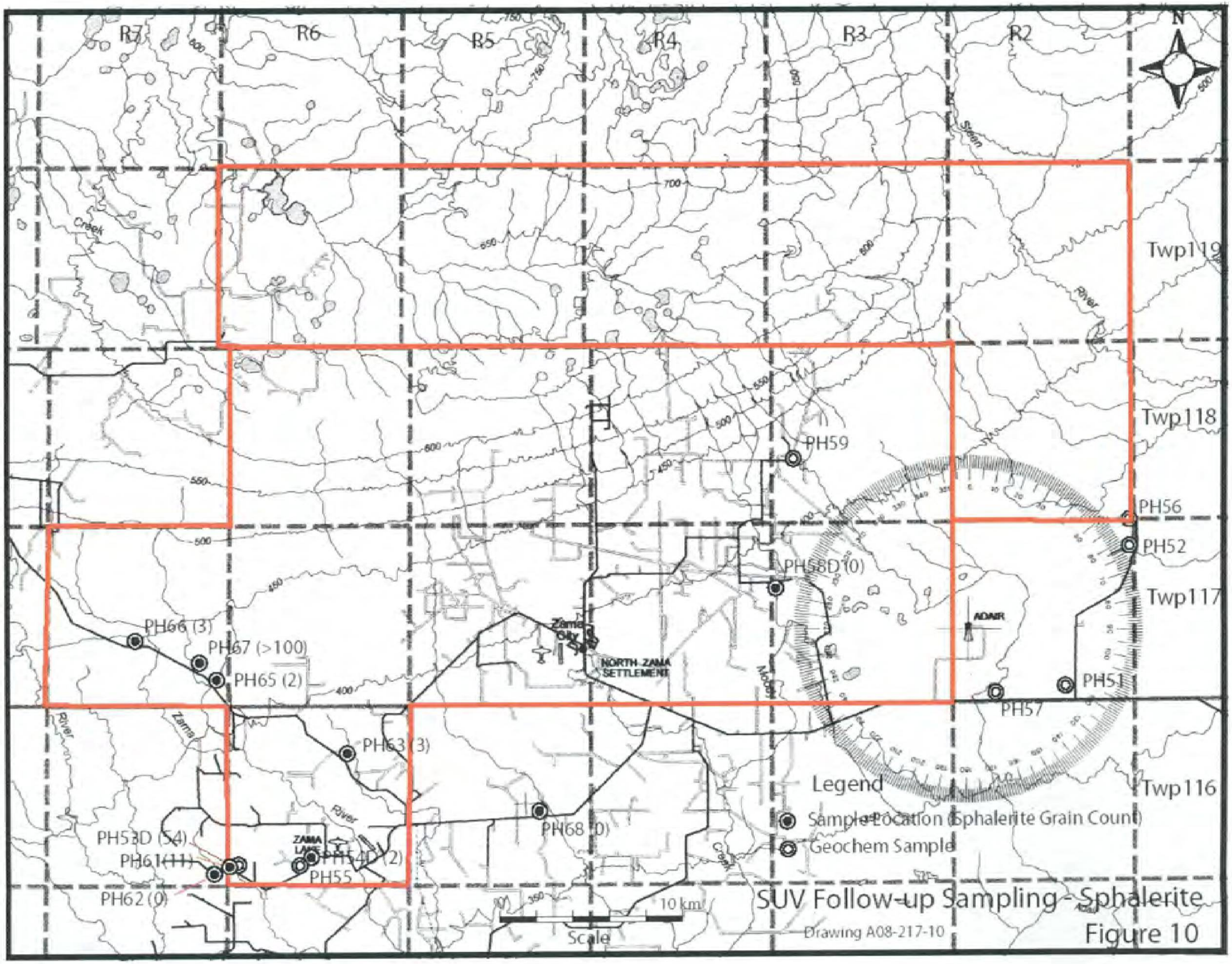
Till sampling conducted by SUV shown on Figures 10, 11, and 12, generally confirm the occurrence of anomalous sphalerite and galena grains in till samples from the Zama Lake area. The number of grains from the SUV sample set (n=10) is highly variable and ranges from nil to >100 grains within a sample. GSC / AGS sampling (n=71) returned a range of between nil to >1000 grains. The upper range is different but not considered significant since the absolute upper limit is dependent on sample weight and sample statistics. The normal range for sphalerite is likely between nil and trace. Thus anything above trace is anomalous. The erratic grain counts may be partly due to sample weights not being normalized as SUV samples varied between 16 and 24 kg. GSC / AGS samples ranged up to 40 kg in size.

Many GSC / AGS sample sites were inaccessible because of high water in the burrow pits or inaccessible because of wet road conditions which prevented any surface access because of the high clay content of the winter roads. GSC / AGS made use of helicopter support and ATV which enabled more extensive access in the wet and more remote areas.

GSC / AGS sample 2423 (>1000 grains of sphalerite) appears to have been a remote sump near a well site (12-06-116W6). This site has now been filled in and fully reclaimed. Sample PH62, obtained on surface from this site, returned no indicators. The adjacent burrow pit across the road and 600 m to the east provided samples PH53D and PH61, returned 54 and 11 grains of sphalerite. Till at this site was well compacted. GSC / AGS samples 2930 and 2931 from the sump returned 700 and 26 grains of sphalerite. Significant variation even exists in GSC / AGS sampling. Sample PH62 taken near surface in undisturbed ground on the side of the clearing of the remote sump produced no indicator grains. A further 4 km east along the road, sample PH54D from another burrow pit returned 2 sphalerite grains.

Four samples (PH63, PH65, PH66, and PH67) were taken along a northwest trending road from the Apache gas plant at Zama Lake returned 3, 2, 3, and >100 grains of sphalerite. These samples were obtained from burrow pits at a depth of 2 - 4 m below surface. Sample PH67 also returned two grains of galena, one grain of molybdenite (MS_2). PH65 and PH66 also returned very small gold grains. The GSC / AGS had taken no samples along this road. The road is approximately 10 km north of GSC / AGS sample site 2423.

Sample PH58D taken north northeast of Zama City was in a recently active burrow pit just west of GSC/ AGS sample 2371 which produced 700 sphalerite and 2 galena grains. Sample PH58D produced no indicators. Large gypsum crystals were also present around this burrow pit. The road access to site 2371 was flooded and not accessible in June 2006.



SUV Follow-up Sampling - Sphalerite
Drawing A08-217-10
Figure 10

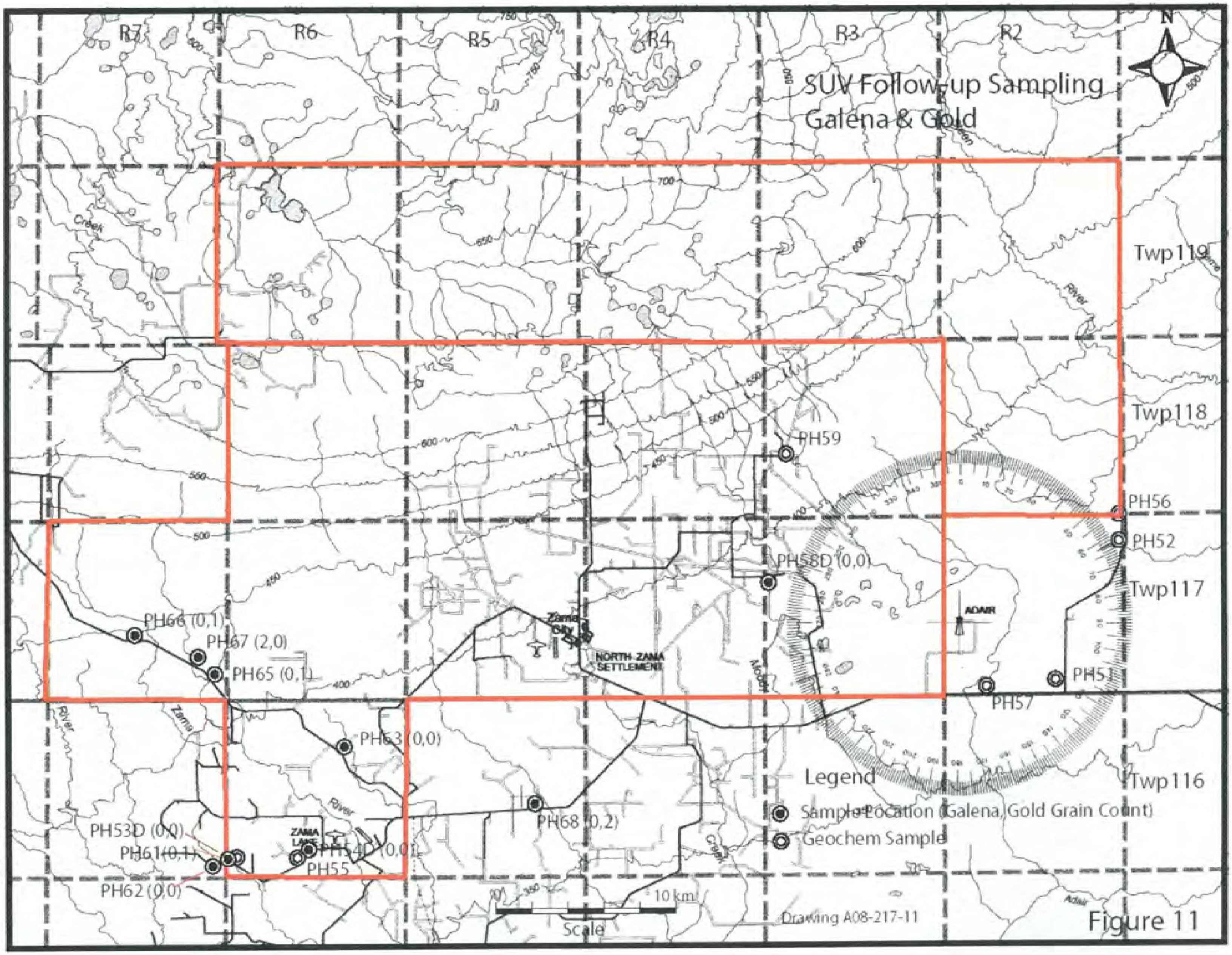

SUV Follow-up Sampling
Galena & Gold
R7
R6
R5
R4
R3
R2
N
Twp119
Twp118
Twp117
Twp116
PH59
PH56
PH52
PH58D (0,0)
PH66 (0,1)
PH67 (2,0)
PH65 (0,1)
PH51
PH57
PH63 (0,0)
PH68 (0,2)
PH53D (0,0)
PH61 (0,1)
PH54D (0,0)
PH55
PH62 (0,0)
ADAIR
NORTH ZAMA SETTLEMENT
ZAMA LAKE
Legend
Sample Location (Galena, Gold Grain Count)
Geochem Sample
10 km
Scale
Drawing A08-217-11

Figure 11

Most samples with high sphalerite grain counts also had very high sulfide counts represented mainly by marcasite (FeS_2). Many samples had lots of barite ($BaSO_4$) present in the concentrates. Sample PH53D had 54 sphalerite, 40,000 marcasite and 2,500 barite grains, while sample PH68 had >100 sphalerite, 19,000 marcasite and 60 barite grains. Barite and marcasite are common minerals that occur with sphalerite and galena in MVT and SEDEX deposits. Sample PH68 was taken along Plant Road adjacent to a producing oil well from an old burrow pit nearly full of water. This sample returned no sphalerite or galena grains but did return 50 barite, 35 marcasite, and two small gold grains.

Several samples (PH53, 54, 55, 56, 57 and 58) are still waiting re-processing at ODM to determine sphalerite grain counts. The six samples still in process represent a gap in coverage and should likely be re-sampled. Additional efforts are likely required to access other more remote sites using ATV to obtain further coverage and higher density. Increasing sample size to 40 kg may provide better sampling statistics.

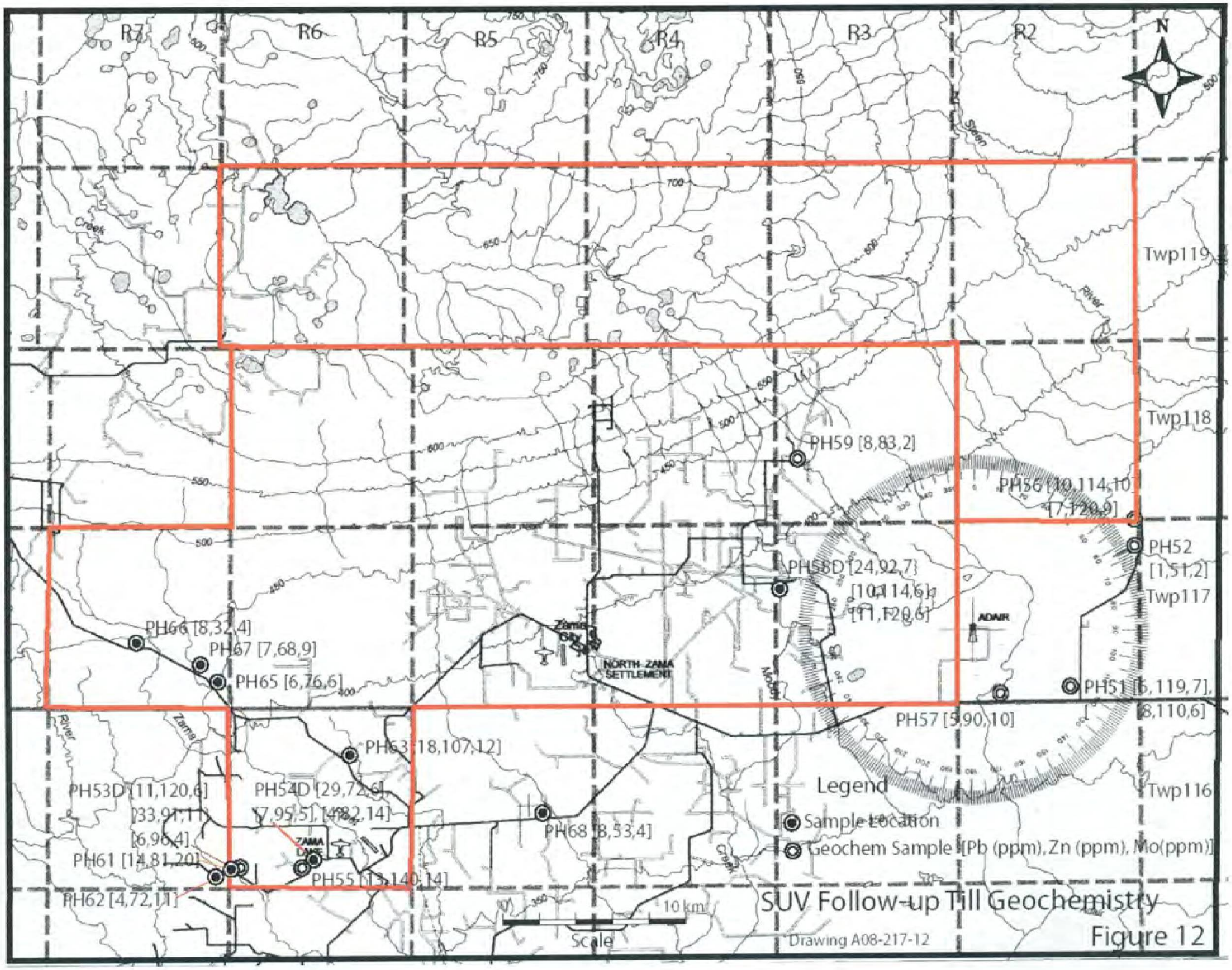
5.1.3 Till Geochemistry

Till geochemistry from the silt and clay fractions shows some interesting results for the property. Regionally zinc appears to define a northeast-southwest corridor of high values. Regional lead values do not follow the same corridor. Property level sampling (n=25) shows some interesting trends and may reflect indicators present in the sand sized fraction. Data for the silt and clay sized fraction for Pb, Zn and Mo is shown on Figure 11. Considerable variation between duplicates is apparent from samples near each other. Till composition is likely very heterogeneous and presents sampling issues. Multiple samples from the same site can produce significant variations. The laboratory can make the sample analyzed homogeneous and have good reproducibility but the till itself is anything but homogeneous.

The property level sampling shows similar distribution and trends to those present in the GSC / AGS regional set for Pb and Zn. The small population (n=25) of the property level sampling does not permit a full comparison. Analysis of geochemistry results by the GSC / AGS appears limited to Pb and Zn only.

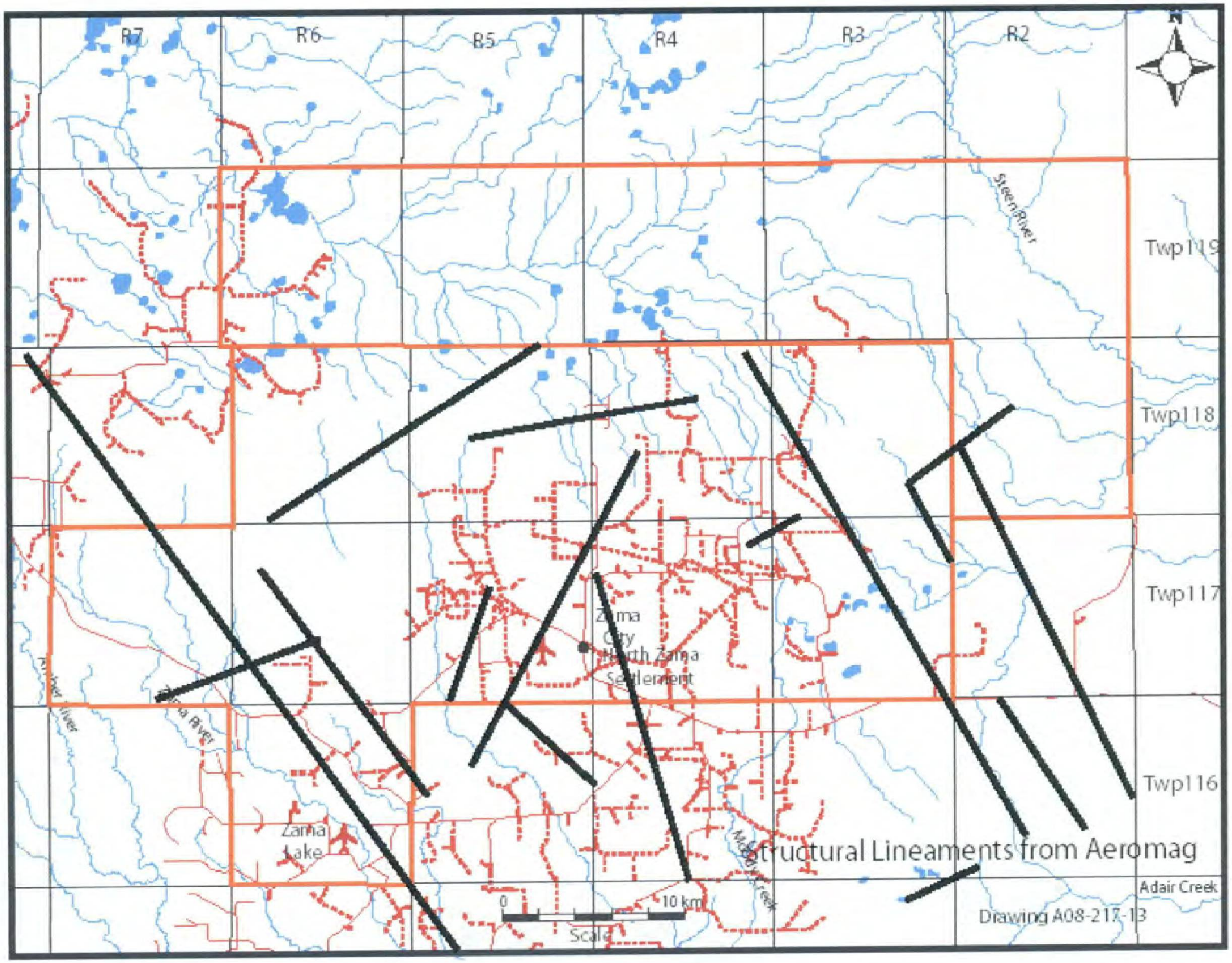
Property level sampling returned: a range of 3 to 33 ppm for Pb, 31 to 149 ppm for Zn, 16 to 62 ppm for Cu and 2 to 28 ppm for Mo. Pb, Zn, Cu, and Mo are regional indicators for Pb-Zn deposits. The relationship between high sphalerite and galena grain counts and high values in Pb and Zn is not fully understood at this time.

The occurrence of the molybdenite grain in PH 67 prompted the examination of molybdenum levels in the silt and clay fractions. There may be some correlation between Pb, Zn and Mo in the silt and clay fraction and mineralization as they are regional indicators of Pb-Zn mineralization based on our model. Further study and an orientation survey is however required. Further property level sampling is required to define the high Pb and Mo values detected on the property. Till geochemical samples has the great advantage that analysis is relatively inexpensive and has rapid turn around.


R7
R6
R5
R4
R3
R2
N
Twp119
Twp118
Twp117
Twp116
PH59 [8,83,2]
PH56 [10,114,10]
[7,120,9]
PH52
[1,51,2]
PH58D [24,92,7]
[10,114,6]
[11,120,6]
PH66 [8,32,4]
PH67 [7,68,9]
PH65 [6,76,6]
PH51 [6,119,7],
[8,110,6]
PH57 [5,90,10]
PH63 [18,107,12]
PH53D [11,120,6]
[33,91,11]
[6,96,4]
PH54D [29,72,6]
[7,95,5], [48,2,14]
PH61 [14,81,20]
PH62 [4,72,11]
PH55 [13,140,14]
PH68 [8,53,4]
NORTH ZAMA SETTLEMENT
ADAIR
Legend
Sample Location
Geochem Sample [Pb (ppm), Zn (ppm), Mo(ppm)]
10 km
Scale
SUV Follow-up Till Geochemistry
Drawing A08-217-12
Figure 12

5.2.0 SUV Airborne Geophysics

Aeromagnetic data was acquired from Fugro Airborne Surveys. This data was brokered data flown in 1996 for the Oil Patch on a non-exclusive basis. Data is high-resolution and relatively high quality. Line spacing was 400 m flown at 030°/210° line direction. Tie line spacing was 1200 m. Survey was flown at a 100 m drape mode (terrain clearance). As of the date of this report, only preliminary analysis had been carried out and full analysis was pending removal of cultural noise from man made features. Data for the entire property was acquired. Preliminary analysis defines a structural frame-work for the property consisting of structures parallel to the MacDonald / Hay River Fault Zone (NE-SW) and cross cutting orthogonal structures (NW-SE). These orthogonal structures are likely significant features that will require careful examination. The line spacing is rather wide but adequate for initial analysis. Any follow-up surveys will likely be at narrower line spacing. A summary of the lineaments defined is shown on Drawing A08-217-13. Many pipelines and well sites cases make the area very magnetically noisy.`````````````````` The acquisition cost of the data was not used as assessment work.


R7
R6
R5
R4
R3
R2
Twp119
Twp118
Twp117
Twp116
Steen River
Zama City
North Zama
Settlement
Zama Lake
Zama River
Adair Creek
0
10 km
Scale
Structural Lineaments from Aeromag
Drawing A08-217-13

6.0.0 Ivany Mining Exploration Program

Ivany Mining's initial program was planned to consist of further sampling on the property but poor weather condition in the late fall of 2007 prevented this because of poor road conditions due to an early snow fall. It was possible to conduct an orientation survey near the old Pine Point Mine site and collect regional sampling between Pine Point and Zama Lake. An airborne survey was flown in the spring of 2008 to detail the geophysical setting of the property.

6.1.0 Orientation Survey at Pine Point

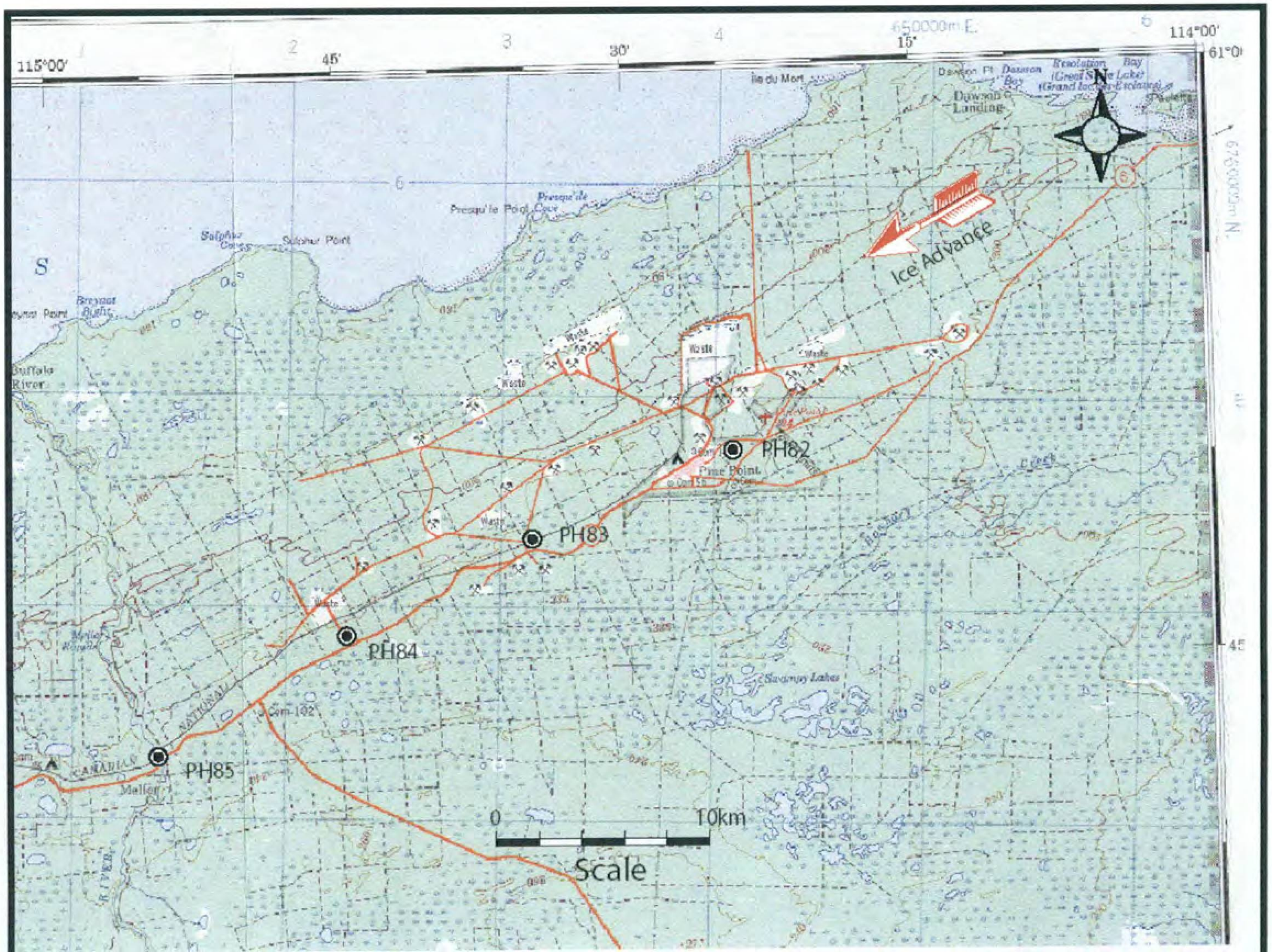
In order to more fully assess the heavy mineral sampling results from the Zama Lake area, an orientation survey was conducted near the now closed Pine Point Mine just south of Hay River, N.W.T. A total of four samples were collected down ice of the old Pine Point Mine property at variable distances to determine if there was a down ice dispersal train of mineralization. Sample locations are shown on Drawing A08-217-14. The samples varied from till to gravel depending on available material and were submitted to ODM as a blind submission to test QC/QA procedures. Results from heavy mineral concentrates and silt size fractions show dramatic differences from those results obtained at Zama Lake.

Sample PH83 taken 3 km SW down ice of mined out Pit #K57 yielded 50,000 grains of yellow brown sphalerite with 10,000 grains of galena. Also present in the sulfide concentrate was marcasite-altered pyrite, which was inter-grown with coarse-grained Pb bearing calcite (plumbocalcite). The sphalerite from Zama Lake is black to dark gray, fragile and platey in nature. The GSC /AGS (Plouffe et al., 2007) reports "*that sphalerite in till in the Zama region contains on average lower levels of Pb and Fe, higher Cd concentrations, than sphalerite from Pine Point (Kyle, 1981)*".

Table 4
Pine Point - Grain Counts Orientation Survey Samples

S/N #	General Location	Down Ice Distance (km)	Sphalerite (grain count)	Galena (grain count)	Barite (grain count)	Sample Type
PH82	3 km south of mine trend	?	250	0	0	Gravel
PH83	3 km SW of K57 pit	3 km	50,000	8000	7	Gravel
PH84	12 km SW of K57 pit	12 km	50	2	4	Gravel
PH85	Buffalo River bank cut about 24 km from K57 pit	24 km	1	0	31	Till

The fluvial glacial process action has produced likely a ten-fold increase in the heavy mineral content of the orientation survey gravel samples. It is evident however that there exponential drop off of indicators as one moves away from the source. The sphalerite present at Zama Lake is not derived from the Pine Point area, as it is different in composition, character and it would not survived the long transport distance.



● Sample Location

Pine Point Sample Sites

Drawing A08-217-14

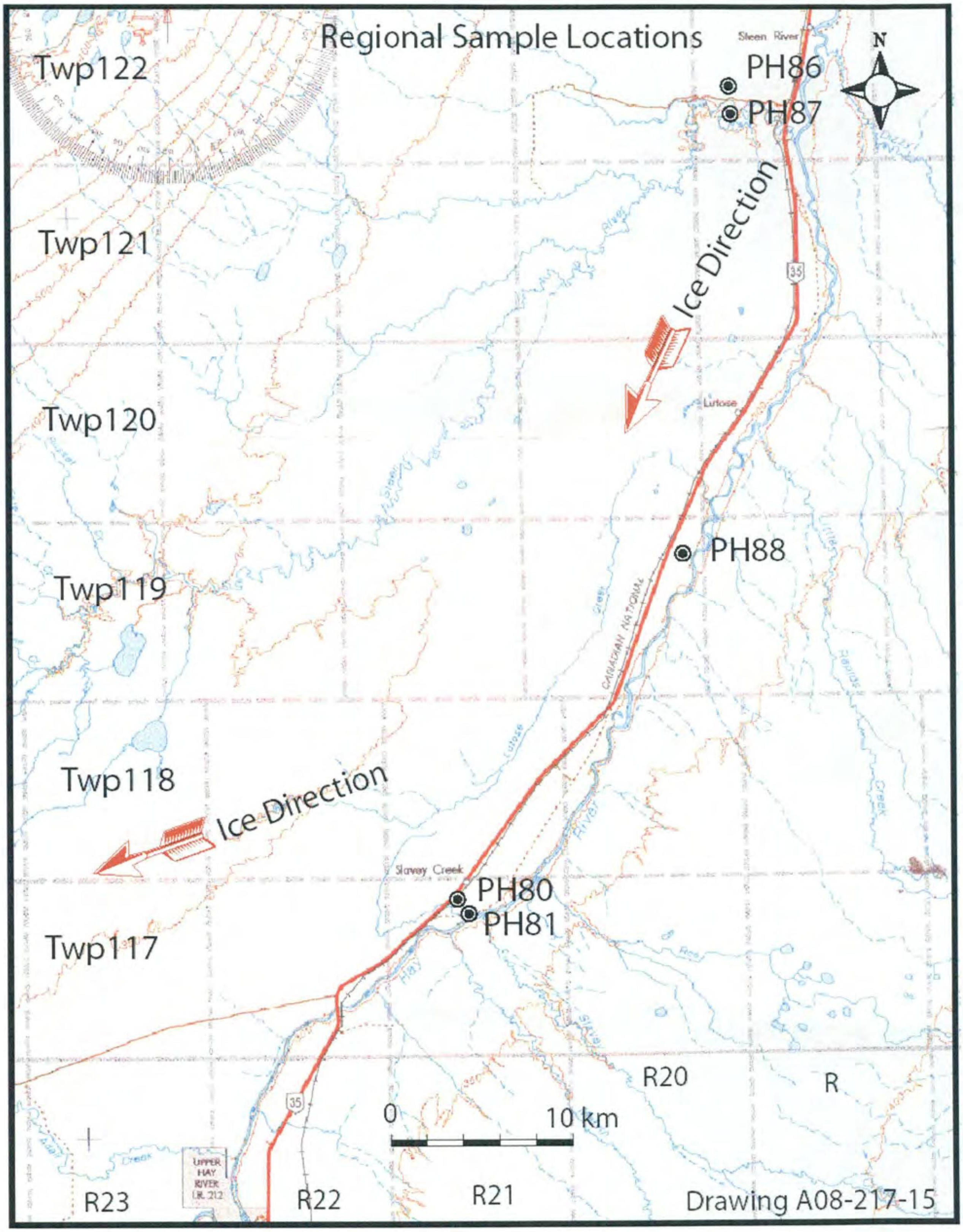
Figure 14.

6.2.0 Regional Sampling

A series of 5 an additional heavy mineral samples were collected between Hay River and Zama Lake to establish background levels for till composition. The normal background level foe sphalerite grains ranges from 0 to 2 grains, and for galena grains from 0 to 1 grain. The chemistry of silt size fraction (–250 mesh) of the till contrast varies greatly as Table 5 indicates. Sample locations are shown on Drawing A08-217-15.

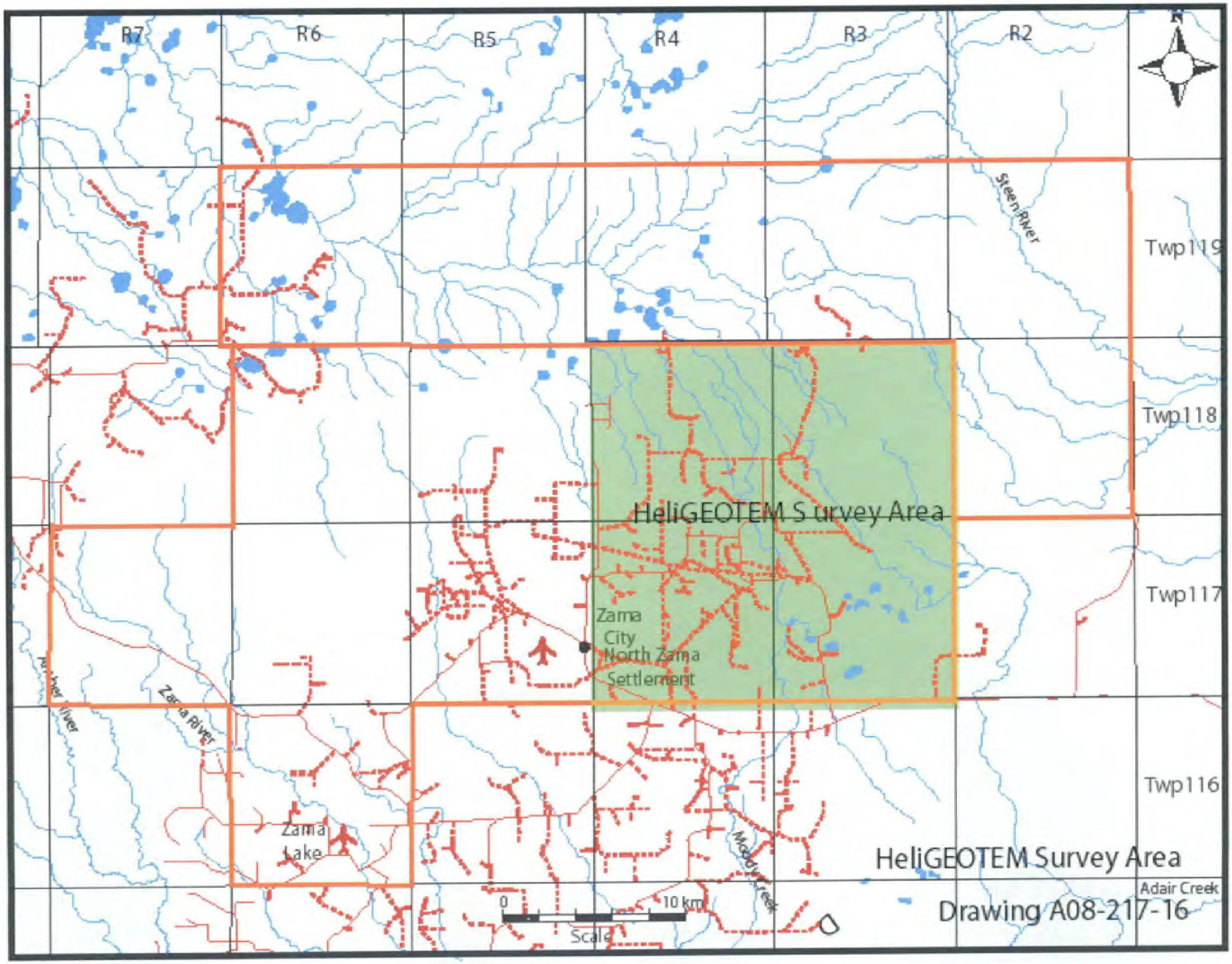
Table 5.
Silt Size Fraction Geochemistry

Element (by ICP)	Zama Lake Area	Pine Point	Steen River Area
Al (%)	1 – 1.8	0.04 – 0.5	0.44 – 1.3
As (ppm)	5 - 11	4 - 6	6 - 11
Ba (ppm)	25 - 250	20 -65	150- 250
Ca (%)	0.22 – 3.7	5.8 – 8.5	1.5 –7.0
Co (ppm)	25 - 40	6 - 8	18 - 20
Cu (ppm)	20 - 35	3 – 5	17 - 26
Fe (%)	2.4 – 4.6	0.6 – 0.8	1.8 – 2.3
Mg (%)	0.3 – 1.5	3.0 – 4.7	1.2 – 1.3


Regional Sample Locations
Steen River
PH86
PH87
N
Twp122
Twp121
Ice Direction
35
Lutose
Twp120
PH88
Twp119
Twp118
Ice Direction
Slavey Creek
PH80
PH81
Twp117
R20
R
35
0
10 km
UPPER HAY RIVER I.R. 212
R23
R22
R21
Drawing A08-217-15

6.3.0 HeliGEOTEM II Airborne Survey

Ivany recently completed (late March 2008) a helicopter GeoTEM survey over the eastern four permits of the property. Survey results are provided in Part "C" of this report. Preliminary results indicate a number of areas of interest where there are either resistivity highs or sight resistivity lows. The survey will provide more detailed structural data along with conductivity/resistivity information for area selection for field follow-up work. The area covered the HeliGEOTEM Survey is shown on Drawing A08-217-16, Survey results are fairly noisy given the industrial activity in the area.


R7
R6
R5
R4
R3
R2
N
Steen River
Twp119
Twp118
Twp117
Twp116
HeliGEOTEM Survey Area
Zama City
North Zama Settlement
Zama River
Zama Lake
Moody Creek
Adair Creek
0
10 km
Scale
HeliGEOTEM Survey Area
Drawing A08-217-16

7.0.0 Exploration Potential

The exploration potential of the Zama Lake Pb-Zn property lies in the recognition that the discovery of sphalerite, galena, barite grains in heavy mineral concentrates are being indicative of the metal bearing hydrothermal fluids ascending through a sedimentary package which hosts carbonates and shale where they could have deposited economic Pb-Zn deposits. Previous to this, sphalerite and galena occurrences were known in the Devonian carbonate rocks in oil wells in northern Alberta. High levels of metals were also found in saline formation waters in Devonian Keg River Formation. Both the federal (GSC) and provincial (AGS) geological surveys have been promoting the Pb-Zn conceptual potential of the Western Canadian Sedimentary Basin for several years (Rice, 2001; Hannigan, 2002; Hannigan et al., 2003). Previous analyses of Devonian formation waters in Northern Alberta show these waters to be Pb-rich and are thus not related to Pine Point because the deposit is Zn-rich. Recent analysis shows that Zn values are in an order of magnitude greater than Pb (Hannigan et al., 2003). Lead isotope dating of the Pine Point deposits is 290 Ma (290 million years ago or Late Pennsylvanian age). The metal-bearing fluids responsible for Pine Point are much older and likely different than modern formation waters. Modern formation waters are likely driven by a Laramide deformation event within the Cretaceous. This would make the whole sedimentary package prospective for Pb-Zn deposition.

The presence of the classical Pb – Zn – Mo anomalous geochemistry on a regional basis in the surficial environment in the clay silt fraction of till within the Zama Lake area indicates proximal source and not a far traveled transported anomaly. This potential has only recently been recognized. The structural setting of the Zama Lake Area along parallel structures to the MacDonald – Great Slave Fault northeast-southwest system and cross cutting northwest-southeast structures is similar in setting to the Pine Point Area. Most of these structures are basement features, which have been reactivated over time and penetrate nearly the full sedimentary package. These structures are likely one of the major controls localizing mineralization.

Exploration on the Zama Lake property consisting of till sampling, examination of indicator mineral concentrates and silt geochemistry indicates the likely proximal presence of Pb-Zn mineralization near surface. The best potential likely exists along structural breaks (faults), collapse structures, porous zones (tuffs), and proximal or up dip of petroleum zones. This potential likely exists beyond the carbonates at depth and into the shale. Further work is required to evaluate this grass-roots Pb-Zn property of merit.

7.1.0 Interpretation and Conclusions

Exploration on the Zama Lake property has resulted in the discovery of sphalerite and galena in the course sand fraction of basal till which is likely indicative of a proximal source of Pb-Zn mineralization. The anomalous sphalerite and galena were obtained from the bottom of the burrow pit at 3 – 4 m depth. The till was extremely well compacted. The surface is covered in most places on the property with a blanket of fine glaciolacustrine deposits. Little evidence of an ablation till is apparent.

Till geochemistry of the silt fraction also shows anomalous values in Pb, Zn and Mo. The potential of Pb-Zn has largely been unrecognized because of the lack of knowledge in the metallic mineral potential of Alberta. Results to date suggest a possible SEDEX type mineralization source of the down ice dispersal train containing highly concentrated sphalerite grains and galena grains. Further work is warranted to evaluate this grass roots Pb-Zn play.

7.2.0 Recommendations

A two-phase exploration is recommended to evaluate this Pb-Zn property in the Zama Lake Area of Northern Alberta. An extensive database of oil industry data exists for the area but most of it is focused at depths in excess of 1000 m within the Devonian carbonates. Sub-surface data should be compiled from select wells on the property to compile the shallow stratigraphy from well logs. Any structural information from the logs would also be valuable. Bedrock topography would also be important to avoid areas of deep overburden. This information can likely be acquired at a minimum cost.

The first batch of samples sent to SRC should be sent to ODM for re-processing to recover the metallic mineral indicators. Further, more extensive bulk till and silt geochemical sampling should be untaken at a higher density using ATV for better access into more remote and wetter areas where summer access does not exist. Coverage of silt geochemistry sampling should be expanded beyond that of addition bulk till sampling. Orientation studies should also be undertaken to define variation with depth and lateral variation within burrow pits near current anomalous areas. Increasing bulk till sample size should also be evaluated. Data from GSC / AGS multi-element sampling should be fully integrated into a single database.

Isotopic age dating of the sulfide indicator minerals recovered is warranted to date theage of the mineralization. The age date for mineralization at Pine Point is 290 million years ago. The age date for mineral at Zama Lake in the subsurface within Devonian carbonates is of a similar age. Mineralization near surface may relate to the Laramide Orogeny 47 ±10 Ma (million years ago). This Laramide Orogeny likely deforms rocks up and including Cretaceous age rock. If the age dates are much younger than the old lead dates for Pine Point, the potential for the play increases significantly. Several of the grains should have their isotopic composition determined.

Processing of brokered aeromagnetic and new HeliGeoTEM data should be completed and targets selected for ground follow-up. Follow-up ground geophysics should likely initially consist of ground magnetometer, VLF-EM, HLEM and selected induced polarization (IP) surveys. The best suite of surveys should be determined given the local ground conditions and overburden thickness. It will likely be possible in some cases to use pre-existing grid lines from seismic surveys. Further airborne EM with magnetics in some areas may be warranted. The Phase I program would likely define some preliminary drill targets by late fall. Total cost for the Phase I program is estimated at $400,000.

The recommended Phase II program is largely a winter drilling program because of access issues. A suite of ground geophysics would delineate drill targets. Drilling would then be conducted on defined targets within 152.4 m (500 ft) of surface. Where possible, surface access would be gained by using pre-existing winter roads. Operations would likely be based out of one of Zama City's open camps. Special care would be required in areas of shallow natural gas. The special care procedures would not be cost prohibitive but include extra training of crews, spark arrestor on diesel engines and gas deflector on casings. The drilling component of the Phase II program budget is contingent on the delineation of suitable drill targets. A phase II budget of $1,000,000 is recommended. Total Budget for Phase I and Phase II as shown below in Table 6 is estimated at $1,400,000 and is warranted to test this grass roots Pb-Zn property in Northern Alberta.

Table 6 - Proposed Budget Zama Lake Property

Phase I - Summer Early Fall

Well Log Data Compilation	$ 25,000	
Heavy Mineral Sampling	$ 25,000	
Laboratory & Isotopic Analysis	$ 35,000	
Ground Geophysics (IP, EM and Mag)	$ 265,000	
Project Management and Reporting	$ 50,000	
Phase I Total =	**$ 400,000**	**$ 400,000**

Phase II Winter

Ground Geophysics (IP, EM and Mag)	$ 200,000	
Diamond Drilling (3000 m.)	$ 750,000	
Project Management and Reporting	$ 50,000	
Sub-total=	**$1,000,000**	**$1,000,000**

Project Total=	**$1,400,000**

Notes:

1. All cost centers are estimates of "all up" expenditures and include overhead but do not include GST.
2. "All up" costs include labour, taxes, camp support costs, fuel, surface transportation charges, equipment rental, assaying, field supplies, and field supervision.

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Date and Signature Page

The Effective Date of this report is: May 16th, 2008

Respectfully Submitted,

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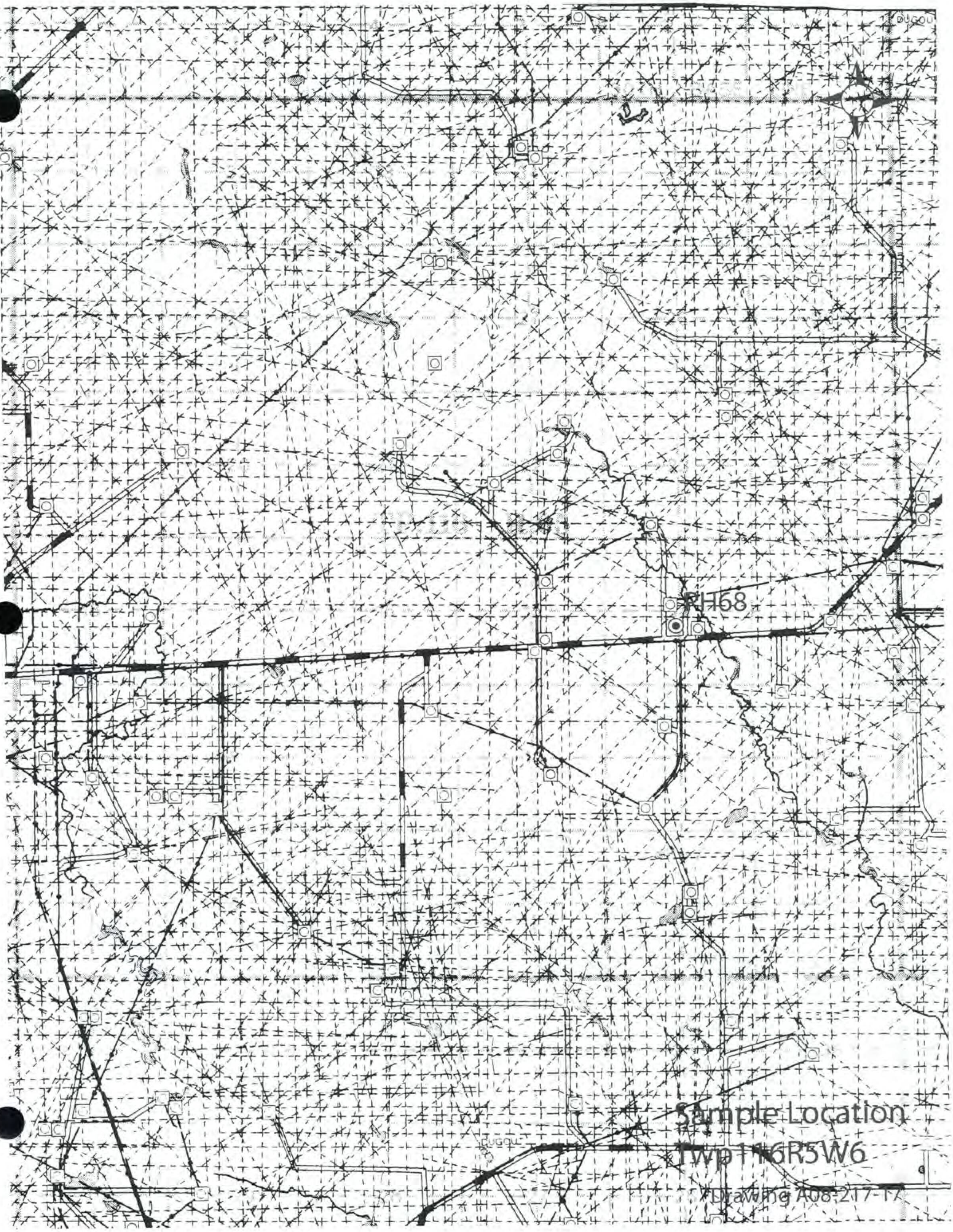
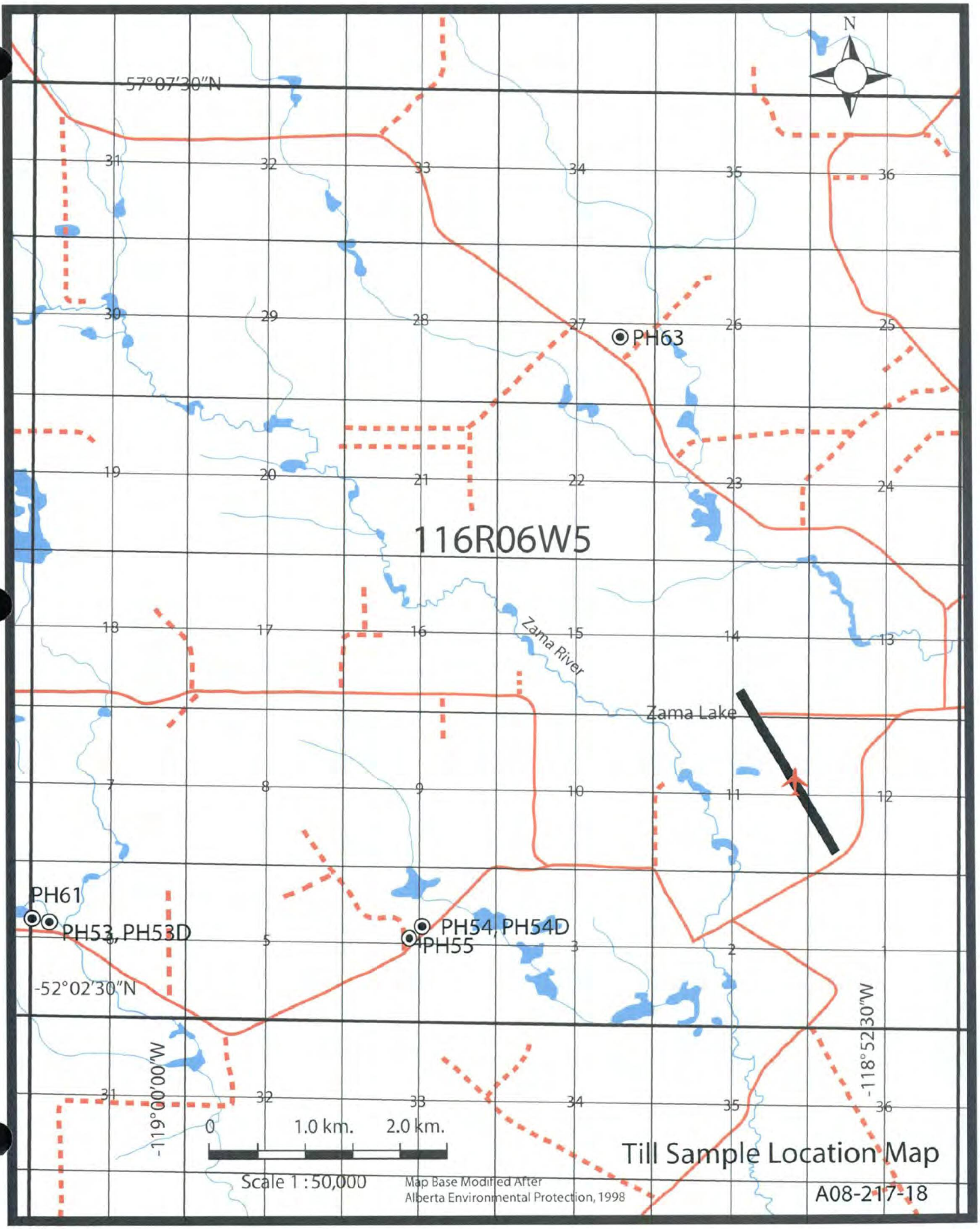
Principal
Paul A. Hawkins & Associates Ltd.
APEGGA Permit to Practice #4521

Appendix 1

Sample Location Maps



RH68
Sample Location
Twp116R5W6
Drawing A08-217-17



N
57°07'30"N
31
32
33
34
35
36
30
29
28
27
26
25
PH63
19
20
21
22
23
24
116R06W5
18
17
16
15
14
13
Zama River
Zama Lake
7
8
9
10
11
12
PH61
PH53, PH53D
PH54, PH54D
PH55
6
5
4
3
2
1
-52°02'30"N
-119°00'00"W
-118°52'30"W
31
32
33
34
35
36
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1.0 km.
2.0 km.
Scale 1 : 50,000
Map Base Modified After
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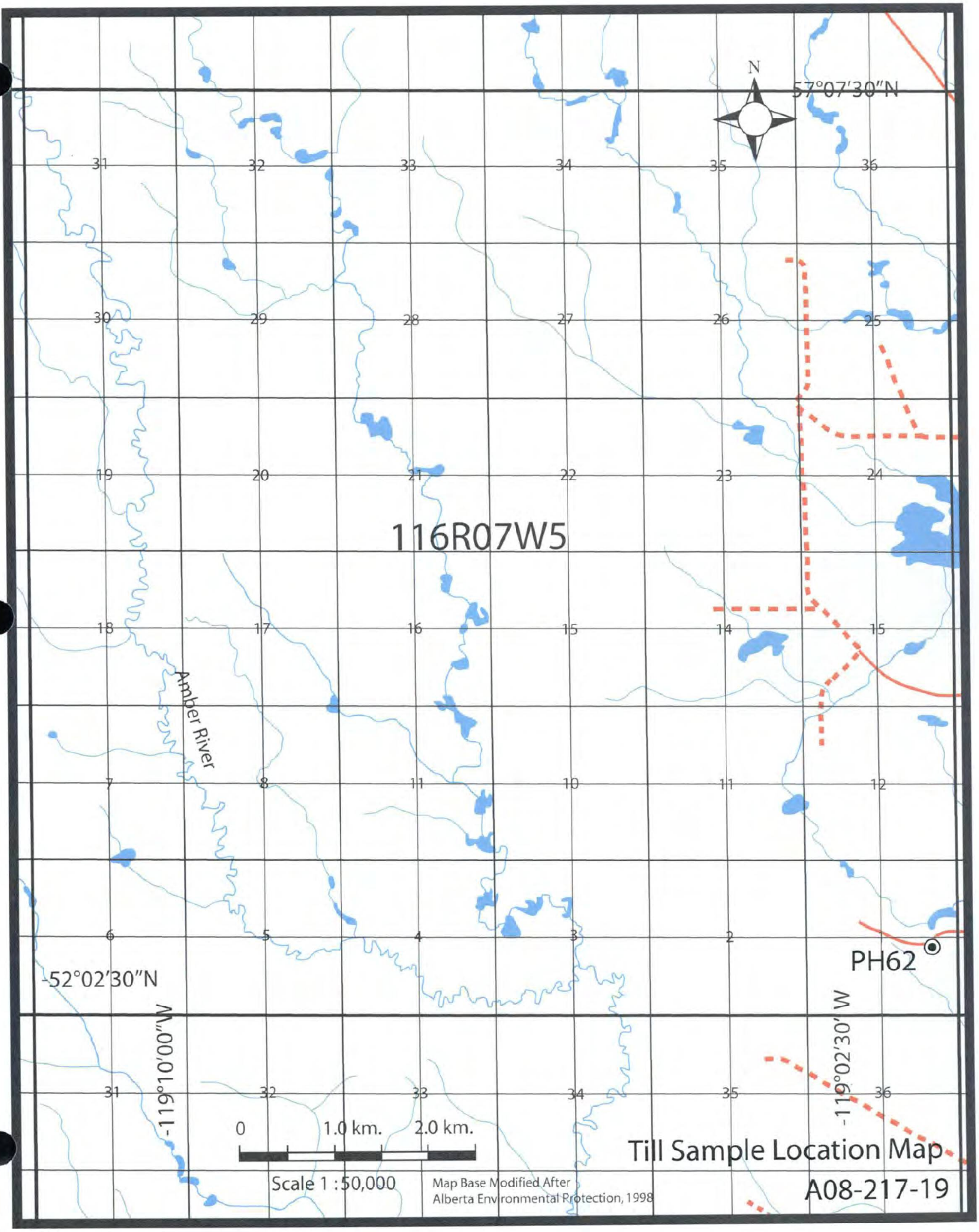
Till Sample Location Map
A08-217-18



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57°07'30"N
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22
23
24
116R07W5
18
17
16
15
14
15
Amber River
7
8
11
10
11
12
6
5
4
3
2
PH62
52°02'30"N
119°10'00"W
119°02'30" W
31
32
33
34
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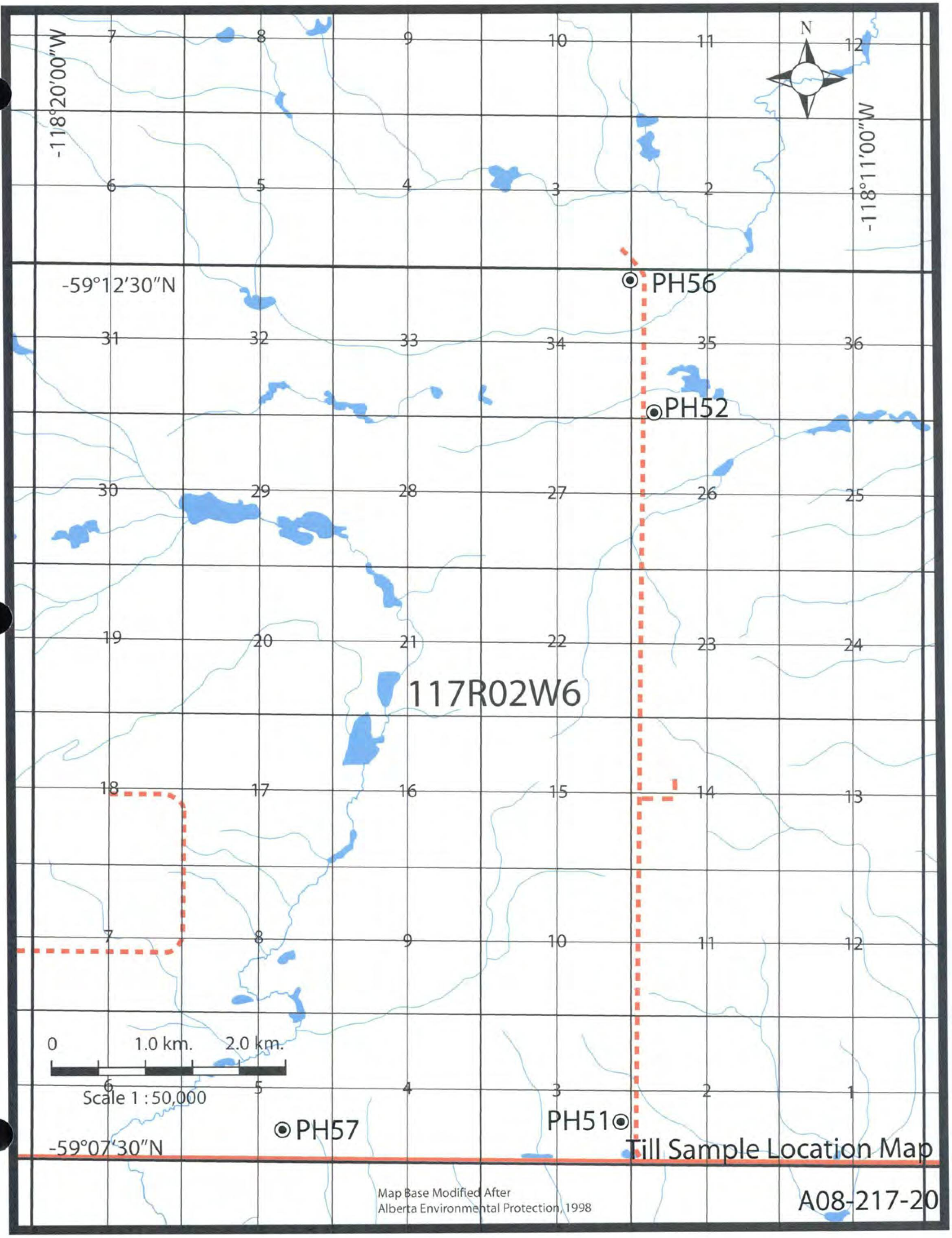
2.0 km.
Scale 1 : 50,000
Map Base Modified After
Alberta Environmental Protection, 1998
Till Sample Location Map
A08-217-19



-118°20'00"W
-118°11'00"W
-59°12'30"N
-59°07'30"N
N
PH56
PH52
PH57
PH51
117R02W6
7
8
9
10
11
12
6
5
4
3
2
1
31
32
33
34
35
36
30
29
28
27
26
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16
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7
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11
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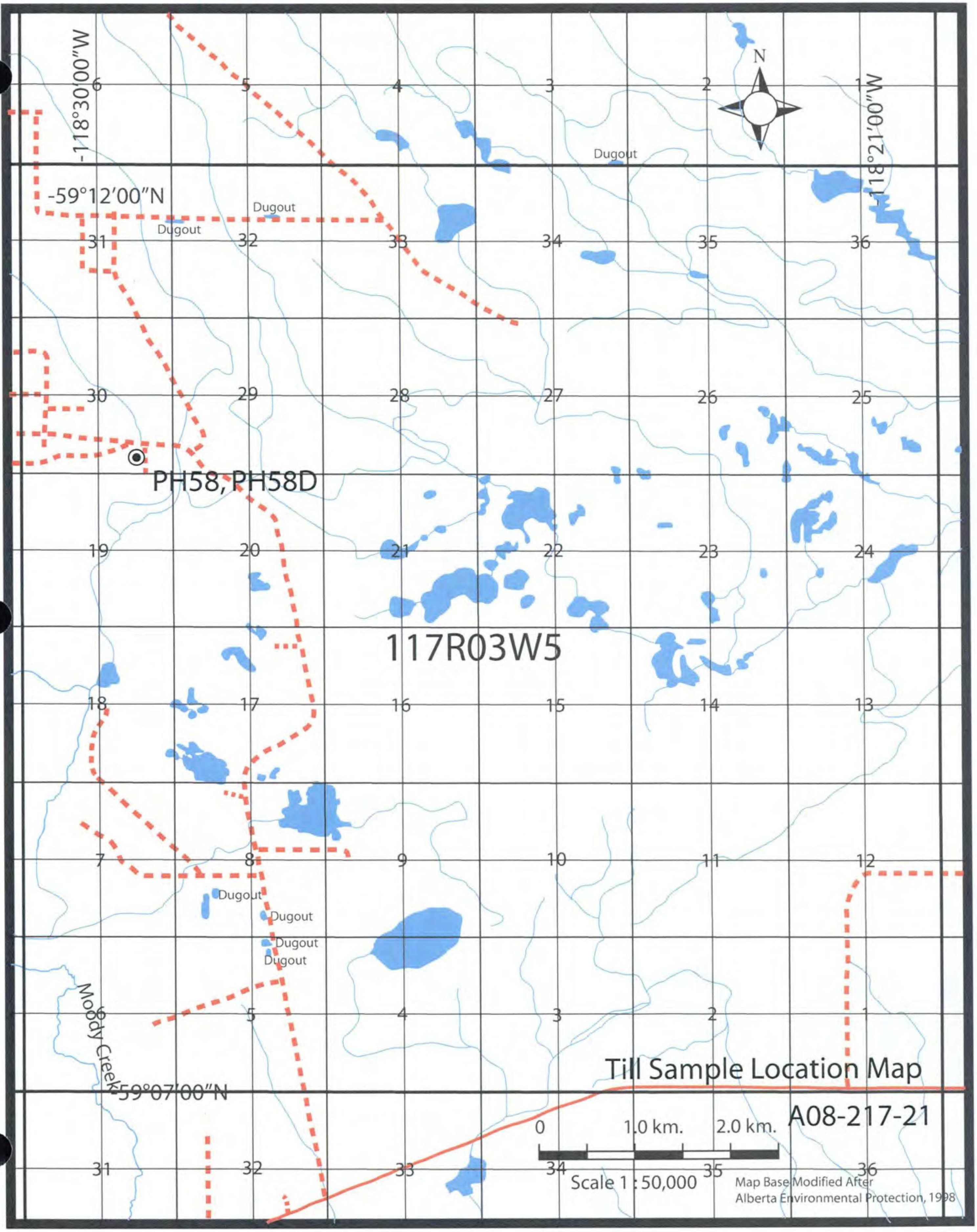
1.0 km.
2.0 km.
Scale 1 : 50,000
Till Sample Location Map
Map Base Modified After
Alberta Environmental Protection, 1998
A08-217-20



-118°30'00"W
-118°21'00"W
-59°12'00"N
-59°07'00"N
N
Dugout
Dugout
Dugout
Dugout
Dugout
Dugout
Dugout
PH58, PH58D
117R03W5
Moody Creek
Till Sample Location Map
A08-217-21
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2.0 km.
Scale 1 : 50,000
Map Base Modified After
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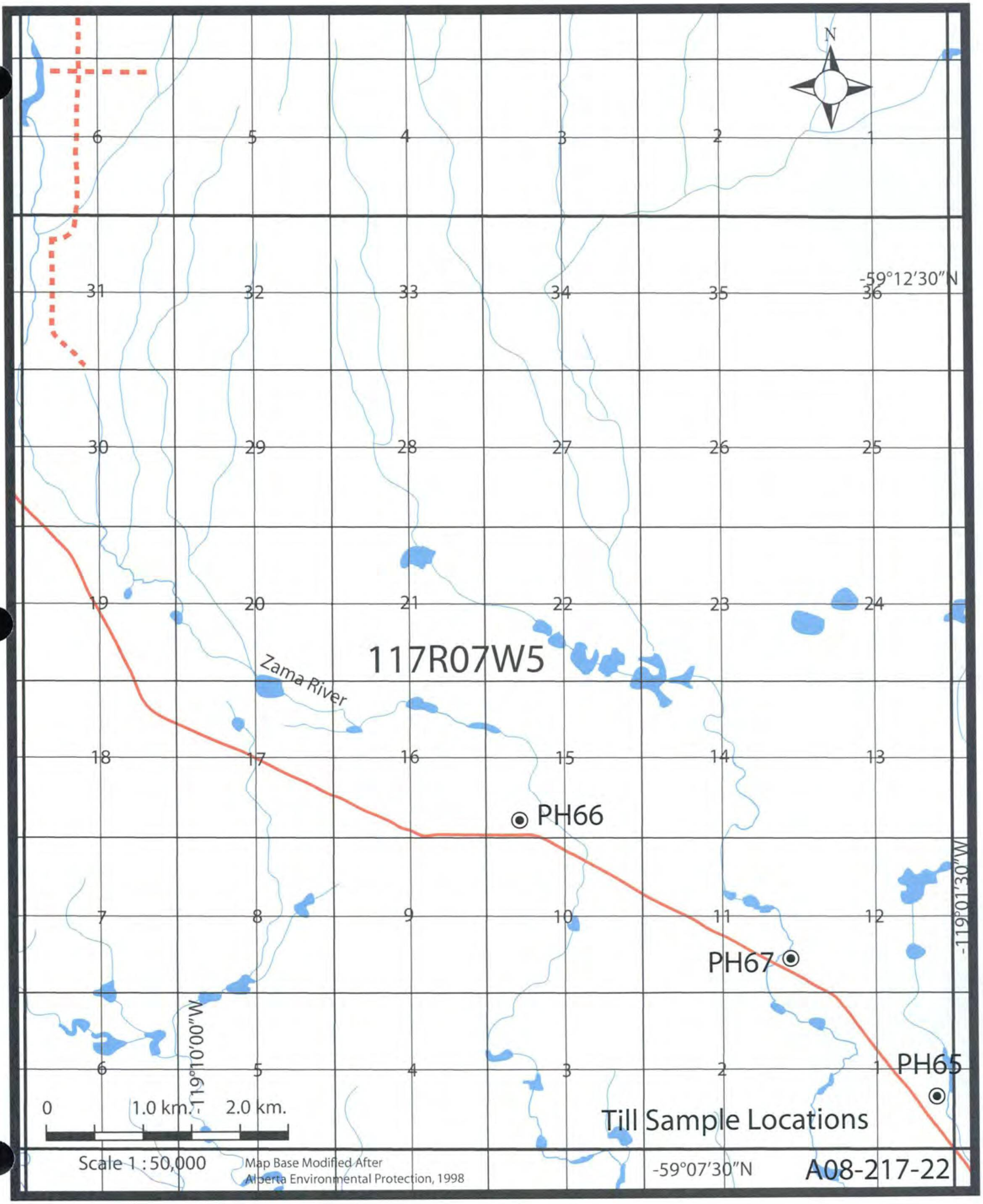
N
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-59°12'30"N
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26
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21
22
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24
117R07W5
Zama River
18
17
16
15
14
13
PH66
7
8
9
10
11
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-119°01'30"W
PH67
-119°10'00"W
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PH65
0
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2.0 km.
Scale 1 : 50,000
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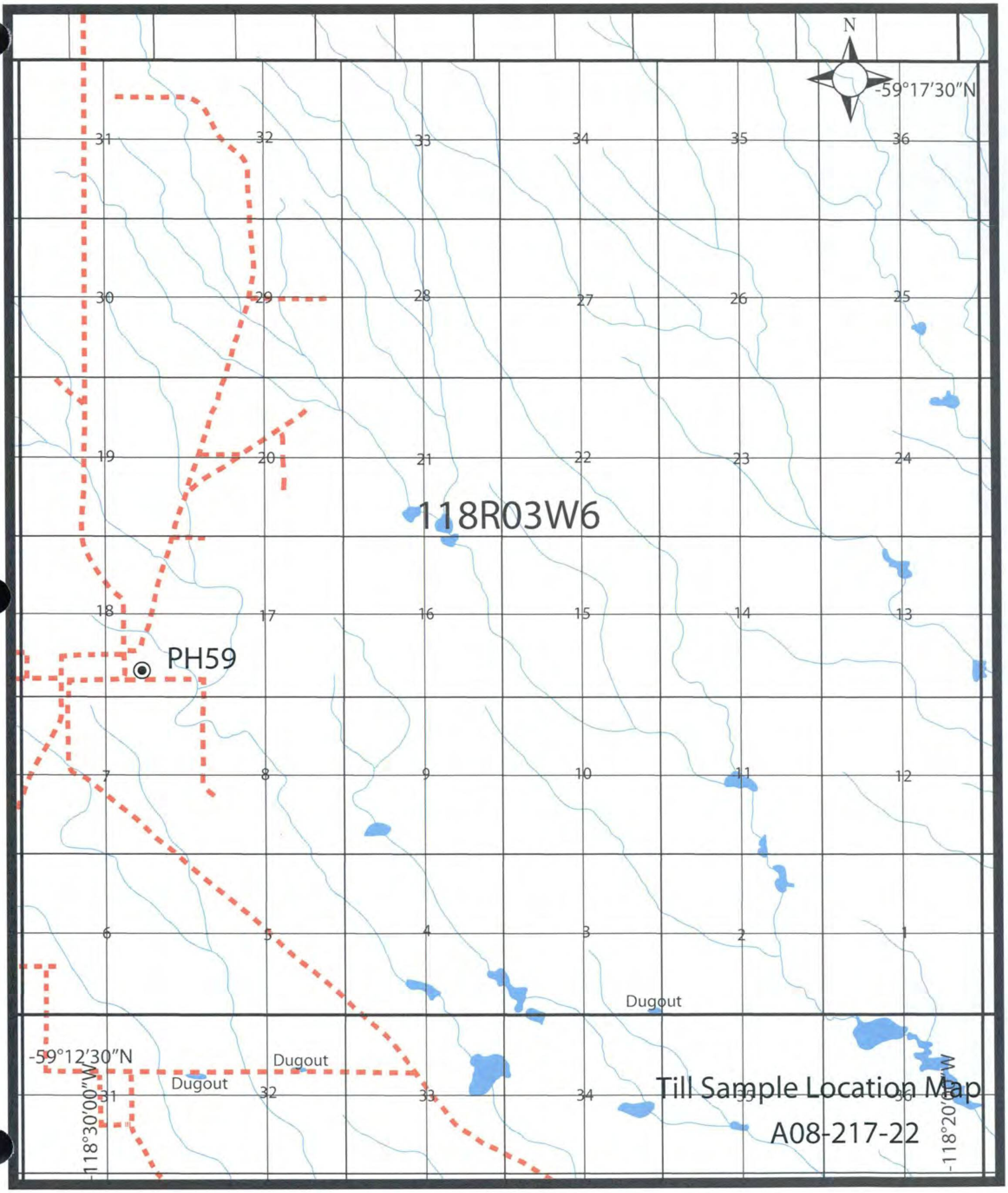
Alberta Environmental Protection, 1998
Till Sample Locations
-59°07'30"N
A08-217-22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23
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118R03W6
18
17
16
15
14
13
PH59
7
8
9
10
11
12
6
5
4
3
2
1
Dugout
-59°12'30"N
Dugout
Dugout
31
32
33
34
-118°30'00"W
Till Sample Location Map
A08-217-22

Appendix 2

Till Sample Data

Appendix 2 - Zama Lake Till Sample Data

The following tables compile sample data and results for regional till and Fluvial Glacial samples. The associated township location maps provide relative locations using NAD27 version maps. GPS locations using NAD 83 were obtained using a Garmin GPS 45XL hand held unit, or a Garmin iQUE M5 Pocket PC, or a Garmin GPSmap 76CSx. Indicator Mineral Processing for a number of samples is incomplete as of the date of this report. Kimberlite Indicator minerals for sample PH51 have been probed. All other indicators were picked based on visual examination of grains only at Overburden Drilling Management. Multi-element ICP analysis is available for these samples.

Table 7A
SRC Till Sample Data
(Metallic Mineral Indicator remain to be picked)

S/N	ATS	NTS	Zone	Easting	Northing	Description	Results (Indictor Minerals from SRC)						Other
							Garnets		cpx	ilmenite	Chromite	olivines	
							Pyropes	eclogitic					
PH51	Twp117R2W6	84M/01	11V	0429763	6555045	gritty brown	5					1	calcite
PH52	Twp117R2W6	84M/01	11V	0433000	6561627	Clay Till							
PH53	Twp117R7W6	84M/03	11V	0383095	6546752	Clay Till							
PH54	Twp117R6W6	84M/02	11V	0388070	6546674	Hard Clay Till							
PH55	Twp117R6W6	84M/02	11V	0388070	6546674	Hard Clay Till							
PH56	Twp118R2W6	84M/01	11V	0433352	6563868	Gypsum							
PH57	Twp117R2W6	84M/01	11V	0426192	6544708	Hard till							
PH58	Twp118R3W6	84M/01	11V	0414497	6561211	Gypsum Pyrite							
PH59	Twp118R3W6	84M/01	11V	0514833	6568004	Very Hard Till							

Table 7B
ODM Till Sample Data

S/N	ATS	NTS	Zone	Easting	Northing	Description	Indicator Minerals					
							Sp	Galena	cpx	ilmenite	Chromite	olivines
PH53D	Twp117R7W6	84M3	11V	0383095	6546752	Clay Till						
PH54D	Twp116R6W6	84M2	11V	0388070	6546674	Clay Till				4	2	1
PH58D	Twp117R3W6	84M1	11V	0414497	6561211	Clay Till						
PH61	Twp116R6W6	84M3	11V	0383095	6546752	Clay Till	11				1	
PH62	Twp116R7W6	84M3	11V	0382446	6547170	Clay Till						
PH63	Twp116R6W6	84M2	11V	0396718	6551961	Clay Till				1	1	
PH65	Twp117R7W6	84M3	11V	0383396	6557037	Clay Till	2					
PH66	Twp117R7W6	84M3	11V	0379591	6559157	Clay Till	3					
PH67	Twp117R7W6	84M3	11V	0382842	6557639	Clay Till	>100		1			
PH68	Twp116R5W6	84M2	11V	0399480	6549281	Organic Till						

Table 7C
Pine Point Orientation Survey Samples

S/N	NTS	Zone	mE	mN	Description	Metallic Indicators		Kimberlitic Indicators					
						Sp	Ga	Garnets		cpx	ilmenite	Chromite	Olivines
								Pyropes	Ecoloitic				
PH82	85B16	11	0640900	6747500	Gravel	250	-						
PH83	85B15	11	0631400	6743500	Gravel	>50,000	8,000						
PH84	85B15	11	0622900	6738600	Gravely till	50	2						
PH85	85B15	11	0614100	6732800	Till	1	-						

Table 7D
Regional Samples

S/N	ATS W5	NTS	Zone	mE	mN	Descript	Metallic Indicators		Kimberlitic Indicators					
							Sp	Ga	Garnets		cpx	ilmenite	Chromite	Olivines
									Pyropes	Ecoloitic				
PH80	T117R21S29	84N04	11	0470000	6562000	Gravely					2			
PH81	T117R21S29	84N04	11	0469500	6561500	Gravely	-				2			
PH86	T122R19S08	84N11	11	0486500	6605900	Till	2							
PH87	T122R19S08	84N11	11	0489500	6605700	Till	-							
PH88	T119R20S36	84N06	11	0482300	6577500	Gravely	-				3			

Appendix 3

SRC Results

SRC Geoanalytical Laboratories
125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8
Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geochem@src.sk.ca

Paul A. Hawkins & Associates Ltd.
Attention:
PO #/Project:
Samples: 9

Report No: 06-818
Date: August 15, 2006

Kimberlite Indicator Minerals

Column Header Details

Original Sample Weight in kilograms (SWT)
Mid Fraction -1.00+0.25MM Wet Weight in grams (MWT)
+1.00mm Wet Weight in grams (+1.00MM)
Permroll Magnetic Dry Weight in grams (PRM)
LST SG 2.96 Sinks in grams (LSTS)

Methylene Iodide SG 3.30 Sinks Weight in grams (MIS)
Ferro Mags -1.00+0.50mm Weight in grams (FM+)
Ferro Mags -0.50+0.25mm Weight in grams (FM-)
Frantz Upper -1.00+0.50mm Weight in grams (UP+)
Frantz Upper -0.50+0.25mm Weight in grams (UP-)

Frantz Lowers -1.00+0.50mm Weight in grams (LW+)
Frantz Lowers -0.50+0.25mm Weight in grams (LW-)
Pyrope Peridotitic Grains +0.5mm in Counts (Pyr-p +)
Pyrope Peridotitic Grains -0.5mm in Counts (Pyr-p -)
Pyrope Eclogitic Grains +0.5mm in Counts (Pyr-e +)

Pyrope Eclogitic Grains -0.5mm in Counts (Pyr-e -)
Chrome-Diopside Grains +0.5mm in Counts (Chr D +)
Chrome-Diopside Grains -0.5mm in Counts (Chr D -)
Olivine Grains +0.5mm in Counts (Olv +)
Olivine Grains -0.5mm in Counts (Olv -)

Lower Fraction +0.5 Observed Weight in grams (LW+Obs)
Lower Fraction +0.5 Observed Weight in % (LW+)
Lower Fraction -0.5 Observed Weight in grams (LW-Obs)
Lower Fraction -0.5 Observed Weight in % (LW-)
Lower Fraction Total Observed Weight in grams (LWT Obs)

Lower Fraction Total Observed Weight in % (LWT)
Picroilmenite Grains +0.5mm in Counts (Picroilm+)
Picroilmenite Grains -0.5mm in Counts (Picroilm-)
Chromite Grains +0.5mm in Counts (Chr +)
Chromite Grains -0.5mm in Counts (Chr -)

Upper Fraction +0.5 Observed Weight in grams (UP+Obs)
Upper Fraction +0.5 Observed Weight in % (UP+)
Upper Fraction -0.5 Observed Weight in grams (UP-Obs)
Upper Fraction -0.5 Observed Weight in % (UP-)
Upper Fraction Total Observed Weight in grams (UPT Obs)

Upper Fraction Total Observed Weight in % (UPT)
LW/UP Fraction -0.250MM Not Observed Weight in grams (-0.250)

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Kimberlite Indicator Minerals

Sample Number	SWT kg	MWT g	+1.00MM g	PRM g	LSTS g	MIS g	FM+ g	FM- g	UP+ g	UP- g	LW+ g	LW- g	Pyr-p + Counts	Pyr-p - Counts
213PH051	18.20	4322	2342	488	49.54	6.61	0.03	0.14	0.35	2.94	0.70	0.75	0	5
213PH052	16.05	772	923	255	8.79	2.42	0.13	0.20	0.47	0.95	0.30	0.08	0	0
213PH053	18.60	1663	1819	173	16.78	5.18	0.09	0.20	1.47	2.10	0.48	0.15	0	0
213PH054	15.55	1438	1305	152	14.43	4.12	0.07	0.15	0.82	1.81	0.66	0.18	0	0
213PH055	13.75	1668	1578	377	12.61	3.57	0.08	0.20	0.53	1.33	0.71	0.20	0	0
213PH056	16.10	1559	927	358	13.86	4.68	0.12	0.24	0.81	1.64	0.80	0.52	0	0
213PH057	17.50	1435	862	531	12.17	2.83	0.10	0.20	0.31	1.12	0.55	0.15	0	0
213PH058	18.25	1431	546	555	10.35	3.22	0.10	0.15	0.73	1.39	0.30	0.09	0	0
213PH059	18.20	1622	1606	444	18.89	6.57	0.16	0.27	1.97	2.27	0.67	0.44	0	0

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Samples: 9

SRC Geoanalytical Laboratories
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Report No: 06-818
Date: August 15, 2006

Kimberlite Indicator Minerals

Sample Number	Pyr-e + Counts	Pyr-e - Counts	Chr D + Counts	Chr D - Counts	Olv + Counts	Olv - Counts	LW+Obs g	LW+ %	LW-Obs g	LW- %	LWT Obs g	LWT %	Picroilm+ Counts	Picroilm- Counts
213PH051	0	0	0	0	0	1	0.71	100	0.69	100	1.40	100	0	0
213PH052	0	0	0	0	0	0	0.08	100	0.00	100	0.08	100	0	0
213PH053	0	0	0	0	0	0	0.14	100	0.05	100	0.19	100	0	0
213PH054	0	0	0	0	0	0	0.59	100	0.10	100	0.69	100	0	0
213PH055	0	0	0	0	0	0	0.67	100	0.15	100	0.82	100	0	0
213PH056	0	0	0	0	0	0	0.76	100	0.44	100	1.20	100	0	0
213PH057	0	0	0	0	0	0	0.47	100	0.08	100	0.55	100	0	0
213PH058	0	0	0	0	0	0	0.30	100	0.09	100	0.39	100	0	0
213PH059	0	0	0	0	0	0	0.61	100	0.37	100	0.98	100	0	0

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Kimberlite Indicator Minerals

Sample Number	Chr + Counts	Chr - Counts	UP+Obs g	UP+ %	UP-Obs g	UP- %	UPT Obs g	UPT %	-0.250 g
213PH051	0	0	0.27	100	2.87	100	3.14	100	1.60
213PH052	0	0	0.36	100	0.78	100	1.14	100	0.27
213PH053	0	0	1.07	100	1.72	100	2.79	100	0.58
213PH054	0	0	0.75	100	1.73	100	2.48	100	0.42
213PH055	0	0	0.48	100	1.26	100	1.74	100	0.52
213PH056	0	0	0.76	100	1.56	100	2.32	100	0.54
213PH057	0	0	0.23	100	1.07	100	1.30	100	0.38
213PH058	0	0	0.73	100	1.38	100	2.11	100	0.44
213PH059	0	0	1.92	100	2.24	100	4.16	100	0.73

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Attention:
PO #/Project:
Samples: 9

Group #	Description	Date	Sample Type	SWT kg	MWT g	+1.00MM g	PRM g	LSTS g	MIS g	FM+ g	FM- g	UP+ g
2006-818	213PH051	08-15-2006	Solid	18.2	4322	2342	488	49.54	6.61	0.03	0.14	0.35
2006-818	213PH052	08-15-2006	Solid	16.05	772	923	255	8.79	2.42	0.13	0.2	0.47
2006-818	213PH053	08-15-2006	Solid	18.6	1663	1819	173	16.78	5.18	0.09	0.2	1.47
2006-818	213PH054	08-15-2006	Solid	15.55	1438	1305	152	14.43	4.12	0.07	0.15	0.82
2006-818	213PH055	08-15-2006	Solid	13.75	1668	1578	377	12.61	3.57	0.08	0.2	0.53
2006-818	213PH056	08-15-2006	Solid	16.1	1559	927	358	13.86	4.68	0.12	0.24	0.81
2006-818	213PH057	08-15-2006	Solid	17.5	1435	862	531	12.17	2.83	0.1	0.2	0.31
2006-818	213PH058	08-15-2006	Solid	18.25	1431	546	555	10.35	3.22	0.1	0.15	0.73
2006-818	213PH059	08-15-2006	Solid	18.2	1622	1606	444	18.89	6.57	0.16	0.27	1.97

UP- g	LW+ g	LW- g	Pyr-p + Counts	Pyr-p - Counts	Pyr-e + Counts	Pyr-e - Counts	Chr D + Counts	Chr D - Counts	Olv + Counts	Olv - Counts	LW+Obs g	LW+ %	LW-Obs g	LW- %
2.94	0.7	0.75	0	5	0	0	0	0	0	1	0.71	100	0.69	100
0.95	0.3	0.08	0	0	0	0	0	0	0	0	0.08	100	0	100
2.1	0.48	0.15	0	0	0	0	0	0	0	0	0.14	100	0.05	100
1.81	0.66	0.18	0	0	0	0	0	0	0	0	0.59	100	0.1	100
1.33	0.71	0.2	0	0	0	0	0	0	0	0	0.67	100	0.15	100
1.64	0.8	0.52	0	0	0	0	0	0	0	0	0.76	100	0.44	100
1.12	0.55	0.15	0	0	0	0	0	0	0	0	0.47	100	0.08	100
1.39	0.3	0.09	0	0	0	0	0	0	0	0	0.3	100	0.09	100
2.27	0.67	0.44	0	0	0	0	0	0	0	0	0.61	100	0.37	100

LWT Obs g	LWT %	Picroilm+ Counts	Picroilm- Counts	Chr + Counts	Chr - Counts	UP+Obs g	UP+ %	UP-Obs g	UP- %	UPT Obs g	UPT %	-0.25 g
1.4	100	0	0	0	0	0.27	100	2.87	100	3.14	100	1.6
0.08	100	0	0	0	0	0.36	100	0.78	100	1.14	100	0.27
0.19	100	0	0	0	0	1.07	100	1.72	100	2.79	100	0.58
0.69	100	0	0	0	0	0.75	100	1.73	100	2.48	100	0.42
0.82	100	0	0	0	0	0.48	100	1.26	100	1.74	100	0.52
1.2	100	0	0	0	0	0.76	100	1.56	100	2.32	100	0.54
0.55	100	0	0	0	0	0.23	100	1.07	100	1.3	100	0.38
0.39	100	0	0	0	0	0.73	100	1.38	100	2.11	100	0.44
0.98	100	0	0	0	0	1.92	100	2.24	100	4.16	100	0.73

Kimberlite Indicator Mineral Grain Morphology Sheet

GROUP: 06-818												
SAMPLE	QUANTITY	LOCATION	SIZE FRACTION	GRAIN TYPE *	COLOR	SHAPE	CLARITY	LUSTRE	SURFACE FEATURE	COMMENT	DATE	OBSERV
213PH051	1	1	-0.50/+0.25mm	pyr-p	purple	fragm	translucent	vitreous	none		14/08/06	CLF
213PH051	1	2	-0.50/+0.25mm	pyr-p	purple	fragm	translucent	vitreous	none		14/08/06	CLF
213PH051	1	3	-0.50/+0.25mm	pyr-p	purple	fragm	translucent	vitreous	none		14/08/06	CLF
213PH051	1	4	-0.50/+0.25mm	pyr-p	purple	fragm	translucent	vitreous	none		14/08/06	CLF
213PH051	1	5	-0.50/+0.25mm	pyr-p	purple	fragm	translucent	vitreous	none		14/08/06	CLF
213PH051	1	6	-0.50/+0.25mm	olv	yellow	irr	translucent	vitreous	striations		14/08/06	CLF

* Unless otherwise indicated all grains are considered definite

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Kimberlite Indicator Mineral Grain Description Sheet

Group: 06-818

☐ Preliminary Data ☐ Finalized Data

No.	Sample Name	p-pyr		ecl-pyr		chr diopside		olv		G - LW	picroilm		chr		G - UP	Others
		+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	Observ	+0.5	-0.5	+0.5	-0.5	Observ	picked by
1	213PH051	0	5	0	0	0	0	0	1	1.4	0	0	0	0	3.14	0
	Comments:															CLF
2	213PH052	0	0	0	0	0	0	0	0	0.08	0	0	0	0	1.14	0
	Comments:															CL
3	213PH053	0	0	0	0	0	0	0	0	0.19	0	0	0	0	2.79	0
	Comments:															NV
4	213PH054	0	0	0	0	0	0	0	0	0.69	0	0	0	0	2.48	0
	Comments:															RD
5	213PH055	0	0	0	0	0	0	0	0	0.82	0	0	0	0	1.74	0
	Comments:															NV
6	213PH056	0	0	0	0	0	0	0	0	1.2	0	0	0	0	2.32	0
	Comments:															NV
7	213PH057	0	0	0	0	0	0	0	0	0.55	0	0	0	0	1.3	0
	Comments:															CLF
8	213PH058	0	0	0	0	0	0	0	0	0.39	0	0	0	0	2.11	0
	Comments:															LB
9	213PH059	0	0	0	0	0	0	0	0	0.98	0	0	0	0	4.16	0
	Comments:															CF
10																
	Comments:															
	Comments:															

Kimberlite Indicator Mineral Microprobe Sheet

Group: 06-818
Checked by:_________

def-Definite pos-Possible

No.	Sample Name	pyr-p		pyr-e		chr.diopside		olv		picroilm		chr		Others
		+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	+0.5	-0.5	pos
1	213PH051		5						1					
	Comments:													

Total Grains to Probe: 6

Grains Lost: 0

Garnets/cpx

Oxide Pt#	Percent SiO2	TiO2	Al2O3	Cr2O3	FeO	MgO	MnO	CaO	Na2O	Total	Project	Sample label
	50.70	0.40	7.40	0.81	4.80	16.62	0.11	17.61	0.79	99.24		Smithsonian Cr augite
	39.91	0.03	22.09	0.00	22.98	10.43	0.44	4.34	0.01	100.24		Mt Gore garnet
	41.87	0.98	20.94	0.79	11.01	18.80	0.27	5.00	0.07	99.73		Stag garnet
1	42.19	0.28	20.13	4.30	7.55	20.91	0.36	4.57	0.06	100.36	06-167	05T06 LE #1 pyr-p
2	55.23	0.00	0.93	0.42	4.17	16.44	0.17	21.54	0.42	99.32	06-868	090 PH-40 LB #1 pos c. d.
3	41.96	0.06	20.30	4.27	8.87	19.12	0.53	5.01	0.02	100.13		090 PH42 CLF #1 pyr-p
4	55.51	0.14	0.63	0.75	2.98	16.27	0.08	21.77	0.88	99.03		090 PH-43 LB #1 c. d.
5	41.90	0.00	18.83	6.57	8.23	18.21	0.60	6.45	0.02	100.82		090 PH44 NV #1 pyr-p
6	42.33	0.05	20.46	4.21	8.14	19.07	0.48	5.03	0.00	99.77		090 PH46 #1 pyr-p
7	42.95	0.44	20.26	3.13	8.12	21.18	0.32	3.95	0.06	100.40	06-701	090 PH-33 RD #1 pyr-p
8	42.51	0.45	19.54	3.78	7.16	20.96	0.34	4.99	0.05	99.77		090 PH-33 RD #2 pyr-p
9	41.99	0.98	20.22	2.47	9.16	20.24	0.34	4.69	0.07	100.17		090 PH-33 RD #3 pyr-p
10	42.63	0.90	21.15	1.04	10.50	19.92	0.29	4.28	0.09	100.80		090 PH-33 RD #4 pyr-p
11	41.33	0.17	16.95	8.35	8.29	17.19	0.52	7.30	0.01	100.11		090 PH-28 CF #1 pyr-p
12	42.40	0.00	20.21	4.92	8.07	19.06	0.58	5.04	0.01	100.29	06-700	OST-10 CLF #2 pyr-p
13	42.35	0.71	20.93	2.31	7.82	19.70	0.31	5.97	0.05	100.15	06-818	213PH-051 CLF #1 pyr-p
14	41.69	0.15	18.08	7.07	8.46	17.87	0.62	6.72	0.04	100.68		213PH-051 CLF #2 pyr-p
15	42.15	0.00	19.12	5.82	7.45	18.94	0.46	5.76	0.01	99.72		213PH-051 CLF #3 pyr-p
16	41.80	0.00	18.61	7.04	8.02	17.17	0.50	6.68	0.01	99.83		213PH-051 CLF #4 pyr-p
17	42.29	0.24	20.53	3.41	7.93	19.52	0.49	4.62	0.04	99.07	06-810	090 PH-049 KA #1 pyr-p
18	41.71	0.00	18.44	7.38	8.22	17.62	0.67	6.00	0.03	100.08		090 PH-049 KA #2 pyr-p
19	42.35	0.00	19.56	5.59	7.13	19.32	0.47	5.42	0.03	99.86		090 PH-049 KA #3 pyr-p
20	41.50	0.08	14.86	11.06	6.76	18.71	0.33	6.78	0.02	100.09		090 PH-049 KA #4 pyr-p
21	55.10	0.07	1.03	1.33	5.04	14.61	0.18	19.58	1.80	98.74		090 PH-049 KA #10 c. d.
22	37.32	0.55	9.36	13.82	5.13	0.37	0.78	31.49	0.02	98.87		090 PH-049 KA ? uvarovite
23	43.05	0.52	20.82	2.05	7.57	21.20	0.33	4.07	0.07	99.68		090 PH-050 TV #1 pyr-p
24	42.30	0.09	20.50	3.46	8.38	19.70	0.48	4.84	0.02	99.78		090 PH-050 TV #2 pyr-p
25	41.65	0.00	18.43	6.64	7.95	17.72	0.52	6.42	0.01	99.34		090 PH-050 TV #3 pyr-p

Weight Pt#	Percent Si	Quant Ti	Al	Cr	Fe	Mg	Mn	Ca	Na	O	Total	Project	Sample label
	23.70	0.24	3.92	0.56	3.73	10.03	0.08	12.59	0.59	43.82	99.24		Smithsonian Cr augite
	18.66	0.02	11.69	0.00	17.86	6.29	0.34	3.10	0.01	42.27	100.24		Mt Gore garnet
	19.57	0.58	11.08	0.54	8.56	11.34	0.21	3.57	0.05	44.22	99.73		Stag garnet
1	19.72	0.17	10.65	2.94	5.87	12.61	0.28	3.27	0.05	44.80	100.36	06-167	05T06 LE #1 pyr-p
2	25.82	0.00	0.49	0.29	3.24	9.92	0.13	15.40	0.31	43.73	99.32	06-868	090 PH-40 LB #1 pos c. d.
3	19.61	0.03	10.74	2.92	6.89	11.53	0.41	3.58	0.02	44.39	100.13		090 PH42 CLF #1 pyr-p
4	25.95	0.08	0.34	0.51	2.32	9.82	0.06	15.56	0.66	43.74	99.03		090 PH-43 LB #1 c. d.
5	19.59	0.00	9.97	4.50	6.40	10.98	0.46	4.61	0.02	44.30	100.82		090 PH44 NV #1 pyr-p
6	19.79	0.03	10.83	2.88	6.32	11.50	0.37	3.60	0.00	44.45	99.77		090 PH46 #1 pyr-p
7	20.08	0.26	10.72	2.14	6.31	12.77	0.25	2.82	0.05	45.00	100.40	06-701	090 PH-33 RD #1 pyr-p
8	19.87	0.27	10.34	2.59	5.57	12.64	0.26	3.57	0.03	44.64	99.77		090 PH-33 RD #2 pyr-p
9	19.63	0.59	10.70	1.69	7.12	12.21	0.27	3.35	0.05	44.56	100.17		090 PH-33 RD #3 pyr-p
10	19.93	0.54	11.19	0.71	8.16	12.01	0.23	3.06	0.06	44.90	100.80		090 PH-33 RD #4 pyr-p
11	19.32	0.10	8.97	5.71	6.44	10.37	0.40	5.22	0.01	43.57	100.11		090 PH-28 CF #1 pyr-p
12	19.82	0.00	10.70	3.36	6.27	11.50	0.45	3.60	0.01	44.58	100.29	06-700	OST-10 CLF #2 pyr-p
13	19.79	0.43	11.08	1.58	6.08	11.88	0.24	4.27	0.03	44.77	100.15	06-818	213PH-051 CLF #1 pyr-p
14	19.49	0.09	9.57	4.84	6.58	10.77	0.48	4.80	0.03	44.04	100.68		213PH-051 CLF #2 pyr-p
15	19.70	0.00	10.12	3.98	5.79	11.42	0.36	4.12	0.01	44.22	99.72		213PH-051 CLF #3 pyr-p
16	19.54	0.00	9.85	4.81	6.24	10.36	0.39	4.78	0.01	43.87	99.83		213PH-051 CLF #4 pyr-p
17	19.77	0.14	10.87	2.33	6.17	11.77	0.38	3.30	0.03	44.31	99.07	06-810	090 PH-049 KA #1 pyr-p
18	19.50	0.00	9.76	5.05	6.39	10.63	0.52	4.29	0.02	43.92	100.08		090 PH-049 KA #2 pyr-p
19	19.79	0.00	10.35	3.82	5.54	11.65	0.37	3.87	0.02	44.44	99.86		090 PH-049 KA #3 pyr-p
20	19.40	0.05	7.86	7.57	5.25	11.29	0.26	4.84	0.01	43.56	100.09		090 PH-049 KA #4 pyr-p
21	25.76	0.04	0.55	0.91	3.92	8.81	0.14	13.99	1.34	43.29	98.74		090 PH-049 KA #10 c. d.
22	17.45	0.33	4.95	9.46	3.99	0.23	0.61	22.51	0.02	39.33	98.87		090 PH-049 KA ? uvarovite
23	20.12	0.31	11.02	1.40	5.89	12.78	0.25	2.91	0.05	44.94	99.68		090 PH-050 TV #1 pyr-p
24	19.77	0.06	10.85	2.37	6.51	11.88	0.37	3.46	0.02	44.49	99.78		090 PH-050 TV #2 pyr-p
25	19.47	0.00	9.75	4.55	6.18	10.69	0.40	4.59	0.01	43.71	99.34		090 PH-050 TV #3 PYR

Note: 06-701 sample 090 PH-33 RD #5 eclogitic garnet ia an almandine and was not analyzed
06-810 sample 090 PH-49 KA ? was an extra grain found with 090 PH-49 KA #14 chromite

Appendix 4

ODM Results

107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

DATA TRANSMITTAL REPORT

DATE:	27-Sep-06
ATTENTION:	**Mr. P. Hawkins**
CLIENT:	**Hawkins & Assc. Ltd.** 72 Strathlorne Cr. SW. Calgary, AB T3H 1M8
FAX NO.:	403-246-1992 **e-mail:** phawkins@shaw.ca
NO. OF PAGES:	6
PROJECT:	**PH**
FILE NAME:	**Hawkins - (PH) - Sept 2006**
SAMPLE NUMBERS:	**213PH53D, 213PH54D and 213PH58D**
BATCH NUMBER:	**3335**
NO. OF SAMPLES:	**3**

THESE SAMPLES WERE PROCESSED FOR: **MMSIMs**
GOLD

SPECIFICATIONS:

1. Submitted by client: ± 20 kg till samples
2. Heavy liquid separation specific gravity: 3.20.
3. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.
4. All other sample fractions are presently stored.

REMARKS: ______________________

[redacted]

Remy Huneault
Laboratory Manager

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Project: PH
Filename: Hawkins - (PH) - Sept 2006
Total Number of Samples in this Report = 3

Batch Number: 3335

Sample Number	Weight (kg)				Clasts >2.0 mm					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	Org	Sand	Clay	
213PH53D	19.8	19.3	5.1	14.2	P	50	20	30	Tr	U	-	Y	+	N	LOC	LBN	TILL
213PH54D	17.2	16.7	1.1	15.6	P	10	20	70	Tr	U	-	Y	+	N	LOC	LOC	TILL
213PH58D	17.2	16.7	0.5	16.2	P	10	80	10	0	U	-	-	+	N	LOC	LOC	CLAY TILL

OVERBURDEN DRILLING MANAGEMENT LIMITED
GOLD GRAIN SUMMARY SHEET

Project: PH
Filename: Hawkins - (PH) - Sept 2006
Total Number of Samples in this Report = 3

Batch Number: 3335

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine	(g) *	Total	Reshaped	Modified	Pristine
213PH53D	0	0	0	0	56.8	0	0	0	0
213PH54D	0	0	0	0	62.4	0	0	0	0
213PH58D	0	0	0	0	64.8	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
DETAILED GOLD GRAIN SHEET

Project: PH
Filename: Hawkins - (PH) - Sept 2006
Total Number of Samples in this Report = 3

Batch Number: 3335

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight	Calculated V.G. Assay in HMC	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total	(g)	(ppb)	
213PH53D	No	NO VISIBLE GOLD									
213PH54D	No	NO VISIBLE GOLD									
213PH58D	No	NO VISIBLE GOLD									

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
HEAVY MINERAL CONCENTRATE WEIGHTS

Project: PH
Filename: Hawkins - (PH) - Sept 2006
Total Number of Samples in this Report = 3

Sample Number	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25-2.0 mm Heavy Liquid Separation S.G 3.20								
					Nonferromagnetic HMC						
						Processed Split					
	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
213PH53D	818.0	596.0	195.2	0.9	25.9	100	25.9	3.4	8.3	8.9	5.3
213PH54D	663.6	530.2	127.0	0.6	5.8	100	5.8	1.0	2.8	1.5	0.5
213PH58D	704.7	500.6	200.8	0.2	3.1	100	3.1	0.3	1.6	0.9	0.3

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: PH
Filename: Hawkins - (PH) - Sept 2006
Total Number of Samples in this Report = 3

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm				Mg/Mn/Al/Cr Minerals 0.25-0.5 mm											Phosphates			
	>1 amp			<1.0 amp	>1.0 amp							<0.8 amp				>1.0 amp			
	% Cpy	Misc. Prime MMSIMs	% Py	% Gth	# Grains + Colour Spinel	Misc. Prime MMSIMs	% Red Rutile	% Ky	% Sil	% Tm	% St	% Sps	% Fay	% Opx	% Cr	% Ap	% Mz	Remarks	Picked Grains
213PH53D	0	0.1% sphalerite (54 gr) 5% barite (~2500 gr)	80 (~40,000 gr)	40	0	0	0	0	0	Tr	0	0	0	Tr	0	Tr	0	Goethite-almandine/pyrite assemblage. 1.0-2.0 mm and 0.5-1.0 mm fractions contain 0.2% (~20 gr) and 0.5% (~300 grains) barite respectively. "Pyrite" is mostly marcasite.	1.0-2.0 mm fraction: 10 representative barit 0.5-1.0 mm fraction: 6 sphalerite 10 representative barit 0.25-0.5 mm fraction: 54 sphalerite 15 representative barit
213PH54D	0	Tr sphalerite (2 gr) 5% barite (~500 gr)	40 (~4000 gr)	30	0	0	Tr (2 gr)	0	0	Tr	0	0	0	0	Tr (1 gr)	Tr	0	Almandine-goethite/pyrite-epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 red sphalerite versus rutile candidates = 2 rutile; 6 chromite candidates = 2 chromite and 4 ilmenite; and 1 forsterite olivine candidate = 1 forsterite olivine. 0.5-1.0 mm fraction contains 4% (~60 grains) barite. "Pyrite" is mostly marcasite.	1.0-2.0 mm fraction: 5 barite 0.5-1.0 mm fraction: 30 representative barit 0.25-0.5 mm fraction: 2 sphalerite 20 representative barit 2 red rutile 2 chromite 4 ilmenite resembling chromite 1 forsterite olivine
213PH58D	0	8% barite (~200 gr)	2 (~50 gr)	40	0	0	0	0	0	0	0	0	0	0	0	Tr	0	Goethite-almandine/epidote assemblage. "Pyrite" is mostly marcasite and is entirely mantled by goethite.	0.5-1.0 mm fraction: 20 barite 0.25-0.5 mm fraction: 20 representative barite

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY ABBREVIATIONS

SEDIMENT LOG

Largest Clasts Present:
- G: Granules
- P: Pebbles
- C: Cobbles

Clast Composition:
- V/S: Volcanics and/or sediments
- GR: Granitics
- LS: Limestone, carbonates
- OT: Other Lithologies (refer to footnotes)
- TR: Only trace present
- NA: Not applicable
- OX: Very oxidized, undifferentiated

Matrix Grain Size Distribution:
- S/U: Sorted *or* Unsorted
- SD: Sand (F: Fine; M: Medium; C: Coarse)
- ST: Silt
- CY: Clay
- Y: Fraction present
- +: Fraction more abundant than normal
- -: Fraction less abundant than normal
- N: Fraction not present

Matrix Organics:

ORG:
- Y: Organics present in matrix
- N: Organics absent *or* negligible in matrix
- +: Matrix is mainly organic

Matrix Colour:

Primary:
- BE: Beige
- GY: Grey
- GB: Grey-beige
- GN: Green
- GG: Grey-green
- PP: Purple
- PK: Pink

Secondary (soil):
- OC: Ochre
- BN: Brown
- BK: Black

Secondary Colour Modifier:
- L: Light
- M: Medium
- D: Dark

GOLD GRAIN LOG

Thickness:
- VG: Visible gold grains
- M: Actual measured thickness of grain (microns)
- C: Thickness of grain (microns) calculated from measured width and length

KIM (kimberlite indicator mineral) LOG

- GP: Purple to red peridotitic garnet (G9/10 Cr-pyrope)
- GO: Orange mantle garnet; includes both eclogitic pyrope-almandine (G3) and Cr-poor megacrystic pyrope (G1/G2) varieties; may include unchecked (by SEM) grains of common crustal garnet (G5) lacking diagnostic inclusions or crystal faces
- DC: Cr-diopside; distinctly emerald green (paler emerald green low-Cr diopside picked separately)
- IM: Mg-ilmenite; may include unchecked (by SEM) grains of common crustal ilmenite lacking diagnostic inclusions or crystal faces
- CR: Chromite
- FO: Forsterite

MMSIM (metamorphosed or magmatic massive sulphide indicator mineral) and PCIM (porphyry Cu indicator mineral) LOGS

Cpy: Chalcopyrite	Ky: Kyanite	Tm: Tourmaline	Fay: Fayalite	Mz: Monazite
Py: Pyrite	Mul: Mullite	St: Staurolite	Opx: Orthopyroxene	Spl: Spinel
Gth: Goethite	Sil: Sillimanite	Sp: Spessartine	Cr: Chromite	Ase: Anatase
Rut: Red Cr-rutile	And: Andalusite	Ol: Olivine	Ap: Apatite	

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

DATA TRANSMITTAL REPORT

DATE: 20-Apr-07

ATTENTION: **Mr. P. Hawkins**

CLIENT: **Hawkins & Assc. Ltd.**
72 Strathlorne Cr. SW.
Calgary, AB
T3H 1M8

FAX NO.: 403-246-1992 e-mail: phawkins@shaw.ca

NO. OF PAGES: ________________

PROJECT: **213PH**

FILE NAME: **Hawkins - (213PH) - April 2007**

SAMPLE NUMBERS: **213PH-61 to 63 and 65 to 68**

BATCH NUMBER: **3706**

NO. OF SAMPLES: **7**

THESE SAMPLES WERE PROCESSED FOR: **MMSIMs**
GOLD

SPECIFICATIONS:
1. Submitted by client: 15.8 to 24.2 kg till samples.
2. Heavy liquid separation specific gravity: 3.20.
3. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.
4. All other sample fractions are presently stored.

REMARKS: ________________

*Most sand and gravel (but few till) samples prescreened to <3.5 in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Project: 213PH
Filename: Hawkins - (213PH) - April 2007
Total Number of Samples in this Report = 7
Batch Number: 3706

	Sample Number	Non Mag
61	213PH-61	79.6
62	213PH-62	64.8
63	213PH-63	67.6
65	213PH-65	59.6
66	213PH-66	72.8
67	213PH-67	60.4
68	213PH-68	71.2

*Most sand and gravel (but few till) samples prescreened to <3.5 in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
GOLD GRAIN SUMMARY SHEET

Project: 213PH
Filename: Hawkins - (213PH) - April 2007
Total Number of Samples in this Report = 7

Batch Number: 3706

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine	(g) *	Total	Reshaped	Modified	Pristine
213PH-61	1	1	0	0	79.6	<1	<1	0	0
213PH-62	0	0	0	0	64.8	0	0	0	0
213PH-63	0	0	0	0	67.6	0	0	0	0
213PH-65	1	1	0	0	59.6	<1	<1	0	0
213PH-66	1	1	0	0	72.8	1	1	0	0
213PH-67	0	0	0	0	60.4	0	0	0	0
213PH-68	2	2	0	0	71.2	8	8	0	0

*Most sand and gravel (but few till) samples prescreened to <3.5 in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
DETAILED GOLD GRAIN SHEET

Project: 213PH
Filename: Hawkins - (213PH) - April 2007
Total Number of Samples in this Report = 7

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total		
213PH-61	No	5 C	25	25	1			1		
								1	79.6	<1
213PH-62	No	NO VISIBLE GOLD								
213PH-63	No	NO VISIBLE GOLD								
213PH-65	No	5 C	25	25	1			1		
								1	59.6	<1
213PH-66	No	8 C	25	50	1			1		
								1	72.8	1
213PH-67	No	NO VISIBLE GOLD								
213PH-68	No	10 C	50	50	1			1		
		13 C	50	75	1			1		
								2	71.2	8

*Most sand and gravel (but few till) samples prescreened to <3.5 in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Project: 213PH
Filename: Hawkins - (213PH) - April 2007
Total Number of Samples in this Report = 7

Batch Number: 3706

Sample Number	Weight (kg)				Clasts >2.0 mm					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	V/S	GR	LS	OT	S/U	SD	ST	CY	Org	Sand	Clay	
213PH-61	24.2	23.7	3.8	19.9	P	40	20	40	0	U	Y	Y	Y	N	LOC	LOC	TILL
213PH-62	17.1	16.6	0.4	16.2	P	60	40	0	0	U	-	Y	+	N	LOC	LOC	TILL
213PH-63	18.4	17.9	1.0	16.9	P	50	20	30	0	U	-	Y	+	N	LOC	LOC	TILL
213PH-65	15.8	15.3	0.4	14.9	P	40	30	30	0	U	-	Y	+	N	LOC	LOC	TILL
213PH-66	20.1	19.6	1.4	18.2	P	30	40	30	0	U	-	Y	+	N	MOC	MOC	TILL
213PH-67	16.0	15.5	0.4	15.1	P	40	20	40	0	U	-	Y	+	N	GB	GB	TILL
213PH-68	18.8	18.3	0.5	17.8	P	40	30	30	0	U	-	Y	+	N	LOC	DGY	TILL

*Most sand and gravel (but few till) samples prescreened to <3.5 in the field.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: 213PH
Filename: Hawkins - (213PH) - April 2007
Total Number of Samples in this Report = 7

Batch Number: 3706

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp: % Cpy	>1 amp: Misc. Prime MMSIMs	>1 amp: % Py	<1.0 amp: % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp: # Grains + Colour Spinel	>1.0 amp: Misc. Prime MMSIMs	>1.0 amp: % Red Rutile	>1.0 amp: % Ky	>1.0 amp: % Sil	0.8-1.0 amp: % Tm	0.8-1.0 amp: % St	<0.8 amp: % Sps	<0.8 amp: % Fay	<0.8 amp: % Opx	<0.8 amp: % Cr	Phosphates >1.0 amp: % Ap	Phosphates >1.0 amp: % Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
213PH-61	0	Tr sphalerite (9 gr) 1% barite (~250 gr)	95 (23,000 gr)	40	0	0	Tr (1 gr)	0	Tr	0	Tr	0	0	0	Tr (1 gr)	1	0	Almandine-goethite/marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 loellingite versus pyrite candidates = 2 pyrite; and 1 chromite versus hercynite candidate = 1 chromite. 0.5-1.0 mm fraction contains 1% (~60 grains) barite.	1.0-2.0 mm fraction: 13 barite 0.5-1.0 mm fraction: 2 sphalerite 40 representative barite 0.25-0.5 mm fraction: 9 sphalerite 25 representative barite 2 pyrite resembling loellingite 1 red rutile 1 chromite	Almandine-goethite/marcasite	SEM checks from 0.25-0.5 mm fraction: 2 loellingite versus pyrite candidates = 2 pyrite; and 1 chromite versus hercynite candidate = 1 chromite. 0.5-1.0 mm fraction contains 1% (~60 grains) barite.
213PH-62	0	0	Tr (4 gr)	70	0	0	Tr (2 gr)	0	60	0	Tr	0	0	0	0	0	0	Goethite-almandine/sillimanite-epidote assemblage.	0.25-0.5 mm fraction: 2 red rutile	Goethite-almandine/sillimanite-epidote	
213PH-63	0	Tr sphalerite (3 gr) 5% barite (~200 gr)	80 (~4000 gr)	60	1 grey	0	Tr (1 gr)	Tr	Tr	0	Tr	0	0	Tr	0	0	0	Goethite-almandine/marcasite-barite assemblage. SEM checks from 0.25-0.5 mm fraction: 1 chromite versus hercynite candidate = 1 ilmenite. 0.5-1.0 mm fraction contains 5% (~30 grains) barite.	1.0-2.0 mm fraction: 2 barite 0.5-1.0 mm fraction: 10 representative barite 0.25-0.5 mm fraction: 3 sphalerite 10 representative barite 1 spinel 1 red rutile	Goethite-almandine/marcasite-barite	SEM checks from 0.25-0.5 mm fraction: 1 chromite versus hercynite candidate = 1 ilmenite. 0.5-1.0 mm fraction contains 5% (~30 grains) barite.
213PH-65	0	Tr sphalerite (2 gr) 10% barite (~500 gr)	70 (~5000 gr)	60	0	0	0	0	Tr	0	Tr	0	0	Tr	0	Tr	0	Goethite-almandine/marcasite-epidote assemblage. 0.5-1.0 mm fraction contains 0.5% (~50 grains) barite.	1.0-2.0 mm fraction: 3 barite 0.5-1.0 mm fraction: 10 barite 0.25-0.5 mm fraction: 2 sphalerite 10 representative barite	Goethite-almandine/marcasite-epidote	0.5-1.0 mm fraction contains 0.5% (~50 grains) barite.
213PH-66	0	Tr sphalerite (3 gr) 2% barite (~100 gr)	25 (~1500 gr)	75	2 blue-green	0	Tr (1 gr)	0	Tr	0	Tr	0	0	Tr	0	Tr	0	Goethite-almandine/epidote-marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 2 spinel.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 24 barite 0.25-0.5 mm fraction: 3 sphalerite 20 representative barite 2 spinel 1 red rutile	Goethite-almandine/epidote-marcasite	SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 2 spinel.
213PH-67	0	0.5% sphalerite (~100 gr) Tr galena (2 gr) Tr molybdenite (1 gr) 0.3% barite (~60 gr)	95 (~19,000 gr)	10	1 blue-green	Tr low-Cr diopside (1 gr)	0	Tr	Tr	0	Tr	0	0	Tr	0	Tr	0	Siderite-almandine/marcasite assemblage. SEM checks from 0.25-0.5 mm fraction: 10 sphalerite candidates = 10 siderite; and 1 blue-green gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 1.5% (~30 grains) barite.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 17 sphalerite 10 representative barite 0.25-0.5 mm fraction: 50 representative sphalerite 10 siderite resembling sphalerite 2 galena 1 molybdenite 10 representative barite 1 spinel 1 low-Cr diopside	Siderite-almandine/marcasite	SEM checks from 0.25-0.5 mm fraction: 10 sphalerite candidates = 10 siderite; and 1 blue-green gahnite versus spinel candidate = 1 spinel. 0.5-1.0 mm fraction contains 1.5% (~30 grains) barite.
213PH-68	0	2% barite (~50 gr)	35	15	0	0	Tr (1 gr)	0	Tr	Tr	Tr	0	0	5	0	Tr	0	Almandine-goethite/epidote-marcasite assemblage.	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 12 barite 0.25-0.5 mm fraction: 20 representative barite 1 red rutile	Almandine-goethite/epidote-marcasite	

*Most sand and gravel (but few till) samples processed to <3.5 in the field

OVERBURDEN DRILLING MANAGEMENT LIMITED
107-15 CAPELLA COURT, NEPEAN, ONTARIO, K2E 7X1
TELEPHONE: (613) 226-1771
FAX NO.: (613) 226-8753
EMAIL: odm@storm.ca

DATA TRANSMITTAL REPORT

DATE: 21-Dec-07

ATTENTION: **Mr. P. Hawkins**

CLIENT: **Hawkins & Assc. Ltd.**
72 Strathlorne Cr. SW.
Calgary, AB
T3H 1M8

E-Mail: **phawkins@shaw.ca**

NO. OF PAGES:

PROJECT: **Zama Lake**

FILE NAME: **Hawkins - (217PH) - Nov 2007**

SAMPLE NUMBERS: **217-PH-80 to 91**

BATCH NUMBER: **3970**

NO. OF SAMPLES: **12**

THESE SAMPLES WERE PROCESSED FOR: **MMSIMs**
GOLD

SPECIFICATIONS:

1. Submitted by client: 18.4 to 26.3 kg till and sand/gravel samples.
2. Heavy liquid separation specific gravity: 3.20.
3. 0.25-2.0 mm nonferromagnetic heavy mineral fraction picked for indicator minerals.

REMARKS: ____________

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Remy Huneault
Laboratory Manager

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

Batch Number: 3970

Sample Number	Weight (kg)				Clasts >2.0 mm					Matrix <2.0 mm							Class
						Percentage				Distribution					Colour		
	Bulk Rec'd	Table Split	+2 mm Clasts	Table Feed	Size	V/S	GR	LS	OT*	S/U	SD	ST	CY	Org	Sand	Clay	
217PH-80	29.1	28.6	10.8	17.8	P	20	50	30	0	S	MC	N	N	N	OC	NA	SAND & GRAVEL
217PH-81	21.9	21.4	11.0	10.4	C	20	50	30	0	S	MC	N	N	N	OC	NA	SAND & GRAVEL
217PH-82	23.2	22.7	13.3	9.4	P	Tr	20	80	0	S	MC	N	N	N	OC	NA	SAND & GRAVEL
217PH-83	24.2	23.7	12.3	11.4	P	Tr	20	80	0	S	FMC	-	N	N	LOC	NA	SAND & GRAVEL
217PH-84	23.5	23.0	11.5	11.5	P	Tr	15	85	0	S	FMC	-	N	N	LOC	NA	SAND & GRAVEL
217PH-85	25.4	24.9	3.6	21.3	P	Tr	10	90	0	U	Y	Y	Y	N	LOC	LOC	TILL
217PH-86	21.9	21.4	1.4	20.0	P	Tr	30	70	0	U	Y	Y	Y	N	LOC	LOC	TILL
217PH-87	23.0	22.5	2.1	20.4	P	10	30	60	0	U	Y	Y	Y	N	LOC	LOC	TILL
217PH-88	26.3	25.8	15.8	10.0	P	20	40	30	10	S	MC	N	N	N	LOC	NA	SAND & GRAVEL
217PH-89	19.6	19.1	0.0	19.1		No Clasts				U	-	Y	+	N	LOC	LOC	CLAY TILL
217PH-90	18.4	17.9	1.1	16.8	P	Tr	30	60	10	U	Y	Y	Y	N	LOC	LOC	TILL
217PH-91	19.1	18.6	0.5	18.1	P	10	30	20	40	U	Y	Y	Y	N	LOC	LOC	TILL

* Clasts listed as "other" are Proterozoic sandstone.

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
GOLD GRAIN SUMMARY SHEET

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12 Batch Number: 3970

Sample Number	Number of Visible Gold Grains				Nonmag HMC Weight (g) *	Calculated PPB Visible Gold in HMC			
	Total	Reshaped	Modified	Pristine		Total	Reshaped	Modified	Pristine
217PH-80	0	0	0	0	71.2	0	0	0	0
217PH-81	0	0	0	0	41.6	0	0	0	0
217PH-82	0	0	0	0	37.6	0	0	0	0
217PH-83	0	0	0	0	45.6	0	0	0	0
217PH-84	0	0	0	0	46.0	0	0	0	0
217PH-85	0	0	0	0	85.2	0	0	0	0
217PH-86	1	1	0	0	80.0	8	8	0	0
217PH-87	0	0	0	0	81.6	0	0	0	0
217PH-88	0	0	0	0	40.0	0	0	0	0
217PH-89	0	0	0	0	76.4	0	0	0	0
217PH-90	0	0	0	0	67.2	0	0	0	0
217PH-91	0	0	0	0	72.4	0	0	0	0

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
LABORATORY SAMPLE LOG
KIMBERLITE INDICATOR MINERAL COUNTS

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

	Weight (g)										
	<2.0 mm Table Concentrate										
			0.25 to 2.0 mm Heavy Liquid Separation S.G 3.20								
					Nonferromagnetic HMC						
						Processed Split					
								Total			
Sample Number	Total	-0.25 mm	Heavy Liquid Lights	Mag HMC	Total	%	Weight	<0.25 mm (wash)	0.25 to 0.5 mm	0.5 to 1.0 mm	1.0 to 2.0 mm
217PH-80	1,225.1	389.5	758.7	4.3	72.6	100	72.6	5.2	50.8	14.0	2.6
217PH-81	712.1	269.6	369.8	4.3	68.4	100	68.4	6.5	48.1	12.6	1.2
217PH-82	795.2	407.4	329.4	6.7	51.7	100	51.7	3.5	34.9	10.4	2.9
217PH-83	741.7	516.6	171.0	2.1	52.0	100	52.0	5.7	19.4	16.7	10.2
217PH-84	833.4	420.4	384.6	5.1	23.3	100	23.3	1.5	10.4	8.2	3.2
217PH-85	692.1	464.2	221.5	1.3	5.1	100	5.1	0.4	2.8	1.4	0.5
217PH-86	864.8	641.3	217.9	0.7	4.9	100	4.9	1.0	2.4	1.2	0.3
217PH-87	747.2	529.3	209.1	0.9	7.9	100	7.9	3.7	3.5	2.2.	0.7
217PH-88	841.0	254.5	520.1	7.2	59.2	100	59.2	3.6	39.4	14.0	2.2
217PH-89	737.8	516.3	215.3	0.1	6.1	100	6.1	2.0	2.1	1.5	0.5
217PH-90	819.5	573.3	238.6	0.5	7.1	100	7.1	1.0	3.0	1.8	1.3
217PH-91	730.7	520.6	206.1	0.2	3.8	100	3.8	0.5	1.7	1.1	0.5

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
DETAILED GOLD GRAIN SHEET

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

Batch Number: 3970

Sample Number	Panned Yes/No	Dimensions (microns)			Number of Visible Gold Grains				Nonmag HMC Weight (g)	Calculated V.G. Assay in HMC (ppb)	Remarks
		Thickness	Width	Length	Reshaped	Modified	Pristine	Total			
217PH-80	No	NO VISIBLE GOLD									
217PH-81	No	NO VISIBLE GOLD									
217PH-82	No	NO VISIBLE GOLD									
217PH-83	No	NO VISIBLE GOLD									SEM checks: 3 of ~500 galena versus loellingite candidates = 3 galena (50-150µ).
217PH-84	No	NO VISIBLE GOLD									
217PH-85	No	NO VISIBLE GOLD									~100 grains galena (50µ).
217PH-86	No	15 C	75	75	1			1			
								1	80.0	8	
217PH-87	No	NO VISIBLE GOLD									
217PH-88	No	NO VISIBLE GOLD									
217PH-89	No	NO VISIBLE GOLD									
217PH-90	No	NO VISIBLE GOLD									
217PH-91	No	NO VISIBLE GOLD									

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

Batch Number: 3970

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp: % Cpy	>1 amp: Misc Prime MMSIMs	>1 amp: % Py	<1.0 amp: % Gth	Mo/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp: # Grains + Colour Spinel	>1.0 amp: Misc. Prime MMSIMs	>1.0 amp: % Red Rutile	>1.0 amp: % Ky	>1.0 amp: % Sil	0.8-1.0 amp: % Tm	0.8-1.0 amp: % Sl	<0.8 amp: % Sps	<0.8 amp: % Fay	<0.8 amp: % Opx	<0.8 amp: % Cr	Phosphates >1.0 amp: % Ap	Phosphates >1.0 amp: % Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
217PH-80	0	Tr barite (9 gr)	Tr (1 gr)	65	1 pink	Tr low-Cr diopside (2 gr)	Tr (14 gr)	Tr	1	Tr	Tr	0	0	0	Tr (1 gr)	Tr	0	Goethite-almandine/epidole-diopside assemblage. SEM checks from 0.5-1.0 mm fraction: 3 barite versus siderite candidates = 3 barite. SEM checks from 0.25-0.5 mm fraction: 4 barite versus apatite candiates = 4 barite; and 1 forsterite vresus diopside candidate = 1 forsterite	0.5-1.0 mm fraction: 4 barite 0.25-0.5 mm fraction: 9 barite 1 spinel 2 low-Cr diopside 14 red rutile 1 chromite 1 forsterite	Goethite-almandine/epidole-diopside	SEM checks from 0.5-1.0 mm fraction: 3 barite versus siderite candidates = 3 barite. SEM checks from 0.25-0.5 mm fraction: 4 barite versus apatite candiates = 4 barite; and 1 forsterite vresus diopside candidate = 1 forsterite
217PH-81	0	0.3% barite (~60 gr)	Tr (5 gr)	65	1 pale blue	Tr low-Cr diopside (2 gr)	Tr (15 gr)	Tr	0.5	Tr	Tr	0	0	0	0	Tr	0.5	Goethite-almandine/epidole-diopside assemblage.	0.5-1.0 mm fraction: 1 Cr diopside (kimberlite indicator mineral) 0.25-0.5 mm fraction: 15 representative barite 1 spinel 2 low-Cr diopside 15 red rutile 1 forsterite	Goethite-almandine/epidole-diopside	
217PH-82	0	0.8% sphalerite (~250 gr)	Tr (10 gr)	1	1 blue-green gahnite; 2 black CrZn-hercynite; 1 blue-green spinel	Tr low-Cr diopside (2 gr)	Tr (8 gr)	1	0.5	Tr	2	0	0	0	0	1	Tr	Almandine/epidote assemblage. SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel; and 8 chromite versus ilmenite candidates = 6 ilmenite and 2 CrZn-hercynite.	1.0-2.0 mm fraction: 1 sphalerite 0.5-1.0 mm fraction: 14 sphalerite 0.25-0.5 mm fraction: 70 representative sphalerite 1 gahnite 2 CrZn-hercynite 1 spinel 2 low-Cr diopside 8 red rutile 6 ilmenite resembling chromite	Almandine/epidote	SEM checks from 0.25-0.5 mm fraction: 2 blue-green gahnite versus spinel candidates = 1 gahnite and 1 spinel; and 8 chromite versus ilmenite candidates = 6 ilmenite and 2 CrZn-hercynite.
217PH-83	0	55% sphalerite (~50,000 gr) 10% galena (~8000 gr)	20 (~16,000 gr)	1	0	0	0	Tr	Tr	0	0	0	0	0	0	Tr	0	Almandine-hornblende/sphalerite-marcasite assemblage. SEM checks from 1.0-2.0 mm fraction: 5 barite versus carbonate (gangue mineral associated with sulphides) = 5 plumbo calcite; and 2 barite versus diopside candidates = 1 diopside and 1 sillimanite. SEM checks from 0.25-0.5 mm fraction: 5 barite versus apatite candidates = 5 kyanite. 1.0-2.0 mm fraction contains 35% (~600 grains) sphalerite and 5% (~100 grains) galena, and 0.5-1.0 mm fraction contains 35% (~4000 grains) sphalerite and 10% (~1000 grains) galena.	1.0-2.0 mm fraction: 40 representative sphalerite 40 representative galena 20 representative plumbo calcite 1 diopside resembling barite 1 sillimanite resembling barite 0.5-1.0 mm fraction: 40 representative sphalerite 40 representative galena 20 representative plumbo calcite 0.25-0.5 mm fraction: 40 representative sphalerite 40 representative galena 20 representative plumbo calcite 5 kyanite resembling barite	Almandine-hornblende/sphalerite-marcasite	SEM checks from 1.0-2.0 mm fraction: 5 barite versus carbonate (gangue mineral associated with sulphides) = 5 plumbo calcite; and 2 barite versus diopside candidates = 1 diopside and 1 sillimanite. SEM checks from 0.25-0.5 mm fraction: 5 barite versus apatite candidates = 5 kyanite. 1.0-2.0 mm fraction contains 35% (~600 grains) sphalerite and 5% (~100 grains) galena, and 0.5-1.0 mm fraction contains 35% (~4000 grains) sphalerite and 10% (~1000 grains) galena

** Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed.

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

Batch Number: 3970

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp: % Cpy	>1 amp: Misc. Prime MMSIMs	>1 amp: % Py	<1.0 amp: % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp: # Grains • Colour Spinel	>1.0 amp: Misc. Prime MMSIMs	>1.0 amp: % Red Rutile	>1.0 amp: % Ky	>1.0 amp: % Sil	0.8-1.0 amp: % Tm	0.8-1.0 amp: % St	<0.8 amp: % Sps	<0.8 amp: % Fay	<0.8 amp: % Opx	<0.8 amp: % Cr	Phosphates >1.0 amp: % Ap	Phosphates >1.0 amp: % Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
217PH-84	0	0.5% sphalerite (~50 gr) Tr galena (2 gr) Tr barite (3 gr)	4 (~400 gr)	1	1 black hercynite 1 green spinel	Tr low-Cr diopside (1 gr)	0	Tr	2	Tr	2	0	0	5	0	2	Tr	Almandine-hornblende/epidote-diopside- titanite assemblage. SEM checks from 0.25-0.5 mm fraction: 3 brown sphalerite candidates = 2 cleiophane sphalerite and 1 titanite; 1 green gahnite versus spinel candidate = 1 spinel; and 1 chromite candidate = 1 hercynite	0.5-1.0 mm fraction: 2 sphalerite 1 barite 0.25-0.5 mm fraction 37 representative sphalerite 1 titanite resembling sphalerite 2 galena 3 barite 1 hercynite 1 spinel 1 low-Cr diopside	Almandine-hornblende/epidote-diopside-titanite	SEM checks from 0.25-0.5 mm fraction: 3 brown sphalerite candidates = 2 cleiophane sphalerite and 1 titanite; 1 green gahnite versus spinel candidate = 1 spinel; and 1 chromite candidate = 1 hercynite.
217PH-85	0	Tr sphalerite (1 gr) 1% barite (~50 gr)	Tr (8 gr)	Tr	0	0	0	Tr	0.5	Tr	Tr	0	0	0	0	2	0	Almandine-hornblende/epidote-diopside assemblage. SEM check from 0.25-0.5 mm fraction: 1 sphalerite versus epidote candidate = 1 sphalerite	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 16 barite 0.25-0.5 mm fraction 1 sphalerite 15 representative barite	Almandine-hornblende/epidote-diopside	SEM check from 0.25-0.5 mm fraction: 1 sphalerite versus epidote candidate = 1 sphalerite
217PH-86	Tr (3 gr)	Tr sphalerite (2 gr) 35% barite (~2000 gr)	10 (~600 gr)	30	0	0	Tr (5 gr)	0	Tr	Tr	Tr	0	0	2	0	Tr	Tr	Almandine-goethite-hornblende/epidote-barite - diopside assemblage. 0.5-1.0 mm fraction contains 3% (~40 grains) barite	1.0-2.0 mm fraction: 4 barite 0.5-1.0 mm fraction: 10 representative barite SEM checks from 0.25-0.5 mm fraction: 3 chalcopyrite 2 sphalerite 15 representative barite 5 red rutile	Almandine-goethite-hornblende/epidote-barite - diopside	0.5-1.0 mm fraction contains 3% (~40 grains) barite
217PH-87	0	30% barite (~3000 gr)	40 (~4000gr)	20	1 blue-green gahnite	0	Tr (1 gr)	0	Tr	Tr	Tr	0	0	Tr	0	Tr	0	Almandine-hornblende-goethite/marcasite-barite-epidote assemblage. SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite. 0.5-1.0 mm fraction contains 3% (~60 grains) barite.	1.0-2.0 mm fraction: 7 barite 0.5-1.0 mm fraction: 10 representative barite 1 low-Cr diopside 0.25-0.5 mm fraction 10 representative barite 1 gahnite 1 red rutile	Almandine-hornblende-goethite/marcasite-barite-epidote	SEM check from 0.25-0.5 mm fraction: 1 blue-green gahnite versus spinel candidate = 1 gahnite. 0.5-1.0 mm fraction contains 3% (~60 grains) barite.
217PH-88	0	3% barite (~600 gr)	0.5 (~100 gr)	30	2 blue-green gahnite 3 pale blue spinel	Tr ruby corundum (2 gr) Tr low-Cr diopside (3 gr)	Tr (19 gr)	0	Tr	Tr	Tr	0	0	2	0	Tr	2	Almandine-goethite-hematite/epidote- diopside assemblage. SEM checks from 0.25-0.5 mm fraction: 5 blue-green to pale blue gahnite versus spinel candidates = 2 gahnite and 3 spinel, and 1 forsterite versus diopside candidate = 1 forsterite. Also picked 2 purple Cr pyrope garnet from 0.25-0.5 mm fraction.	0.5-1.0 mm fraction: 2 forsterite 0.25-0.5 mm fraction: 20 representative barite 2 gahnite 3 spinel 2 ruby corundum 3 low-Cr diopside 19 red rutile 1 forsterite 2 Cr-pyrope (kimberlite indicator minerals)	Almandine-goethite-hematite/epidote- diopside	SEM checks from 0.25-0.5 mm fraction: 5 blue-green to pale blue gahnite versus spinel candidates = 2 gahnite and 3 spinel, and 1 forsterite versus diopside candidate = 1 forsterite. Also picked 2 purple Cr-pyrope garnet from 0.25-0.5 mm fraction.
217PH-89	Tr (1 gr)	Tr sphalerite (2 gr) 2% barite (~300 gr)	90 (~13,000 gr)	4	0	0	0	0	Tr	0	0	0	0	Tr	Tr (1 gr)	Tr	0	Almandine-siderite-hornblende/marcasite assemblage	1.0-2.0 mm fraction: 1 barite 0.5-1.0 mm fraction: 14 barite 1 forsterite 0.25-0.5 mm fraction: 1 chalcopyrite 2 sphalerite 15 representative barite 1 chromite	Almandine-siderite-hornblende/marcasite	

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed

OVERBURDEN DRILLING MANAGEMENT LIMITED
MMS INDICATOR MINERAL DATA

Project: Zama Lake
Filename: Hawkins - (217PH) - Nov 2007
Total Number of Samples in this Report = 12

Batch Number: 3970

Sample Number	Sulphide/Arsenide + Related Minerals 0.25-0.5 mm: >1 amp: % Cpy	>1 amp: Misc. Prime MMSIMs	>1 amp: % Py	<1.0 amp: % Gth	Mg/Mn/Al/Cr Minerals 0.25-0.5 mm: >1.0 amp: # Grains + Colour Spinel	>1.0 amp: Misc. Prime MMSIMs	>1.0 amp: % Red Rutile	>1.0 amp: % Ky	>1.0 amp: % Sil	0.8-1.0 amp: % Tm	0.8-1.0 amp: % St	<0.8 amp: % Sps	<0.8 amp: % Fay	<0.8 amp: % Opx	<0.8 amp: % Cr	Phosphates >1.0 amp: % Ap	Phosphates >1.0 amp: % Mz	Remarks	Picked Grains	INPUT Assemblage	INPUT Remarks
217PH-90	0	Tr galena (1 gr) 30% barite (~1500 gr)	40 (~2000 gr)	25	1 grey	0	Tr (1 gr)	0	Tr	Tr	Tr	0	0	0	Tr (1 gr)	1	Tr	Almandine-goethite-hornblende/marcasite-barite-epidote assemblage. SEM check from 1.0-2.0 mm fraction: 1 picroilmenite versus chromite candidate = 1 picroilmenite. SEM checks from 0.5-1.0 mm fraction: 1 orange sphalerite candidate = 1 barite; and 1 chromite versus hercynite candidate = 1 chromite. SEM checks from 0.25-0.5 mm fraction: 1 galena candidate = 1 galena; 5 sphalerite candidates = 1 barite, 1 staurolite, 1 monazite, 1 titanite and 1 enstatite; 1 ruby corundum versus Cr-pyrope candidate = 1 Cr-pyrope; and 2 chromite versus tourmaline candidates = 1 chromite and 1 tourmaline. 0.5-1.0 mm fraction contins 2% (~40 grains) barite.	1.0-2.0 mm fraction: 7 barite 1 picroilmenite (kimberlite indicator mineral) 0.5-1.0 mm fraction: 11 representative barite 1 chromite 0.25-0.5 mm fraction: 1 galena 1 staurolite resembling sphalerite 1 monazite resembling sphalerite 1 titanite resembling sphalerite 1 enstatite resembling sphalerite 21 representative barite 1 spinel 1 red rutile 1 chromite 1 tourmaline resembling chromite 1 Cr-pyrope (kimberlite indicator mineral)	Almandine-goethite-hornblende/marcasite-barite-epidote	SEM check from 1.0-2.0 mm fraction: 1 picroilmenite versus chromite candidate = 1 picroilmenite. SEM checks from 0.5-1.0 mm fraction: 1 orange sphalerite candidate = 1 barite; and 1 chromite versus hercynite candidate = 1 chromite. SEM checks from 0.25-0.5 mm fraction: 1 galena candidate = 1 galena; 5 sphalerite candidates = 1 barite, 1 staurolite, 1 monazite, 1 titanite and 1 enstatite; 1 ruby corundum versus Cr-pyrope candidate = 1 Cr-pyrope; and 2 chromite versus tourmaline candidates = 1 chromite and 1 tourmaline. 0.5-1.0 mm fraction contins 2% (~40 grains) barite
217PH-91	0	30% barite (~1000 gr)	50 (~1500 gr)	40	0	Tr low-Cr diopside (2 gr)	0	Tr	Tr	Tr	Tr	0	0	0	0	0	Tr	Goethite-almandine-hornblende/marcasite-barite-epidote assemblage. SEM check from 0.5-1.0 mm fraction: 1 forsterite versus diopside candidate = 1 forsterite (kimberlitic).	1.0-2.0 mm fraction: 4 barite 0.5-1.0 mm fraction: 17 barite 1 forsterite (kimberlite indicator mineral) 0.25-0.5 mm fraction: 10 representative barite 2 low-Cr diopside	Goethite-almandine-hornblende/marcasite-barite-epidote	SEM check from 0.5-1.0 mm fraction: 1 forsterite versus diopside candidate = 1 forsterite (kimberlitic).

* Calculated PPB Au based on assumed nonmagnetic HMC weight equivalent to 1/250th of the table feed

Appendix 5

Major Element ICP Analysis

Loring Laboratories Ltd.

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

TO: PAUL A. HAWKINS & ASSOCIATES LTD.
72 Strathlorne Cr. S.W.
Calgary, Alberta
T3H 1M8
Attn: Paul Hawkins

FILE: 48739

DATE: July 13, 2006

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba 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
213PH51(-250m)	<0.5	1.87	15	<1	44	326	<1	1.28	2	49	27	35	2.54	0.27	29	0.62	835	7	0.03	51	0.12	6	2	80	<1	0.01	11	56	<1	119
213PH51(+250m)	<0.5	1.38	13	<1	33	245	<1	1.09	2	45	16	28	2.05	0.21	25	0.53	872	7	0.02	46	0.10	5	1	65	4	0.01	20	46	<1	101
213PH52(-250m)	<0.5	2.13	11	<1	44	227	<1	4.25	1	30	25	30	1.56	0.30	42	1.22	364	2	0.03	31	0.04	1	1	99	9	0.02	3	51	<1	51
213PH52(+250m)	<0.5	2.10	11	<1	43	260	<1	3.92	1	31	31	26	1.53	0.27	38	1.22	389	2	0.03	34	0.05	1	<1	112	2	0.01	<1	53	<1	51
213PH53(-250m)	<0.5	1.90	16	<1	50	326	<1	1.86	1	38	26	40	1.96	0.30	32	1.10	354	4	0.11	38	0.09	6	<1	74	5	0.01	<1	59	<1	96
213PH53(+250m)	<0.5	1.47	14	<1	46	270	<1	1.74	1	35	22	31	1.68	0.24	32	1.01	372	4	0.09	38	0.08	7	1	65	4	0.01	5	47	<1	84
213PH54(-250m)	<0.5	1.97	17	<1	48	325	<1	1.49	1	39	26	39	1.90	0.30	31	1.03	338	5	0.09	36	0.06	7	1	71	6	0.01	4	59	<1	95
213PH54(+250m)	<0.5	1.33	14	<1	42	245	<1	1.48	1	34	22	30	1.56	0.21	28	0.77	339	4	0.07	35	0.06	6	<1	60	6	0.01	5	43	<1	79
213PH55(-250m)	<0.5	1.68	22	<1	50	281	<1	1.38	2	52	17	52	2.36	0.27	30	0.90	542	14	0.10	54	0.06	13	3	71	7	0.01	12	56	<1	140
213PH55(+250m)	<0.5	1.35	18	<1	40	193	<1	1.76	2	42	18	36	1.87	0.22	28	0.65	494	11	0.08	46	0.05	9	2	65	6	0.01	10	47	<1	109
213PH56(-250m)	<0.5	1.85	18	<1	44	331	<1	1.70	1	42	23	38	2.00	0.28	30	0.72	364	10	0.03	45	0.05	10	<1	74	6	0.01	5	56	<1	114
213PH56(+250m)	<0.5	1.70	16	<1	43	262	<1	1.88	1	41	21	31	1.86	0.25	31	0.73	414	8	0.02	43	0.05	8	<1	71	<1	0.01	17	51	<1	104
213PH57(-250m)	<0.5	1.41	16	<1	41	46	<1	4.08	1	35	21	34	1.67	0.23	36	0.99	326	10	0.02	40	0.05	5	1	87	6	0.01	7	47	<1	90
213PH57(+250m)	<0.5	1.74	18	<1	46	244	<1	2.97	2	44	21	46	1.97	0.28	34	1.08	366	12	0.02	51	0.05	7	2	81	<1	0.01	5	55	<1	112
213PH58(-250m)	<0.5	1.88	17	<1	46	522	<1	1.06	1	45	21	62	2.08	0.26	27	0.59	455	6	0.12	43	0.05	10	2	94	4	0.01	7	49	<1	114
213PH58(+250m)	<0.5	1.65	13	<1	42	59	<1	2.78	1	41	21	36	1.79	0.22	33	0.50	639	4	0.11	46	0.05	7	<1	101	6	0.01	<1	46	<1	92
213PH59(-250m)	<0.5	1.66	12	<1	39	272	<1	1.46	1	35	20	48	1.79	0.25	29	0.68	470	2	0.19	34	0.05	8	1	75	<1	0.01	5	38	<1	83
213PH59(+250m)	<0.5	1.44	11	<1	40	213	<1	1.49	1	33	17	33	1.58	0.21	28	0.62	405	2	0.17	32	0.05	8	1	70	3	0.01	<1	35	<1	74
213TD100(-250m)	<0.5	1.59	14	<1	40	278	<1	0.97	2	48	18	53	2.39	0.23	26	0.50	763	6	0.02	42	0.08	8	2	72	6	0.01	4	47	<1	110
213TD100(+250m)	<0.5	1.09	10	<1	34	184	<1	0.89	1	36	11	27	1.68	0.15	22	0.43	586	4	0.02	33	0.06	5	<1	51	2	0.01	5	36	<1	82
213TD101(-250m)	<0.5	1.93	20	<1	46	325	<1	1.92	2	47	27	42	2.11	0.28	36	0.92	370	9	0.03	46	0.06	7	2	76	10	0.01	5	56	<1	120
213TD101(+250m)	<0.5	1.70	17	<1	42	175	<1	2.31	2	43	22	34	1.93	0.24	35	0.91	424	9	0.03	47	0.06	6	2	76	6	0.01	3	54	<1	105
213TD102(-250m)	<0.5	2.25	16	<1	42	318	<1	2.26	1	39	29	43	2.01	0.25	39	0.97	388	4	0.03	45	0.06	4	2	67	10	0.01	2	65	<1	82
213TD102(+250m)	<0.5	2.08	15	<1	44	282	<1	2.01	1	37	29	32	1.80	0.22	35	0.91	358	4	0.03	44	0.05	3	2	61	<1	0.01	<1	58	<1	75
213TD103(-250m)	<0.5	1.55	16	<1	42	258	<1	1.79	1	40	20	44	1.93	0.24	32	0.69	356	6	0.04	43	0.06	8	2	63	5	0.01	<1	49	<1	103
213TD103(+250m)	<0.5	1.49	15	<1	32	212	<1	1.75	1	36	19	34	1.75	0.22	30	0.65	352	5	0.03	40	0.06	7	1	60	4	0.01	2	47	<1	96
213TD104(-250m)	<0.5	1.97	17	<1	47	671	<1	1.13	1	48	23	51	2.25	0.29	30	0.61	569	6	0.14	50	0.06	11	1	103	2	0.01	14	51	<1	120
213TD104(+250m)	<0.5	1.66	14	<1	44	98	<1	2.51	1	44	22	39	1.90	0.24	35	0.53	648	5	0.13	50	0.05	8	1	101	6	0.01	<1	46	<1	99
213TD105(-250m)	<0.5	0.33	4	<1	35	53	<1	0.15	<1	14	7	25	0.62	0.06	15	0.09	239	<1	0.03	13	0.03	6	<1	11	5	0.01	<1	12	<1	15
213TD105(+250m)	<0.5	0.13	3	<1	35	20	<1	0.09	<1	8	3	12	0.35	0.03	7	0.05	100	<1	0.01	8	0.02	3	<1	7	<1	0.01	5	7	<1	9
213Rx001(-250m)	<0.5	0.61	<1	<1	60	126	22	0.84	5	218	10	<1	21.22	0.07	26	2.03	13150	2	0.04	63	0.03	3	11	42	<1	<0.01	94	31	<1	26
213Rx001(+250m)	<0.5	0.53	<1	<1	62	127	21	0.81	5	229	7	<1	21.57	0.06	25	1.93	13430	2	0.05	67	0.04	4	12	46	<1	<0.01	88	32	<1	28
213PH58(+250) R	<0.5	1.71	14	<1	43	63	<1	2.93	1	44	22	40	1.90	0.24	38	0.52	661	5	0.12	48	0.05	7	<1	107	4	0.01	<1	47	<1	96

0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.
"R" denotes duplicate sample analyzed.

Certified by: ____________________

Loring Laboratories Ltd.

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

TO: PAUL HAWKINS & ASSOCIATES LTD.
72 Strathlorne Cres SW
Calgary, Alberta

FILE: 50190

DATE: Nov. 05, 2007

Attn: Paul Hawkins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba 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
213PH53	<0.5	1.75	10	<1	<1	156	<1	1.20	2	34	59	26	3.17	0.25	25	0.61	312	5	0.09	26	0.06	3	4	61	7	0.03	<1	62	<1	92
213PH56	<0.5	1.30	14	<1	<1	25	<1	2.58	2	30	77	29	2.58	0.27	28	0.62	325	8	0.03	33	0.05	4	3	69	<1	<0.01	<1	47	<1	111
213PH57	<0.5	1.59	15	<1	<1	33	<1	3.05	2	32	131	32	2.85	0.37	29	0.78	284	11	0.03	37	0.05	2	5	74	1	<0.01	<1	62	<1	124
213PH61	<0.5	1.35	12	<1	<1	107	<1	1.15	1	28	59	25	2.54	0.20	23	0.55	263	6	0.07	25	0.04	3	2	41	9	<0.01	<1	46	<1	97
213PH62	<0.5	1.66	12	<1	<1	131	<1	0.22	1	30	52	25	2.98	0.25	15	0.38	218	5	0.03	21	0.02	3	3	33	3	<0.01	<1	52	<1	84
213PH63	<0.5	1.08	13	<1	<1	23	<1	2.19	3	42	51	25	4.61	0.23	29	0.71	900	6	0.11	30	0.10	6	3	69	2	<0.01	<1	40	<1	108
213PH65	<0.5	1.24	11	<1	<1	26	<1	1.59	1	28	42	25	2.60	0.26	29	0.46	237	3	0.14	22	0.05	5	2	66	6	<0.01	<1	38	<1	90
213PH66	<0.5	1.41	10	<1	<1	152	<1	3.77	1	26	44	18	2.51	0.24	36	1.49	406	3	0.08	23	0.12	1	2	76	8	<0.01	<1	42	<1	65
213PH67	<0.5	1.25	9	<1	<1	34	<1	1.66	2	43	30	24	4.95	0.23	29	0.82	921	3	0.18	27	0.05	5	3	64	<1	<0.01	<1	38	<1	91
213PH68	<0.5	1.74	10	<1	<1	254	<1	1.25	1	29	48	23	2.44	0.28	25	0.68	277	4	0.03	29	0.04	2	3	52	7	<0.01	<1	54	<1	78
217ST01	<0.5	0.16	2	<1	<1	36	<1	0.06	<1	5	111	2	0.43	0.06	5	0.03	62	<1	0.03	5	0.01	1	4	8	5	<0.01	<1	10	<1	5
217ST02	<0.5	0.47	3	<1	<1	117	<1	1.16	<1	9	124	5	0.82	0.10	16	0.19	278	<1	0.03	11	0.03	<1	3	23	8	0.02	<1	25	<1	16
217PH80	<0.5	0.51	8	<1	<1	119	<1	4.54	1	18	94	11	1.87	0.13	37	1.18	452	3	0.03	12	0.04	1	3	43	13	0.03	<1	28	<1	33
217PH81	<0.5	0.42	6	<1	<1	173	<1	5.76	<1	13	90	6	1.32	0.12	35	1.65	341	2	0.03	10	0.06	1	2	52	10	0.02	<1	25	<1	21
217PH82	<0.5	0.38	5	<1	<1	22	<1	6.10	<1	7	83	4	0.72	0.07	33	3.66	244	1	0.03	5	0.01	8	2	27	9	0.02	<1	19	<1	38
217PH83	<0.5	0.25	5	<1	<1	22	<1	8.14	2	6	46	3	0.60	0.06	36	4.84	259	1	0.02	4	0.01	255	2	36	8	<0.01	<1	18	<1	772
217PH84	<0.5	0.04	4	<1	<1	40	<1	8.13	<1	8	41	5	0.79	0.09	43	3.00	216	1	0.03	5	0.02	6	<1	54	10	0.02	<1	22	<1	39

0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.

Certified by: ______________________

Loring Laboratories Ltd.
629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
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loringlabs@telus.net

TO: PAUL HAWKINS & ASSOCIATES LTD.
72 Strathlorne Cres SW
Calgary, Alberta

FILE: 50190

DATE: Nov. 05, 2007

Attn: Paul Hawkins

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	Au ppm	B ppm	Ba 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
217PH85	<0.5	0.50	6	<1	<1	65	<1	8.54	<1	7	28	5	0.66	0.14	38	4.62	197	1	0.02	8	0.02	7	<1	50	12	0.01	<1	24	<1	32
217PH86	<0.5	1.28	11	<1	<1	247	<1	4.73	1	25	45	26	2.25	0.27	38	1.20	335	5	0.02	29	0.05	3	3	70	10	<0.01	<1	49	<1	81
217PH87A	<0.5	0.78	8	<1	<1	158	<1	6.89	1	18	51	17	1.79	0.22	38	1.25	632	4	0.02	20	0.03	3	1	79	10	<0.01	<1	35	<1	50
217PH88	<0.5	0.44	6	<1	<1	149	<1	4.22	<1	13	65	7	1.23	0.11	33	1.33	316	2	0.03	10	0.08	2	2	45	10	0.02	<1	27	<1	33
090PH89	<0.5	0.99	10	<1	<1	161	<1	1.47	1	24	42	23	2.17	0.21	24	0.62	284	2	0.03	25	0.07	4	2	54	11	<0.01	<1	38	<1	78
090PH90A	<0.5	0.94	9	<1	<1	226	<1	1.86	<1	21	65	19	2.11	0.19	27	0.57	184	2	0.02	16	0.05	4	3	44	8	<0.01	<1	35	<1	63
090PH90B	<0.5	1.54	9	<1	<1	238	<1	0.40	1	26	54	20	2.41	0.21	20	0.34	234	2	0.01	23	0.03	<1	3	29	9	<0.01	<1	52	<1	64
090PH90G	<0.5	0.56	5	<1	<1	185	<1	2.18	<1	14	78	9	1.36	0.13	24	0.43	247	1	0.02	12	0.04	2	3	33	3	0.01	<1	28	<1	29
090PH91A	<0.5	0.97	11	<1	<1	161	<1	1.47	1	24	44	20	2.23	0.21	25	0.57	344	2	0.04	27	0.06	5	2	53	7	<0.01	<1	35	<1	74
090PH91B	<0.5	1.53	9	<1	<1	60	<1	1.50	1	25	29	28	2.24	0.29	27	0.71	238	2	0.07	31	0.06	2	2	90	10	<0.01	<1	53	<1	73
213PH53R	<0.5	1.70	10	<1	<1	160	<1	1.15	2	32	58	26	3.14	0.25	27	0.59	320	5	0.09	25	0.06	2	4	58	5	0.03	<1	61	<1	90
213PH84R	<0.5	0.41	5	<1	<1	42	<1	8.43	<1	8	44	6	0.85	0.09	41	3.06	220	<1	0.03	6	0.02	6	<1	56	8	0.02	<1	25	<1	42
blk	<0.5	<0.01	<1	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	5	<0.01	<1	<1	<1	<1

0.500 Gram sample is digested with Aqua Regia at 95 C for one hour and bulked to 10 ml with distilled water.
Partial dissolution for Al, B, Ba, Ca, Cr, Fe, K, La, Mg, Mn, Na, P, Sr, Ti, and W.

Certified by: ______________________

Appendix 6

MINERAL ASSESSMENT
EXPENDITURE BREAKDOWN BY TYPE OF WORK

☐ **Estimated Expenditure** (submitting with **Statement of Intent to File**)

☒ **Actual Expenditure** (**for Part B of Report**; Must match total filed in Part A)

Project Name: Zama Lake Pb-Zn Project

	AMOUNT
1. Prospecting	$**12,000**
2. Geological Mapping & Petrography	$
3. Geophysical Surveys	
a. Airborne	$**327,405**
b. Ground	$
4. Geochemical Surveys	$**95,639**
5. Trenching and Stripping	$
6. Drilling	$
7. Assaying & whole rock analysis	$
8. Other Work: ______	$
SUBTOTAL	$**435,044**
9. Administration (up to 10% of subtotal)	$ **43,504**
[redacted] **TOTAL**	$**478,548**

Paul A. Hawkins
SUBMITTED BY (Print Name)

14Jul2006
DATE

Alberta
Government

Disclaimer

This page was inserted by the Coal and Minerals Development Branch, to provide a reference that there is a Part C attachment that can additionally down loaded. This page was not included in the original document.