

# MAR 20050008: NORTHWEST

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20050008

**NORTHWEST ALBERTA PROJECT**

**Mineral Assessment Report (Revised)**

**Metallic and Industrial Minerals  
Permit Nos. 939701001 and 939701002  
Permit Holder Alan David Lewis**

**Submitted by**

**713803 Alberta Ltd**

**December 6, 2006**

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## **Executive Summary**

### **Activities of 713803 Alberta Ltd. May 2003 to April 2005**

The last mineral assessment report was submitted on May 12, 2003. Since that time the activities of 713803 Alberta Ltd. have been primarily a continuation of testing of ore pretreatment and assay analysis techniques at Mr. Lewis' home-based lab facilities.

Mr. Lewis has continued to improve and extend his facilities. Photographs of his equipment are included in this report.

Unfortunately, consistent with prior experience, none of that additional work in the period since May 2003 has been successful in establishing either the existence of significant quantities of precious metals on a widespread basis in the ore bodies or a commercially viable technique to extract those precious metals.

713803 Alberta Ltd. has maintained contact with other companies or individuals who are pursuing similar efforts to extract precious metals from similar ores to determine if any joint efforts are feasible. These discussions have not led to any joint ventures at this time.

## **1.0 Introduction**

713803 Alberta Ltd. was incorporated in 1996 for the purpose of pursuing exploration and development of potential precious metal bearing properties in northwestern Alberta including the properties that are the subject of this report held under metallic and industrial minerals permit #9397010002 and #9397010001 in the name of Alan David Lewis, a shareholder of 713803 Alberta Ltd. (see figure 1.1 showing mineral permit location).

Previous Mineral Assessment Reports have been filed on May 14, 1999, May 17, 2001 and May 12, 2003. This report describes the further work conducted in the period from May 2003 to April 2005 which has consisted almost entirely of continuing lab analysis by Alan Lewis in his home based facilities supported by external commercial lab analysis. For completeness and ease of reference certain extracts of earlier reports are included in this report

Some of the analytical work performed by Mr. Lewis in the current reporting period has been based on suggestions and input received from Mr. Norm Smalley, a 713803 Alberta Ltd. shareholder who is also a well experienced independent assay analyst.

Contact has been maintained with Birch Mountain Resources Ltd. to determine if there was interest in pursuing any exploration/analysis work on the subject permit lands or sample ores

These various activities will be described in more detail in the following sections of the Report.

## **2. Lab Scale Mineral Content Analysis**

Lab scale analyses were conducted by:

- Al Lewis (51 tests in total) at his home lab
- Loring Laboratories Ltd.
- SGS Lakefield Research Limited

Each of these series of tests will be described below.

### **2.1 Al Lewis**

An overview of the qualifications and experience of Mr. Lewis is provided.

Mr. Lewis first became interested in gold mining in the nineteen seventies. Through reading, visits to gold mining operations in Australia and the Yukon and discussions with people active in the mining industry, Mr. Lewis developed sufficient knowledge and interest to initiate his first actual mining activity in the Yukon in 1980.

During the next seventeen years from 1980 to 1997, Mr. Lewis and his associates mined several properties in the Yukon including Bonanza Creek, Vancouver Creek, and the Moosehorn Range with varying degrees of success. In some years, 40 to 80 oz. of gold per day was successfully mined over the course of the 90 day summer Yukon mining season.

In the mid nineteen nineties, Mr. Lewis became aware of the gold potential of Northwestern Alberta and through his knowledge and experience developed a proposal that was successfully presented to 10 other investors in 1996 resulting in the formation of 713803 Alberta Ltd. These individuals, along with Mr. Lewis, remain the shareholders of 713803 Alberta Ltd. to the present day.

Mr. Lewis equipped his own testing lab using the knowledge he had gained in the seventeen years of Yukon mining experience. Supplemented by additional discussion and reading germane to the "fine gold" type of ore found in Northwestern Alberta, Mr. Lewis developed and continues to develop the analytical approaches that are being used by 713803 Alberta Ltd.

In the early years of 713803 Alberta Ltd.'s activities, confirmation of the quality of Mr. Lewis' laboratory facilities and analysis was provided by Mr. Doug Read, President of Cantech Laboratories Inc. Mr. Read confirmed in a letter provided to 713803 Alberta Ltd. that the work performed by Mr. Lewis was reliable and consistent with established practices of commercial laboratories.

A copy of the letter provided by Mr. Read, dated September 15, 1997 was included in 713803 Alberta Ltd.'s original 1999 assessment report dated May and is again included as attachment 2.1.1 in Section 2 of this report. Since the time of writing of Mr. Read's

letter, Mr. Lewis has continued to improve the quality of this equipment and now has in place an additional propane-fired furnace and has an improved scale capable of resolution to one ten thousandth of a gram. Mr. Lewis has also obtained a separate lab trailer to house the laboratory equipment, which again improves the quality of operations from the time of Mr. Read's assessment when the lab equipment was housed in a vehicle garage. Photographs of Mr. Lewis' laboratory equipment are included as attachment 2.1.2 in Section 2 of this report

Mr. Lewis and other 713803 Alberta Ltd. shareholders also met with principals of Birch Mountain Resources Ltd., a much larger public company, which has been engaged in research and development of "fine gold" analytical process is in the same time frame as 713803 Alberta Ltd. The purpose of the discussion was to explore analytical approaches to Northwestern Alberta "fine gold" ore samples. The Birch Mountain personnel were similarly supportive of the approaches and analytical techniques undertaken by Mr. Lewis.

A chronological summary of all tests conducted by Al Lewis from April 25th of 2001 to March 26th, 2003 is shown on Table 2.1 entitled "Test Procedures and Values", included as Attachment 2.1.3. Column 1 shows the period of time over which the test was conducted and Column 2 provides the test number.

Column 3 shows the type and source of ore tested and the size of the sample used in the test in terms of the number of assay tons. Of the 51 tests, 33 of the ore samples came from locations within the Lewis permit lands as shown on Figure 1, included as Attachment 2.1.4. The sources of the other 18 samples are described in the notes to Table 2.1. All of the other samples are of ore types similar to those obtained from the Lewis permit lands and were utilized as part of the ongoing efforts to establish viable and repeatable ore treatment and assaying technique. This is the critical knowledge that is necessary to prove up the value of the Lewis permit lands.

The geological assessment of the Lewis permit lands, originally included in the May14, 1999 Assessment Report is included again in this report as Attachment 2.1.5.

Column 4 describes the pre treatment and/or leaching agent used to extract precious metals.

Column 5, entitled "Value", provides the results obtained. Where the bead obtained from a specific test has been analyzed for precious metal content by an external laboratory, the results obtained from the external laboratory are provided. The name and test file number from the external laboratory are provided in Column 6. In those instances where no external analysis has been done the value stated is that measured by Al Lewis. The values stated will be the milligram weight of the bead obtained and that milligram weight converted to a weight of precious metal (in fractions of an ounce) per ton of raw head ore (OPT). This conversion of bead weight to precious metal concentration is achieved by dividing the bead weight by the number of assay tons in the sample that was analyzed.

An assay ton (A.T.) is defined as follows:

1 ton of ore (2000 lbs.) avoirdupois weighs 29166 troy oz.

1 assay ton (A.T.) weighs 29.166 grams.

Therefore, if the 'assay ton' yields 1 mg. of precious metal, it follows that the 2000 lb. ton of ore has a yield of 1 troy oz. per ton of ore.

Finally, column 7 shows the hours of work performed by Mr. Lewis in conducting the test.

## **2.2 Discussion of Lewis Analytical Techniques and Results**

As discussed in previous assessment reports (May 14, 1999, May 17, 2001 and May 12, 2003), 713803 Alberta Ltd. continues to face the challenge of developing and establishing a reliable and repeatable sample pretreatment and leaching techniques to remove and capture the precious metal content from the ore sample. Accordingly, the test analyses reported in the Table 2.1 entitled "Test Procedures and Values" in this assessment report note in Column 3, the various pretreatment and leaching and processes that were used.

The pretreatment agents included:

H<sub>2</sub>SO<sub>4</sub> (sulfuric acid)  
NaOH (Sodium hydroxide)  
HNO<sub>3</sub> (nitric acid)

Differing concentrations and proportions of these pretreatment agents were used in the various tests.

Once a sample was pretreated, different leaching agents were utilized to extract the precious metals from the ore samples. These leaching agents included:

HCl (three parts) and HNO<sub>3</sub> (one part) (known as Aqua Regia)  
NaCl (common salt)  
NaBr (sodium bromide)  
KI (potassium iodide)

Again, different concentrations of leaching agents realized in various tests. These varying concentrations of leaching agents resulted in differing levels of PH (acid – alkalinity balance) and differing levels of ORP (oxidation reduction potential).

The leached solution was then precipitated and dried. The dried precipitates were then fired in a conventional fire assay and the resulting bead weighed. In certain instances as



noted in the table the bead precious metal content was analyzed by an external lab (Loring) to provide independent confirmation of the results that Lewis was achieving.

The specific concentrations of agents used in the various analyses are not reported in Table 2.1. This is based on the anticipation of 713803 Alberta Ltd. that once repeatable techniques are established that they would provide proprietary analytical knowledge which could be the basis of patent applications.

However, in order to provide the maximum amount of information, copies of Mr. Lewis' laboratory log notes covering Lewis test nos. 766 to 830 (redacted to exclude sensitive information) are provided as Attachment 2.2.1. For test #802 to #830 inclusive, additional log notes (Attachment 2.2.2) are provided to describe the typical information that is recorded for the firing process of each test.

As compared to the earlier assessment reports, fewer tests have been performed by Mr. Lewis, but more of the Lewis assay beads were forwarded to external labs for measurement of precious metal content in the beads.

However, the fact that we continue in a few tests to find significant values of precious metal (as confirmed by the Loring tests) provides a basis for continuing efforts to prove the existence of commercially significant levels of precious metals and to ultimately develop a repeatable and commercially viable extraction process.

### **2.3. Loring Laboratories**

All the tests conducted by Loring were to analyze the precious metal content of beads obtained from tests conducted by Al Lewis. Twenty-one Loring test reports are included in chronological order as attachment 2.3.1. An examination of these test results shows that almost all the Loring tests showed measurable precious metal content. However, there was significant variability in precious metal content ranging from some tests where precious metal content was below the detection limits of the tests (e.g., #826 and #827), to others where the measured precious metal content was significant (e.g., # 808 and #810) and represented values within possible commercial feasibility. The majority of the tests produced measurable content, but was below commercial viability.

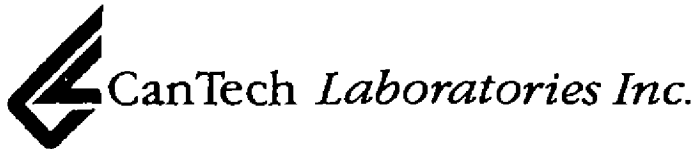
### **2.4. SGS Lakefield Research Limited**

In June of 2003, Mr. Lewis met with analysts at Lakefield to discuss our project and have Lakefield perform assays on four samples of raw ore, as well as on the material obtained from two Lewis tests (#772 and #774).

The results obtained by Lakefield are included as Attachment 2.3.2. Lakefield did not find any significant quantity of precious metals in the raw samples (nos. 1, 2, 3 and 6 in the Lakefield Report), nor did they find any significant quantity of precious metals in the bead obtained by Lewis in Lewis Test No. 774. The results for Lewis test No. 772 did show measurable quantities.

**ATTACHMENT 2.1.1**

**Douglas Read Letter**



September 15, 1997

713803 Alberta Ltd.  
124 Edgehill Close N.W.  
Calgary, Alberta  
T3A 2X1

Attention: Mr. G.R. Walsh

Re: Assay Procedure (Alan Lewis)

Dear Sir:

At your request, I visited the home of Mr. Alan Lewis in Ponoka, Alberta on July 17, 1997 to view his assaying operation. In addition to yourself, Alan and Mr. Bob Liddle, two other gentlemen were also present, namely Messrs. Art Wilkins and Barry Luft whom I understood are also participants of this Company.

I make a few comments herewith:

**Sample Preparation:** The rolling ball mill in use is acceptable and appropriate for this type of operation. I did not see the cleaning of the mill after the sample was prepared; however, Alan assured me that compressed air and brushes were used between samples.

**Sample Weighing:** A beam balance was used for weighing both the sample and the flux charge for fire assay. A more accurate digital top-loading balance would be more suitable and accurate.

**Fire Assaying:** The electric furnace in use is acceptable. My only comment would be that the temperature increase is slow and difficult to maintain at the desired temperatures of 1600 F and 2000 F. This lack of temperature control could possibly have some effect on the end result.

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I provided Alan with a CANMET Certified Reference Sample from Ottawa to run alongside the samples he was assaying that day. The result he obtained for this standard was certainly within the accepted range after taking into consideration the possibility of errors arising from the above comments. His result of 0.165 opt compared with the accepted value of 0.25 opt.

Overall I found the procedures for sample preparation and fire assaying carried out by Alan to be of a generally acceptable standard.

I hope this information is of assistance to you. If you have any questions, please do not hesitate to contact me.

Yours truly,  
CanTech Laboratories, Inc.



C. Douglas Read  
President

**ATTACHMENT 2.1.2**

**Photographs of Lewis Laboratory Equipment**



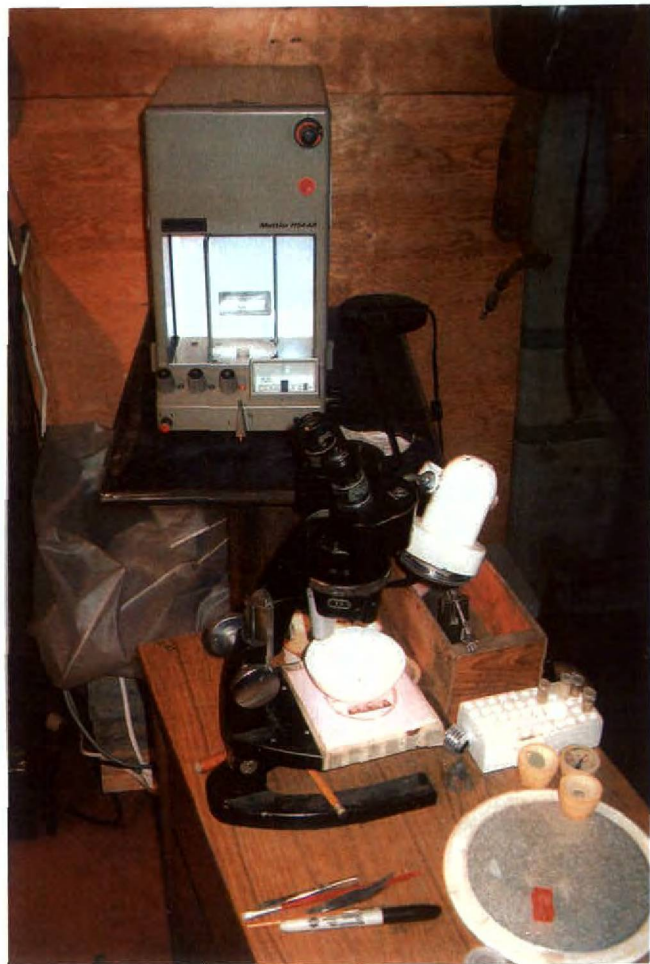
Precision Scale  
Accurate to milligram



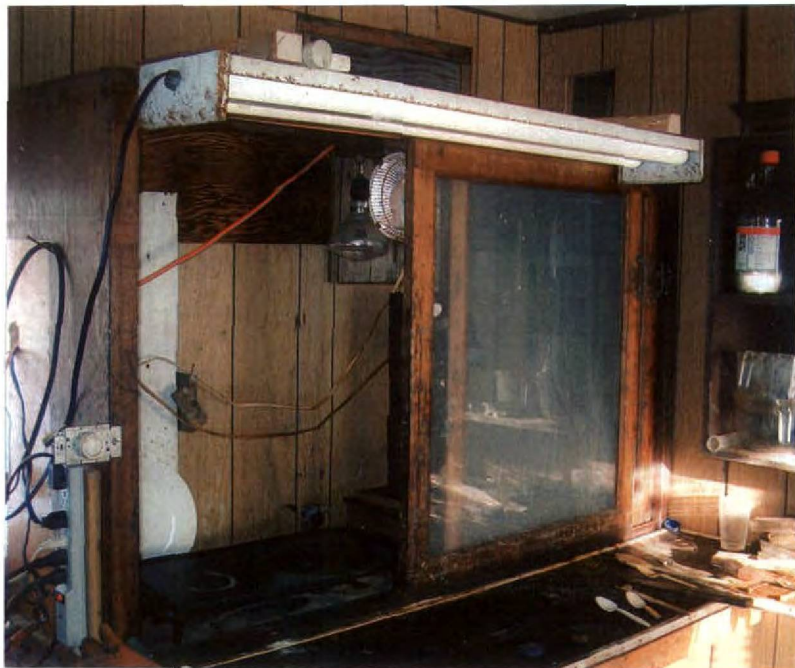
Microscope 128X + 352X



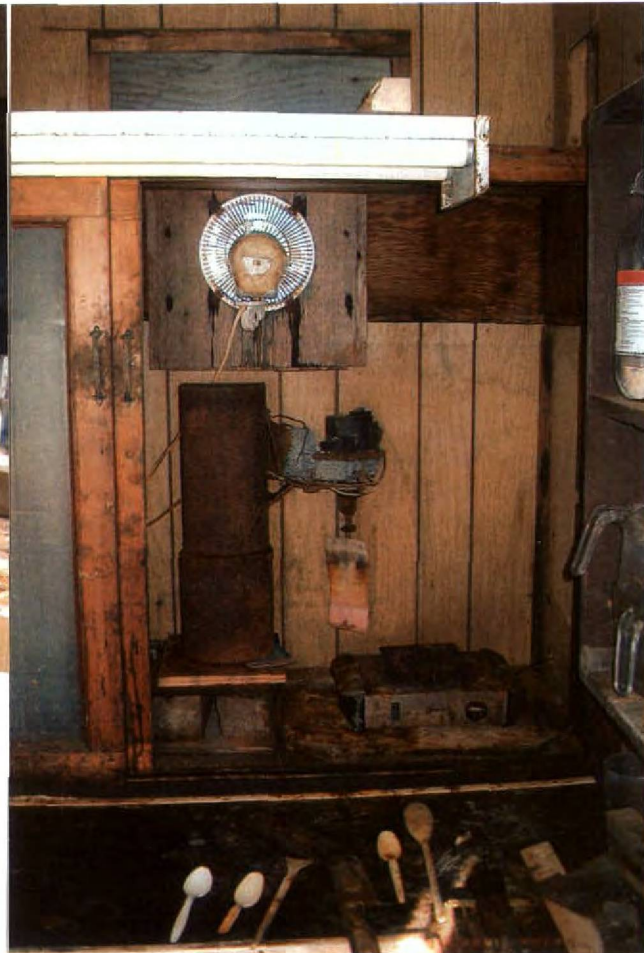
Balance - to weigh ore  
Samples and reagents.



20X 30X 60X  
To examine beads etc.



Glass enclosed fume Hood containing drying grill area



Rt. side of Hood with mixing device and hot plate for leaching.



Propane-fired furnace



Electric Cupeling Furnace

**ATTACHMENT 2.1.3**

**Table 2.1**

**Test Procedures & Values**



**TABLE 2.1  
TEST PROCEDURES & VALUES**

(1) DATE	(2) TEST	(3) ORE	(4) PROCESS	(5) VALUE	(6) EXT. LAB	(7) HOURS
Apr. 19-21/03	#766	Roger 3 A.T.	HN03, HCL Zinc precip.	Au and PGMs .24 mg., .08 OPT		26 hrs.
May 1/03	#767	Roger 1 A.T.	HN03, HNOCL	0		16 hrs.
May 5-7/03	#768	Roger 5 A.T.	Chloride Zinc precip.	Not parted Au,Ag and PGMs 0.532mg., .106 OPT		15 hrs.
May 13/03	#769	20% from #768	Roasted dish broke	0		12 hrs.
May 14/03	#770	20% from #768	Sodium Nitrite NaHC4	Au and PGMs. .22mg., .22 OPT		10 hrs.
May 15/03	#771	20% from #768	Bicarbonate Sodium Nitrite	Au and PGMs. .10 mg., .10 OPT		12 hrs.
May 18/03	#772	Roger 5 A.T.	Chloride	Au 1.30 g/t. Pt. 1.45 g/t Pd. 0.56g/t	Lakefield #CA9457	11 hrs.
May 26-27/03	#773	Roger 5 A.T.	Chloride	trace Au.		14 hrs.
Jun. 2-3/03	#774	Roger 5 A.T.	Chloride	Au. <0.0002 g/t Pt. 0.0007 g/t Pd. <0.0002 g/t	Lakefield #CA9457	15 hrs.
Jun. 14-15/03	#775	Roger 5 A.T.	NaBr, KI Pretreat H2SO4	Au. And PGMs .20 mg., .04 OPT		18 hrs.
Jun. 24-25/03	#776	Roger 5 A.T.	Pretreat H2SO4 NaBr, KI	Au. and PGMs 0.21 mg., .042 OPT		23 hrs.
Jul. 7-8/03	#777	Roger 5 A.T.	Pretreat Na OH NaBr., KI	Not parted Au,Ag and PGMs 0.363 mg.,.073OPT		10 hrs.

(1) DATE	(2) TEST	(3) ORE	(4) PROCESS	(5) VALUE	(6) EXT. LAB	(7) HOURS
Jul. 23-25/03	#778	Roger 5 A.T.	NaBr	Not parted Au,Ag and PGMs 0.15mg., .03 OPT		33 hrs.
Jul. 31, Aug. 7-9/03	#779	Roger 5 A.T.	Chloride	Lost		29 hrs.
Aug. 14-15/03	#780	Roger 20 A.T.	Chloride	Au and PGMs. 0.82mg., .041 OPT		22 hrs.
Sept. 8-10/03	#781	Roger 5 A.T.	Chloride	Au,Ag,PGMs 0.21mg., .042 OPT		31 hrs.
Oct. 2/03	#782	Conglomerate 5 AT	HNO3 HCL	Au,Ag, PGMs 0.07mg., .014OPT		13 hrs.
Oct. 7/03	#783	Plant 5 A.T. Note 1	Aqua Regia	Au, Ag, PGMs 0.03mg.,.006 OPT		11 hrs.
Oct. 18/03	#784	Plant 5 AT Note 1	Aqua Regia	Au trace		11 hrs.
Oct. 21-22/03	#785	Roger 5 A.T.	NaBr, KI	Au and PGMs .035 mg.,.007 OPT		16 hrs.
Nov. 4-5/03	#786	Chin. 5 A.T. Note 2	NaBr, KI	Au and PGMs 0.21 mg., .044 OPT		21 hrs.
Dec. 8-11/03	#788	Roger 5 A.T.	NaBr, KI	Au .0035mg., .0007OPT	Loring #46193	36 hrs.
Dec. 20-21/03	#789	Roger 5 A.T.	Chloride	Au .0016mg.,.0003 OPT	Loring #46257	22 hrs.
<b>Note:nos 790 to 801 not used</b>						
Feb. 11/04	#802	Roger 5 A.T.	NaBr, KI	Au .0069mg., .007 OPT Pt .001mg., .001 OPT Pd..0015 mg., .0015 OPT	Loring #46385	12 hrs.
Feb. 12-13/04	#803	Roger 5 A.T.	NaBr, KI	Au .019 mg., .019 OPT Pt..0025 mg., .003 OPT Pd..0018 mg., .0018 OPT	Loring #46385	17 hrs.
Mar. 9-10/04	#804	Far West 5 A.T.	NaBr.,KI	Au .065mg., .014 OPT	Loring #46428	18 hrs.
Mar. 18-19/04	#805	6-26, 5 A.T. Note 1	NaBr	Au .0198mg. .0198 OPT	Loring #46466	18 hrs.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
DATE	TEST	ORE	PROCESS	VALUE	EXT. LAB	HOURS
Mar. 30, Apr. 1/04	#807	Cong. 5 A.T.	NaBr	Au .135mg .027 OPT	Loring #46476	21 hrs.
Apr. 17-29/04	#809	Cong. 5 A.T.	Aqua Regia	Au .032 mg., .0064 OPT	Loring #46548	26 hrs.
May 5-7/04	#808	6-26 Plant Note 1	Aqua Regia	Au .505mg., .505 OPT	Loring #46549	27 hrs.
May 7-10/04	#810	Far West 5 A.T.	Aqua Regia	Au .836mg., .167 OPT Pt .0059mg .0012 OPT	Loring #46618	31 hrs.
May 27-30/04	#811	Ron. 5 A.T. Note 1	Aqua Regia	Au .086mg, .017 OPT	Loring #46672	42 hrs.
Jun. 14-18/04	#812	Chin. 5 A.T.	Aqua Regia	Au .022mg., .004 OPT	Loring #46745	36 hrs.
Jun. 20-27/04	#813	Cong. 5 A.T.	Aqua Regia	Au .026mg., .005 OPT	Loring #46745	32 hrs.
Jun 24-27/04	#814	Sand under Cong. 5 A.T.	Aqua Regia	Au .024 Mg., .0048 OPT	Loring #46745	30 hrs.
Jul. 6-10/04	#815	Conglomerate 5 A. T..	Aqua Regia	Au .056mg., .0012 OPT	Loring #46774	46 hrs.
Jul. 24-27/04	#816	Far West 5 A.T.	NaBr	Au .079mg., .0158 OPT	Loring #46803	36 hrs.
Aug. 3-6/04	#817	Reg. 5 A.T. Note 3	NaBr	Au .015mg., .003 OPT	Loring #46881	36 hrs.
Aug. 12-15/04	#818	6-26 3.5 A.T. Note 1	Aqua Regia	Au .048mg., .0137 OPT	Loring #46881	36 hrs.
Aug. 18-19/04	#819	Worsley 5 A.T. Note 4	Aqua Regia	Au .012 mg., .0024 OPT	Loring #46881	32 hrs.
Aug. 30-31/04	#820	6-26, 5 A.T. Note 1	NaBr	Au .012 mg., .0024 OPT	Loring #47103	21 hrs.
Sept. 19-21/04	#821	6-26, 5 A.T. Note 1	Aqua Regia	Au .031mg., .0062 OPT	Loring #47103	36 hrs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)

DATE	TEST	ORE	PROCESS	VALUE	EXT. LAB	HOURS
Oct. 12-13/04	#822	Reg. 10 A.T. <u>Note 3</u>	NaBr	Au 0.712 mg., .0712 OPT	Loring #47175	20 hrs.
Dec. 2/04	#823	Reg. 4 A.T. <u>Note 3</u>	NaBr	Au .012 mg., .003 OPT	Loring #47253	13 hrs.
Dec. 12-13/04	#824	Reg. 3 A.T. <u>Note 3</u>	NaBr	Au .015 mg. .005 OPT	Loring #47253	21 hrs.
Jan. 10/05	#825	Reg. 3 A.T. <u>Note 3</u>	NaBr KI	Au .003 mg., .001 OPT	Loring #47253-1	17 hrs.
Jan. 19-20/05	#826	<u>Far West 3 A.T.</u>	Chloride	trace Au	Loring #47350-Feb 1	26 hrs.
Jan. 27-30/05	#827	<u>Far West 3 A.T.</u>	Aqua Regia	trace Au	Loring #47350-Feb 11	24 hrs.
Feb. 10-11/05	#828	<u>Far West 2 A.T.</u>	Aqua Regia	Au .017 mg. .0085 OPT	Loring #47421	21 hrs.
Mar. 1-4/05	#829	Far West 4 A.T.	Aqua Regia	Au .080 mg. .020 OPT		33 hrs.
Mar. 24-25/05	#830	Ron 5 A.T. <u>Note 1</u>	Aqua Regia	Au .530 mg., .106 OPT		28 hrs.

Notes re: source of Ore Samples from areas other than Lewis permit lands

All ore samples from other locations are from locations where ore has similar characteristics to ore on Lewis permit lands

Note 1: Samples are from the vicinity of gas well and plantsite in Section 26 Twp 79 Rge 9 W6M

Note 2: Samples are from outcrops along Chinchaga River, 160 km N.W. of Hinton, near Alta/B.C border

Note 3: Samples are from a location 7km southwest of Dawson Creek

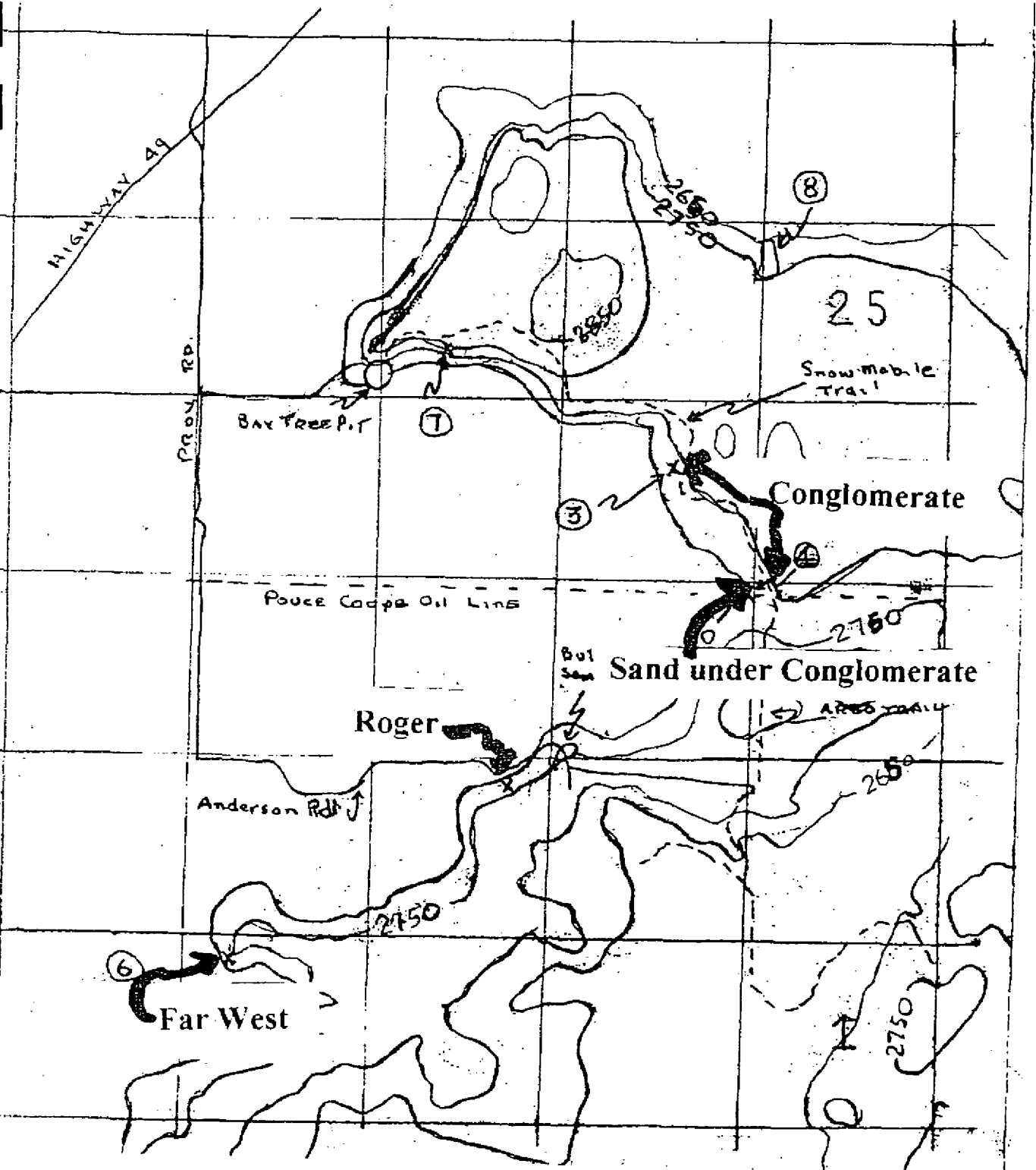
Note 4: Samples are from Worsley area, 95 km northeast of Baytree along Highway 49

**ATTACHMENT 2.1.4**

**Location of Ore Samples**

TWP 78 R6E 13 W6M

Figure 1 - Sample Source Location



- 2750 - SURFACE ELEVATION

**ATTACHMENT 2.1.5**

**Geological Interpretation Report**

**Attachment 1**

**Geological Discussion**



### 3. Geological Interpretation Report

The 713803 Alberta Ltd. geological interpretation of the "west" permit area, as it relates to the Bad Heart sandstone and conglomerate deposits is set out in the following report entitled "Geological Survey, November 11-12, 1997" prepared by A.A. Wilkins, P.Geol.<sup>1</sup>

Also attached is a copy of a field drilling report prepared by the Manager of Drilling, Mr. B. Luft, for activity undertaken during the period March 21 through March 25, 1998 (Attachment 3.1). This report has been previously submitted to the Alberta Land and Forest Service on May 22, 1998.

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<sup>1</sup> Note that further interpretation letter reports have also been provided by Placer Dome North America (Section 5.1) and BHP Minerals Canada Ltd. (Section 5.2).

## Geological Survey November 11-13, 1997

A geological Field Trip was made to the West Permits to determine the best location to capture bulk samples for analysis.

Base Camp was established at the Airport Motel in Dawson Creek on November 11, 1997. Using Alan Lewis' 4x4 Dodge Ram Extended Cap Truck and all terrain ARGO low pressure rubber tire 8 wheel vehicle Messrs. Lewis, Luft, and Wilkins carried out a two day geological field trip over 713803 Alberta Ltd.'s West Permits and adjacent lands.

Although unanimous agreement concerning the geological interpretation of the West Permits was not reached, the following summarizes the writer's observations and opinions regarding the stratigraphic nature of the Bad Heart Conglomerate and Sandstones at eight (8) locations visited during the field trip. (See Map 1).

### Day 1 November 12

#### Site (1) NW ¼ Section 29 78 12 W6M (Not on Map)

This site, a local "gravel pit" on crown lands, sits approximately two miles east of the West Permit's eastern boundary. Access was reached by foot from a good condition provincial road. Very little sediment has been removed from a twenty foot high glacial mound of poorly sorted clays, sand, pebbles and boulders. A very poor access road, mainly ice covered, probably is the reason why only limited amounts of material have been taken from this pit. The surface elevation of the pit ranges between 2650 and 2700 feet therefore the top of the Bad Heart Sandstone has been glacially eroded. Drilling would be required to determine:

- 1) the surface elevation and thickness of the Bad Heart Sandstone; or
- 2) if it has been totally glaciated at this location

Site (2) N ½ Section 10 78 13 W6M

Access to this location was reached, from Site 1, by Lewis' 4x4 truck with the ARGO in tow. Travelling in a south and southwesterly direction the surface elevation ranged between 2650 and 2850+ feet over the eight miles traversed. Road conditions, provincial and well site, over the eastern portion of the West Permit varied from good to very poor. Timber in the area is mainly mature poplar with some spruce growing out of clayey glacial debris. The Bad Heart Sandstone was not observed to outcrop along this road traverse.

At the Site, Luft and Wilkins walked a ¼ mile South to North traverse along a cut line from an abandoned well site in the NW ¼ of section 10 to the boundary of section 15 (Anderson Road). Glacial debris caps the hill at the well site location. About 200 feet of elevation drop took place from the beginning to the end of the traverse (2793 to 2600 feet).

No out crops of the Bad Heart Sandstone were observed, however it was evident from sediments contained in the root systems of fallen trees that the Bad Heart Sandstone lies very close, within 1 to 3 feet, of the surface at this location.

The sample collected by Luft and Lewis in this locality, during their September trip, is probably a mixture of indigenous Bad Heart Sandstone and glacial debris. Also, in close proximity to this location, a large (1 and ½ ton) bulk sample was taken by Lewis and Wilkins during the brutally cold winter of 1996. No further samples were collected from this site since Lewis has carried out numerous assays on the bulk sample sediments, as well as the material mentioned above, collected in September.

Site (3) NW ¼ Section 23 78 13 W6M

The ARGO was used to reach this location, following a quick carburetor overhaul done by Lewis with Luft's assistance. A good trail (ARGO TRAIL) about 30 feet wide, impassible in places by a 4x4, runs due north along the western boundary of section 13 and then NNW across section 23. Logging of poplar trees has occurred along this trail with preparations underway for further removal of timber during the upcoming winter.

This site was first visited in the winter of 1996 by Wilkins. Access was gained, from the west, by snowmobile operated by a local farmer/trapper who resides in the Spirit River Area. Messrs. Fonteyne, M. Frost and Lewis collected samples from this site and surrounding area this past summer. As well Luft and Lewis collected bed rock samples from this site during their September trip.

About 45 feet of Bad Heart Conglomerate outcrops at this location, forming a near vertical cliff face. Considerable spalling and slumping has taken place dislodging large, up to 40 x 40 foot blocks, of conglomerate. The sandstone has a gradual slope, about 3.0 degrees, and is covered by topsoil and vegetation. The conglomerate was observed to outcrop 50 to 75 yards to the east of the cliff face. To the SE for about 1/2 mile the conglomerate outcrops and is generally covered by a thin layer of moss. To the NW the cliff face can be seen extending almost to the Bay Tree pit.

Bot the conglomerate and sandstone dip about 5 degrees to the East, although a true dip reading is not possible because of the slumping that has occurred at this location. Samples of the conglomerate and sandstone (at the contact point) were collected. It was observed that the grain size of the conglomerate pebbles increased from the base to the top of the exposed interval suggesting a shore line environment rather than channel fill.

Site (4) NW ¼ Section 14 78 13 W6M

A glaciated depression forms a draw and shallow saddle between the two major topographic highs on the West Permit. The Pouce Coupe oil pipeline right-of-way runs up the center of this draw along the northern border of section 14. Luft and Lewis collected a sample from this right-of-way during their September trip. Rounded glacial boulders, granite and quartzite, were observed at the sample collection site as well as 20 feet below such site where a large uprooted tree exposed the underlying sediments. Sufficient platy sand fragments were observed at both locations to indicate that the glacial till probably contains, in part, Bad Heart Sandstone indigenous to the area.

Day 2 November 13

Base Camp was Vacated at 8:30 a.m.

Site 5 Tree Tower Pit (Located in B.C. 3 Miles due West of Section 4 of West Permits)

(Not on Map)

Site 6 NW ¼ Section 4 78 13 W6M

This site was reached by ARGO, travelling south on a cut line which runs along the eastern boundary of Section 8 and then east on a very old cut line, heavily overgrown by 2 to 3 inch poplar trees. Luft and Lewis collected random samples from this cut line near the 2700 to 2750 foot surface elevation during such trip. A short distance to the south of the cut line Wilkins observed and collected samples from Bad Heart Sandstone outcrops which were discovered at 2750, 2700 and 2675 foot surface elevations. The sandstone dips in the range of 5 to 10 degrees to the east at this location although some slumping may have taken place. The Bad Heart Conglomerate was not found at this location.

#### Site 7 SW ¼ Section 27 78 13 W6M

Luft and Wilkins accessed this location by foot climbing in a northeasterly direction from the Bay Tree pit. The northwestern end of the horseshoe shaped cliff escarpment was intersected about ½ mile from the Bay Tree pit. At this location, the cliff is capped by 1 foot of conglomerate underlain by cliff forming sandstone. Total vertical thickness, "eye balled" from the top of the cliff, is estimated to be 25 to 30 feet. Samples from both the conglomerate and sandstone were carried back to the 4x4 at the Bay Tree pit.

#### Site 8 NW ¼ Section 25 78 13 W6M

This site, referred to as the Moxely Pit, was accessed by the Dodge 4x4 via a good provincial road. The Bad Heart Sandstone is within 1 foot of the surface at this location. The surface elevation ranges between 2750 to 2700 feet. Interbedded in the sand is 1 foot of conglomerate occurring 5 feet below the top of the sand. This conglomerate is finer grained and more friable than the cliff forming conglomerates observed at the other sites. Samples of the conglomerate and sandstone were collected.

#### **General Topography & Stratigraphy**

The thickest exposed Bad Heart conglomerate section observed was at Site 3. Pit excavations at Sites 5 & 8 expose the thickest sections of Bad Heart Sandstone. The most extensive removal of the Bad Heart formation has occurred at the Bay Tree pit which covers an area the size of a CFL football field from the pit's entrance to the eastern rim of the pit. Drilling will be required to confirm the remaining thickness of sandstone, however, a good estimation would be that about 5 feet of sand remains below the base of the pit. There is possibly an unexcavated 10 foot tier of sandstone about 50 by 30 yards remaining in the pit below the glacial till deposit which forms the topographic high (2800+ feet surface elevation) on the north side of the pit. (See schematic X Section 1).

The Bad Heart conglomerate is interpreted to be a shoreline deposit about 55 feet in thickness where it outcrops at Site 3. It occurs as a wedge in the sandstone sequence thinning to the northwest and the southeast. Based on a discussion held with a local Spirit River resident, who worked for NOVA during its pipeline construction in the area, the conglomerate extends several miles to the east. If dip readings at Site 3 are true the conglomerate will occur at increasing depths to the east. Overburden thickness will also be significantly greater in some areas. (See Schematic X Section 2).

More detailed mapping will be necessary to confirm the wedge-like nature of the conglomerate and facies change to sandstone along the horseshoe bluffs in sections 23 & 27.

The Bad Heart conglomerate is dark grey in color. Grain size of the pebbles varies from  $\frac{1}{4}$  to 1 inch and all are rounded or oval in shape. The pebbles are predominantly micro crystalline quartz or chert. The cementing agent is non-calcareous, probably silica. The matrix consists of fine sandstone and silt with only minor amounts of argillaceous material typical of a shoreline deposit. Grain size orientation provides the rock with considerable strength and hardness in one direction. However, when fragments are broken away from the outcrop they become very friable.

The Bad Heart Sandstone is tan in color composed predominantly of poorly rounded and irregular clear quartz grains in a very argillaceous matrix. The rock is weakly silica cemented and rock integrity results from packing of the argillaceous matrix.

The sandstone is interpreted to be marine deposit laid down in a tectonically active basin. Diastrophism formed the Peace River Arch, an uplift which occurred throughout the depositional history of the northwestern portion of the Western Canada Sedimentary Basin. Rapid sedimentation, in the geological sense, lays down poorly sorted argillaceous sandstones which the Bad Heart sandstone typifies.

The thickness of the Bad Heart sandstone underlying the West Permits is at least 90 feet. The base of the sandstone has not been seen in outcrop, however, the base of the Bay Tree pit may be near the contact with the underlying formation which is most likely a shale deposit (Muskiki Shale).

Bedding planes have been observed in outcrop sections and pit excavations. Bed thickness varies between only a few inches to over five feet. In sections where the sand is thinly bedded (platy), the rock splits along muscovite rich bedding planes.

### **Summary and Conclusions**

Field geology has identified 4 large areas where conglomerate and/or sandstone rock is within 1 foot of the surface. (See Map 2).

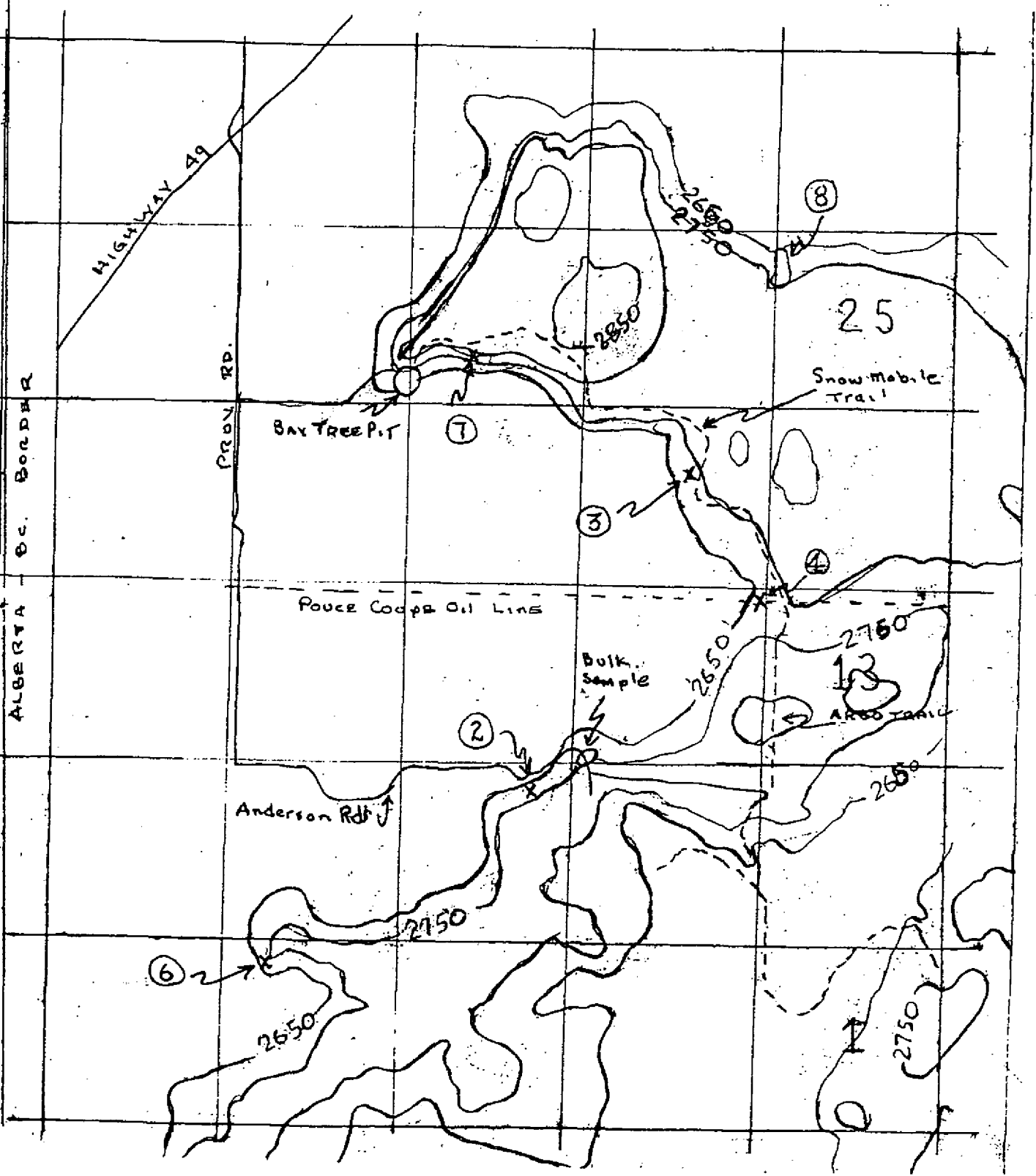
More selective analysis of the samples collected at the above sites will be necessary.

Sites 2 & 8 are the most easily accessible for bulk sample collection. Sites 3 & 7 may become more readily accessible if logging operations upgrade the roads into these sites.



TWP 78 RGE 13 W6M

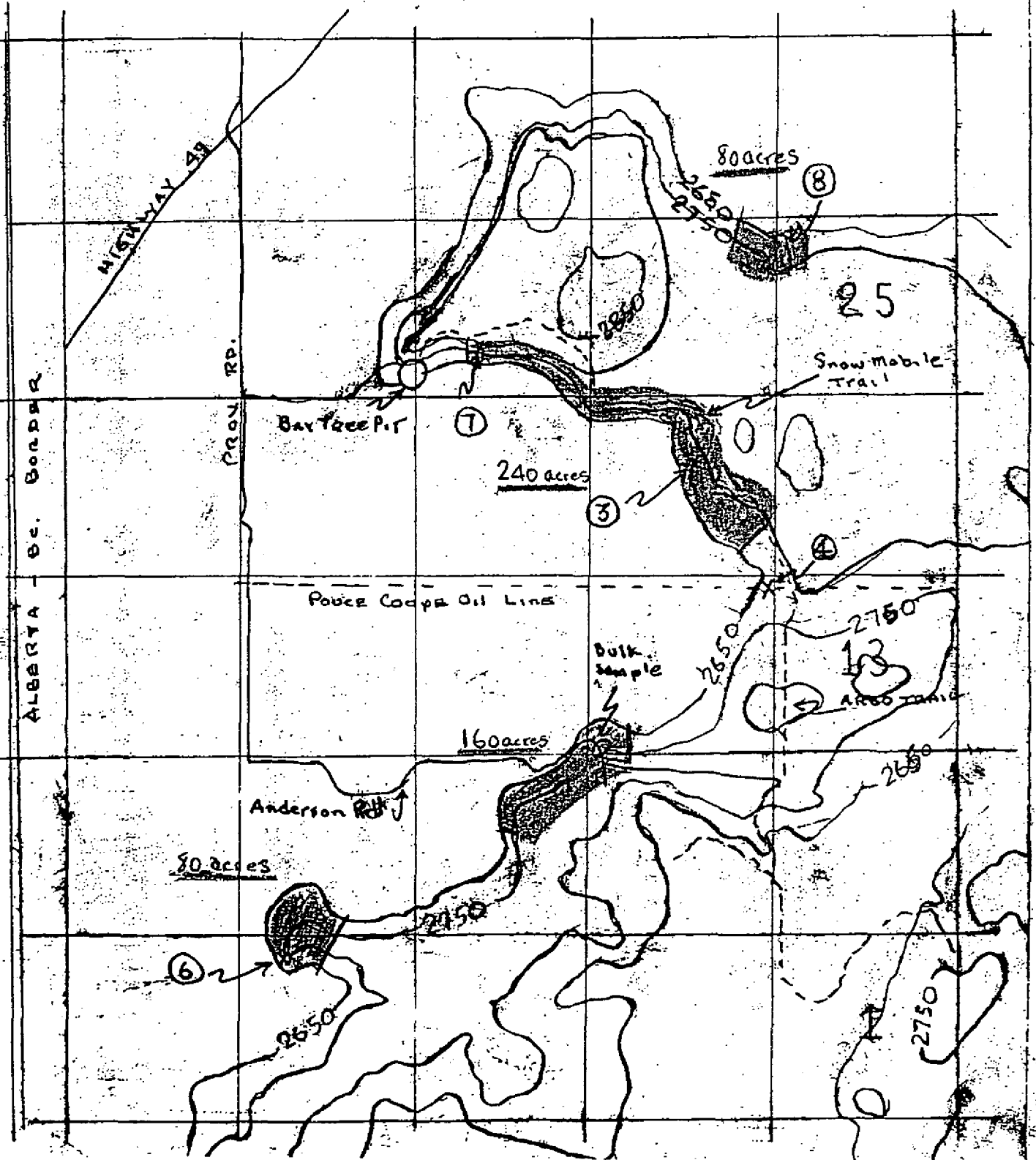
MAP 1



- 2750 - SURFACE ELEVATION

TWP 78 RGE 13 W6M

MAP 2.



- 2750 - SURFACE ELEVATION

S.W.

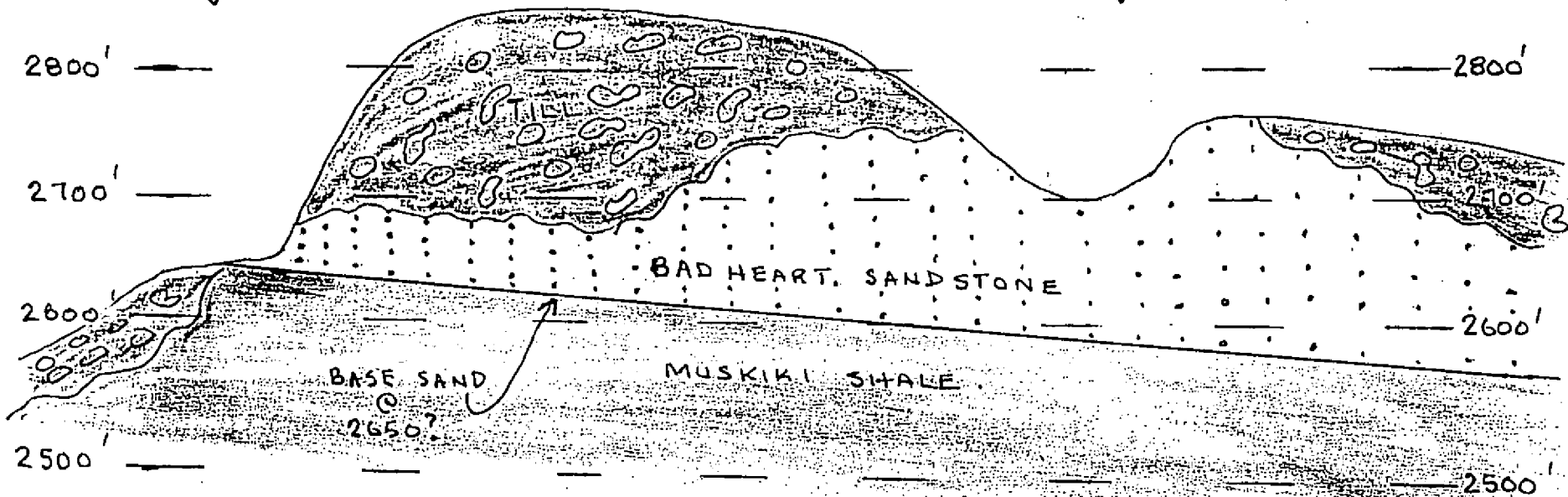
J. L. MURKIN SECTION (1)

N.E.

BAYTREE  
PIT

MOXELY  
PIT  
SITE (8)

~ 2 MILES



SCHEMATIC X-SECTION (2)

N W SE  
K ≈ 2 1/4 MILES →

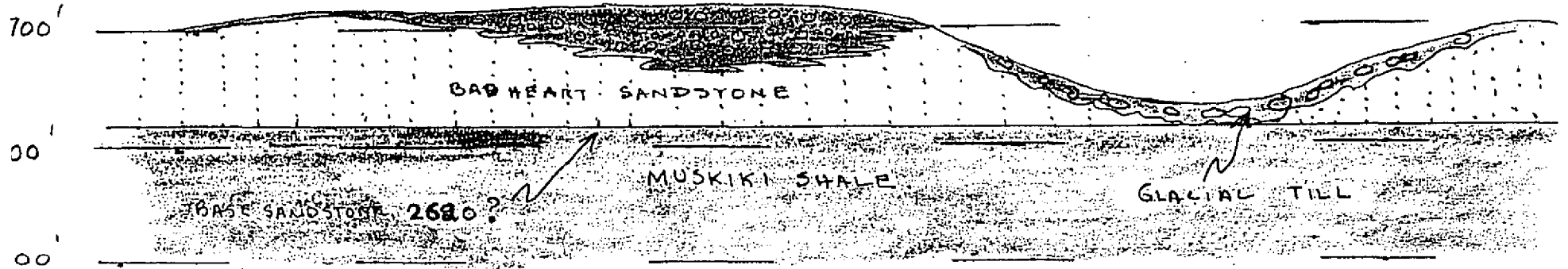
SITE  
①



SITE  
③



SITE  
④



B.G. Luft  
116 Oakland Place S.W.,  
Calgary, Ab. T2V 4M8

Phone (403)251-4508  
Fax (403)251-4508

May 22, 1998

Mr. Ralph Jamieson  
Exploration Technologist  
Disposition Services Branch  
Lands and Forest Service  
Petroleum Plaza, South Tower  
9914 - 108th Street,  
Edmonton, Alberta  
T5K 2G8

Dear Mr. Jamieson,

Re: Exploratory Drilling, Baytree, Alberta,  
713803 Alberta Limited  
Exploration Licence #5145

Enclosed are five copies of the final report on the exploratory drilling activity undertaken by 713803 Alberta Ltd. during March 23 and 24, 1998.

Also enclosed are copies of a summary report sent by our Mr. Alan Lewis to Mr. Cory Wojtowicz, Forest Officer, Land and Forest Service, in Grande Prairie, Alberta.

The drill cutting samples, 27 in all, have been forwarded to Mr. Dixon Edwards, P. Geology, at the Alberta Geological Survey in Edmonton.

Please contact myself or Bob Liddle at (403)239-4546 if you have any questions or comments.

Thank you.

Barry Luft  
for 713803 Alberta Ltd.

## FIELD REPORT

Saturday March 21 - Wednesday March 25, 1998

The objective was to arrange and oversee the drilling of six test holes to define the geographical extent, overburden depth and gross thickness of the Bad Heart conglomerate zone. Cutting samples were taken at all six wells.

### SATURDAY - MARCH 21

Lewis and Luft travelled to Hythe, Alberta and met with representatives of Hopper Drilling. (The principals of Hopper Drilling are located in Beaverlodge, Alberta, but their shop is in Hythe). We arranged to meet with the driller and his helper (Murray and Chad) in Pouce Coupe on Sunday, to travel to our permit area and determine the viability of the drilling program. Arrangements completed, Lewis and Luft progressed to Dawson Creek.

### SUNDAY - MARCH 22

We met with drillers in Pouce Coupe at 9 A.M., then travelled to the site of the recent oil well on the 'Anderson Road' (16-9-78-13), unloaded skidoos and travelled to site of #1 proposed test hole (NE/4 - Lsd. 16-9-78-13) at the top of the hill at the junction. It was apparant that the road would have to be snow-plowed prior to bringing in the drilling rig and water truck. Al and Murray continued on the snowmobiles to reconnoiter the other potential drill sites. All required some snow-plowing of roads, trails or cut lines to provide accessibility. We returned to Pouce Coupe and met with Herb Nodes of Nodes Construcion, to arrange for snow-plowing equipment. Herb agreed to provide a D-6 caterpillar tractor for Monday morning. We arranged to meet at the 16-9 lease site before 8 A.M. The driller agreed to be there shortly after 8 A.M. It was clear that any travel with heavier equipment had to occur prior to 9 A.M. NOTE: There was a 10 A.M. to 10 P.M. road ban in effect in Alberta.

### MONDAY - MARCH 23

Truck carrying the D-6 showed up at 16-9 lease at approximately 7:43 A.M., unloaded, attached dozer blade and proceeded to snow-plow the 'Anderson Road'. We reached #1 drill site at 8:55 A.M. Drilling rig and water truck arrived at the same time. Drill rigged up and started drilling at 9:25 A.M.

\*\*\*\* #1 NE/4 of Lsd. 16-10-78-13 Elev. 2750' TD 60'  
Sample intervals 0-10, 20-30, 30-40 and 40-50.

DRILLERS COMMENTS:

Encountered brown sand(stone?) at 4'  
Grey sand(stone?) at 7'  
Brown sand(stone?) to 17'  
2 or 3 ft. shale lens at 17'  
Brown sandstone from 20' to 30'  
Thin shale lens at 30'  
Brown sandstone to 35'  
Sandstone and shale to 40'  
Brown sandstone to 52'  
Grey shale from 52 to 60'  
End of stand - quit drilling

Cleaned up site and filled hole (didn't have enough cuttings to completely fill hole, so returned on Tuesday and completed filling with bagged produce supplied by driller). Travelled east to gas plant, then north to pipeline right-of-way to second site, immediate north side of the right-of-way. Rigged up and started drilling #2 at 11:50 A.M.

\*\*\*\* #2 NW/4 of Lsd 8-14-78-13 Elev. 2760' TD 60'  
Sample intervals 0-10, 10-20, 20-30, 30-40, 50-60

DRILLERS COMMENTS:

Blue clay  
Some brown sand returns at about 5'  
Blue clay at 6'  
Blue clay all the way to 60'; odd brown SS rock  
End of stand, quit drilling

Cleaned up site, filled hole, rigged down and returned to north/south road, and proceeded north to the southwest corner of logged out area. Moved to site #3 and rigged up - started drilling at 2:40 P.M.

\*\*\*\* #3 NE/4 of Lsd. 13-13-78-13 Elev. 2760' TD 80'  
Sample intervals 30-40, 40-50, 50-60, 60-70, 70-80.

DRILLERS COMMENTS:

Blue clay from surface to 42'  
Conglomerate at 42'  
Hard drilling at 64' - sandstone?  
Changed bits at 64'  
Still conglomerate to 72'  
Encountered grey sandstone at 72'  
End of stand at 80' - still grey sandstone  
Quit drilling at 80' --- Time: 4:10 P.M.

Cleaned up site and filled hole - rigged down and moved east along the cutline towards #4 site.

TUESDAY - MARCH 24

\*\*\*\*#4 NE/4 of Lsd. 16-13-78-13 Elev. 2770' TD 20'  
Samples taken 0-10, 10-20 and bottom.

DRILLERS COMMENTS:

Loose conglomerate gravel at surface  
3 feet of brown sand at 4 or 5'  
Clay from 8' to 20'  
End of stand; quit drilling.

Tidy up site and fill hole; progress south down cutline  
to pipeline right-of-way --rig up and drill #5.

\*\*\*\* #5 NE/4 of Lsd. 7-13-78-13 Elev. 2780' TD 20'  
Sample taken at 20'.

Clay from surface to end of stand 20'  
Quit drilling.

Filled hole, rigged down and travelled west to north/south  
road, went north to site #6, rigged up and started drilling  
at 12:35 P.M.

\*\*\*\* #6 NE/4 of Lsd. 1-23-78-13 Elev. 1740' TD 80'  
Samples 0-10, 10-20, 20-30, 30-40, 40-50, 50-60, 60-70  
and 70-80.

DRILLERS COMMENTS:

Conglomerate at 1 or 2'  
Sandy conglomerate to 15'  
'Pure' conglomerate from 15' to 58'  
Grey sandstone from 58' to 80'  
End of stand, quit drilling at 2:50 P.M.

Fill hole, tidy up site.

WEDNESDAY - MARCH 25

Lewis and Luft travelled to Grande Prairie; tried to meet  
with Cory at the Alberta Forestry and Environment, as a  
follow-up to Al's attempts to contact him last week. Cory  
was out of the office but Al reached him on his cellular  
and recapped our activities. Lewis and Luft then to south  
Grande Prairie to visit with Weyerhaeuser Canada Ltd.  
Weyerhaeuser owns the timber rights in the area of our  
interest.



NOTE:

Our original plan included the drilling of some test holes to the north of holes 3,4 and 6. However, because the 'rim trail' is in the protected area where no equipment is allowed and the cutlines north of site #4 encounter considerable stretches of muskeg, we were unable to drill in that general area. More field work should be done in the area between the conglomerate outcrop rim and the Moxnes pit (where conglomerate is visible) to determine thickness of the Bad Heart conglomerate at various locations.

\*\*\*\* Locations and elevations are taken from small scale surface and topographic maps and should be read as approximate.

Government of Alberta,  
Lands & Forests,  
Grande Prairie, Alberta.

Attention: Cory Woytowicz,

Re: MME - 971273.

EXPLORATION SOUTH OF BAYTREE, ALBERTA,  
713803 ALBERTA LTD.,  
EXPLORATION LICENSE NO. 5145.

Two snow machines were used on March 22, 1998, to assess the project,  
but the depth of the snow in the area made it very difficult.

The snowplowing and drilling started March 23, 1998, and it was all  
finished March 24, 1998. One tandem drill truck, one tandem water truck,  
one 4 x 4  $\frac{1}{2}$ ton and one D6 Caterpillar - this was the equipment used.

The access to the drilling (see accompanying map) is the shaded - in  
road from highway 49.  $\frac{1}{2}$  mile East of the county road on Anderson Road,  
at the new oil well drill site approach, the road had to be plowed to all 6  
test holes. All the plowing and drilling was done on existing trails  
and outlines.

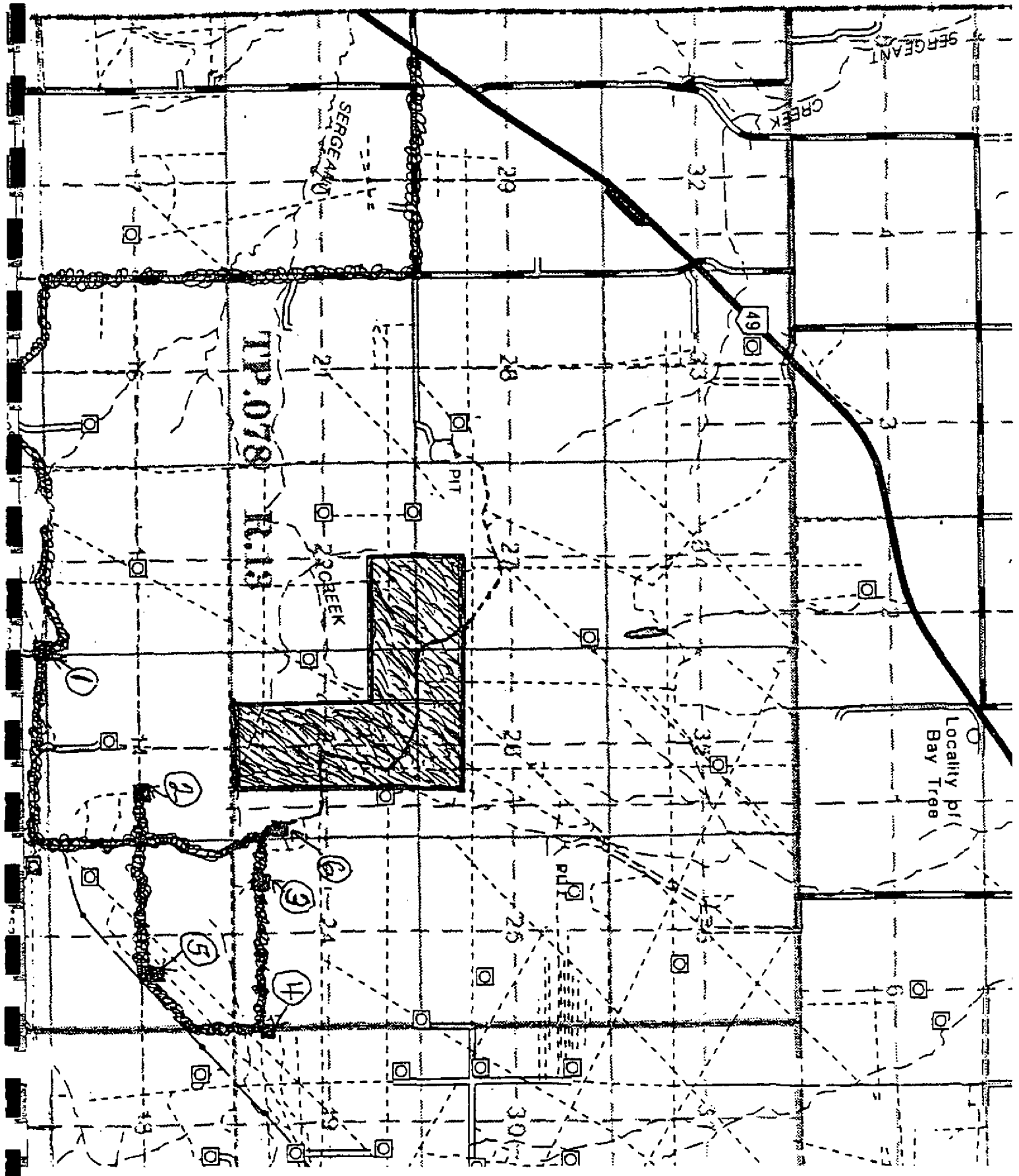
End Report.

  
ALAN LEWIS.

04/02/98

57

ATTENTION: CORY Wojtowicz  
COMPANION MAP OF DRILL REPORT 55.47.30"  
713803 ALBERTA LTD  
LICENSE # 5145.



**ATTACHMENT 2.2.1**

**Alan Lewis Test Log Notes (Process)**

## GENERAL INFORMATION

1. The crucibles used are refractory clay (usually 40 gm.)
2. The cupels are bone ash.
3. The firing is done in a propane-fired furnace @ 2050' F.- 2200' F.
4. The cupeling is done in an electric furnace at usually 1700' F.

### How the "assay ton" (A.T.) is arrived at:

1 ton of ore (2000 lbs.) avoirdupois weighs 29166 troy oz.

1 assay ton (A.T.) weighs 29.166 grams.

Therefore, if the 'assay ton' yields 1 mg. of precious metal - the 2000 lb. ton of ore has a yield of 1 troy oz. per ton.

## FIRING LEGEND

Below is the order the reagents are listed in all the fire assays.

Ag. 20 - 45 - 10 - 25 - 30  
#1 - #2 - #3 - #4 - #5

#1 - soda ash  
#2 - litharge  
#3 - silica

#4 - borax  
#5 - granulated lead

Sat. April 19/03 Test #766  
Ore - Roger Fine 3AT

HNO3 - 100 ml  
H2O - 400 ml - (concentrated strength)  
H2O - 100 ml

11:00

Started leach

Temp 1250 F

24 hrs

O.R.P 975

12:20

Added 3 top bits O

Ac & P.H. wa.

4:30

Stopped O.R.P 925

Sun. Settled all night

02:30

Added Ammonium Hydroxide to PH 10, let for 1 hr  
Then added ~~2~~ Zinc and after 1 hr added  
H2SO4 to PH 4.5. Settled all night. Then piped  
off dark liquid. Added water to residue + H2SO4  
until rusty deposit turned to dark ~~green~~ green  
then let settle.

Mon. Look dark liquid from over night settling PH 3.57

02:30

Tues.

8:00

Thur. Lot Capsules Crues

	#	Lot	Crues	Crues
1st	# 4	B	# 1 - Big	- 1/3 (1 AT) of residual liquid from <del>leach</del> leach
	# 2	A	- Big	- 1/3 (1 AT) of total liquid leach
2nd	# 3	1	# 1 - small	- 1/3 (1 AT) of liquid from <del>leach</del> residual dried
	# 1	2	# 2 - small	
	# 2	A		- 1/3 (1 AT) of total liquid leach

2 Crues.

Wed.  
May 1/03 Tent # 767

1:45 Start

1 RT. Boga  
100 ml H<sub>2</sub>O  
9 ml HNO<sub>3</sub>  
30 ml HNO<sub>2</sub>

Thurs.

1:15

Fri.

1:00

Results 0

16 hrs

Mon.  
May 5/03 Test # 768  
080 SAT Hoger

1500 ml H<sub>2</sub>O

170 ml HNO<sub>3</sub>

500 ml Salt

50 ml Sodium Hypochlorite

1:30 Started leach pH 4.6 ORP 1050

2:45

3:45

3:45 Added 75 ml NaOH

Added 2 top Bio D to the 3 type previous

ORP 995 pH off scale

7:00 Added NaOH & 1 top Bio D, ORP 945 pH 4.1

Stopped leach in 9 hrs ORP 835 pH 3.8

Tues.

1:30 Started

Stopped in 3 hrs, filtered off liquid

Wed

11:30 Started

Thur.

Lot - Cues.

#1 - #1 Precip 5 AT	size 9	.24
#2 - #2 - 1/2 dred to dust 1 AT	size 5	.043
#3 - #3 -	size	Type head 4.0
#4 - #2 - Filter ash 5 AT	size 7	1.09

not part .532

22 hrs.

.532 ÷ 5 AT = 0.106 g per ton

cu, ag & PGM's



Tues  
May 13/03 Tent #769 ~~768~~

1/3 of #768 liquid dried to dust, then  
repacked at 4000°F, leak broke & 50%  
was lost, final remainder (zero)

17

Wed. May 14/03 Tent 770

Dried 1/3 to dust, then added H<sub>2</sub>O, ~~raised~~ raised PH to  
soda 7. Then fired 2 of 3 cruc.

Thurs. May 15/03 Tent 771

3rd cruc. 109 grams, added H<sub>2</sub>O then  
sodium ~~oxide~~ bicarbonate to 7.5 PH, added  
sodium nitrite, then ~~NaNO<sub>2</sub>~~ <sup>NaNO<sub>2</sub></sup> to PH 9, added zinc  
after process added HCl to PH ~~31~~ .31

12

Fru.

<u>Tot</u>	<u>Cruc.</u>		
#1	#1	1/3 of 1 AT	.28 max
#2	Big	Na Bisulphate	added zinc } Partial 3/4 1 AT } .22 max
#3	#3	Odd & ends of 1/3 of 1 AT	added zinc } 0 } .22 max

Total from #769, #770 & #771 - Partial '0

.22  
.10  
 .32 oz per Ton. Acc & PGMs

Sun  
May 18/03 Test # 772

Ore 5 AT Roger  
1500 ml H<sub>2</sub>O  
225 ml NaCl  
120 ml HNO<sub>3</sub>  
3 - H<sub>2</sub>O<sub>2</sub> 1000  
Temp 125°F  
PH = 1.23 ORP 1020

R:15 Start time of leach  
4:30 Stopped leach PH = 2.5 ORP 875

Mon.  
1:00 Started

PH to 3.6 with Sodium Bicarbonate

4:00 Stopped  
Raised PH from 4.20 to 9.30 with Na<sub>2</sub>CO<sub>3</sub> & NaOH 3 steps

1:30

Med. Lat #	Cree #	Description
# 1	# 3 - Big	Zinc precip
# 2	# 2 - Big	Sodium Bisulfate 2.5 AT
# 3	# 1 - Big	Total liquid Zinc precip.
# 4	# 1 small	
# 5	# 5 small	NaOH 1 precip 1/2
# 6	# 2 small	Na Bisulfate after O <sub>2</sub> 2.5 AT

Lakefield Research Ltd.

Cu. - 1.30 g/t  
P.T. - 1.45 g/t  
Pd. - 0.56 g/t

Mon.  
May 26/03 Test # 773

Ore Roger SAT

1500 ml H<sub>2</sub>O

275 ml FeCl<sub>3</sub>

120 ml HNO<sub>3</sub>

10:45 Start leach.

ORP

Added two H<sub>2</sub> tips Red-D ~~1025~~ 1025 pH 0.00

Temp 1250 F

Stopped in 9 hrs let set all night

Red-D ORP 942 pH 0.28

4 hrs

Leach.

10:30 Started.

Trace. Old

Moscow  
June 2/03 Lent # 774

Ore 5 AT Razer  
1500 H<sub>2</sub>O

120 ml HNO<sub>3</sub>

300 ml Seltz

Temp 125°F

9:00 Started lunch

10:20 added 1 photo box 0 ORP 1050 PH 0.00

Let sit all night

Raised PH to 3.25 with Na bicarb.

1:00 Started

Tue

10:15 Started

PH 4.24

Wed Started fire 10:25

Started rodmill 8:30

< 0.0002, Au, PE, Pd

bat

June 14/03 Test # 775

treatment - H<sub>2</sub>SO<sub>4</sub> 3 to 1 at 150°F for 4 hrs.

One Regen 5 AT (fine)

1250 ml H<sub>2</sub>O

100 gram NaBr

30 gram KI

200 ml Sodium Hypochlorite

16 level top Bio D

Temp 125°F

ORP 825 PH 6.00

1:30 Start time

Added 18 top total Bio D

2:30 Added HCl to 5.87 PH

ORP went from 775 to 850

sun

8:30 Stopped ORP 750 PH 3.0x

Added ~~Na~~ Sodium Bicarbonate to PH 6.2

9:00 Started

Mon.

Test # Crac #

#1 - #1 - Zinc precip

#2 - #2 - " "

#3 - #3 -

#4 - #4 - Filter ash from #1

.04 Au. + Pt. + D.P.T.

18

Trace  
June 24/03 Test # 196

Ore Roger (fine) 5 AT  
H<sub>2</sub>SO<sub>4</sub> treatment 3 to 1  
Temp 150°F

0:00 Started

3:00 Started leach  
1250 ml H<sub>2</sub>O  
100 Grams Filter  
30 gm KI  
200 ml Sodium Hypochlorite

Added 5 tap Bio D  
ORP stayed 720 - 615, PH 7.25

7:00 Lowered PH to 2.15

added 2 tap Bio D - ORP at 791

(10:00) Stopped ORP 730 PH 2.70

10:00 Thursday 96 hrs., added 200 ml Hypochlorite, added HCl  
ORP 800 PH 2.64

Friday 1:00 After 50+ hrs ORP 815 PH 2.29

4:00

6:00 ~~Stop~~ Stopped in 2 hrs.

lots 11345

PH 4.55 with H<sub>2</sub>SO<sub>4</sub> from PH 10

sol Cr<sub>2</sub>O<sub>7</sub> temperature

.21 ÷ 5 AT = .042 O.P.T., Au + Pt

1	1	1
2	2	2
3	3	3

Mon.

July 7/03 Last # 777

Ore Roger (Face) 5 AT

1250 Hz 0

re OH 1/2 ear

Temp. 150° F

11:00 Start time back

Stopped in 3 1/2 hrs.

Wed. July 9

1000 Hz

50 gms. K.I.

Temp. 125° F

1:15 Start time ~~back~~

1:30 Started

Stopped

Stopped back 8 hrs. O R P 706 PH 7.00

5:00 Started

Lot	Count
1	4
2	2
3	3

Lead found

1	1	- 10 gms lead
2	2	- 10 gms lead
3	4	- 20 gms lead

Time 5:20

.363 mass \$5 = .073  
 not parted  
 Acc. by P & PL

Wed  
July 23/03

Test # 778  
Ore Payer 45 AT.  
20.5 litre H<sub>2</sub>O  
3 lbs NaBr  
10 lb tape T<sub>10</sub> D  
Temp 100+  
ORP 825 PH 4.00

2:00 Stool time

Stopped circulation in 18 hrs ORP 775 PH 6.53

Thurs.

2:00 Started.

7:30

Fri.

9:00 Started.

10:00 " "

6:30 Stopped 8.5 hrs

July 24 - Mon.

10:00 Started.

ORP Pass 850 added NaHCO<sub>3</sub>

ORP uppt. to 4.50 PH 9.00

9:00

July 24

stopped in 9 hrs.

July 25 10:30

at halfway mark.

33 hrs.

03 OPT not partial  
Au. Ag. P. S. H.



Mon. Sept 8 1951

5 A T Cong.  
 350 ml H<sub>2</sub>O  
 150 " H<sub>2</sub>O<sub>4</sub>  
 Temp 150°F

10:15 Start time stirred continuously.  
 Stopped in 2 hrs. siphoned off to be later, then put to bench

1:00 Started bench  
 1500 ml 100% H<sub>2</sub>O (all)  
 150 " HNO<sub>3</sub>  
 Temp 125°F

4:50 After 3 hrs ORP 835 added 1.5g Na<sub>2</sub>O<sub>2</sub> H<sub>2</sub>O 1105  
 Temp added 2 temp later on.

10:00 Stopped bench 9 hrs. ORP 990 PH off scale  
 Stopped.

Wed.  
 10:30 Still

Thursday  
 Started in 9 hrs

Lot #	Cruc.	Lot	Second	Filter
153	1	1507	5	
2	2		6	
4	3		7	

0.42 O.P.T.  
 not Parted

Oct 2/03 Test # 782  
Thursday. One Comp. Fine SAT

100 ml H<sub>2</sub>O<sub>3</sub>

360 ml H<sub>2</sub>O

Started out well  
- 11:00

10:15 Started leach

180 ml H<sub>2</sub>O

64.0 Total

11:30 stopped and but set till 5:15 on piddle

5:15 Started leach on agitation again  
Stopped in 3 hrs.

Filtered off liquid added NH<sub>4</sub>OH to make Hg

Fri. lowered pH to 3.20

4:30 Started

0.14 O.P.T. acc. p<sub>2</sub>

Tuesday  
Oct 7/03 Tent # 783

Ore 5 AT (Plant)

360 ml H<sub>2</sub>O

100 ml HNO<sub>3</sub>

180 ml H<sub>2</sub>O

11 hrs  
.006 OPT  
du Ag, P, S, Mn

1:15 started back 125° - 150° F

Wednesday  
Oct 18/03 Tent # 784 (5 AT Plant)

250 ml HNO<sub>3</sub>

750 ml H<sub>2</sub>O

4:00 start time

Temp 135°

Stopped back in 5 hrs

Put on hot plate overnight

5:30

Stayed in 5 hrs.

Put all liquid through filter for morning

Summary

Lot	Ores		
1	-	1	
2	-	2	Filter used 27 gms
3	-	3	" " 26 gms - silver added
4	-	2	Liquid dried 30 gms

Lot	Ores
#1	- 3
#2	- #2
#3	- #1

.007 OPT

du Ag, P, S, Mn

11 hrs.

Tues. Oct 21/03 Test # 785 (Reg. 5A)

170 gram NaBr

20 gram KI

1700 ml H<sub>2</sub>O

12:45

Start time

Stopped 9:30 8 1/4 hrs.

Temp. 140° F 5 hrs at PH 3.5 ORP 750-820

Wed

4 hrs more at PH 1.20 ORP 753-805

11:45

Stopped in 3 hrs.

Precipitated liquid with NH<sub>4</sub> OH

Dried & fired.

Thurs

Put liquid to cytochrome

4:00 - start time

16 hrs

007-O.P.T.

all, P & M



Mon

Dec. 8/03 Lat # 788

One Rager 5AT

120 Grams NaBr

30 Grams KI

1500 ml H<sub>2</sub>O

Temp 125°F

Vol 0.6920 ORP PH 170

Start time 11:00 stopped in 10 hrs.

Tues.

Wed

Thurs

100

Fri.

Added Zinc, then dried overnight  
Lat - Added 15 to 1, H<sub>2</sub>O & H<sub>2</sub>SO<sub>4</sub> to dried Zinc powder

1500 ml H<sub>2</sub>O

100 ml H<sub>2</sub>SO<sub>4</sub>

Loring 46193

Clu - .003, O.P.G.

Sat

Dec. 20/03 Test # 789

Ore / Paper SAT

1500 ml H<sub>2</sub>O (100% salt) (375 ml) to 1500 ml H<sub>2</sub>O

150 ml HNO<sub>3</sub>

Temp 125° F

00 pH off scale ORP after 1 hr Bio D 1042

1:30

2:30

8:30 Stopped back

Second pump H<sub>2</sub>O - aerobically and stop

5:00 Stopped Bio

Lowered pH to 2.75 part (circulated)

Sun

11:00 ~~was~~ circulated

Mon. started

4:00

cu. 0.00% of parton going  
27 hrs.

Big #1 error. #3 sat

Big #2 error. #4 sat

#1 "

#2 "

Wed.

Feb. 11/04 East # 802

Ore 5 AT Roger fine

Spring 48385

170 Gravel No Br

Acc - .0014 OPT

30 gms. K1

PC - \_\_\_\_\_

1500 ml H<sub>2</sub>O

Pd - \_\_\_\_\_

1:30 Start times

Stopped in 8 hrs

17 hrs

1:40 Staked

Stopped in 3 hrs

1:30 Staked

#803

2:00 started apua Regia, stopped in 3 hrs

Free

2:00 Staked

First set 11:20

Set # - Core #

#1 - #1

#2 - #2

second

#4 # 1

#5 # 2

third

#7 # 1

#8 # 2

#9 # 3

1:50

Lava Rock 2 Spring 48385

#1 - 802 Acc - .004

#2 - 803 AT - \_\_\_\_\_

#3 - Apua Regia Pd - \_\_\_\_\_

on land

17 hrs



Lucas

March 9/04 Leaf # 804

~~5 A T~~ Far West Loring 46428

90 gms Robin

.014 opt.

1250 ml H<sub>2</sub>O

10:30 Start time

2 Top Bead, ORP 815 pH 6.00

Temp 125°-150° F

2:30 Added HCl to 250 ORP 845, Temp 135° F

Stopped in 8 1/2 hrs ORP 760 pH 2.75

Stopped.

Shaw.

11:30 Started Open Regia on lead ore (Stopped in 4 hrs)

12:30 Started

18 hrs

#1 - 2 cruc. 14.5 gms each plus filter ash 2 gm (approx)

Zinc added from water leach.

#2 -

Zinc added from Open Regia leach

microscope (didn't look) on lead ore after water leach.  
too good

#3 -

looked good.

Taken to Loring March 16/04.

Thurs.

March 18/04 Test # 805 (SAT 6-26)

Water 110 grams

Loxing 46466

1500 ml H<sub>2</sub>O

du - .0198

Start time 11:30

Added 2 lbs Bio-D 135°F

1:00 ORP 878 pH 5.85

2:10 ORP 750 pH 6.55

5:00 Added HCl to pH 2.60 ORP 855

~~Stopped at 7:30~~

7:30 Stopped, (2 1/2 hrs after adding HCl)

Fri.

10:15 Start

~~Stopped~~

10:45 - stopped in 4 1/2 hrs. ORP (minus 865) pH ~~9.45~~

Lot #	Cruc
#1	#1
#2	#2 no salt
#3	#3

Lot moved?  
 Lowered pH with  
 NH<sub>4</sub>OH to 2.5  
 Dried residue

Mar 28 Sun.

Aqua Regia on head ore

2:45 Start

600 ml HCl

200 ml HNO<sub>3</sub>

100 ml H<sub>2</sub>O

18 hrs

Time	Lot	Cruc.
2:10	#1	- 1 & 2
3:50	#2	- 3
	#3	- 3

3 no salt cruc

stopped 8:00

stopped 3 hrs (Crucel 2 & 3)

120

33

Jess

March 30 / 04 Test # 907

5AT Comglomerate (Fine)

90 grams NaBr

1200 ml H<sub>2</sub>O

Bio D 2 top 830 ORP 6.00 PH

Loring 46476

Av. .027 O.P.T.

1:00 Start time

Temp 135° F

1:00 Added HCl PH went from 6.0 to 9.50

ORP went from 780 to ~~780~~ 835

7:30 Stopped mixing, put on hot plate for overnight

ORP 840 PH 350

Thurs. April

10:45

11:30

1:45 stopped

Lot Cuv.

Cupels

April 8  
Loring

Residue 1 - salt

5 - sprouted lots

av. #1 3.093

Residue 3 - no salt

N goldish color

av. #1 1.032

Serpent regular

goldish color #2

av. #2 .010

Mon  
April 5/04 Test # 808 -  
Ore (625 plant) 5 AT

200 ml HNO <sub>3</sub>	#1 - Residue from	ashed filters
600 ml HCl	#2 - " "	" " " plus <sup>prep</sup> zinc
600 ml H <sub>2</sub> O	#3 -	

Temp 135 F #4 - Unknown red material on drying deck

2:30 Start time. (Ore on hot plate)  
ORP 980 added ore ORP went to 930, added  
4.5g BiO<sub>2</sub> ORP went to 970

5:00

8:30 Stopped mixing and put on hot plate till AM  
ORP 870 PH

Juice added Urea 400 ml (twice HNO<sub>3</sub>)

12:00

5:30 Stopped and added zinc, then  
dried to slant

5:45

Wed

5:00

11:30

Circled with peristaltic pump

27 Wras

Spring 46549

505 g per ton Ore

1:15

First firing Lot #1 - 3 cases #1 ore Lead

2nd " Lot #2 - 2 runs of #2, 1 run of #1 with added  
#3 ore extra lead's added silver + lead

Sat.  
April 17/04 Inst # 809  
One 5AT Comp. (Fine)

Scorified 1.32 mgs.  
1 flue. 2 mgs.  
#1 + 2 -

HNO<sub>3</sub> 200 ml #3 - (2 crues.)  
H<sub>2</sub>O 600 ml #4 - Zinc precip from residue  
HCl 600 ml #5 - 15 ppm lead oxide

0:30 Start traces added 2 top Bio-D  
Temp 135°F

0:15 ORP ~~925~~ 925  
Loring 46548  
0.0064 g per ton Au

0:55 Started

1:00 Stopped. 2.05 hrs Total  
Added Bio-D ORP went from 760 to 920

Thursday - drained off liquid twice then filtered. Added H<sub>2</sub>O 1ml  
Urea to kill HNO<sub>3</sub> then added H<sub>2</sub>H<sub>4</sub> OH to get  
PH to 2.00

1:00

9:15 Stopped: stopped pump for overnight

1:30 Started

10:30 AM Started 2.7 hrs

9:00

8:30 Started  
stopped pump for night  
went all sat. into all day scorify into

Monday

11:00

Fri  
May 7/04 Fri. Test # 810, 5AT For 2nd

HNO<sub>3</sub> 200 ml  
HCl 600 ml  
H<sub>2</sub>O 400 ml  
Temp 135° F  
1:20 started  
rod mill

0:30 start time

ORP 910 <sup>1st</sup> ~~2nd~~ Test D

Soring #6618

2:00 ORP 912

Al<sub>2</sub>O<sub>3</sub> = .167 g per ton

Sat

Fe<sub>2</sub>O<sub>3</sub> = .0012 g per ton

4:00 went all night

Pb = \_\_\_\_\_

sun.

Stopped at 10:00 next day.

Mon

0:30

Stopped at 5:00

aw. 0.19, # 1 - Residue & filter ash 22 grams

aw. 0.15, # 2 - 20 grams

aw. 0.002, # 3 - Zinc precip all liquid

These

May 27/04 Tent #811 - "Roni" 5 AT

HNO3 - 200 ml

HCl - 600 ml.

H<sub>2</sub>O - 400 ml

Temp 135°F

1st firing #1 - A, B, C

2nd firing #2, 4A, 5B

3rd firing 1 & 2

6:30 start time

ORP 930

Spring 46672

after 30 minutes add 1 top Cu. - 0.017 g per top

7:00 add 1 top Bio D

7:30 " 1 top Bio D ORP 910

7:00 Stopped leach ORP 925

now set on hot plate for overnight

Stopped Tuesday 22 hrs total

Wednesday 1:00

calculating

Stopped Wed AM 20 hrs

Thursday

42 SO<sub>4</sub> to 1.30 PH from 4.5 PH

1:15 started

PH 2.64 when starting

Stopped 8:00 9 hrs total

fr. -

PH 1.5

4 7 hrs

stopped in 230 hrs

Used 2 hrs on all liquid left.

second firing 3:45

Sat  
July 24/04 Test # 816 For West (NaBr)

2:30 Start Loring 46803  
1250 H<sub>2</sub>O  
120 ~~gms~~ gms NaBr  
Bis D to 890 ORP PH 2.00  
5:00 Started

Temperature 175°F

7:30 Stopped.  
Stopped 9:30 put on hot plate.  
Mon  
1:00 Started.

Tues.

Start 8:45  
Stopped 11:45  
Start 12:00  
Stopped 2:50  
Start 3:00  
Stopped 6:15  
Start 6:30

Stopped in 3.5 hrs

Monday Aug 2

11:30  
~ 10:30 Stopped in 6 hrs  
Tues Aug 3  
Stopped 1:30  
Tues Started 1:45

PH 1.4

PH 1.8

Stopped at 7:00, 5 1/2 hrs.  
Wed started

36 hrs



Mon  
June 14/04 Test # 812, 5 AT. "Chin Change Fine"

HHO<sub>3</sub> - 200 ml  
HCl - 600 ml  
H<sub>2</sub>O - 400 ml  
Temp 135 °F

Loring #6745  
.004 g per ton All.

0:30 Start time

ORP 973

After 2 hrs 950

After 5 hrs 820, added 2 bags B.O.D ORP 950

2:00 Stopped ORP 830, put on hot plate for rest of night

Filtered off liquid

Tues  
1:30

Wed 11:30

Thurs 1:45

20 hrs total

Fri 12:30 Start

pH ~~238~~ 239

Stopped after 9.5 hrs.

#1 - firing

36 hrs

Lot	Green	
#1	#1	first
#2	#2	last few
#3	#4	" "
#4	#5	" "
		mixed manual mix

Lot #1 - mixed with ingredients in grinder 3  
Lot #2, ~~364~~ mixed in grinder, there 2 + ~~3~~ mixed in

grinder with ingredients. #4 manual mixed with ingredients. (List to Calpoy on facing page of Test # 804)

Sun.  
June 20/04 Test # 813 Sand ~~under~~ under comp.  
5AT (fine)

HNO<sub>3</sub> - 200 ml  
HCl - 600 ml  
H<sub>2</sub>O - 400 ml

Living 46745  
.005 of protein etc.

Start

2:45 Temp 135°F  
Added Bio-D 4 trays. BRP 815  
Stopped in 7 hrs.

Mon - Filtered off liquid, added 400 ml urea

11:00

9:00 PM

9:15 Started up again

Tues.

Stopped

Started

Wed - dried Tues

10:00 Started

Stopped in 10 hrs, dried there was poor slowing.

Thursday

~~Started~~ 3 hrs

~~Friday~~

~~Started~~

~~8 hrs~~

32 hrs

Thur.  
June 24/04 Leat II 814 Cong. 8' from bottom  
SAT

200 ml HNO<sub>3</sub>  
600 ml HF  
400 ml H<sub>2</sub>O

Saving 46745

.0048 g per ton Au.

1:00 Start time

1 kg Bio-D ORP 760 added Bio-D to 900 ORP  
Temp 135°F

Stopped 10:00 10 hrs total leach ORP 830

Friday

1:30

Stopped 10:00 AM Sat

1:00

Stopped 10:00 Sun. 2.1 hrs total

12:30 Sun. Started.

Stopped after 6 1/2 hrs.

Monday

Start 2:45

Stopped in 3 hrs.

30 hrs

Leat #	Crow. #	Cupel	Residue
813 } # 1	# 1		# 813
# 2	# 2		"
# 3	# 3		# 814
814 } # 4	# 4		# 814
Res. 814 # 5	# 5		# 814
# 6	# 6		

6 hrs.

Comments - all beads showed Au.  
# 6 was oval & flat, lots of  
stuck on the bead & in the cupel

Sun.

July 6/04 Test # 8.15. "Cong. 8' from bottom"  
South End400 ml H<sub>2</sub>O200 ml HNO<sub>3</sub>600 ml H<sub>2</sub>E /

Loring 46774

.0012 g per liter.

11:30 Start time

Started

Temp 175°F

1:30 Stopped

ORP ~~940~~ 940 added Bio-D 2 tabs. ORP went to 1125

3:30 Stopped leach ORP 925

Wed.

Drained off liquid twice, filtered remainder, added 400 ml

Wrag

1:30 Started

Stopped 8:30, 7 hrs total

Thurs

10:30 Started

8:00 Stopped 8 1/2 hrs

Fri

8:00 AM started

added H<sub>2</sub>SO<sub>4</sub> PH from 2.50 to 1.30

2:00

(showed a lot of metallics)

2:30 Started

9:00

4:15

Sat -

5:30

Sun.

8:00 Stopped

2:15 Started

5:15 Stopped in 3 hrs.

Mon

Tues  
Aug 7/04 Test # 817 "Ref"  
5 AT

1250 ml H<sub>2</sub>O

Loisig 46881

120 gm water

Bio-D 2 top 135°F

•003 of protein

11:00 Start leach

2:30 Stated

ORA 890

Thurs

Stated elect 11:00

12:30

Fri

9:45 Stated

3:00 Stopped

3:00

7:00 Stopped elect.

Sat: 9:00 Stated

Stopped in 3 hrs.

1:30 Start

PH 3.0

Sunday

12:00 Stated

PH 3.8

6:00 Stopped

6:30 stated

PH 3.6

Stopped 10:30

36 hrs

Thursday

Aug 12/04 Tent # 818

"6-26" Fine 15.AT

200 ml HNO<sub>3</sub>

Foamed over and lost at least

600 ml HF

1.5 AT Total leach 3.5 AT

600 ml H<sub>2</sub>O

Temp 135° F

Leaching 46681

1 tsp Bio-D, ORP 940

- 0.131 g per ton Au.

10:00

Started leach

10:50

Started

ORP 963 at start time. Foamed over 3.5 AT left.

5:00

Stopped leach added 3 tsp Bio-D in first 2 hrs.

PH-03 ORP was 932 when leach was stopped, put on hot plate until morning.

Fri

added ~~100~~ 300 ml Urea

5:30

Started

PH 2.7, circulated, peristaltic.

9:30

Stopped in 4 hrs. PH 1.8

Let.

10:00

11:30

2:00 Stopped

2:15 Started

Sunday -

10:00

Filtered off liquid, liquid

Added H<sub>2</sub>SO<sub>4</sub> to PH 1.8 from 4.2

2:00

9:30 AM Monday Stopped

11:00

Took all remaining liquid and added Zinc

First added NaOH to PH 6.6 warmed to 105° F

then added Zinc after 30 minutes added H<sub>2</sub>SO<sub>4</sub> to PH 5.6

Let	1st	Urea	2 <sup>nd</sup> Let	Cross
#1	#1		#3	#3
#2	#2		#4 - 2 urea	#4
#3 - 1/2	#6			

36 hrs

Wed. Aug 18/04 Test # 819 Worsley "Lime Fine" 5AT

400 H<sub>2</sub>O Loring 46881  
600 HCl

Wed. 200 HNO<sub>3</sub> 0024 oz per 100 lbs

10:30 Started leech.  
11:30 Added 2 tsp Bio-D PH went from 880 to 932  
Temp. 135°F

12:30 Added 1 tsp Bio-D PH 883 rose to 915

2:30 Added 1 tsp Bio-D PH 863 " " 917

5:30 Added 2 tsp Bio-D PH 853 " " 953

7:30 Stopped leech ORP 900, Ph. 1.9  
Set on hot plate until morning.

Thursday  
12:10

1:50

1:00 Started

4:00 Stopped 4 hrs Total

~~4:15~~

Lowered PH from .03 to 1.7

5:00 Stopped

9:30 Stopped

9:50 Started

9:00 Stopped. 11 hrs Total.

4:30 Fri. treated all liquid with Zinc

37 hrs

Mon  
Aug 30/04 Test # 820 "626" 20 A.T

Ore 20 A.T. mixed with magnetic pump  
5000 ml ~~H<sub>2</sub>O~~ H<sub>2</sub>O  
1200 ml H<sub>2</sub>SO<sub>4</sub>  
Stated.

1.15 stated

11:50 Started leach 5AT (1/2 of total liquid)

150 gms KBr, ~~150 gms KBr~~  
ORP 750

Loing 47013  
0.0024 g per ton Ore

12:30 Added Bio-D, ORP 873, 155°F

4:00 ORP 907, temp 150°F

7:30 Stopped ORP 873, temp 150° for entire leach.

1.30 Started

Sat.

Sun.

1.45 -

Diced to deat & annealed 1400°F

Then put in PH 1 - H<sub>2</sub>SO<sub>4</sub> all night to remove copper.

Lot # 1      # 1  
Lot # 2      # 4

21 hrs



Sept 19/04 Tent II 821 (Part of 820-5AT)

H<sub>2</sub>O - 400 ml

HCl - 600 ml

HNO<sub>3</sub> - 200 ml

Loring 47017

11:00 Start PH -5 ORP 1123

• 0062 copper ton Cu

12:30 ORP 1163 Temp 175°F (no Bio D)

4:00 ORP 1183 " " "

7:30 Stopped ORP 1167 - PH 01

Monday -

Took liquid off.

Added 400 ml. Urea. PH 01 ORP 1000

Tuesday

Added NaOH, PH 00

10:15 Started

circulating with pump.

3:00 Fixed pump, lost  $\frac{3}{4}$  hr on 10:15,

Started

7:00 Stopped.

of copper in bottom of plastic container.

Dried residual copper & put on heat 150°F 1-5 H<sub>2</sub>SO<sub>4</sub>

2:00 Started

PH 01

Thursday - Tried H<sub>2</sub>SO<sub>4</sub> on copper residue to no avail.

Tried sample with HNO<sub>3</sub> 1-1, took all copper, so going to try the rest.

36 hrs

Tuesday      Wednesday      Thursday      Friday      Saturday

1	Sept 19/04	<del>Thursday</del> Sun.	4	5
	Start loads 11:00	300 gm	10 AT	Rep
8		170g Rep		Long 47175
		3040 <del>Rep</del> K11		12
		1500 ml H <sub>2</sub> O		0.012 g protein
		Added 3 tap H <sub>2</sub> O		
		Added NaOH to 11.4 PH		
15		ORP 17475	18	19
		Temp 1350 F		
	1.10	Kept adding H <sub>2</sub> O - ORP went from 450 to 710		
		But PH went from 11.00 to 3.7		
		Added NaOH to 8.1 PH, ORP went to 6.15		
22		23	24	25
	5:45	Added HCl to Ph 3 from 8.3		
		ORP rose to 850 from 490		

29 10:15 Wed. started

1:30 started

Thursday started

JUNE 2004

(11 hrs stopped) 10300 meta  
20 hrs

Monday  
Nov. 22/04 Test # 823 (H.A.T. "Reg")

400 ml  $H_2O$

200 ml  $HNO_3$

600 ml  $HCl$

Temp.  $135^\circ F$

Loring 47253

.003 g per ton Ore

1:45 Start time.

Stopped in  $6\frac{1}{2}$  hrs. added 400 ml more

Wed. - added ~~NaOH~~  $NaOH$  PH still  $-0.04$

10:00 Started.

2:00 -

Stopped in  $6\frac{1}{2}$  hrs.

Thur.

10:45 Started.

PH 1.2

2:30

12:45 Started

Stopped at 8:15 ~~hrs~~  $5\frac{1}{2}$  hrs

Monday

1:30 Started

Stopped 20 hrs later

Wed.

Zinc precip 2:1 ratio  $H_2O$  to  $H_2SO_4$ ; PH ended  
 $up 0.5$

Lot Crev. Cysel

#1

#3

#2

#6

Friday  
Dec 3/04 Test # 824 "SAT Reg."

1250 ml H<sub>2</sub>O

100 gm NaBr

25 gm K.I.

Loring 47253

11:00 Started lead.

005 g per liter

9:30 Stopped put on hot plate till morning. ORP 750  
Set PH 2.05

11:45 Started

Stopped 1:45

4:30 Started  
PH 1.3

Wed.

1:00 Started

These Stopped

Used Zinc

" "

Lot #	Cover	Cupel
#1	# #	
#2	#2	
#3	#1	

Friday  
Jan 7/65 Test # 825 "Reg" 3 AT

1000 ml H<sub>2</sub>O  
50 grams NaBr  
10 grams KI  
Temp 135

17 hrs

11:00 Started back

11:30 ORP 805 PH 2.2 - Fil level had one off.  
Set

Started

Soring 47253

10:15

• 001 opp to Au.

Wed.  
Jan 19/65 Test # 826 (3 AT for 2 test)

200 ml H<sub>2</sub>O  
1750 ml H<sub>2</sub>O  
Temp 135°F  
100 ml HNO<sub>3</sub>

Soring 47350

Trace of Au.

11:30 Started back ORP 860 PH (-1.0) at top 10 hrs.

4:00 Started

Sunday

11:12 Started

Test	Green	Copial
1	# 1	# 1
2	# 2	# 2
3	# 1	# 3
4	# 3	# 4

26 hrs

Thur. Jan 27/05 Text # 828 (For West 3AT)

H<sub>2</sub>O - 1300  
NaCl - 200 ml.  
HNO<sub>3</sub> - 100 ml. PH - 1.4  
Loring 47350  
Gross dev.

Put in one of 2 Top Bio D. PH was down to -1.1  
Added 20 ml HNO<sub>3</sub> PH - 1.3

10:30 Start time temp = 135°F

Stopped 8:30  
ORP 820

2:30 Started

Sat. - Added NaOH to 3.5  
Added 200 ml NaOH 1/2 Top Zinc, PH 6.5

~~Was~~ Sat all night drained liquid off & dried residue  
Sun. 11:45 started added H<sub>2</sub>SO<sub>4</sub> dilute PH 2.5

1:00 started PH 2.2

Stopped in 7 hrs

Wed. 11:00 started PH 2.5

Stopped 7:30 8 1/2 hrs  
Dried residue

H<sub>2</sub>O to H<sub>2</sub>SO<sub>4</sub>, PH 0.5 after adding ~~residue~~

~~24 hrs~~ 24 hrs

**ATTACHMENT 2.2.2**

**Alan Lewis Test Log Notes (Firing)**

## GENERAL INFORMATION

1. The crucibles used are refractory clay (usually 40 gm.)
2. The cupels are bone ash.
3. The firing is done in a propane-fired furnace @ 2050' F.- 2200' F.
4. The cupeling is done in an electric furnace at usually 1700' F.

### How the "assay ton" (A.T.) is arrived at:

1 ton of ore (2000 lbs.) avoirdupois weighs 29166 troy oz.

1 assay ton (A.T.) weighs 29.166 grams.

Therefore, if the 'assay ton' yields 1 mg. of precious metal - the 2000 lb. ton of ore has a yield of 1 troy oz. per ton.

## FIRING LEGEND

Below is the order the reagents are listed in all the fire assays.

Ag. 20 - 45 - 10 - 25 - 30  
#1 - #2 - #3 - #4 - #5

#1 - soda ash  
#2 - litharge  
#3 - silica

#4 - borax  
#5 - granulated lead



Feb. 18 Test # 802

#1 - 3 ~~grams~~

soda ash, litharge, silica, borax

grams - 20 - 40 - 15 - 15 - 1 top F - 20 lead. top salt & add Ag.

#2 - 12 grams

flour

borax on top

Residue from

grams 20 - 40 - 15 - 15 - 1 top F - 20 lead - 1 top salt - add Ag.

#3 - 12 grams

borax on top

same as #2

grams 20 - 40 - 15 - 15 - 1 top F - 20 lead - 1 top salt - add Ag.

soda ash, litharge, silica, borax flour

borax on top

Feb. 26/04 Test # 803 (head ore of #802 after

Aqua Regia 3 hrs on #802 residue ~~...~~ (leach)

#1 - 7 zinc percips

7 grams

grams - 20 - 40 - 15 - 20 - 1 top F - 20 lead (1 top salt, Ag added, borax cover)

zinc, lith, silica, borax flour

9 grams #2 - Material out of big pan

20 - 45 - 20 - 20 - 20 lead (top salt, Ag added, borax cover)

8 grams #4 -

20 - 40 - 15 - 20 - 20 lead (1 top salt, Ag added, borax cover)

10 grams #5 - Filter ash

20 - 45 - 20 - 20 - 1 top F - 20 lead (same as others)

34 grams #6 - HNH<sub>2</sub>OH

3 cruc 11 grams each

20 - 45 - 20 - 25 - 1 top F - 20 lead (same as others)

Thurs.

Feb. 10/05 Test # 828 Far West 2AT

Dissolved 6.5 gm nickel in Aqua Regia. 180°F

Desched 2AT in aqua regia 165°F

10:40 Started

12:40 Closed plates  
Started

70 grams Iron out.

220 ml  $\text{NH}_4\text{OH}$  - PH 7.5

Dried residue after filtering out water.

Dried residue weighed 1.95 grams.

Put half residue in oven at 1200°F

Spring 47420

Lot	Cruc.
#1	#2
#2	#1
#3	#3
#4	#1
#5	#3

0.085 g per ton Au.

91 hrs

Tuesday  
March 1/05 Tent # 829 (For West HAT)

8 grams diluted nickel  
100 ml HNO<sub>3</sub> } added to what was left of assay  
300 ml HCl } that diluted the nickel approx 100 ml  
~~water~~ maybe 100 ml of water was added

11:15 Started leach. (150° F for most of the time.)  
Stopped agitator at 3:45. Put on hot plate overnight  
there PH 1.3 ORP 1093  
1:45 Started PH 2.6

Fri

1:15 Started.

PH 1.6

3:50 PH 5.00 so added H<sub>2</sub>SO<sub>4</sub>

9:00 Stopped

Sat.

12:00 Started

9:00 Stopped.

Took residue from  
crut and dried all night on ~~hot plate~~, then  
put filter (after trimming) and residue in gas  
furnace at 1200° F for 30 minutes or more.  
Cooled then ground residue added H<sub>2</sub>SO<sub>4</sub> 30:1  
and put on ~~hot plate~~ grille till morning

Sun.

Drained liquid off of residue and put on hot plate  
to dry add Bicarb. to 6.5 PH

12:00 Started

9:00 Stopped.

Sunday

1:00 Started.

9:30 Stopped

• 020 of per. ton Au

Lot #	Cruc	Cupel
1	1	1
2	2	2
3	2	3
4		4

March 24 Test # 830 (Row 5 AT)

- 8 gm nickel
- 300 ml aqua Regia
- 300 ml H<sub>2</sub>O
- 100 ml HNO<sub>3</sub>
- 100 ml H<sub>2</sub>O

1:00 Started leach (circulated on hot plate)  
 7:00 Stopped leach, put on grill overnight  
 Sat  
 12:36 Started

Added NiO<sub>2</sub> to # 8 added 2 ins.  
 Took mats off and dried residue. Put in furnace  
 to 1400° F for 1 hr.  
 Added H<sub>2</sub>SO<sub>4</sub> at 32 to 1. ~~Put residue~~ Put residue  
 in water so pH was close to 6. Then dried.  
~~Put~~ divided remainder 10.8 gms in 2 and fired  
 half on three crucibles. Sat .56 ~~gms~~ milligrams  
 on scale.

10:00 Stated  
 7:00 Stopped  
 17:40 Stated

Lot	Cruc.
# 3	big head
Lot # 3	no marks
# 2	# 2
# 2	# 2
# 1	# 2
# 1	# 2
# 3	no marks

$.53 \text{ mg} \div 5 = .106 \text{ g per ton}$   
 All.

March 15/04 Leaf #804 For West

#1

Elect. residue & Zinc from Refr.

2 cruc. 14<sup>5</sup> grams with filter ash

20-45-20-20-20 lead, AgCl added 1/2 top salt mixed  
1" on top & borax

#2

Residue Zinc Ague Regia - head ore after Refr. lead

7 grams.

7 grams with filter dust 2 grams

20-40-15-20-20 lead - 1/2 top salt mixed 1/2 on top & borax  
AgCl added

#3

(Zinc good) (Ague?) 2 grams.

15-40-10-15-20 lead 1/2 top salt 1/2 on top & borax  
AgCl added.

March 23/04 Test # 805 (625 Plant)

#1 - 7gms.  
20-40-15-20-20 lead  $\frac{1}{2}$  top salt mixed  
( $\frac{1}{2}$  top Flour) " " on top & bottom of

#2 - 90gms = 18gms per cruc, 5 crucibles  
25-50-20-20-20 lead & level top flour, top salt mixed

To Calgary #1-6 beads. (Ag added) top " on top & Bottom

March 30/04 Test # 806 A Aqua Regia leach  
after water in #805

with #1 - 18gms each 2 cruc. Residue.  
A-25-50-20-20-20 lead 1 top salt mixed, 1 top salt on top  
with flour AgCl added  
B-25-50-20-20-20 lead, no salt, brass on top AgCl

with #2 - Residue. wet with brush  
3gms 20-40-15-20-20 lead -  $\frac{1}{2}$  top salt mixed  $\frac{1}{2}$  top salt on top  
 $\frac{1}{2}$  top Flour AgCl

with #3 - 2 cruc. 11gms each  
20-40-15-20-20 lead  $\frac{1}{2}$  top salt mixed 1 top salt on top  
Brass on top, AgCl added

with #4  
3gms  
20-40-15-20-20 lead -  $\frac{1}{2}$  top F  $\frac{1}{2}$  top salt mixed  
AgCl added.  $\frac{1}{2}$  " " " on top  
Brass on top

To Calgary  
#2 - 2 + 4 - 2 beads.  
#3 - 1 + 3 - 4 beads.  
Aqua Regia after No Br leach

May 4/04 Test # 807 Comp. Test.

#1 -

Hgms. #1/A - 5-40-15-15-20 lead 1/2 floor. AgCl lower on top, 1/2 top salt & mixed on top.

Hgms. - 20 lower 60' lithology, AgCl, 1 top floor.

#2 - 2 runs, 10 grams each. Residue.

A - 20-45-15-20-20 lead 1/2 floor 1/2 top salt mixed on top lower on top AgCl

B - 20-45-15-20-20 lead 1 top floor, no salt lower on top AgCl

April 12/04 Test # 308 625 Plant Open Peps

#1 Residue & filter ash

68 gms.

4 cruc of 17 gms. 25-50-20-20-20 lead - salt, base on top & AgCl

#2 Residue & filter ash

66 gms

25-50-20-20-20 - salt & AgCl

15.3 per cruc 3 cruc.

#3

19 gms, 6.3 gms in 2 cruc. 20-45-20-20-20 <sup>1/2</sup> salt & base AgCl

6.3 gms sacrificed - 30-60-1 top for AgCl

#4

7 gms.

Zinc precip. of total liquid left.

20-45-25-20-20-<sup>1/2</sup>F, salt & AgCl



April 26/04 #809 Conglomerate (fine)

#1 - scorification

15 gms -

25 gm lead mixed

25 gm on top.

Had to add borax

Ended up with a 1.32 oz lead, didn't add silver

#2 - 15 gms -

25-40-20-20-20 gm lead on top after melting.

1 top mixed mixed, another on top of borax concs.

#3 2 cruc. of 16 gms each.

25-40-20-20-30 gm lead on top after melt.

(small Ag added) 1 top salt mixed 1 top on top with borax

#4 2 cruc. of Zinc precip + hot residue

(small Ag added)

25-40-20-20-70 gm lead on top after melt.

#5 - lead on after leach.

15 gms.

25-40-20-20-30 same as #4 through out (Ag added small)

Fri - May 24/04 Test # 810 (For West)

#1 Residue of filter ash 22 grams.

2 crucibles (12 gm each) 20

25-40-20-~~30~~-30 lead on top after melt.

1/2 top floor, half mixed top. 1 top half

of added. on to with brass

#2 20 grams.

2 crucibles (10 gm each)

25-40-20-20-30 lead on top after melt.

The rest is the same as #1

#3 Zinc precip. 4.5 gm.

15-40-15-20-30 lead mixed after melt

of added. touch of floor half 1/2 top mixed

1/2 top section on top with brass

June 8/04 Test # 811 (Ron)

- # 1 - 27 gms in three crucibles @ 9 gms each. 25-40-20-20 - 30 gms lead on top after melt
- # 2 - 7 inc precip 2.2 gms first lot. 25-40-20-20 - 30 lead put in melt 1 top salt mix 10 top salt
- # 3 - 7 inc precip 1.7 gms from dried liquid last lot. 25-40-20-20-30 - 1 top salt 1/2 top flour, all mixed 1 top salt + horse top
- # 4A 25-40-20-20 - 30 lead in melt. 25-45-20-20 - 30 lead mixed
- # 5B (25-40-20-20-30 - 1 top salt 1/2 top flour, all mixed) 1 top salt + horse top
- # 6 1B - 25-45-20-20 - 30 lead mixed
- # 7 1B - 25-45-20-20 - 30 lead mixed

(5 gms of Wood) with the black of wood on top  
1-B the 1 top salt and horse is put on top.

- 1st firing - 3 cruc. A - lead added B - mixed C - mixed & wood
- 2nd firing - 1st Zinc lot 2 cruc. #4 - lead added #5 - mixed
- 3rd firing - 2nd Zinc precip 2 cruc. #1 - lead added #2 - mixed.

1,6,7 / 4 / 5 /

June 20/04 Test #812 (Chin Champs)

- #1 - First settling 9 grams
- #1 25-40-20-20-30 - 1 top ball - 1/2 top flour, all mixed, then top ball on top & boxes
- #2 25-40-20-20-30 - 4 grams, 3 cruc. 13+ in each. manual mix - all mixed, then top ball & boxes on top.

June 25/04 Test #813 (Sand Under Cong.)

- #4 25-40-20-20-30 - 10 grams - 1 top ball mixed, one on top with flour, 1/2 top flour - Ag added
- #5 #2 - Zinc precip of all liquid 8 grams Same as #1

June 30/04 - (Cong. 8' from bottom) #814

- #3 - Residue with Zinc (not total liquid) 9 grams. 25-40-20-20-30 - 1 top ball mixed, 1 on top - 1/2 top flour, Ag added.
- #5 - 2 cruc @ 14 grams each. 25-40-20-20-30 - Same as #1
- #6 20 grams. 25-45-20-20-30 - Same as above

July 12/04 Lat # 815 (Comp 8' above bottom)

#1 & #2

2 cruc. 12 gram each  
25-40-20-20-30 - 1 top NaCl mixed, Ag. ~~top~~  
1/2 top flour + 2cc Et on top with Boq

#3 -

10 gram.  
25-40-20-20-30 - Same as #1 & #2

#4 -

15 gram.  
25-40-20-20-30 Same as above.

July 20/04 # 815 continued

#1 - 2 Cruc., 15 gram each

Find  
5 AT

Zinc precip from total liquid, 49 gram  
total dust, roasted at 1600° F, shrank from 76 to 56  
25-40-20-20-30 1/2 top flour, Ag, 1 top salt mixed salt on

#2  
11 AT  
44

2 Cruc., 15 gram each. 5 (AT) of total  
liquid after Z inc precip. Dried to dust then  
roasted at 1600° F, total shrank from 231 gram to  
121 gram.

Same as #1.

July 28/04 Test # 816 (Far West - Rabbe)

#1 - 8 hrs, 3 hrs, 3 hrs. Total weight 34 grams.  
2 cruc. 17 grams each.  
30-45-20-20-30 - Ag. 1 top salt mixed, 1 on top with borax

#2 - 2-3 hr sessions 19 grams.  
2 cruc. 9.5 grams each.  
25-40-20-20-30 - Ag. 1 top salt mixed, 1 on top to borax  
1/2 top flour.

#3 - 10 grams.  
25-40-20-20-30 - same as #2

Aug 5/04 - more of #816 (see book)

Crystal  
#4  
Calyx  
with

#1 - 2 cruc. 17 grams each.  
30-45-20-20-30 - 1/2 top flour, 1 top salt mixed  
1 top salt on top with borax, Ag.

Aug 11/04 Test # 817 "Reg"

#1 - Zinc 1/2 of liquid (2.5 A.to) 10 grams.  
25-40-20-20-30 - 1/2 top salt mixed, 1 top salt  
on top with borax, Ag, 1/2 top flour.

#2 - 38 grams. 3 cruc. (12.6 grams)

A 25-40-20-20-30 - 1/2 top salt mixed 1/2 top salt  
on top 1 top borax Ag, 1/2 top flour

B 25-40-20-20-30 - same as above.

C 25-40-20-20-30 - 1 top salt mixed, 1 on top with 1/2 flour

Aug 17/04 Test # 818 "6-26", 3.5 A.T.

#1 - 1st.

14 grams.

25-45-20-20-30 1/2 tsp salt mixed, 1/2 tsp on top  
1/2 tsp flour, with honey, Ag.

#2 - 2nd, third & last - 15 grams.

25-45-20-20-30 - Same as #1

#3 - Filtered ash roasted, 14.5 grams in 2 cruc.

25-45-20-20-30 - Same as #1 (no flour)

#4 - Zinc precip. 2 cruc @ 10 grams each.

20-40-20-20-30, same as #1

Aug 22/04 Test # 819 "Worsley"

#5 - 9 grams.

20-40-20-20-30 - 1/2 tsp flour. Ag - 1/2 tsp salt mixed, 1/2 tsp salt on top with honey

#6 - Zinc precip. 11 grams.

20-40-20-20-30 - Same as #1

Aug 20/64 Test # 820 "626" ~~5 grams~~

#1 - with ore present. 5 grams.  
20-40-20-20 - 1/2 top salt mixed, Ag., flour 1/2  
1/2 " on top with borax.

#2 - with ore present 7 grams.  
same as #1

Sept 12/04 all mixed together, 29 grams  
2 cruc. of 14.5 grams each.

#1 - with 1 bead of Ag added.  
25-45-20-20-30 - 1/2 top salt mixed + 1/2 flour  
1/2 " " on top with borax

#2 - same as #1 except no Ag added.

Sept 26/04 Part of #820 - SAT called #21

#1 - First 1/2, 7 1/2 A.T. ( ) 5 grams.  
20-40-20-20-30 1/2 top salt mixed  
1/2 flour 1/2 top on top with borax - Ag mixed

#2 - Second 1/2 - 7 1/2 A.T. ( ) 5 grams.  
20-40-20-20-30 - 1/2 top salt mixed & Ag.  
1/2 top flour 1/2 " " on top with borax

#3 - Silver residue after dissolving copper. (10 grams)  
20-40-20-20-30 - 1/2 top salt mixed (no Ag)  
1/2 top flour 1/2 " " on top with borax



Mar. 15/04. Lat # 827 Reg. 10 AT

#1 2 Crul. 2 1 gram each.  
30-45-20-20-30 - 1/2 top salt mixed, 1/2 top proof on top

#2 1st + 2nd. 10 grams.  
20-40-20-20-30 - 1/2 top, same as #1

#3 Purple 9 grams  
20-40-20-20-30 1/2 top - same as #1

#4 10 grams  
20-40-20-20-30 - 1/2 top - same as #1

#5 Zinc precip. 3 grams  
15-30-15-15-30 1/2 top - same as #1

Lot #	Crul. #	Cypals
#1	#1 + #2	#1, #1
#2	#3	#2
#3	#6	#3
#4	#4	#4
#5	Drophen top	#5

To Calgary - Mar. 17

Cal. #1 - Lot #1 - 2 heads.  
#2 - Lot #3 - purple.  
#3 - Lots #2, #4, #5

Dec 2/04 Test # 823 (Reg 4 A.T.)

- #1 - all -17 grams  $\frac{1}{2}$  top flour  
20-45-20-20-30 - Oly  $\frac{1}{2}$  salt mixed  $\frac{1}{2}$  or top flour
- #2 - Zinc precip - 15 grams  
20-45-20-20-30 - Oly - same as #1 -  $\frac{1}{3}$  top flour

Dec 12/04 Test # 824 Reg 3 AT

- #1 - 1st & 2nd - 5 grams  
15-20-15-15-30 - Oly  $\frac{1}{2}$  top NaCl mixed  
 $\frac{1}{2}$  top " on top & Roan
- #2 - 3rd - 20 gm - 8 grams  
20-40-20-20-30 Oly same as #1
- #3 - Zinc residue - 8 grams  
20-45-20-20-30 - Oly same as #1 + head liquid

Monday Jan 10/05 - Test # 825

- #1 - Zinc 7 grams  
20-40-20-20-30 Oly added  $\frac{1}{2}$  top salt mixed  
 $\frac{1}{2}$  top on top plus bread  
 $\frac{1}{2}$  top flour.

Jan 25/05 Test # 826 (7AT For 2 set)

#1 - Zinc precip (2 conc. 30 gm each)  
and #2) 30-50-20-20-30-Ag, 1/2 top level mixed  
1/2 " on top & base  
1/2 top flour,  
#3 residue from ~~test~~ - 19 grams.

25-45-20-20-30-Ag, 1/2 top salt mixed  
1/2 top salt on top & base  
1/2 top flour.

#4 Head ore ~ 15 gm (after leach)

20-40-20-20-30-Ag, 1/2 top salt mixed  
1/2 " " on top & base  
1/2 top flour.

#5 - 20 hrs. 3 gm  
(Forgot to put it in with first fringe)

15-30-10-15-30-Ag, 1/2 top salt mixed  
1/2 top " on top & base

Feb. 5/05 Test # 827 (Far West 3AT)

#1 — 9 grams.

20-40-20-20-30-Og  $\frac{1}{2}$  top ball mixed  
 $\frac{1}{2}$  " " on top & porous

#2 Zinc 10 grams

20-40-20-20-30-Og.  $\frac{1}{2}$  top mixed  $\frac{1}{2}$  top on top & porous

#3 Residue. — 20 grams.

25-45-20-20-30-Og.  $\frac{1}{2}$  top not mixed  
 $\frac{1}{2}$  " " on top & porous

Feb. 19/05 Test # 828 (Far West 2AT)

#1 1, 2, 3, 5 grams.

20-40-20-20-30-Og usual salt.

#2 - Annealed  $\frac{1}{2}$  16 grams.

25-45-20-20-30-Og usual salt

#3 - ~~1/2 of annealed~~ (like #2) 16 grams  
Same as #2

#4 - 2nd half H2 SO4 30:1 9 grams.

20-40-20-20-30 Og usual salt.

#5 Zinc - 7 grams

20-40-20-20-30 Og usual salt.

added from

March 10/25 Test # 829 (For dist 4AT)

Residue from 17.5 gm, put in furnace at 1200° for 30 minutes  
25-45-20-20-30 lead to top floor  
(Ag added, 1/2 top salt mixed 1/2 top salt on top with borax)

#2 Same as #1 - 17.5 gm.

#3 - 1st & 2nd 10 gm

20-40-20-20-30, Ag, floor, 1/2 top salt mixed 1/2 top on top of borax

#4 3rd 4th & 5th.

12 gm

20-40-20-20-30 - Ag, floor, 1/2 top salt mixed 1/2 top salt on top + borax

March 31/05 Lat # 830 (5 AT Row)

Total of 108 pins. (6 parts 18 pins each)

#1 - 18 pins

20-45-20-20-30 - 1/2 top floor, 1/2 top salt mixed  
(no top) 1/2 top on top with base

#2 - 18 pins

Same as #1

#3 - 18 pins

Same as #1

**ATTACHMENT 2.3.1**

**Loring Test Analyses**



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R. 1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 48193

DATE: December 19, 2003

## PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	3.50 ± .0025 mg ÷ 5 = .0007007 gPT	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

#788

Certified by:





3



### Loring Laboratories Ltd.

629 Beverdam Road N.E.,  
Calgary Alberta T2K 4A7  
Tel: 274-2777 Fax: 275-0541



TO: ALAN LEWIS  
R.R.1, Site 13, Box 13  
Ponoka, Alberta  
T4J 1R1

FILE:48257

DATE: January 16, 2004

### PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	1.60 ± .0016 mg ÷ 5 = .00032 mg #789	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



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### Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:48385

DATE:March 8, 2004

### PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	8.85 ±0.007 opt	1.00 ±0.001 opt	1.58 ±0.0015 opt	<0.01
Lewis #3	19.45 ±0.019 opt	2.52 ±0.003 opt	1.77 ±0.018 opt	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



*[Handwritten signature]*



# Loring Laboratories Ltd.

529 Beaverdam Road N.E.  
Calgary Alberta T2K 4W7  
Tel: 274-3777 Fax: 275-0541



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:48428

DATE:March 22, 2004

## PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	18.85	<0.01	<0.01	<0.01
Lewis #2	27.20	<0.01	<0.01	<0.01
Lewis #3	19.45	<0.01	<0.01	<0.01

*Handwritten notes in table:*  
 } 804 (bracketed next to Lewis #1 and #2)  
 6550  
 = 0.065 mg ÷ 5 = 0.014 mg per ton

Beads dissolved in aqua regia and analyzed by ICP.

Certified by:

[Redacted signature area]

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# Loring Laboratories Ltd.

629 Bessemer Road N.E.,  
Calgary Alberta T2K 4V7  
Tel: 274-2777 Fax: 275-0541



TO: ALAN LEWIS  
R.R.1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 48486

DATE: April 2, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.047	3.03 - 0.003	2.18	<0.01
Bead #2	0.034	<0.01	<0.01	<0.01
Bead #3	0.018	<0.01	<0.01	<0.01
	$\frac{0.099}{\div 5} = 0.0198 \text{ OPT}$			

Beads dissolved in aquaregia and analyzed by ICP.

11.08 per ton  
560 Crd. per oz

Certified by:



# 805

To : MR. ALAN LEWIS  
 R.R. # 1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1



File No : ~~46476~~  
 Date : April 12, 2004  
 Samples : Beads  
 Project :  
 P.O.#

7

## Certificate of Assay

### Loring Laboratories Ltd.

629 Beaverdam Road, NE Calgary Alberta T2K 4W7  
 Tel: (403)274-2777 Fax: (403)275-0541

Sample No.	Au mg	Pd ug	Pt ug	Rh ug
Bead # 1	0.032	< 0.10	< 0.10	< 0.10
Bead # 2	0.010	< 0.10	< 0.10	< 0.10
Bead # 3	0.093	< 0.10	< 0.10	< 0.10
$\frac{0.135}{5} = 0.027 \text{ opt}$ <p style="font-size: 2em; font-weight: bold;">#807</p>				

NOTE: Due to high silver content of beads, samples had to be diluted to a higher volume to be analyzed. Therefore detection limits for Pt, Pd and Rh are higher.

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

Assayer

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



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46549

DATE:April 25, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.055	<0.05	<0.05	<0.01
Lewis #2	0.380	<0.10	<0.10	<0.10
Lewis #3	$\frac{2.090}{2.525 \div 5} = .505$	<0.20 0 PT	<0.20	<0.20
Lewis #4	<0.001	<0.01	<0.01	<0.01

Samples #2+#3 had to be diluted 10 fold to obtain gold concentrations.  
As a result, PGM detection limits have been compromised.

Beads dissolved in aquaregia and analyzed by ICP.

*Test # 808*

Certified by:



9



### Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box 13  
Poncha, Alberta  
T4J 1R1

FILE 48548

DATE: May 5, 2004

### FGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Beads #1+2	0.010	0.95	1.35	<0.01
Beads #3	0.014	1.38	2.02	<0.01
Beads #4	0.006	0.36	<0.01	<0.01
Beads #5	0.002	<0.01	<0.01	<0.01

*0.032 ÷ 5 = 0.0064 g per ton*

*A 809*

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



10



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 46618

DATE: May 21, 2004

## FGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Beads #1	0.019 - 0.019	2.24	<0.01	<0.01
Beads #2	0.813 - 0.815	2.97	0.27	<0.01
Beads #3	0.002 - 0.002	0.68	2.28	<0.01
	<u>0.836</u>	<u>5.86</u>	<u>2.56</u>	

#810

$0.836 \text{ mg} \div 5 = .167 \text{ g per ton}$   
 $Pt: .0058 \div 5 = .0012 \text{ g per ton}$   
 $Pd: \text{---}$

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: 

May 27/04 Acc. 540 End. Cnd. del. br 1.36  
 $540 \times .836 = 451.44 \div 5 = 90.28 \text{ per ton}$



11



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46672

DATE: June 15, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.008	0.45	<0.01	<0.01
Bead #2	0.007	0.30	0.25	<0.01
Bead #3	0.031	3.62	1.11	<0.01
Bead #4	0.003	0.56	0.40	<0.01
Bead #5	0.004	0.81	0.35	<0.01
Bead #6	0.033	5.70	1.04	<0.01

*0.086 ÷ 5 = 0.017 g per ton*

Beads dissolved in aquaregia and analyzed by ICP.

*Test # 811*

Certified by:



*Pl. # 993  
June 30/04  
mailed  
96.30*

12



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R.1, Site 13, Box18  
 Ponoka, Alberta  
 T4J 1R1

FILE:46745

DATE: July 9, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.003	<0.01	<0.01	<0.01
Vial #2	0.014	2.86	1.26	<0.01
Vial #3	0.005	0.15	1.02	<0.01
Vial #4	0.022	10.32	2.28	<0.01
Vial #5	0.008	0.28	0.39	<0.01
Vial #6	0.013	3.93	3.88	<0.01
Vial #7	0.005	0.25	0.41	<0.01
Vial #8	0.006	0.56	<0.01	<0.01
Vial #9	0.029	3.42	1.32	<0.01

*Handwritten notes in table:*  
 Vial #2-3: # 812  
 Vial #4-5: # 813  
 Vial #7: # 814  
 Vial #9: "Non"  
 Calculations:  $0.022 \div 5 = 0.004$ ,  $0.026 \div 5 = 0.005$ ,  $0.024 \div 5 = 0.0048$   
 Summations:  $2.91 + 2.49 = 5.40$ ,  $2.65$

Beads dissolved in aquaregia and analyzed by ICP.

# 812 - 0.004 ug per ton Au.  
 # 813 - 0.026 ÷ 5 = 0.005 ug per ton Au.  
 # 814 - 0.024 ÷ 5 = 0.0048 ug per ton Au.



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46774

DATE: July 22, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.023	1.24	<0.01	<0.01
Vial #2	0.008	2.41	2.75	<0.01
Vial #3	0.008	13.04	5.53	<0.01
Vial #4	0.012	1.28	1.39	<0.01
Vial #5	0.005	<0.01	0.50	<0.01

*0.056 ÷ 5 = 0.0112 g per ton Au.*

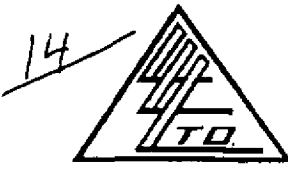
Beads dissolved in aquaregia and analyzed by ICP.

*Test # 815*  
~~per ton~~

Certified by: \_\_\_\_\_



*OK # 122  
80.25  
Aug 13/04*



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46803

DATE: July 30, 2004

## PGM ANALYSIS

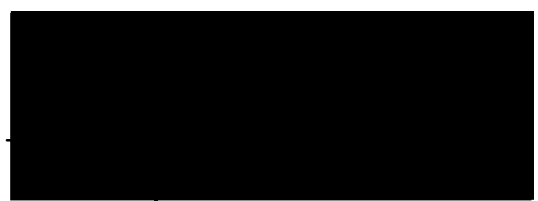
Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.034	1.45	<0.01	<0.01
Vial #2	0.027	<0.01	<0.01	<0.01
Vial #3	<u>0.018</u>	<0.01	<0.01	<0.01

*0.079 ÷ 5 = 0.0158 g per ton Au.*

Beads dissolved in aquaregia and analyzed by ICP.

*# 816*

Certified by:



*48.13  
CK # 122.  
Aug 13/04*

15



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE:46881

DATE: August 27, 2004

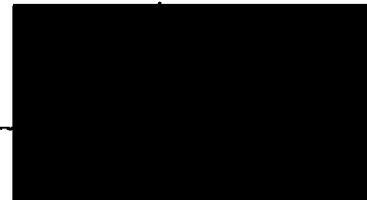
## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
#1	0.006	<0.01	<0.01	<0.01
#2	0.006	<0.01	<0.01	<0.01
#3	0.003	<0.01	<0.01	<0.01
#4	0.003	<0.01	<0.01	<0.01
#5	0.012	<0.01	<0.01	<0.01
#6	0.003	<0.01	<0.01	<0.01
#7	0.033	0.04	0.02	<0.01
#8	0.067	<0.01	<0.01	<0.01
#9	0.005	<0.01	<0.01	<0.01

Handwritten notes in the table:  
 - Sample #1-4: } 4.77  
 - Sample #3:  $0.015 \div 5 = 0.003$   
 - Sample #4:  $0.015 \div 5 = 0.003$   
 - Sample #7:  $0.48 \div 3.5 AT = 0.137$   
 - Sample #9:  $0.12$

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: \_\_\_\_\_



16



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE:47013

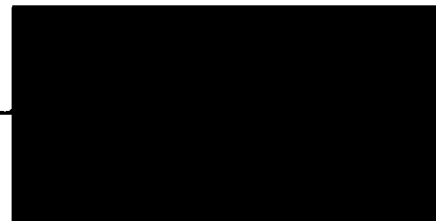
DATE: October 6, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
#1A } 820	0.002	1.50	1.34	<0.01
#2A	$\frac{0.010}{.012 \div 5 = .0024 \text{ of per ton Au.}}$	1.65	1.50	<0.01
#1	0.021	0.27	<0.01	<0.01
#2 } 821	0.008	<0.01	<0.01	<0.01
#3	$\frac{0.002}{.031 \div 5 =}$ LL	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



17



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 P.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE: 47175

DATE: Nov. 30, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.072	0.54	1.54	<0.01
Bead #2	0.668	0.35	0.53	<0.01
Bead #5	0.052	0.68	0.84	<0.01

$0.712 \div 10 = 0.07120PT$

Beads dissolved in aqua regia and analyzed by ICP.

# 922

Certified by: \_\_\_\_\_

18



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47253

DATE:Dec.23, 2004

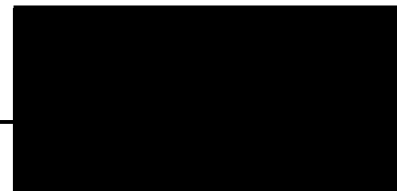
## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.008	0.18	<0.01	<0.01
Lewis #2	0.002	0.34	<0.01	<0.01
Lewis #3	0.005	0.15	0.12	<0.01
Vial A	0.004	0.45	<0.01	<0.01
Vial B	0.008	0.96	1.99	<0.01

*Handwritten notes in table:*  
 Lewis #1-3 } #824  
 Vial A } #823  
 Lewis #3:  $\frac{0.005}{.015 \div 3 \text{ AT} = .005 \text{ au opt}}$   
 Vial B:  $\frac{0.008}{.012 \div 4 = .003 \text{ au opt}}$

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: \_\_\_\_\_



*Handwritten signature and date:*  
Jan 17/05  
8225



19



### Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 12, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 47253-1

DATE: Jan. 13, 2005

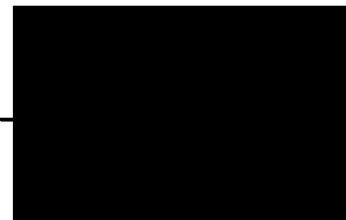
### PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.003 ÷ 3 = .001 <0.01 <i>of parts per million.</i>		<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

# 825

Certified by:



20



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47350

DATE:Feb. 1, 2005

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.001	<0.01	<0.01	<0.01
Lewis #2	<0.001	<0.01	<0.01	<0.01
Lewis #3	0.001	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

# 826

Certified by:



21



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47350

DATE:Feb. 11, 2005

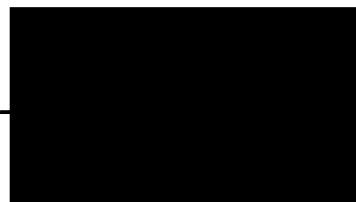
## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	<0.001	<0.01	<0.01	<0.01
Lewis #2	<0.001	<0.01	<0.01	<0.01
Lewis #3	<0.001	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

#827

Certified by: \_\_\_\_\_





# Loring Laboratories Ltd.

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



FILE:47420

TO:ALAN LEWIS  
 R.R.1, Site 13, Box18  
 Ponoka, Alberta  
 T4J 1R1

DATE:March 2, 2005

## PGM ANALYSIS

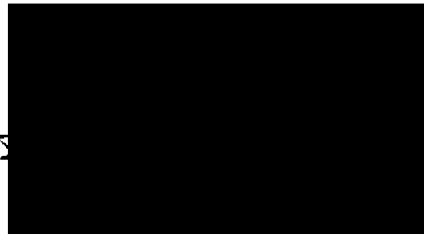
Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.003	0.20	<0.01	<0.01
Lewis #2	0.005	0.50	<0.01	<0.01
Lewis #3	0.004	0.13	<0.01	<0.01
Lewis #4	0.004	0.23	<0.01	
Lewis #5	<u>0.001</u> -0.17	<u>0.18</u> 1.24	<0.01	
$0.017 \div 2 = 0.0085$				

Beads dissolved in aquaregia and analyzed by ICP.

9.09 0.74

H 8 2 8

Certified by:



**ATTACHMENT 2.3.2**

**SGS Lakefield Research Limited  
Test Analysis**



SGS Lakefield Research Limited  
 P.O. Box 4300 - 185 Concession St.  
 Lakefield - Ontario - KOL 2H0  
 Phone: 705-652-2038 FAX: 705-652-6441

Alan D. Lewis Assay & Prospecting  
 Attn : Alan Lewis

RR1, Site 13, Box 18  
 Ponoka, Alberta, T4J 1R1  
 Canada

Phone: 403-783-4567  
 Fax:403-783-5480

June 23, 2003

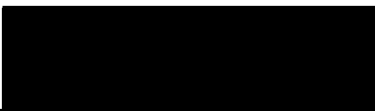
Date Rec. : 10 June 2003  
 LR Report : CA9457-JUN03  
 Project : 2301634  
 Client Ref : Au, Pt, Pd analysis - June 9,  
 2003

## CERTIFICATE OF ANALYSIS

### Lakefield Research Limited - Final Report

Sample ID	Au g/t	Pt g/t	Pd g/t	Au mg	Pt mg	Pd mg
1: Sandstone (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
2: Sandstone (semi-fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
3: Conglomerate (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
#774 4: A Lewis #1	---	---	---	< 0.0002	0.0007	< 0.0002
#772 5: A Lewis #2	1.30	1.45	0.56	---	---	---
6-DUP: Sandstone (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---

Sample "A Lewis #1" was a bead weighing 0.0601g.

  
 Nicole Mozola, B.Sc. (Eng)  
 Project Coordinator  
 Mineral Services, Analytical

*Handwritten:*  
 Pd  
 July 07/03  
 #5357

### **3.0 Computer Tabulation and Analysis of Test results**

Dr. Walter Haessel, a shareholder and director of 713803 Alberta Ltd., has undertaken a tabulation and computer analysis of the AI Lewis test results to determine if any discernible patterns exist relative to location of sample sources, type of pretreatment/analysis used, etc., to correlate the relative quality of test results. This work is still in its early stages.

#### **4.0 Discussions with Other Companies**

Contact has also been maintained with Birch Mountain Ltd. who is a public company that has been active for several years in pursuing Alberta gold and platinum prospects. Birch Mountain Resources Ltd. is currently concentrating their efforts on developing a limestone quarry to serve the aggregate and quicklime requirements of the Ft. McMurray oil sands industry. However, they have not abandoned their precious metals project and have encouraged us to maintain contact with a view to eventually establishing some form of cooperative effort.



## 5.0 Summary of Expenditures

The majority of the expenditures incurred by 713803 Alberta Ltd. in the period covered by this report (May 2003 to April 2005) are represented by contributed labor of Al Lewis. Small amounts of contributed labor were provided by Dr. Walter Haessel and Robert Liddle.

The value of contributed labor plus other expenditures are summarized below:

### 5.1 Contributed Labor

#### (a) Alan Lewis

- |       |   |                      |    |            |
|-------|---|----------------------|----|------------|
| (i)   | Travel June 8-11/03 from Ponoka to Lakefield, Ontario to observe SGS Lakefield Research Limited procedures of assaying samples and to leave samples with them for assay<br>4 days | ██████████           | \$ | ██████████ |
| (ii)  | Travel December 3 – 6, 2003 from Ponoka to Langley, B.C. to meet with Mr. Norm Smalley re assay and extraction processes, etc.<br>4 days  | ██████████           | \$ | ██████████ |
| (iii) | Lab Analysis and testing in home lab over the period April, 2003 to March, 2005   | ████████████████████ | \$ | ██████████ |

#### (b) Dr. Walter Haessel

Tabulation and computer analysis of Al Lewis test results Walter Haessel	████████████████████	\$	██████████
---	----------------------	----	------------

### 5.2 Materials, Services and Travel Expenses

Al Lewis		\$	██████████
----------	--	----	------------

### 5.3 Report Preparation

Al Lewis	████████████████████	\$	██████████
Robert Liddle	████████████████████	\$	██████████

---

<b>Grand Total Costs</b>			<b><u>\$68,696.00</u></b>
--------------------------	--	--	---------------------------

**NORTHWEST ALBERTA PROJECT**

**Supplementary Information re**

**Mineral Assessment Report**

**Dated May 17, 2005**

**Metallic and Industrial Minerals  
Permit Nos. 939701001 and 939701002  
Permit Holder Alan David Lewis**

**Submitted by**

**713803 Alberta Ltd**

**October 13, 2006**

## **Introduction**

For the last several years, the work undertaken by 713803 Alberta Ltd. has focused entirely on the work being performed by Alan Lewis to try and establish a reliable and repeatable ore pretreatment and leaching processes that will in turn result in positive precious metal assay analysis. Accordingly there has been no new work in certain of the areas addressed in your request for supplemental information. However to be responsive to your request we have provided copies of relevant work or information that had been previously submitted in earlier assessment reports

## **Discussion of Geology and Formations over Permitted Lands**

The geological interpretation of the permitted lands was provided by 713803 Alberta Ltd under Tab 3 of its original assessment report dated May 14, 1999. For convenience, a copy of the that material is provided as Attachment 1 to this supplemental report. No further geological analysis has been done since that time. \*

## **Sample Location**

All of the sample ore material analysed during the April 2003 to March 2005 period was obtained from the bulk ore sample (approximately 20 cu yds. in total collected on July 18, 2000 which was delivered to and stored by Mr. Lewis near his home based lab) This sample was collected from Area 1 shown on the attached Map entitled attachment 2. This bulk sample collection was described and discussed in the assessment report dated May 17, 2001. \*

## **Discussion of Test Results**

As discussed in previous assessment reports ( May 14, 1999, May 17, 2001 and May 12, 2003) 713803 Alberta Ltd continues to face the challenge of developing and establishing a reliable and repeatable sample pretreatment and leaching techniques to remove and capture the precious metal content from the ore sample. Accordingly the test analyses reported under tab 2 of the May 7, 2005 assessment report describe the various pretreatment and leaching and processes that were used and covering the period reported ( April 2003 to March 2005) in this assessment report . \*

The pretreatment agents included:

H<sub>2</sub>SO<sub>4</sub> (sulfuric acid)

NaOH (Sodium hydroxide)

HN<sub>3</sub> (nitric acid)

Differing concentrations and proportions of these pretreatment agents were used in the various tests.

Once a sample was pretreated, different leaching agents were utilized to extract the precious metals from the ore samples . These leaching agents included:

HCl (three parts) and HNO<sub>3</sub> (one part) ( known as Aqua Regia)  
NaCl (common salt)  
NaBr (sodium bromide)  
KI (potassium iodide)

Again, different concentrations of leaching agents realized in various tests. These varying concentrations of leaching agents resulted in differing levels of PH ( acid – alkalinity balance) and differing levels of ORP ( oxidation reduction potential)

The leached solution was then precipitated and dried. The dried precipitates were then fired in a conventional fire assay and the resulting bead weighed. In certain instances as noted in the table the bead precious metal content was analyzed by an external lab (Loring) to provide independent confirmation of the results that Lewis was achieving.

The specific concentrations of agents used in the various analyses are not reported in the table. This is based on the anticipation of 713803 Alberta Limited that once repeatable techniques are established that they would provide proprietary analytical knowledge which could be the basis of patent applications.

### **Qualifications and Experience of Alan Lewis**

Mr. Lewis first became interested in gold mining in the nineteen seventies. Through reading, visits to gold mining operations in Australia and the Yukon and discussions with people active in the mining industry, Mr. Lewis developed sufficient knowledge and interest to initiate his first actual mining activity in the Yukon in 1980.

During the next seventeen years from 1980 to 1997, Mr. Lewis and his associates mined several properties in the Yukon including Bonanza Creek, Vancouver Creek, and the Moosehorn Range with varying degrees of success. In some years 40 to 80oz. of gold per day were successfully mined over the course of the 90 day summer Yukon mining season.

In the mid nineteen nineties, Mr. Lewis became aware of the gold potential of Northwestern Alberta and through his knowledge and experience developed a proposal that was successfully presented to ten other investors in 1996 resulting in the formation of 713803 Alberta Ltd. These individuals, along with Mr. Lewis remain the shareholders of 713803 Alberta Ltd to the present day.

Mr. Lewis equipped his own testing lab based the knowledge he had gained in the seventeen years of Yukon mining experience. Supplemented by additional discussion and reading germane to the “fine gold” type of ore found in Northwestern Alberta, Mr. Lewis developed and continues to develop the analytical approaches that are being used by 713803 Alberta Ltd .

In the early years of the 713803 Alberta Ltd's activities, confirmation of the quality of Mr. Lewis' laboratory facilities and analysis was provided by Mr. Doug Read, President of Cantech Laboratories Inc. Mr. Read confirmed in a letter provided to 713803 Alberta Ltd. that the work performed by Mr. Lewis was reliable and consistent with established practices of commercial laboratories.

A copy of the letter provided by Mr. Read was included in 713803 Alberta Ltd's original assessment report dated May and is included as attachment 3 to this supplementary report. Since the time of writing of Mr. Read's letter, Mr. Lewis has continued to improve the quality of these equipment and now has in place an additional propane fired furnace and has an improved scale capable of resolution to one ten thousandth of a gram. Mr. Lewis has also obtained a separate lab trailer to house the laboratory equipment which again improves the quality of operations from the time of Mr. Read's assessment when the lab equipment was housed in a vehicle garage. ✕

Mr. Lewis and other 713803 Alberta Ltd shareholders also met with principals of Birch Mountain Resources Ltd, a much larger public company which has been engaged in research and development of "fine gold" analytical process is in the same time frame as 713803 Alberta Ltd.. The purpose of the discussion was to explore analytical approaches to Northwestern Alberta "fine gold" ore samples. The Birch Mountain personnel were similarly supportive of the approaches and analytical techniques undertaken by Mr. Lewis.

#### **Discussion of Results from Computer Analysis of Lab Data**

The work performed to date has been to enter data into computer data files , but no analysis of that data has been undertaken yet.

#### **Revised Expenditure Statement**

713803 Alberta Ltd. believes that the expenditures submitted in the original expenditure statement remain valid. 713803 Alberta Ltd is not requesting any additional expenditure allowance for the time expended in preparing this supplemental report.

**Attachment 1**

**Geological Discussion**

### 3. Geological Interpretation Report

The 713803 Alberta Ltd. geological interpretation of the "west" permit area, as it relates to the Bad Heart sandstone and conglomerate deposits is set out in the following report entitled "Geological Survey, November 11-12, 1997" prepared by A.A. Wilkins, P.Geol.<sup>1</sup>

Also attached is a copy of a field drilling report prepared by the Manager of Drilling, Mr. B. Luft, for activity undertaken during the period March 21 through March 25, 1998 (Attachment 3.1). This report has been previously submitted to the Alberta Land and Forest Service on May 22, 1998.

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<sup>1</sup> Note that further interpretation letter reports have also been provided by Placer Dome North America (Section 5.1) and BHP Minerals Canada Ltd. (Section 5.2).

## Geological Survey November 11-13, 1997

A geological Field Trip was made to the West Permits to determine the best location to capture bulk samples for analysis.

Base Camp was established at the Airport Motel in Dawson Creek on November 11, 1997. Using Alan Lewis' 4x4 Dodge Ram Extended Cap Truck and all terrain ARGO low pressure rubber tire 8 wheel vehicle Messrs. Lewis, Luft, and Wilkins carried out a two day geological field trip over 713803 Alberta Ltd.'s West Permits and adjacent lands.

Although unanimous agreement concerning the geological interpretation of the West Permits was not reached, the following summarizes the writer's observations and opinions regarding the stratigraphic nature of the Bad Heart Conglomerate and Sandstones at eight (8) locations visited during the field trip. (See Map 1).

### Day 1 November 12

#### Site (1) NW ¼ Section 29 78 12 W6M (Not on Map)

This site, a local "gravel pit" on crown lands, sits approximately two miles east of the West Permit's eastern boundary. Access was reached by foot from a good condition provincial road. Very little sediment has been removed from a twenty foot high glacial mound of poorly sorted clays, sand, pebbles and boulders. A very poor access road, mainly ice covered, probably is the reason why only limited amounts of material have been taken from this pit. The surface elevation of the pit ranges between 2650 and 2700 feet therefore the top of the Bad Heart Sandstone has been glacially eroded. Drilling would be required to determine:

- 1) the surface elevation and thickness of the Bad Heart Sandstone; or
- 2) if it has been totally glaciated at this location



Site (2) N ½ Section 10 78 13 W6M

Access to this location was reached, from Site 1, by Lewis' 4x4 truck with the ARGO in tow. Travelling in a south and southwesterly direction the surface elevation ranged between 2650 and 2850+ feet over the eight miles traversed. Road conditions, provincial and well site, over the eastern portion of the West Permit varied from good to very poor. Timber in the area is mainly mature poplar with some spruce growing out of clayey glacial debris. The Bad Heart Sandstone was not observed to outcrop along this road traverse.

At the Site, Luft and Wilkins walked a ¼ mile South to North traverse along a cut line from an abandoned well site in the NW ¼ of section 10 to the boundary of section 15 (Anderson Road). Glacial debris caps the hill at the well site location. About 200 feet of elevation drop took place from the beginning to the end of the traverse (2793 to 2600 feet).

No out crops of the Bad Heart Sandstone were observed, however it was evident from sediments contained in the root systems of fallen trees that the Bad Heart Sandstone lies very close, within 1 to 3 feet, of the surface at this location.

The sample collected by Luft and Lewis in this locality, during their September trip, is probably a mixture of indigenous Bad Heart Sandstone and glacial debris. Also, in close proximity to this location, a large (1 and ½ ton) bulk sample was taken by Lewis and Wilkins during the brutally cold winter of 1996. No further samples were collected from this site since Lewis has carried out numerous assays on the bulk sample sediments, as well as the material mentioned above, collected in September.

Site (3) NW ¼ Section 23 78 13 W6M

The ARGO was used to reach this location, following a quick carburetor overhaul done by Lewis with Luft's assistance. A good trail (ARGO TRAIL) about 30 feet wide, impassible in places by a 4x4, runs due north along the western boundary of section 13 and then NNW across section 23. Logging of poplar trees has occurred along this trail with preparations underway for further removal of timber during the upcoming winter.

This site was first visited in the winter of 1996 by Wilkins. Access was gained, from the west, by snowmobile operated by a local farmer/trapper who resides in the Spirit River Area. Messrs. Fonteyne, M. Frost and Lewis collected samples from this site and surrounding area this past summer. As well Luft and Lewis collected bed rock samples from this site during their September trip.

About 45 feet of Bad Heart Conglomerate outcrops at this location, forming a near vertical cliff face. Considerable spalling and slumping has taken place dislodging large, up to 40 x 40 foot blocks, of conglomerate. The sandstone has a gradual slope, about 3.0 degrees, and is covered by topsoil and vegetation. The conglomerate was observed to outcrop 50 to 75 yards to the east of the cliff face. To the SE for about 1/2 mile the conglomerate outcrops and is generally covered by a thin layer of moss. To the NW the cliff face can be seen extending almost to the Bay Tree pit.

Bot the conglomerate and sandstone dip about 5 degrees to the East, although a true dip reading is not possible because of the slumping that has occurred at this location. Samples of the conglomerate and sandstone (at the contact point) were collected. It was observed that the grain size of the conglomerate pebbles increased from the base to the top of the exposed interval suggesting a shore line environment rather than channel fill.

Site (4) NW ¼ Section 14 78 13 W6M

A glaciated depression forms a draw and shallow saddle between the two major topographic highs on the West Permit. The Pouce Coupe oil pipeline right-of-way runs up the center of this draw along the northern border of section 14. Luft and Lewis collected a sample from this right-of-way during their September trip. Rounded glacial boulders, granite and quartzite, were observed at the sample collection site as well as 20 feet below such site where a large uprooted tree exposed the underlying sediments. Sufficient platy sand fragments were observed at both locations to indicate that the glacial till probably contains, in part, Bad Heart Sandstone indigenous to the area. \*

Day 2 November 13

Base Camp was Vacated at 8:30 a.m.

Site 5 Tree Tower Pit (Located in B.C. 3 Miles due West of Section 4 of West Permits)

(Not on Map)

Site 6 NW ¼ Section 4 78 13 W6M

This site was reached by ARGO, travelling south on a cut line which runs along the eastern boundary of Section 8 and then east on a very old cut line, heavily overgrown by 2 to 3 inch poplar trees. Luft and Lewis collected random samples from this cut line near the 2700 to 2750 foot surface elevation during such trip. A short distance to the south of the cut line Wilkins observed and collected samples from Bad Heart Sandstone outcrops which were discovered at 2750, 2700 and 2675 foot surface elevations. The sandstone dips in the range of 5 to 10 degrees to the east at this location although some slumping may have taken place. The Bad Heart Conglomerate was not found at this location. \*

Site 7 SW ¼ Section 27 78 13 W6M

Luft and Wilkins accessed this location by foot climbing in a northeasterly direction from the Bay Tree pit. The northwestern end of the horseshoe shaped cliff escarpment was intersected about ½ mile from the Bay Tree pit. At this location, the cliff is capped by 1 foot of conglomerate underlain by cliff forming sandstone. Total vertical thickness, "eye balled" from the top of the cliff, is estimated to be 25 to 30 feet. Samples from both the conglomerate and sandstone were carried back to the 4x4 at the Bay Tree pit.

Site 8 NW ¼ Section 25 78 13 W6M

This site, referred to as the Moxely Pit, was accessed by the Dodge 4x4 via a good provincial road. The Bad Heart Sandstone is within 1 foot of the surface at this location. The surface elevation ranges between 2750 to 2700 feet. Interbedded in the sand is 1 foot of conglomerate occurring 5 feet below the top of the sand. This conglomerate is finer grained and more friable than the cliff forming conglomerates observed at the other sites. Samples of the conglomerate and sandstone were collected.

**General Topography & Stratigraphy**

The thickest exposed Bad Heart conglomerate section observed was at Site 3. Pit excavations at Sites 5 & 8 expose the thickest sections of Bad Heart Sandstone. The most extensive removal of the Bad Heart formation has occurred at the Bay Tree pit which covers an area the size of a CFL football field from the pit's entrance to the eastern rim of the pit. Drilling will be required to confirm the remaining thickness of sandstone, however, a good estimation would be that about 5 feet of sand remains below the base of the pit. There is possibly an unexcavated 10 foot tier of sandstone about 50 by 30 yards remaining in the pit below the glacial till deposit which forms the topographic high (2800+ feet surface elevation) on the north side of the pit. (See schematic X Section 1).

The Bad Heart conglomerate is interpreted to be a shoreline deposit about 55 feet in thickness where it outcrops at Site 3. It occurs as a wedge in the sandstone sequence thinning to the northwest and the southeast. Based on a discussion held with a local Spirit River resident, who worked for NOVA during its pipeline construction in the area, the conglomerate extends several miles to the east. If dip readings at Site 3 are true the conglomerate will occur at increasing depths to the east. Overburden thickness will also be significantly greater in some areas. (See Schematic X Section 2).

More detailed mapping will be necessary to confirm the wedge-like nature of the conglomerate and facies change to sandstone along the horseshoe bluffs in sections 23 & 27.

The Bad Heart conglomerate is dark grey in color. Grain size of the pebbles varies from  $\frac{1}{4}$  to 1 inch and all are rounded or oval in shape. The pebbles are predominantly micro crystalline quartz or chert. The cementing agent is non-calcareous, probably silica. The matrix consists of fine sandstone and silt with only minor amounts of argillaceous material typical of a shoreline deposit. Grain size orientation provides the rock with considerable strength and hardness in one direction. However, when fragments are broken away from the outcrop they become very friable.

The Bad Heart Sandstone is tan in color composed predominantly of poorly rounded and irregular clear quartz grains in a very argillaceous matrix. The rock is weakly silica cemented and rock integrity results from packing of the argillaceous matrix.

The sandstone is interpreted to be marine deposit laid down in a tectonically active basin. Diastrophism formed the Peace River Arch, an uplift which occurred throughout the depositional history of the northwestern portion of the Western Canada Sedimentary Basin. Rapid sedimentation, in the geological sense, lays down poorly sorted argillaceous sandstones which the Bad Heart sandstone typifies.

The thickness of the Bad Heart sandstone underlying the West Permits is at least 90 feet. The base of the sandstone has not been seen in outcrop, however, the base of the Bay Tree pit may be near the contact with the underlying formation which is most likely a shale deposit (Muskiki Shale).

Bedding planes have been observed in outcrop sections and pit excavations. Bed thickness varies between only a few inches to over five feet. In sections where the sand is thinly bedded (platy), the rock splits along muscovite rich bedding planes.

### **Summary and Conclusions**

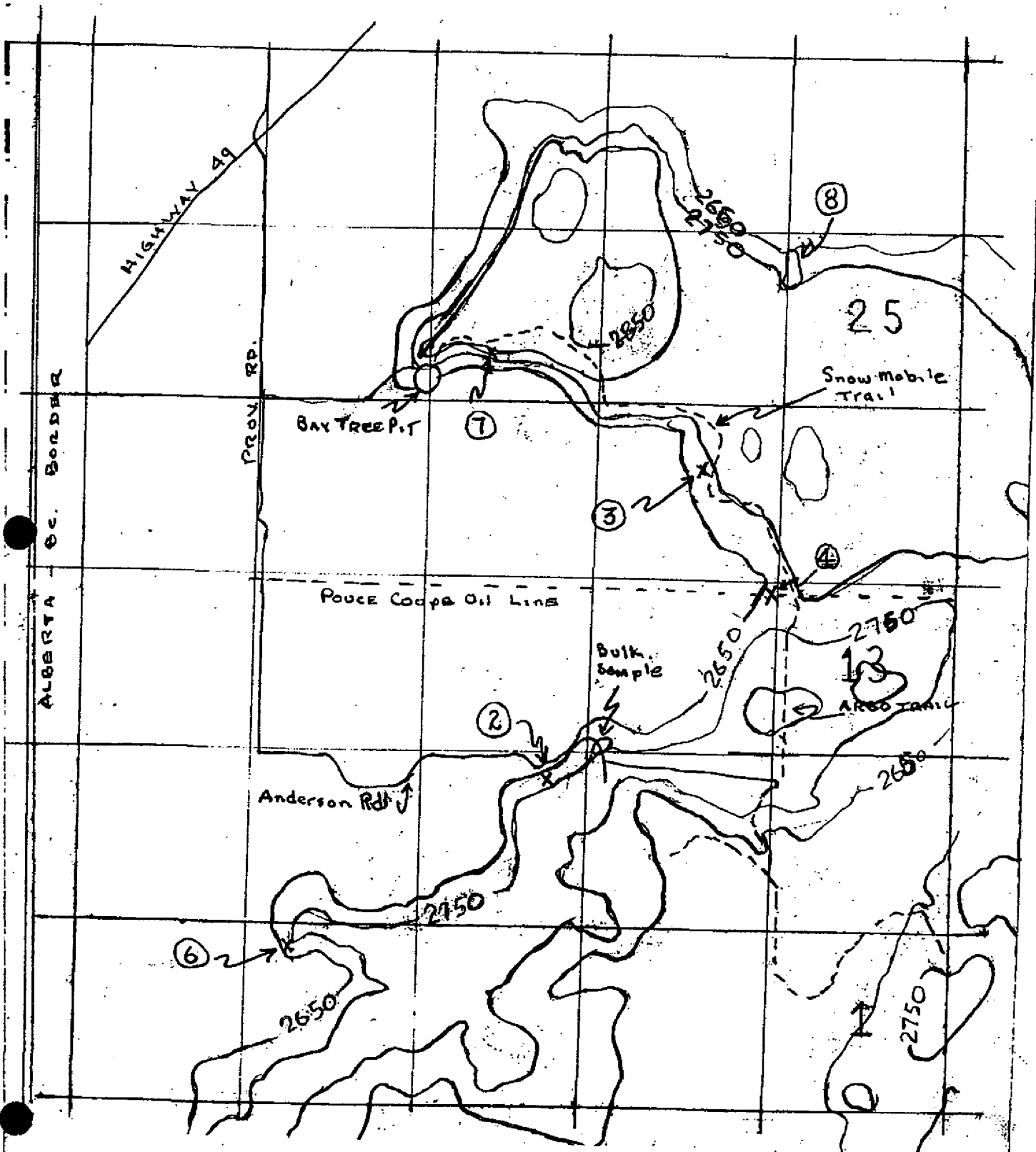
Field geology has identified 4 large areas where conglomerate and/or sandstone rock is within 1 foot of the surface. (See Map 2).

More selective analysis of the samples collected at the above sites will be necessary.

Sites 2 & 8 are the most easily accessible for bulk sample collection. Sites 3 & 7 may become more readily accessible if logging operations upgrade the roads into these sites.

TWP 78 RGE 13 W6M

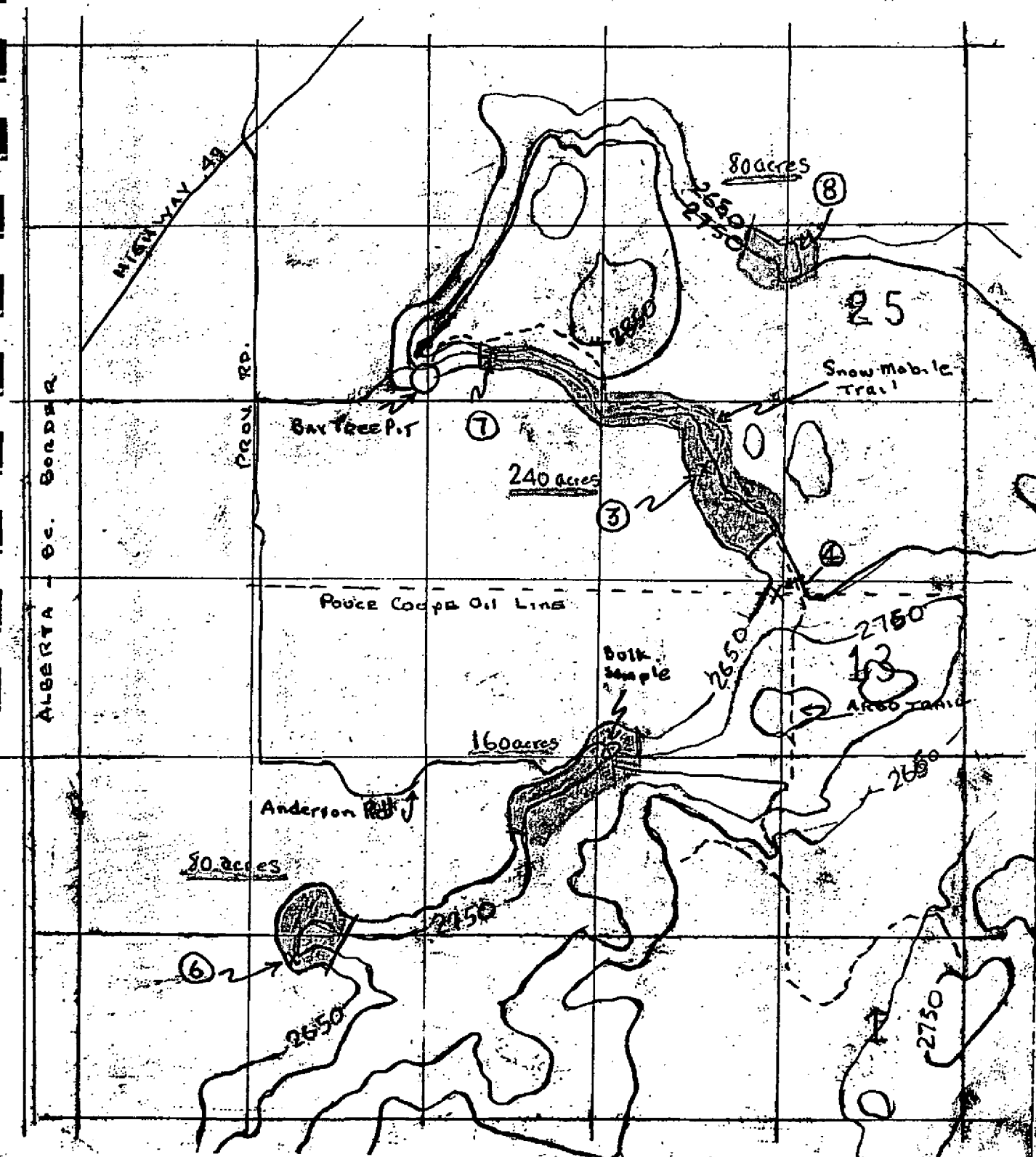
MAP 1



- 2750 - SURFACE ELEVATION

TWP 78 RGE 13 W6M

MAP 2.



- 2750 - SURFACE ELEVATION



W.

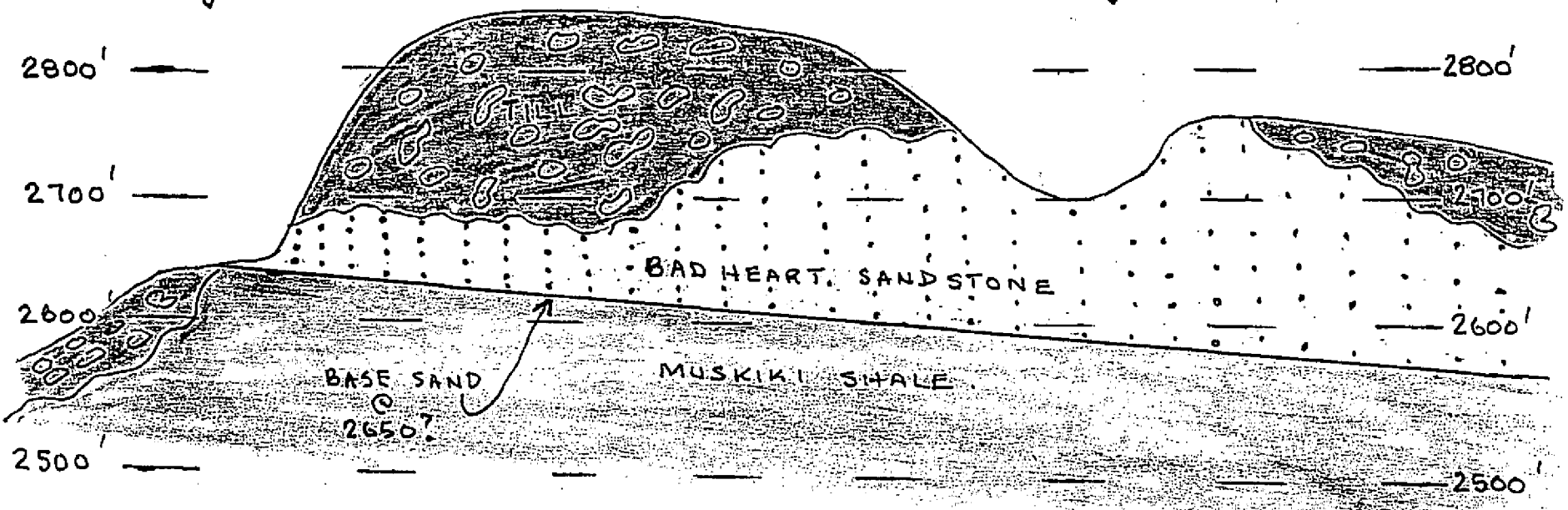
# SYNEMPTIC X SECTION (1)

N.E.

BAYTREE  
PIT

MOXELY  
PIT  
SITE (B)

≈ 2 MILES



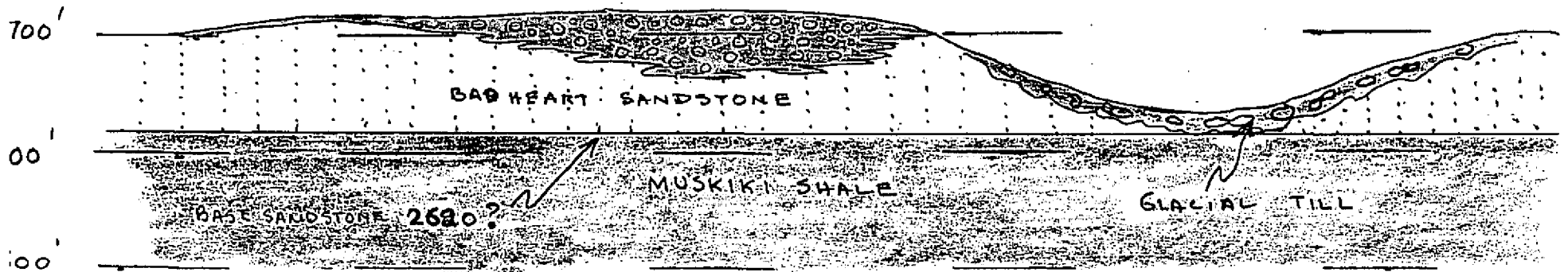
SCHMATIC X-SECTION (2)

NW  
K ← ————— ≈ 2 1/4 MILES ————— → SE

SITE  
①  
↓

SITE  
③  
↓

SITE  
④  
↓



B.G. Luft  
116 Oakland Place S.W.,  
Calgary, Ab. T2V 4M8

Phone (403)251-4508  
Fax (403)251-4508

May 22, 1998

Mr. Ralph Jamieson  
Exploration Technologist  
Disposition Services Branch  
Lands and Forest Service  
Petroleum Plaza, South Tower  
9914 - 108th Street,  
Edmonton, Alberta  
T5K 2G8

Dear Mr. Jamieson,

Re: Exploratory Drilling, Baytree, Alberta  
713803 Alberta Limited  
Exploration Licence #5145

Enclosed are five copies of the final report on the exploratory drilling activity undertaken by 713803 Alberta Ltd. during March 23 and 24, 1998.

Also enclosed are copies of a summary report sent by our Mr. Alan Lewis to Mr. Cory Wojtowicz, Forest Officer, Land and Forest Service, in Grande Prairie, Alberta.

The drill cutting samples, 27 in all, have been forwarded to Mr. Dixon Edwards, P. Geology, at the Alberta Geological Survey in Edmonton.

Please contact myself or Bob Liddle at (403)239-4546 if you have any questions or comments.

Thank you.

Barry Luft  
for 713803 Alberta Ltd.

## FIELD REPORT

Saturday March 21 - Wednesday March 25, 1998

The objective was to arrange and oversee the drilling of six test holes to define the geographical extent, overburden depth and gross thickness of the Bad Heart conglomerate zone. Cutting samples were taken at all six wells.

### SATURDAY - MARCH 21

Lewis and Luft travelled to Hythe, Alberta and met with representatives of Hopper Drilling. (The principals of Hopper Drilling are located in Beaverlodge, Alberta, but their shop is in Hythe). We arranged to meet with the driller and his helper (Murray and Chad) in Pouce Coupe on Sunday, to travel to our permit area and determine the viability of the drilling program. Arrangements completed, Lewis and Luft progressed to Dawson Creek.

### SUNDAY - MARCH 22

We met with drillers in Pouce Coupe at 9 A.M., then travelled to the site of the recent oil well on the 'Anderson Road' (16-9-78-13), unloaded skidoos and travelled to site of #1 proposed test hole (NE/4 - Lsd. 16-9-78-13) at the top of the hill at the junction. It was apparant that the road would have to be snow-plowed prior to bringing in the drilling rig and water truck. Al and Murray continued on the snowmobiles to reconnoiter the other potential drill sites. All required some snow-plowing of roads, trails or cut lines to provide accessibility. We returned to Pouce Coupe and met with Herb Nodes of Nodes Construcion, to arrange for snow-plowing equipment. Herb agreed to provide a D-6 caterpillar tractor for Monday morning. We arranged to meet at the 16-9 lease site before 8 A.M. The driller agreed to be there shortly after 8 A.M. It was clear that any travel with heavier equipment had to occur prior to 9 A.M. NOTE: There was a 10 A.M. to 10 P.M. road ban in effect in Alberta.

### MONDAY - MARCH 23

Truck carrying the D-6 showed up at 16-9 lease at approximately 7:43 A.M., unloaded, attached dozer blade and proceeded to snow-plow the 'Anderson Road'. We reached #1 drill site at 8:55 A.M. Drilling rig and water truck arrived at the same time. Drill rigged up and started drilling at 9:25 A.M.

\*\*\*\* #1 NE/4 of Lsd. 16-10-78-13 Elev. 2750' TD 60'  
Sample intervals 0-10, 20-30, 30-40 and 40-50.

DRILLERS COMMENTS:

Encountered brown sand(stone?) at 4'  
Grey sand(stone?) at 7'  
Brown sand(stone?) to 17'  
2 or 3 ft. shale lens at 17'  
Brown sandstone from 20' to 30'  
Thin shale lens at 30'  
Brown sandstone to 35'  
Sandstone and shale to 40'  
Brown sandstone to 52'  
Grey shale from 52 to 60'  
End of stand - quit drilling

Cleaned up site and filled hole (didn't have enough cuttings to completely fill hole, so returned on Tuesday and completed filling with bagged produce supplied by driller). Travelled east to gas plant, then north to pipeline right-of-way to second site, immediate north side of the right-of-way. Rigged up and started drilling #2 at 11:50 A.M.

\*\*\*\* #2 NW/4 of Lsd 8-14-78-13 Elev. 2760' TD 60'  
Sample intervals 0-10, 10-20, 20-30, 30-40, 50-60

DRILLERS COMMENTS:

Blue clay  
Some brown sand returns at about 5'  
Blue clay at 6'  
Blue clay all the way to 60'; odd brown SS rock  
End of stand, quit drilling

Cleaned up site, filled hole, rigged down and returned to north/south road, and proceeded north to the southwest corner of logged out area. Moved to site #3 and rigged up - started drilling at 2:40 P.M.

\*\*\*\* #3 NE/4 of Lsd. 13-13-78-13 Elev. 2760' TD 80'  
Sample intervals 30-40, 40-50, 50-60, 60-70, 70-80.

DRILLERS COMMENTS:

Blue clay from surface to 42'  
Conglomerate at 42'  
Hard drilling at 64' - sandstone?  
Changed bits at 64'  
Still conglomerate to 72'  
Encountered grey sandstone at 72'  
End of stand at 80' - still grey sandstone  
Quit drilling at 80' --- Time: 4:10 P.M.

Cleaned up site and filled hole - rigged down and moved east along the cutline towards #4 site.

TUESDAY - MARCH 24

\*\*\*\*#4 NE/4 of Lsd. 16-13-78-13 Elev. 2770' TD 20'  
Samples taken 0-10, 10-20 and bottom.

DRILLERS COMMENTS:

Loose conglomerate gravel at surface  
3 feet of brown sand at 4 or 5'  
Clay from 8' to 20'  
End of stand; quit drilling.

Tidy up site and fill hole; progress south down cutine  
to pipeline right-of-way --rig up and drill #5.

\*\*\*\* #5 NE/4 of Lsd. 7-13-78-13 Elev. 2780' TD 20'  
Sample taken at 20'.

Clay from surface to end of stand 20'  
Quit drilling.

Filled hole, rigged down and travelled west to north/south  
road, went north to site #6, rigged up and started drilling  
at 12:35 P.M.

\*\*\*\* #6 NE/4 of Lsd. 1-23-78-13 Elev. 1740' TD 80'  
Samples 0-10, 10-20, 20-30, 30-40, 40-50, 50-60, 60-70  
and 70-80.

DRILLERS COMMENTS:

Conglomerate at 1 or 2'  
Sandy conglomerate to 15'  
'Pure' conglomerate from 15' to 58'  
Grey sandstone from 58' to 80'  
End of stand, quit drilling at 2:50 P.M.

Fill hole, tidy up site.

WEDNESDAY - MARCH 25

Lewis and Luft travelled to Grande Prairie; tried to meet  
with Cory at the Alberta Forestry and Environment, as a  
follow-up to Al's attempts to contact him last week. Cory  
was out of the office but Al reached him on his cellular  
and recapped our activities. Lewis and Luft then to south  
Grande Prairie to visit with Weyerhaeuser Canada Ltd.  
Weyerhaeuser owns the timber rights in the area of our  
interest.

NOTE:

Our original plan included the drilling of some test holes to the north of holes 3,4 and 6. However, because the 'rim trail' is in the protected area where no equipment is allowed and the cutlines north of site #4 encounter considerable stretches of muskeg, we were unable to drill in that general area. More field work should be done in the area between the conglomerate outcrop rim and the Moxnes pit (where conglomerate is visible) to determine thickness of the Bad Heart conglomerate at various locations.

\*\*\*\* Locations and elevations are taken from small scale surface and topographic maps and should be read as approximate.

Government of Alberta,  
Lands & Forests,  
Grande Prairie, Alberta.

Attention: Cory Woytowicz,

Re: MME - 971273.

EXPLORATION SOUTH OF BAYTREE, ALBERTA,  
713803 ALBERTA LTD.,  
EXPLORATION LICENSE NO. 5145.

Two snow machines were used on March 22, 1998, to assess the project,  
but the depth of the snow in the area made it very difficult.

The snowplowing and drilling started March 23, 1998, and it was all  
finished March 24, 1998. One tandem drill truck, one tandem water truck,  
one 4 x 4  $\frac{1}{2}$ ton and one D6 Caterpillar - this was the equipment used.

The access to the drilling (see accompanying map) is the shaded - in  
road from highway 49.  $\frac{1}{2}$  mile East of the county road on Anderson Road,  
at the new oil well drill site approach, the road had to be plowed to all 6  
test holes. All the plowing and drilling was done on existing trails  
and cutlines.

End Report.



ALAN LEWIS.

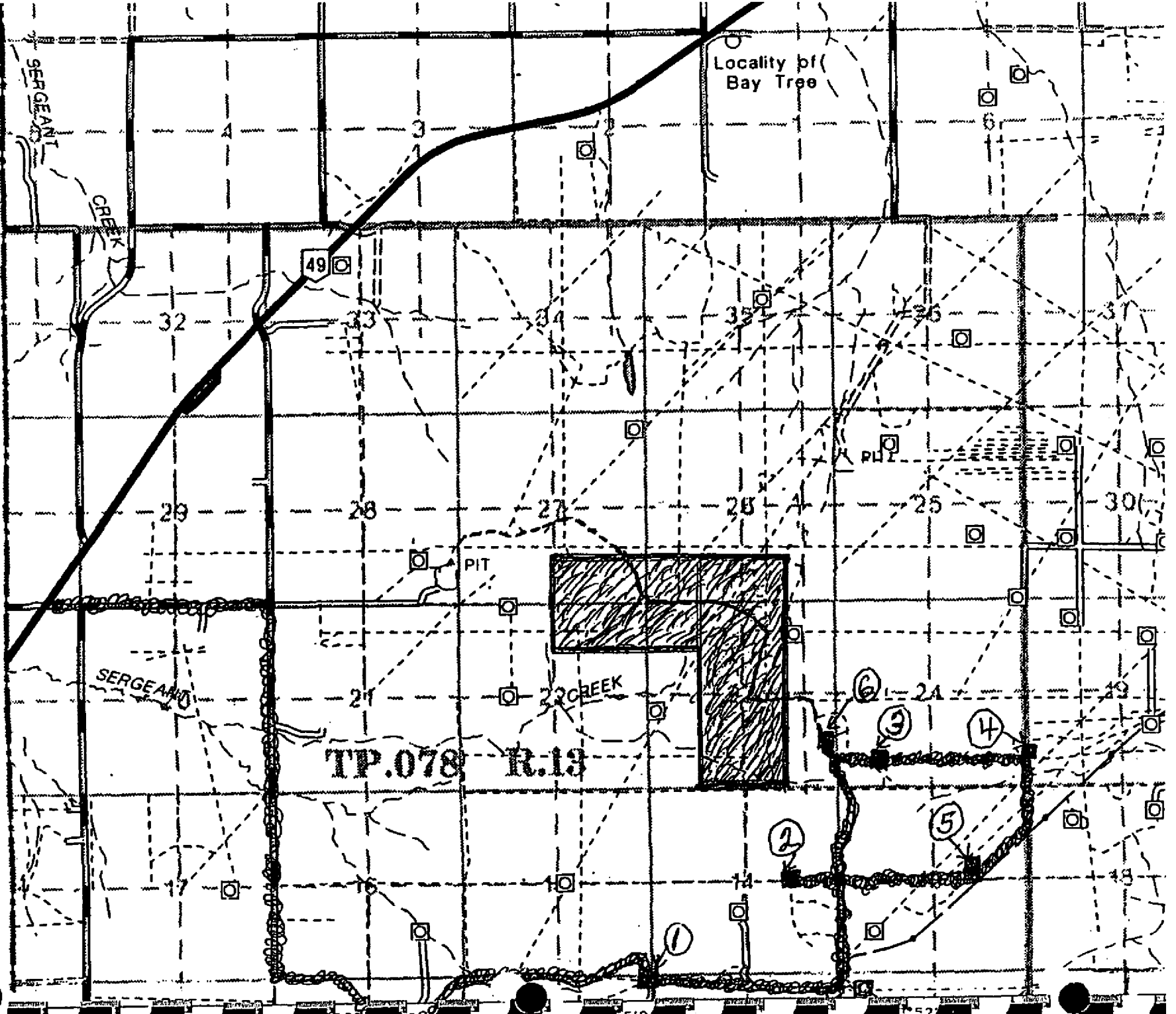
04/02/98

1267



ATTENTION: CORY WOJCIOWICZ  
COMPILED MAP OF DRILL REPORT  
713803 ARDETH LTD  
LICENSE # 5145.

55°47'30"



Locality of  
Bay Tree

49

PIT

SERGEANT

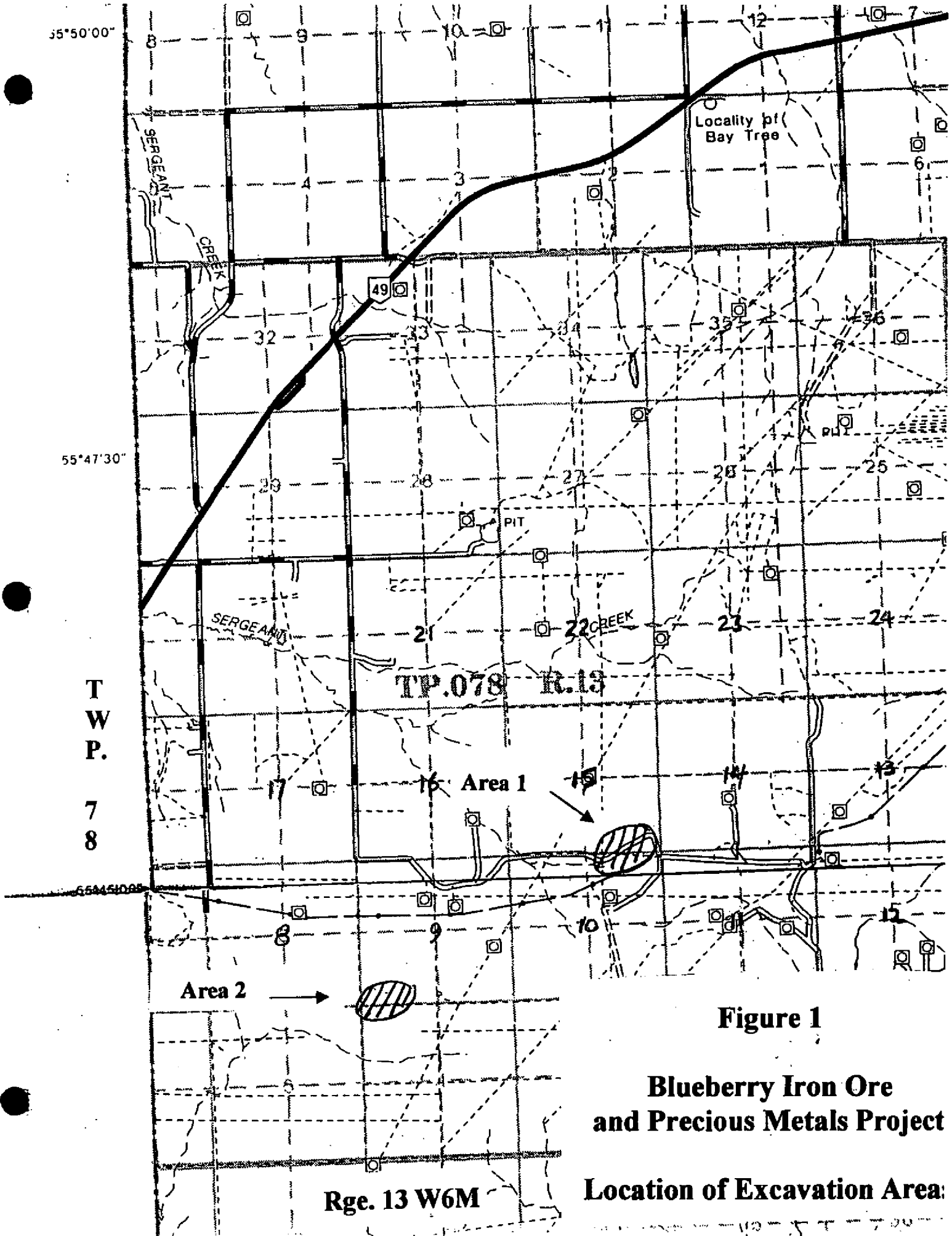
TP.078 R.13

CREEK

- ①
- ②
- ③
- ④
- ⑤
- ⑥

**Attachment 2**

**Location of Ore Samples**



Locality of Bay Tree

TP.078 N.13

Area 1

Area 2

**Figure 1**

**Blueberry Iron Ore and Precious Metals Project**

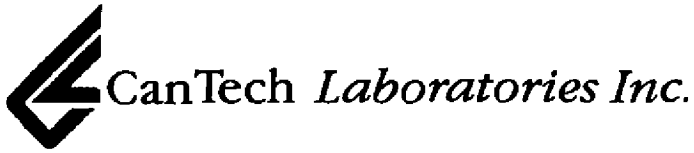
**Location of Excavation Area:**

**Rge. 13 W6M**

**Attachment 3**

**Letter from Mr. Dave Read**

**President, Cantech Laboratories Inc.**



September 15, 1997

713803 Alberta Ltd.  
124 Edgehill Close N.W.  
Calgary, Alberta  
T3A 2X1

Attention: Mr. G.R. Walsh

Re: Assay Procedure (Alan Lewis)

Dear Sir:

At your request, I visited the home of Mr. Alan Lewis in Ponoka, Alberta on July 17, 1997 to view his assaying operation. In addition to yourself, Alan and Mr. Bob Liddle, two other gentlemen were also present, namely Messrs. Art Wilkins and Barry Luft whom I understood are also participants of this Company.

I make a few comments herewith:

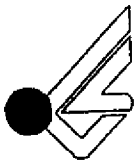
**Sample Preparation:** The rolling ball mill in use is acceptable and appropriate for this type of operation. I did not see the cleaning of the mill after the sample was prepared; however, Alan assured me that compressed air and brushes were used between samples.

**Sample Weighing:** A beam balance was used for weighing both the sample and the flux charge for fire assay. A more accurate digital top-loading balance would be more suitable and accurate.

**Fire Assaying:** The electric furnace in use is acceptable. My only comment would be that the temperature increase is slow and difficult to maintain at the desired temperatures of 1600 F and 2000 F. This lack of temperature control could possibly have some effect on the end result.

4200B-10 Street N.E.  
Calgary, Alberta  
Canada T2E 6K3  
Tel (403) 250-1901  
Fax (403) 250-8265

Kleine Waterstraat 2-6  
Box 2510  
Paramaribo - Suriname  
Tel (597) 421523  
Fax (597) 421533



I provided Alan with a CANMET Certified Reference Sample from Ottawa to run alongside the samples he was assaying that day. The result he obtained for this standard was certainly within the accepted range after taking into consideration the possibility of errors arising from the above comments. His result of 0.165 opt compared with the accepted value of 0.25 opt.

Overall I found the procedures for sample preparation and fire assaying carried out by Alan to be of a generally acceptable standard.

I hope this information is of assistance to you. If you have any questions, please do not hesitate to contact me.

Yours truly,  
CanTech Laboratories, Inc.



C. Douglas Read  
President

MAY 06 2005

20050008

**NORTHWEST ALBERTA PROJECT  
MINERAL ASSESSMENT REPORT**

**Metallic and Industrial Minerals  
Permit Nos. 9397010001 and 9397010002**

**Permit Holder Alan David Lewis**

**Submitted by**

**713803 Alberta Ltd.**

**May 7, 2005**

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## **Executive Summary**

### **Activities of 713803 Alberta Ltd. May 2003 to April 2005**

The last mineral assessment report was submitted on May 12, 2003. Since that time the activities of 713803 Alberta Ltd. have been primarily a continuation of testing of ore pretreatment and assay analysis techniques at Mr. Lewis' home-based lab facilities.

Unfortunately, consistent with prior experience, none of that additional work in the period since May 2003 has been successful in establishing either the existence of significant quantities of precious metals on a widespread basis in the ore bodies or a commercially viable technique to extract those precious metals.

713803 Alberta Ltd. has maintained contact with other companies or individuals who are pursuing similar efforts to extract precious metals from similar ores to determine if any joint efforts are feasible. These discussions have not led to any joint ventures at this time.

## **1.0 Introduction**

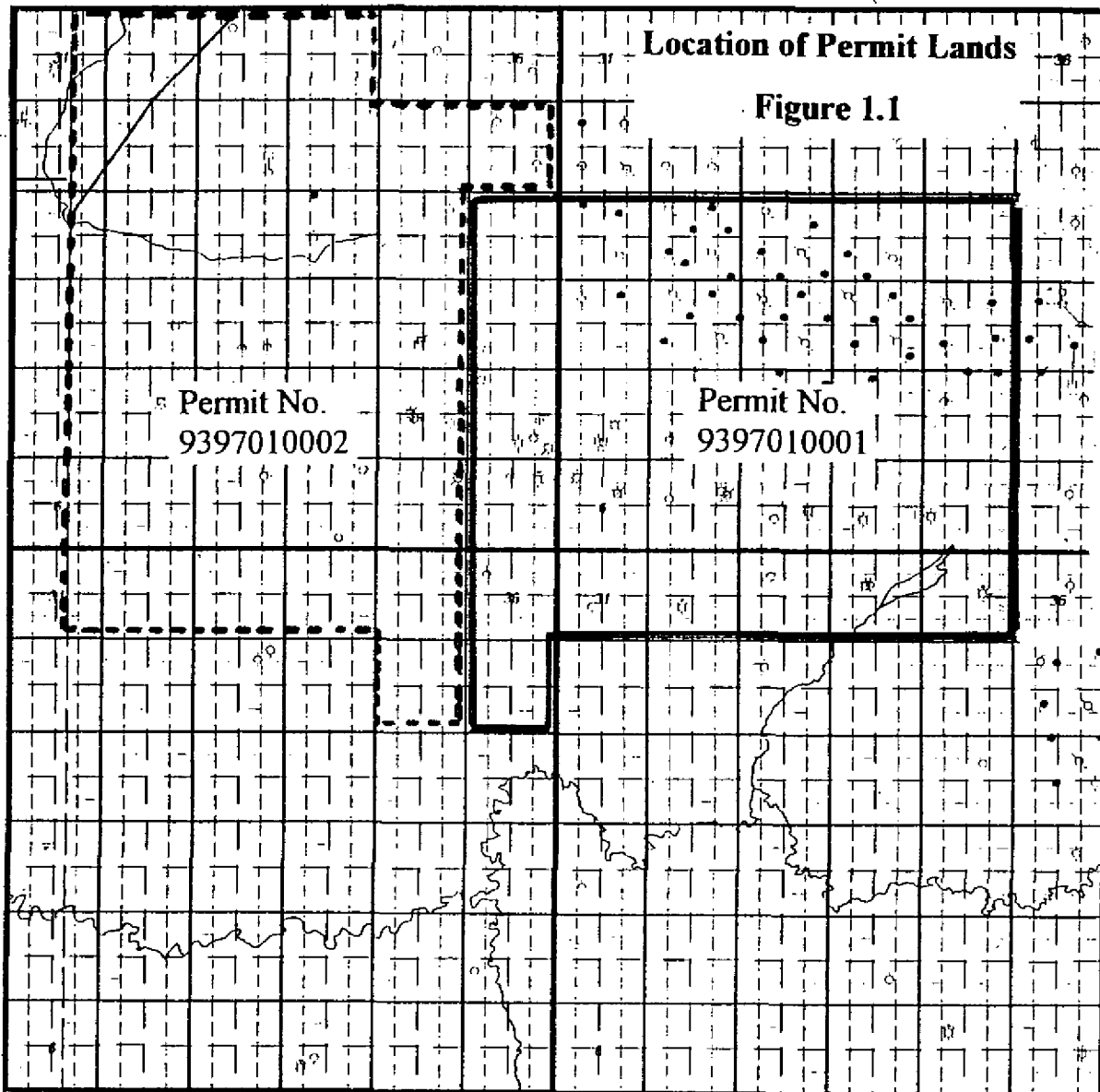
713803 Alberta Ltd. was incorporated in 1996 for the purpose of pursuing exploration and development of potential precious metal bearing properties in northwestern Alberta including the properties that are the subject of this report held under metallic and industrial minerals permit #9397010002 and #9397010001 in the name of Alan David Lewis, a shareholder of 713803 Alberta Ltd. (see figure 1.1 showing mineral permit location).


Previous Mineral Assessment Reports have been filed on May 14, 1999, May17, 2001 and May 12, 2003. This report describes the further work conducted in the period from May 2003 to April 2005 which has consisted almost entirely of continuing lab analysis by Alan Lewis in his home based facilities supported by external commercial lab analysis.

Some of the analytical work performed by Mr Lewis in the current reporting period has been based on suggestions and input received from Mr. Norm Smalley, a 713803 Alberta Ltd. shareholder who is also a well experienced independent assay analyst.

Contact has been maintained with Birch Mountain Resources Ltd. to determine if there was interest in pursuing any exploration/analysis work on the subject permit lands or sample ores

These various activities will be described in more detail in the following sections of the Report.



<b>713803 Alberta Ltd.</b>		
<b>Location of Alan D. Lewis Permits</b>		
Permit No. 9397010001	———	
Permit No. 9397010002	- - - - -	
Licensed to : Geo-Energy Ventures Ltd.		
 <small>geologic systems Ltd. 1983 MA 1982 www.prologic.com</small>	By :	Date : 1999/06/02
	Scale = 1:125000	Project : untitled

## **2. Lab Scale Mineral Content Analysis**

Lab scale analyses were conducted by:

- Al Lewis (51 tests in total) at his home lab
- Loring Laboratories Ltd.
- SGS Lakefield Research Limited

Each of these series of tests will be described below.

### **2.1 Al Lewis**

A chronological summary of all tests conducted by Al Lewis from April 25th of 2001 to March 26th, 2003 is included as attachment 2.1. Columns 1 and 2 show the date when the test commenced and the test # respectively.

Column 3 shows the type and source of ore tested and the size of the sample used in the test in terms of the number of assay tons.

Column 4 describes the pre treatment and/or leaching agent used to extract precious metals.

Column 5 provides the results obtained. Where the bead obtained has been tested for precious metal content by an external laboratory the results obtained from the external laboratory are referenced. In those instances where no external analysis has been done the value stated is that measured by Al Lewis. Unless otherwise noted the value stated will be the milligram weight of the bead obtained.

As compared to the earlier reports, fewer tests have been performed by Mr. Lewis, but more of the Lewis assay beads were forwarded to external labs for measurement of precious metal content in the beads. As was reported in the 1999, 2001 and 2003 mineral assessment reports, consistency and repeatability of results continues to be a problem.

However, the fact that we continue in a few tests to find significant values of precious metal are (as confirmed by the Loring tests) provides a basis for continuing efforts to prove the existence of commercially significant levels of precious metals and to ultimately develop a repeatable and commercially viable extraction process.

Column (6) records the hours of labor required by Mr. Lewis to conduct the tests

### **2.2 Commercial Laboratories**

#### **2.2.1 Loring Laboratories**

All the tests conducted by Loring were to analyze the precious metal content of beads obtained from tests conducted by Al Lewis. Twenty-one Loring test reports are included in chronological order as attachment 2.2. An examination of these test results shows that almost all the Loring tests showed measurable precious metal content. However, there is significant variability in precious metal content ranging from some tests where precious metal content was below the detection limits of the tests (e.g #826 and #827) to others where the measured precious metal content was significant (e.g # 808 and #810) and represented values within possible commercial feasibility. The majority of the tests produced measurable content but below commercial viability

### **2.2.2 SGS Lakefield Research Limited**

In June of 2003, Mr. Lewis met with analysts at Lakefield to discuss our project and have Lakefield perform assays on four samples of raw ore as well as on the material obtained from two Lewis tests (#772 and #774).

The results obtained by Lakefield are included as Attachment 2.2. Lakefield did not find any significant quantity of precious metals in the raw samples (nos. 1,2,3 and 6 in the Lakefield Report) nor did they find any significant quantity of precious metals in the bead obtained by Lewis in Lewis Test No. 774. The results for Lewis test No. 772 did show measurable quantities

## 1.0 Introduction

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Some of the analytical work performed by Mr Lewis in the current reporting period has been based on suggestions and input received from Mr. Norm Smalley, a 713803 Alberta Ltd. shareholder who is also a well experienced independent assay analyst.

Contact has been maintained with Birch Mountain Resources Ltd. to determine if there was interest in pursuing any exploration/analysis work on the subject permit lands or sample ores

These various activities will be described in more detail in the following sections of the Report.

**ATTACHMENT 2.1**

## TEST PROCEDURES & VALUES

(1)	(2)	(3)	(4)	(5)	(6)
DATE	TEST	ORE	PROCESS	VALUE	HOURS
Apr. 19-21/03	#766	Roger 3 A.T.	HN03, HCL Zinc precip.	.24 mg.	26 hrs.
May 1/03	#767	Roger 1 A.T.	HN03, HNOCL	0	16 hrs.
May 5-7/03	#768	Roger 5 A.T.	Chloride Zinc precip.	0.532 mg. not parted	15 hrs.
May 13/03	#769	20% from #768	Roasted dish broke	0	12 hrs.
May 14/03	#770	20% from #768	Sodium Nitrite NaHO4	.22 mg Au.	10 hrs.
May 15/03	#771	20% from #768	Bicarbonate Sodium Nitrite	.10 mg.	12 hrs.
May 18/03	#772	Roger 5 A.T.	Chloride	Lakefield	11 hrs.
May 26-27/03	#773	Roger 5 A.T.	Chloride	trace	14 hrs.
Jun. 2-3/03	#774	Roger 5 A.T.	Chloride	Lakefield	15 hrs.
Jun. 14-15/03	#775	Roger 5 A.T.	NaBr, KI Pretreat H2SO4	.20 mg. Au.	18 hrs.
Jun. 24-25/03	#776	Roger 5 A.T.	Pretreat H2SO4 NaBr., KI	0.21 mg	23 hrs.
Jul. 7-8/03	#777	Roger 5 A.T.	Pretreat Na OH NaBr.KI	3.63 mg not parted	10 hrs.
Jul. 23-25/03	#778	Roger 5 A.T.	NaBr	\$15.60 per ton	33 hrs.
Jul. 31, Aug. 7-9/03	#779	Roger 5 A.T.	Chloride	Lost	29 hrs.
Aug. 14-15/03	#780	Roger 20 A.T.	Chloride	\$12.00 per ton	22 hrs.
Sept. 8-10/03	#781	Roger 5 A.T.	Chloride	\$27.00 per ton	31 hrs.
Oct. 2/03	#782	Conglomerate 5 AT	HNO3 HCL	\$7.50 per ton	13 hrs.
Oct. 7/03	#783	Plant 5 A.T.	Aqua Regia	\$3.75 per ton	11 hrs.



(1) DATE	(2) TEST	(3) ORE	(4) PROCESS	(5) VALUE	(6) HOURS
Oct. 18/03	#784	Plant 5 AT	Aqua Regia	trace	11 hrs.
Oct. 21-22/03	#785	Reg 5 A.T.	NaBr, KI	\$4.50/ton	16 hrs.
Nov. 4-5/03	#786	Chin. 5 A.T.	NaBr, KI	\$23.00 per ton	21 hrs.
Dec. 8-11/03	#788	Roger 5 A.T.	NaBr, KI	Loring #46193	36 hrs.
Dec. 20-21/03	#789	Roger 5 A.T.	Chloride	Loring #46257	22 hrs.
Note: Nos. 790 to 801 not used					
Feb. 11/04	#802	Roger 5 A.T.	NaBr, KI )	#46385	12 hrs.
Feb. 12-13/04	#803	Roger 5 A.T.	NaBr, KI )	Loring	17 hrs.
Mar. 9-10/04	#804	Far West 5 A.T.	NaBr	Loring #46428	18 hrs.
Mar. 18-19/04	#805	6-26, 5 A.T.	NaBr	Loring #46466	18 hrs.
Mar. 30, Apr. 1/04	#807	Cong. 5 A.T.	NaBr	Loring #46436	21 hrs.
Apr. 17-29/04	#809	Cong. 5 A.T.	Aqua Regia	Loring #46548	26 hrs.
May 5-7/04	#808	6-26 Plant	Aqua Regia	Loring #46549	27 hrs.
May 7-10/04	#810	Far West 5 A.T.	Aqua Regia	Loring #46618	31 hrs.
May 27-30/04	#811	Ron. 5 A.T.	Aqua Regia	Loring #46672	42 hrs.
Jun. 14-18/04	#812	Chin. 5 A.T.	Aqua Regia	Loring #46745	36 hrs.
Jun. 24-27/04	#813	Cong. 5 A.T.	Aqua Regia	Loring #46745	32 hrs.
Jun. 24-27/04	#814	Sand under Cong. 5 A.T.	Aqua Regia	Loring #46745	30 hrs.
Jul. 6-10/04	#815	Conglomerate 5 A.T.	Aqua Regia	Loring #46774	46 hrs.
Jul. 24-27/04	#816	Far West 5 A.T.	NaBr	Loring #46803	36 hrs.

(1)	(2)	(3)	(4)	(5)	(6)
DATE	TEST	ORE	PROCESS	VALUE	HOURS
Aug. 3-6/04	#817	Reg 5 A.T.	NaBr	Loring #46881	36 hrs.
Aug. 12-15/04	#818	6-26	Aqua Regia	Loring #46881	36 hrs.
Aug. 18-19/04	#819	Worsley 5 A.T.	Aqua Regia	Loring #46881	32 hrs.
Aug. 30-31/04	#820	6-26, 5 A.T.	NaBr	Loring #47013	21 hrs.
Sept. 19-21/04	#821	6-26, 5 A.T.	Aqua Regia	Loring #47013	36 hrs.
Oct. 12-13/04	#822	Reg 5 A.T.	NaBr	Loring #47175	20 hrs.
Dec. 2/04	#823	Reg 4 A.T.	NaBr	Loring #47253	13 hrs.
Dec. 12-13/04	#824	Reg 3 A.T.	NaBr	Loring #47253	21 hrs.
Jan. 10/05	#825	Reg 3 A.T.	NaBr KI	Loring #47253-1	17 hrs.
Jan. 19-20/05	#826	Far West 3 A.T.	Chloride	Loring #47350	26 hrs.
Jan. 27-30/05	#827	Far West 3 A.T.	Aqua Regia	Loring #47350	24 hrs.
Feb. 10-11/05	#828	Far West 2 A.T.	Aqua Regia	Loring #47421	21 hrs.
Mar. 1-4/05	#829	Far West 4 A.T.	Aqua Regia	\$12.50/ton	33 hrs.
Mar. 24-25/05	#830	Ron 5 A.T.	Aqua Regia	.53 mg. Au	28 hrs.



## **ATTACHMENT 2.2**



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R 1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 46193

DATE: December 19, 2003

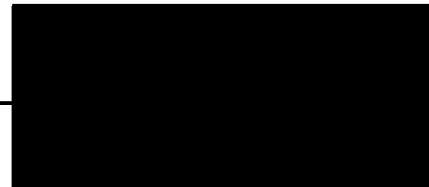
## PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	3.50	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

#788

Certified by:



3



### Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE:46257

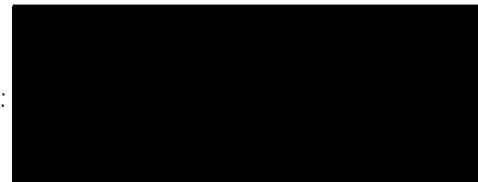
DATE: January 16, 2004

### PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pg ug	Rh ug
Lewis #1	1.60	<0.01	<0.01	<0.01
	#789			

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



4



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:48385

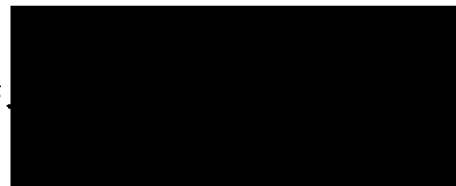
DATE:March 8, 2004

## PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	6.85	1.00	1.50	<0.01
Lewis #3	19.46	2.62	1.77	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:





# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R.1, Site 13, Box18  
 Ponoka, Alberta  
 T4J 1R1

FILE:46428

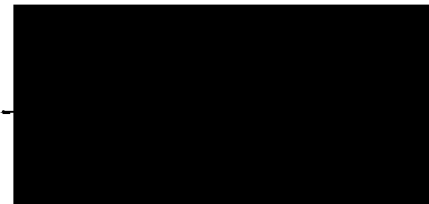
DATE:March 22, 2004

## PGM ANALYSIS

Sample No.	Au ug	Pt ug	Pd ug	Rh ug
Lewis #1	18.85	<0.01	<0.01	<0.01
Lewis #2	27.20	<0.01	<0.01	<0.01
Lewis #3	19.45	<0.01	<0.01	<0.01
	804 0.0550			

Beads dissolved in aqua regia and analyzed by ICP.

Certified by: \_\_\_\_\_



6



### Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Poroka, Alberta  
T4J 1R1

FILE:46466

DATE:April 2, 2004

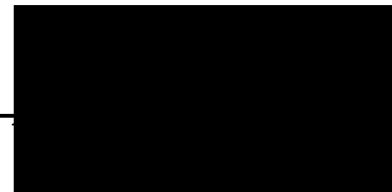
### PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.047	3.03	2.18	<0.01
Bead #2	0.034	<0.01	<0.01	<0.01
Bead #3	0.018	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

*11.08 per ton*  
*560 Cred. per oz*

Certified by: \_\_\_\_\_



#805



To : MR. ALAN LEWIS  
 R.R. # 1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1



File No : ~~46476~~  
 Date : April 12, 2004  
 Samples : Beads  
 Project :  
 P.O.#

*7*

**Certificate of Assay**  
**Loring Laboratories Ltd.**

629 Beaverdam Road, NE Calgary Alberta T2K 4W7  
 Tel: (403)274-2777 Fax: (403)275-0541

Sample No.	Au mg	Pd ug	Pt ug	Rh ug
Bead # 1	0.032	< 0.10	< 0.10	< 0.10
Bead # 2	0.010	< 0.10	< 0.10	< 0.10
Bead # 3	0.093	< 0.10	< 0.10	< 0.10

*#307*

NOTE: Due to high silver content of beads, samples had to be diluted to a higher volume to be analyzed. Therefore detection limits for Pt, Pd and Rh are higher.

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



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

8



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46549

DATE:April 25, 2004

## PGM ANALYSIS

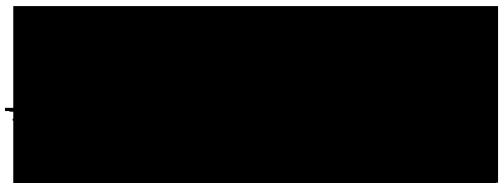
Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.055	<0.05	<0.05	<0.01
Lewis #2	0.380	<0.10	<0.10	<0.10
Lewis #3	2.090	<0.20	<0.20	<0.20
Lewis #4	<0.001	<0.01	<0.01	<0.01

Samples #2+#3 had to be diluted 10 fold to obtain gold concentrations.  
As a result, PGM detection limits have been compromised.

Beads dissolved in aquaregia and analyzed by ICP.

*Test # 808*

Certified by:



9



# Loring Laboratories Ltd.

629 Beaverdam Road N.E.,  
Calgary Alberta T2K 4V7  
Tel: 274-2777 Fax: 275-0541



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46548

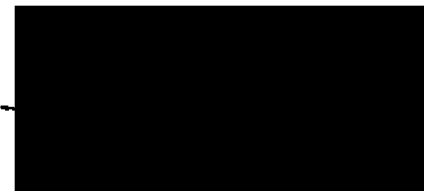
DATE:May 5, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Beads #1+2	0.010	0.95	1.36	<0.01
Beads #3	0.014	1.38	2.62	<0.01
Beads #4	0.006	0.35	<0.01	<0.01
Beads #5	0.002	<0.01	<0.01	<0.01
	0.032			
	A 809			

Beads dissolved in aquaregia and analyzed by ICP.

Certified by:



10



**Loring Laboratories Ltd.**

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



TO: ALAN LEWIS  
 R.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE: 45018

DATE: May 21, 2004

PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Beads #1	0.019 - 0.019	2.24	<0.01	<0.01
Beads #2	0.813 - 0.815	2.97	0.27	<0.01
Beads #3	0.002 - 0.002	0.65	2.28	<0.01
	0.836			

#810

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: 

May 27/04 Acc. 540 End. End holder 1.36  
 $540 \times 0.836 = 451.44 \div 5 = 90.28 \text{ per ton}$

11



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46672

DATE:June 15, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.008	0.45	<0.01	<0.01
Bead #2	0.007	0.30	0.25	<0.01
Bead #3	0.031	3.62	1.11	<0.01
Bead #4	0.003	0.56	0.40	<0.01
Bead #5	0.004	0.81	0.35	<0.01
Bead #6	0.033	5.70	1.04	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

*Test # 811*

Certified by



*Pd. # 993  
June 30/04  
mailed.  
96.30*

12



# Loring Laboratories Ltd.

629 Beaverdam Road N.E.,  
 Calgary Alberta T2K 4W7  
 Tel: 274-2777 Fax: 275-9541



TO: ALAN LEWIS  
 R.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE:46745

DATE: July 9, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.003	<0.01	<0.01	<0.01
Vial #2	0.014	2.88	1.26	<0.01
Vial #3	0.005	0.15	1.02	<0.01
	<u>-0.022</u>			
Vial #4	0.022	10.82	2.28	<0.01
Vial #5	0.008	0.28	0.39	<0.01
Vial #6	0.013	3.93	3.08	<0.01
Vial #7	0.006	0.25	0.41	<0.01
Vial #8	0.006	0.56	<0.01	<0.01
Vial #9	0.029	3.42	1.92	<0.01

*Handwritten notes in table:*  
 - Vials 1-3: # 812  
 - Vials 4-5: # 813  
 - Vials 6-8: # 814  
 - Vial 9: "Rom"  
 - Vial 4: 2.91, 2.49, 5.46  
 - Vial 4: 10.82 } 2.49  
 - Vial 6: 2.65 per ton  
 - Vial 7: 0.025 TCE

Beads dissolved in aquaregia and analyzed by ICP.



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46774

DATE: July 22, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.023	1.24	<0.01	<0.01
Vial #2	0.008	2.41	2.75	<0.01
Vial #3	0.008	13.04	5.53	<0.01
Vial #4	0.012	1.28	1.39	<0.01
Vial #5	0.005	<0.01	0.50	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

*Test # 815  
\* 15.6 g per ton*

Certified by:



*CK # 122  
80-25  
Aug 13/04*



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:46803

DATE: July 30, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Vial #1	0.034	1.45	<0.01	<0.01
Vial #2	0.027	<0.01	<0.01	<0.01
Vial #3	0.018	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

7816

Certified by: 

48.15  
CK # 122.  
Aug 13/04



15



# Loring Laboratories Ltd.

629 Beaverdam Road N.E.,  
 Calgary Alberta T2K 0W7  
 Tel: 274-2777 Fax: 275-0541



TO: ALAN LEWIS  
 R.R.1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE:46081

DATE: August 27, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
#1	0.006	<0.01	<0.01	<0.01
#2	0.006	<0.01	<0.01	<0.01
#3	0.003	<0.01	<0.01	<0.01
#4	0.003	<0.01	<0.01	<0.01
#5	0.012	<0.01	<0.01	<0.01
#6	0.003	<0.01	<0.01	<0.01
#7	0.033	0.04	0.02	<0.01
#8	0.007	<0.01	<0.01	<0.01
#9	0.005	<0.01	<0.01	<0.01

*Handwritten notes:*  
 #1-#3: } 4.77  
 #5-#7: } 7.27  
 #7: -0.48  
 #8-#9: }  
 #1-#3: 817  
 #4: 816  
 #5-#7: 819

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: \_\_\_\_\_



16



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R. 1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE:47013

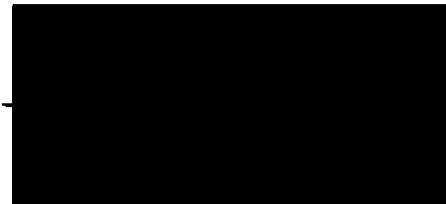
DATE: October 6, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
#1A } #820	0.002	1.50	1.34	<0.01
#2A }	0.010	1.66	1.50	<0.01
#1 } #821	0.021	0.27	<0.01	<0.01
#2 }	0.006	<0.01	<0.01	<0.01
#3 }	0.002	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: \_\_\_\_\_



17



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
R.R.1, Site 13, Box 18  
Ponoka, Alberta  
T4J 1R1

FILE: 47175

DATE: Nov. 30, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Bead #1	0.072	0.54	1.54	<0.01
Bead #2	0.608	0.35	0.53	<0.01
Bead #3	0.032	0.63	0.84	<0.01
	0.712			

Beads dissolved in aquaregia and analyzed by ICP.

# 822

Certified by: \_\_\_\_\_

18



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47253

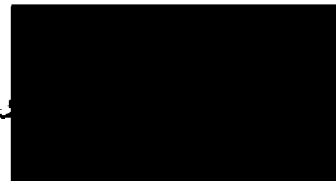
DATE:Dec.23, 2004

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.008	0.18	<0.01	<0.01
Lewis #2	0.002	0.34	<0.01	<0.01
Lewis #3	0.005	0.15	0.12	<0.01
Vial A	0.004	0.45	<0.01	<0.01
Vial B	0.008	0.96	1.99	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

Certified by: \_\_\_\_\_



Ed.  
Jan-17/05  
82.25

19



### Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47253-1

DATE:Jan. 13, 2005

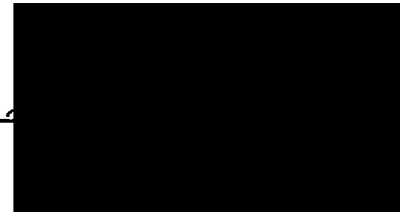
### PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.003	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

# 825

Certified by:



20



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47350

DATE:Feb. 1, 2005

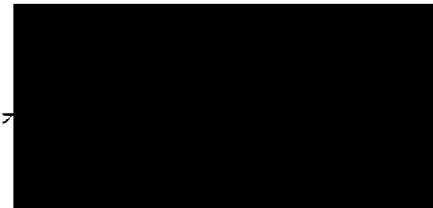
## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.001	<0.01	<0.01	<0.01
Lewis #2	<0.001	<0.01	<0.01	<0.01
Lewis #3	0.001	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

# 826

Certified by:



21



# Loring Laboratories Ltd.

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



TO:ALAN LEWIS  
R.R.1, Site 13, Box18  
Ponoka, Alberta  
T4J 1R1

FILE:47350

DATE:Feb. 11, 2005

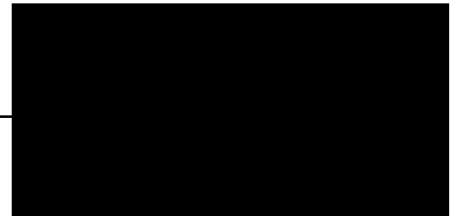
## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	<0.001	<0.01	<0.01	<0.01
Lewis #2	<0.001	<0.01	<0.01	<0.01
Lewis #3	<0.001	<0.01	<0.01	<0.01

Beads dissolved in aquaregia and analyzed by ICP.

#827

Certified by: \_\_\_\_\_



22



# Loring Laboratories Ltd.

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



TO: ALAN LEWIS  
 R.R. 1, Site 13, Box 18  
 Ponoka, Alberta  
 T4J 1R1

FILE: 4742

DATE: March 2, 2005

## PGM ANALYSIS

Sample No.	Au mg	Pt ug	Pd ug	Rh ug
Lewis #1	0.003	0.20	<0.01	<0.01
Lewis #2	0.005	0.50	<0.01	<0.01
Lewis #3	0.004	0.13	<0.01	<0.01
Lewis #4	0.004	0.23	<0.01	
Lewis #5	<u>0.003</u> 0.017	<u>0.18</u> 1.24	<0.01	

Beads dissolved in aquaregia and analyzed by ICP.

9.09 # 0.74

H 8 2 8

Certified by: [Redacted]



**ATTACHMENT 2.3**



SGS Lakefield Research Limited  
 P.O. Box 4900, 145 Compassion St.  
 Lakefield - Ontario - K0L 2H0  
 Phone: 705-652-8036 Fax: 705-652-6441

Alan D. Lewis Assay & Prospecting  
 Attn: Alan Lewis

June 23, 2003

RR1, Site 13, Box 18  
 Ponoka, Alberta, T4J 1R1  
 Canada

Date Rec.: 10 June 2003  
 LR Report: CA9457-JUN03  
 Project: 2301634  
 Client Ref: Au, Pt, Pd analysis - June 9,  
 2003


Phone: 403-783-4567  
 Fax: 403-783-6480

## CERTIFICATE OF ANALYSIS

### Lakefield Research Limited - Final Report

Sample ID	Au g/t	Pt g/t	Pd g/t	Au mg	Pt mg	Pd mg
1: Sandstone (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
2: Sandstone (semi-fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
3: Conglomerate (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---
Leaf 774 → A Lewis #1	---	---	---	< 0.0002	0.0007	< 0.0002
Leaf 772 → A Lewis #2	1.30	1.46	0.56	---	---	---
6-DUP: Sandstone (fine ground)	< 0.02	< 0.02	< 0.02	---	---	---

sample "A Lewis #1" was a bead weighing 0.0601g.

  
 Nicole Mazola, B.Sc. (Eng)  
 Project Coordinator  
 Mineral Services, Analytical

### **3.0 Computer Tabulation and Analysis of Test results**

Dr. Walter Haessel, a shareholder and director of 713803 Alberta Ltd. has undertaken a tabulation and computer analysis of the Al Lewis test results to determine if any discernible patterns exist relative to location of sample sources, type of pretreatment/analysis used, etc. to correlate the relative quality of test results. This work is still in progress and is expected to be complete later this year.

#### **4.0 Discussions with Other Companies**

Contact has also been maintained with Birch Mountain Ltd. who are a public company that has been active for several years in pursuing Alberta gold and platinum prospects. Birch Mountain Resources Ltd are currently concentrating their efforts on developing a limestone quarry to serve the aggregate and quicklime requirements of the Ft. McMurray oil sands industry. However, they have not abandoned their precious metals project and have encouraged us to maintain contact with a view to eventually establishing some form of cooperative effort.

## 5.0 Summary of Expenditures

The majority of the expenditures incurred by 713803 Alberta Ltd. in the period covered by this report (May 2003 to April 2005) are represented by contributed labor of Al Lewis. Small amounts of contributed labor were provided by Dr. Walter Haessel and Robert Liddle.

The value of contributed labor plus other expenditures are summarized below:

### 5.1 Contributed Labor

#### (a) Alan Lewis

(i)	Travel June 8-11/03 from Ponoka to Lakefield, Ontario to observe SGS Lakefield Research Limited procedures of assaying samples and to leave samples with them for assay 4 days	[REDACTED]	[REDACTED]
(ii)	Travel December 3 – 6, 2003 from Ponoka to Langley, B.C. to meet with Mr. Norm Smalley re assay and extraction processes, etc. 4 days	[REDACTED]	[REDACTED]
(iii)	Lab Analysis and testing in home lab over the period April 2003 to March 2005	[REDACTED]	[REDACTED]
		Sub Total	[REDACTED]

#### (b) Dr. Walter Haessel

Tabulation and computer analysis of Al Lewis test results

Walter Haessel	[REDACTED]	[REDACTED]
	Sub total	[REDACTED]

**5.2 Materials, Services and Travel Expenses**

Al Lewis



**5.3. Report Preparation**

Al Lewis



Robert Liddle



Sub total

**Grand Total Costs**

**\$70,796.00**



**Schedule A**

**5.0 Summary of Expenditures**

The majority of the expenditures incurred by 713803 Alberta Ltd. in the period covered by this report (May 2003 to April 2005) are represented by contributed labor of Al Lewis. Small amounts of contributed labor were provided by Dr. Walter Haessel and Robert Liddle.

The value of contributed labor plus other expenditures are summarized below:

**5.1 Contributed Labor**

**(a) Alan Lewis**

- (i) Travel June 8-11/03 from Ponoka to Lakefield, Ontario to observe SGS Lakefield Research Limited procedures of assaying samples and to leave samples with them for assay  
4 days [redacted] [redacted]
  - (ii) Travel December 3 – 6, 2003 from Ponoka to Langley, B.C. to meet with Mr. Norm Smalley re assay and extraction processes, etc.  
4 days [redacted] [redacted]
  - (iii) Lab Analysis and testing in home lab over the period April 2003 to March 2005  
[redacted] [redacted]
- Sub Total [redacted]

**(b) Dr. Walter Haessel**

Tabulation and computer analysis of Al Lewis test results [redacted]

Walter Haessel [redacted]  
Sub total [redacted]



**5.2 Materials, Services and Travel Expenses**

Al Lewis

[REDACTED]

?

**5.3. Report Preparation**

Al Lewis

[REDACTED]

Robert Liddle

[REDACTED]

Sub total

**Grand Total Costs**

**\$70,796.00**