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**PROSPECTING & DRILLING REPORT**  
**ON THE PLANT GROUP MINERAL CLAIMS**  
Slocan Mining Division, B.C.

082F052/062

UTM 5495000N, 445000E

for  
**CRYSTAL GRAPHITE CORPORATION**  
Suite 1750 – 999 West Hastings Street  
Vancouver, B.C.  
V6C 2W2

by  
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Consulting Geologist

**GEOLOGICAL SURVEY BRANCH**  
January 2001 **ASSESSMENT REPORT**

26,818

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## SUMMARY

During the 2001 field season consulting geological staff from Crystal Graphite Corporation determined that Calc-Silicate hosted Graphite mineralization occurs on the Plant Group mineral claims, which is similar to that found at the company's Black Crystal project area which is some 20 kilometres to the north. After discovery, trenching was done on a showing which was found close by the company's Hoder Creek beneficiation plant, followed by limited prospecting, and rudimentary geological mapping. Eventually management decided that the discovery warranted follow-up work, and two short drill programs were initiated.

Omineca belt high grade metamorphic rocks of the Valhalla assemblages underlie the property. Upper amphibolite facies Calc-Silicate rocks are the host for the disseminated graphite mineralization encountered locally. Numerous discontinuous pegmatitic swarms and discontinuous pegmatite dykes cut the local rock, being pene contemporaneous to the metamorphism which reportedly culminated during the Late Cretaceous. Calc-Silicate rocks which host graphite mineralization of interest similar to those encountered at the Black Crystal area are noted to occur here.

As noted above after an initial trench, limited prospecting and mapping, 5 diamond drill holes were drilled on the property for a total of approximately 233 metres of NQ size hole. The core generated from this program was logged, and prospective zones were split, and shipped to Bondar Clegg in Vancouver where they were prepped and analyzed, utilizing a Leco analyzer. A total of 50 samples were generated in the course of the drilling program. In November a two hole conventional down the hole hammer drilling program was undertaken, which totaled approximately 216 meters of 6" hole. Chip samples were taken every 1.5 metres, and the more prospective samples were prepped and analyzed at CGC's laboratory facility at the Hoder Creek Plant.

A two phase exploration program is proposed for the property. The first phase would consist of geological mapping and prospecting in order to possibly determine if other areas of interest are located within the claim area, and to better understand the geology of the general area. The second phase would consist of 500 metres of diamond drilling on targets generated after compilation of the data generated during the first phase of exploration. The total costs for all exploration proposed herein is estimated to be \$98,780.

## **INTRODUCTION**

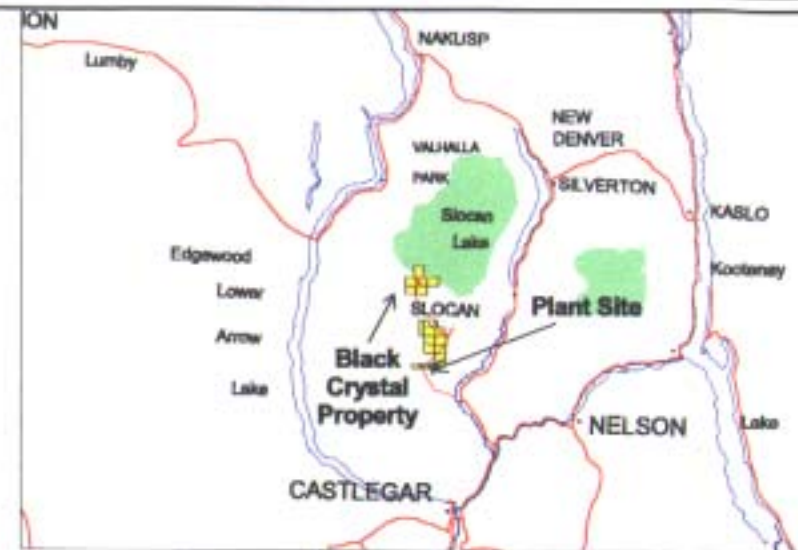
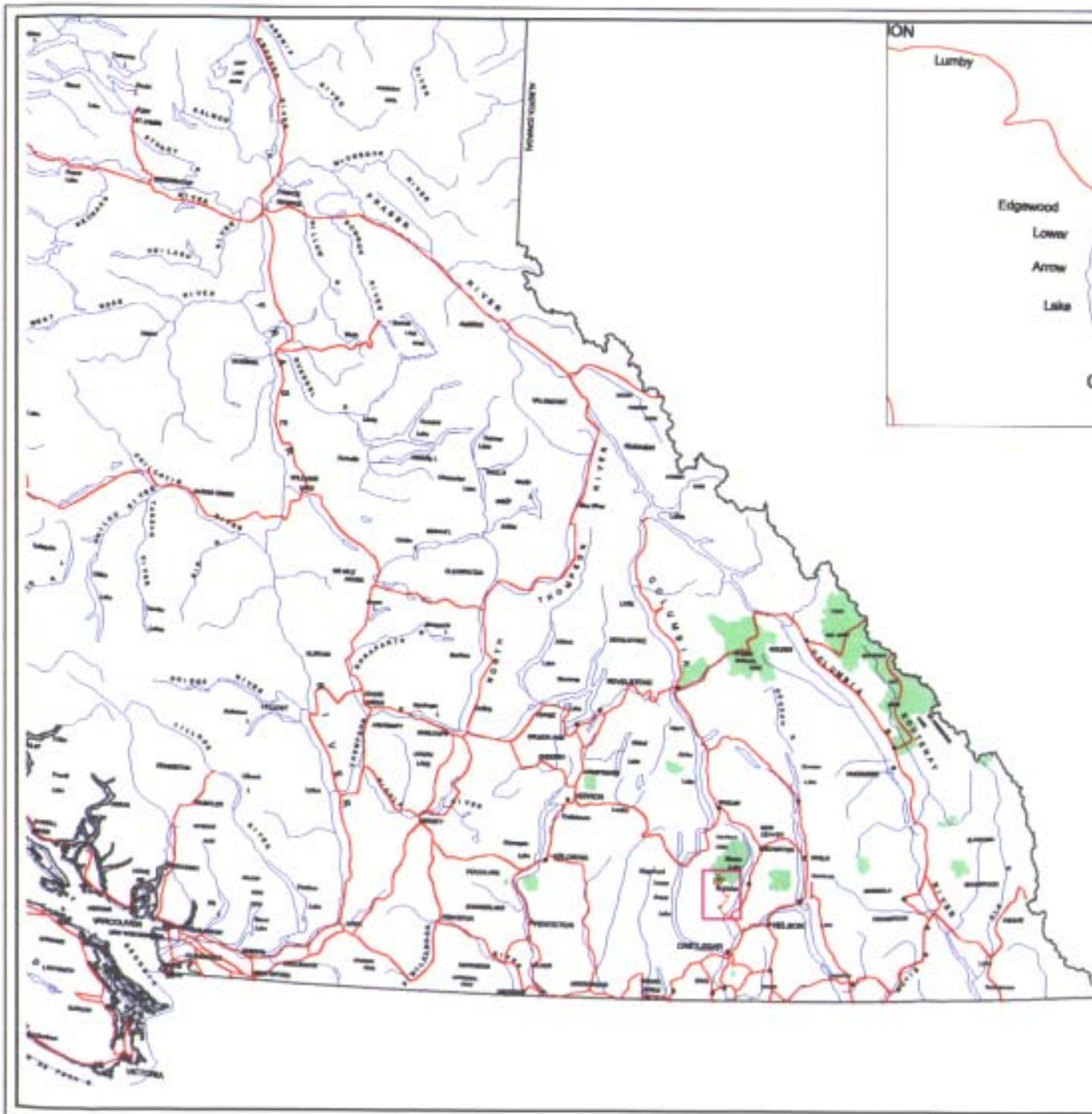
The author was retained by Crystal Graphite Corporation to conduct a program of prospecting, trenching, diamond drill core logging, and conventional down the hole hammer drilling on the property, and finally to summarize the events of the exploration program in this report. James Chapman P. Geo spent a part of the month of September on the property.

### **Location**

The area of interest on the property is roughly centered at UTM coordinates 5495000N and 445000E, or 49°36'00" north latitude, and 117°45'00" longitude, and is approximately 30 kilometres north of Castlegar, or approximately 11 kilometres northwest of the village of Passmore (Figure 1). The property is located in the Valhalla Range of the southern Selkirk Mountains, and is displayed on NTS map 82F/12, or Trim maps 082F052, 062.

### **Access**

The property is accessed from Highway #6 turning west on Passmore Upper Road just south of the village of Passmore, and then turning on to the Little Slokan Forest Service Road (F.S.R.) after approximately 4 kilometres. One then travels another 10 kilometres on this road before turning west onto Koch Creek F.S.R. and traveling approximately another 700 metres to the entrance to Crystal Graphite's beneficiation plant. Alternatively one may leave highway #6 at Slokan City, traveling southerly on the Little Slokan F.S.R. approximately 34.5 kilometres to the Koch Creek F.S.R. junction. Access to the various other points on the



**Crystal Graphite Corporation**

**Figure 1:  
Location Map  
PLANT GROUP**

0 25 50 75 Kilometers



UTM Zone 11  
NAD 83  
Grid North

Figure: 1

Scale: To Fit

NTS Sheets: 82F052, 62, 71, 72, 82

Drawn By: JL

Date: February 2002

Prepared For: Industrial Mineral Park Mining Corp.  
8306-628 West Pender Street  
Vancouver, BC V6B 1V9

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property is achieved by taking numerous logging roads which leave Koch, and the Little Slocan roads, while to get to the upper portions of the property one must take the Little Slocan road a further 12 kilometres from the turnoff to the plant, then go up Hoder Creek approximately 6 kilometres, turn onto Berry Creek F.S.R. and travel approximately 8 kilometres to the claim area. A network of logging roads exists in the general area of the upper areas on the flank of Mt Heimdal. The major forest service roads are normally kept in excellent condition while the others are in decent condition with local poor sections. A four wheel drive truck is advisable on any but the major roads. The alpine areas surrounding Mt. Heimdal are best accessed by utilizing a helicopter, although foot access is possible.

### **Physiography**

The property is located in moderately steep mountainous country. The area of the work reported herein would probably be best classified as montane forest, while the claim block stretches up into sub-alpine to alpine terrain on the southern slopes of Mt Heimdal. Elevations range from 700 metres A.S.L. at the junction of Koch Creek and Little Slocan River, to highs of 2400 metres A.S.L. on Mt Heimdal. A variety of tree species are located on the claims, which are by and large mostly forested, typically ranging from a mixed deciduous/conifer forest comprised of pine of several species, larch, fir, spruce, alder, birch, cottonwood etc.

The property is within the Wet Interior bioclimatic zone. Winter usually extends from November into early April, and in some years a considerable amount of snowfall can accumulate during this period. The majority of the property has a southerly aspect, and is typically snow free from early May until early to mid November, although this may vary depending on yearly conditions. The short summers can be somewhat rainy at times, although conditions during that season are normally quite conducive to performing field work.

## PROPERTY

As shown in Figure 2, the property consists of ten two-post mineral claims, and twelve four-post, or modified-grid mineral claims, for a total of 22 claims which cover 192 units. There are several claims owned by other parties within the claim area, so although Crystal Graphite's claims cover an area of 4800 hectares, they effectively control approximately 4560 hectares. Crystal Graphite Corporation holds a 100% interest in these claims. The claims are depicted on B.C. Energy and Minerals Division, Mineral Titles Branch, Mineral Titles Reference Maps 082F052 and 082F062.

All of the claims are presently in good standing, and the pertinent data is provided in the following Table:



**TABLE I - MINERAL CLAIMS – PLANT GROUP  
SLOCAN MINING DIVISION, B.C.**

CLAIM	TENURE NO.	CLAIM TYPE	NUMBER OF UNITS	GOOD TO DATE*
MILL #10	384444	2 POST	1	Jan. 31, 2007
MILL #12	384446	2 POST	1	Jan. 31, 2007
MILL #13	384447	2 POST	1	Jan. 31, 2007
MILL #14	384448	2 POST	1	Jan. 31, 2007
MILL #15	384449	2 POST	1	Jan. 31, 2007
MILL #16	384450	2 POST	1	Jan. 31, 2008
MILL #17	385662	2 POST	1	Jan. 31, 2008
MILL #18	385663	2 POST	1	Jan. 31, 2008
MILL #19	385969	GRID	20	Jan. 31, 2005
MILL #20	385970	GRID	20	Jan. 31, 2005
MILL #21	385971	GRID	20	Jan. 31, 2005
MILL #22	385972	GRID	16	Jan. 31, 2005
MILL #23	385973	GRID	20	Jan. 31, 2005
MILL #24	385974	GRID	18	Jan. 31, 2005
PLANT #1	387588	GRID	4	Jan. 31, 2006
PLANT #2	387589	GRID	4	Jan. 31, 2006
PLANT #3	388758	GRID	6	Jan. 31, 2005
MILL #25	388759	GRID	20	Jan. 31, 2005
MILL #26	388760	GRID	20	Jan. 31, 2005
MILL #27	388761	GRID	14	Jan. 31, 2005
MILL 9R	389737	2 POST	1	Jan. 31, 2009
MILL 11R	389738	2 POST	1	Jan. 31, 2009

\*Subsequent to choosing a common anniversary and pending acceptance of this report for assessment credit.

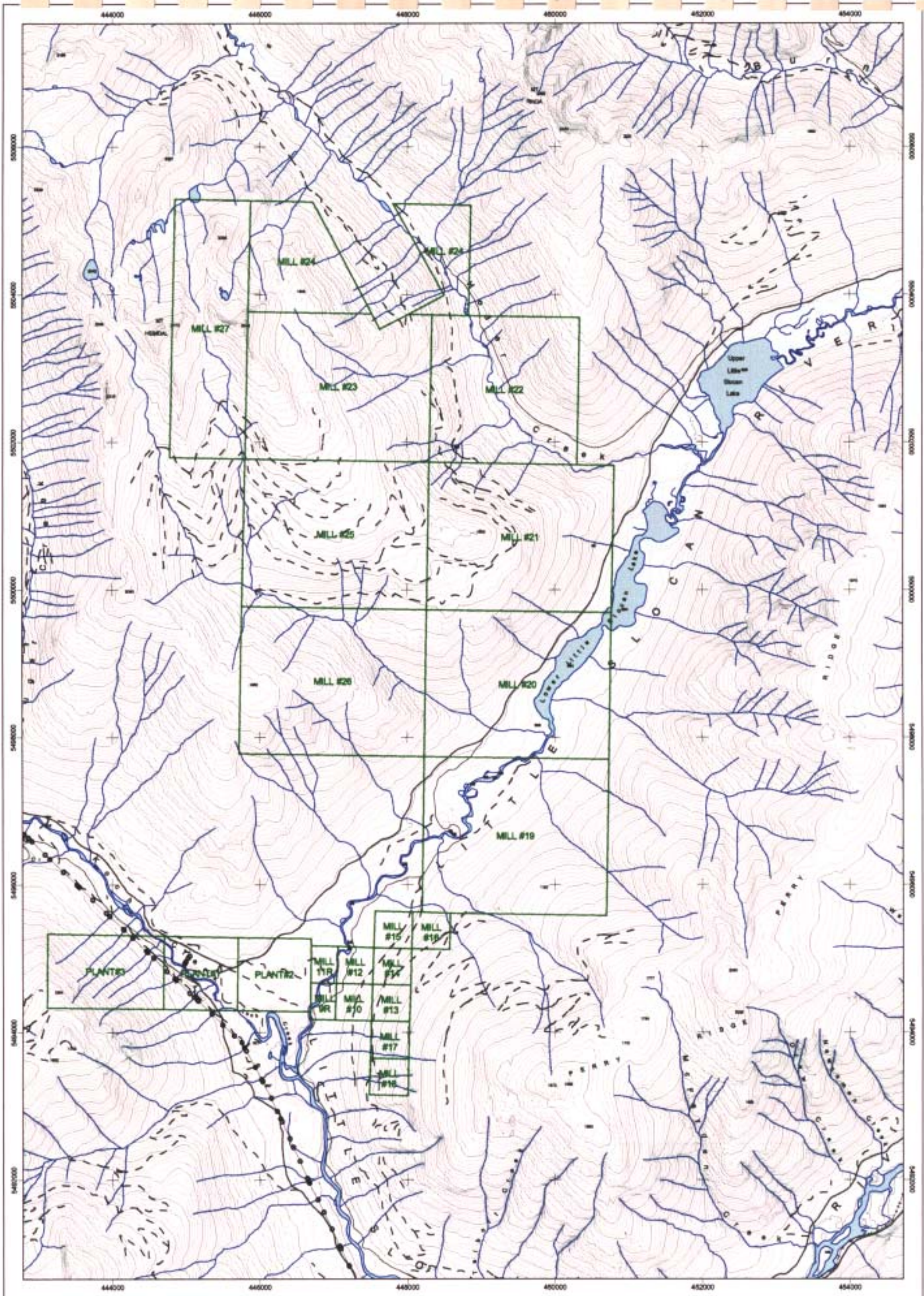


Figure 2 Plant Group Property Map

**Crystal Graphite Corp.**  
**Crystal Graphite Claim Map**

— Claim Boundary

Scale 1 : 50,000  
 February 2002

500 0 500 1000 M

Kokarua Information Services  
 250.362.9141

26818

①

## **HISTORY**

While the general area has been the focus of Graphite and Gem exploration for the past decade no known previous exploration work has been performed in the area covered by the Mill or Plant claims. Crystal Graphite Corporation and its predecessor company Industrial Mineral Park have done considerable graphite exploration work in the Black Crystal Project area which ranges from approximately 13 to 20 kilometres to the north of the claim group. A sizable graphite resource has been delineated on the property, and the company is in the process of applying for a Mine Permit. Immediately to the north of the group lie the Superior Claims, where some graphite exploration work was conducted in the late nineties, culminating in a diamond drill program in 1999. Also, a few kilometres to the east Anglo Swiss Corporation has done considerable work on their Slocan Gemstone Property, exploring for gems and precious stones on their claims in the past several years. In the process of evaluating their claims, they have discovered some thinly bedded Marble and Calc-Silicate hosted graphite mineralization.

As Crystal Graphite Corporation's beneficiation plant is located on the property, considerable environmental, and other impact studies have already been conducted in the area.

## **REGIONAL GEOLOGY**

The Plant site area is wholly situate within the Omineca Crystalline Belt (Figure 3). This belt along with the Foreland Thrust Belt to the east, the Intermontane Belt immediately to the west, the Coast and Insular belts further outboard make up the five distinct morphogeological provinces which comprise the Canadian Cordillera. The Omineca Crystalline Belt is best typified as being an area of extensive tectonic

uplift which is underlain by metamorphosed miogeoclinal rocks, with local rocks which were formed in island arc settings, and subsequently accreted to the margin of the ancestral North American Craton during the Jurassic era. The property itself is located within the Valhalla Complex which is a structural or domal culmination of high grade metamorphic (upper amphibolite grade) rocks. Foliation and outwardly dipping layering define this 30 X 90km gneiss complex which is located at the eastern exposed edge of the Shuswap complex. Generally the lithologies contained within the complex are divided into three sheet like layers of variably deformed paragneiss and middle Cretaceous to Eocene igneous rocks. Apparently, (Carr et al 1998) exhumation along Eocene normal faults have resulted in a "tectonic denudation" which has given rise to the domal shape of the complex. More specifically the Valkyr ductile extensional shear zone (which arches over the complex) bounds the complex on all but the eastern margin, where the complex terminates against the easterly dipping Slocan-Champion Lake ductile-brittle normal fault. There are three subculminations within the complex, the project being located fairly well centered between the Passmore Dome and the northernmost dome – the Valhalla dome.

Lithologically the Valhalla assemblage in this area consists of an approximately 1.5 km thick, heterogeneous package of upper amphibolite facies pelitic schist, marble, calc-silicate gneiss, psammitic gneiss metaconglomerate, amphibolite gneiss, and ultramafic schist (figure 4). The base of the section is comprised of a sequence of conglomerate, calc-silicate gneiss, and marble interlayered with 50-100m thick units of aluminum poor semi-pelitic schist. The sequence becomes more carbonate rich moving up in the metamorphic section, with metre – thick marbles and calc-silicate gneisses interlayered with quartzites and sillimanite-bearing pelitic schists. It also contains amphibolite gneiss and ultramafic schist, which do not occur in the structurally lower sections. The upper portion of the exposed sequence contains 30m thick marble and quartzite layers. Metasedimentary rocks in the core of the Valhalla dome generally consist of

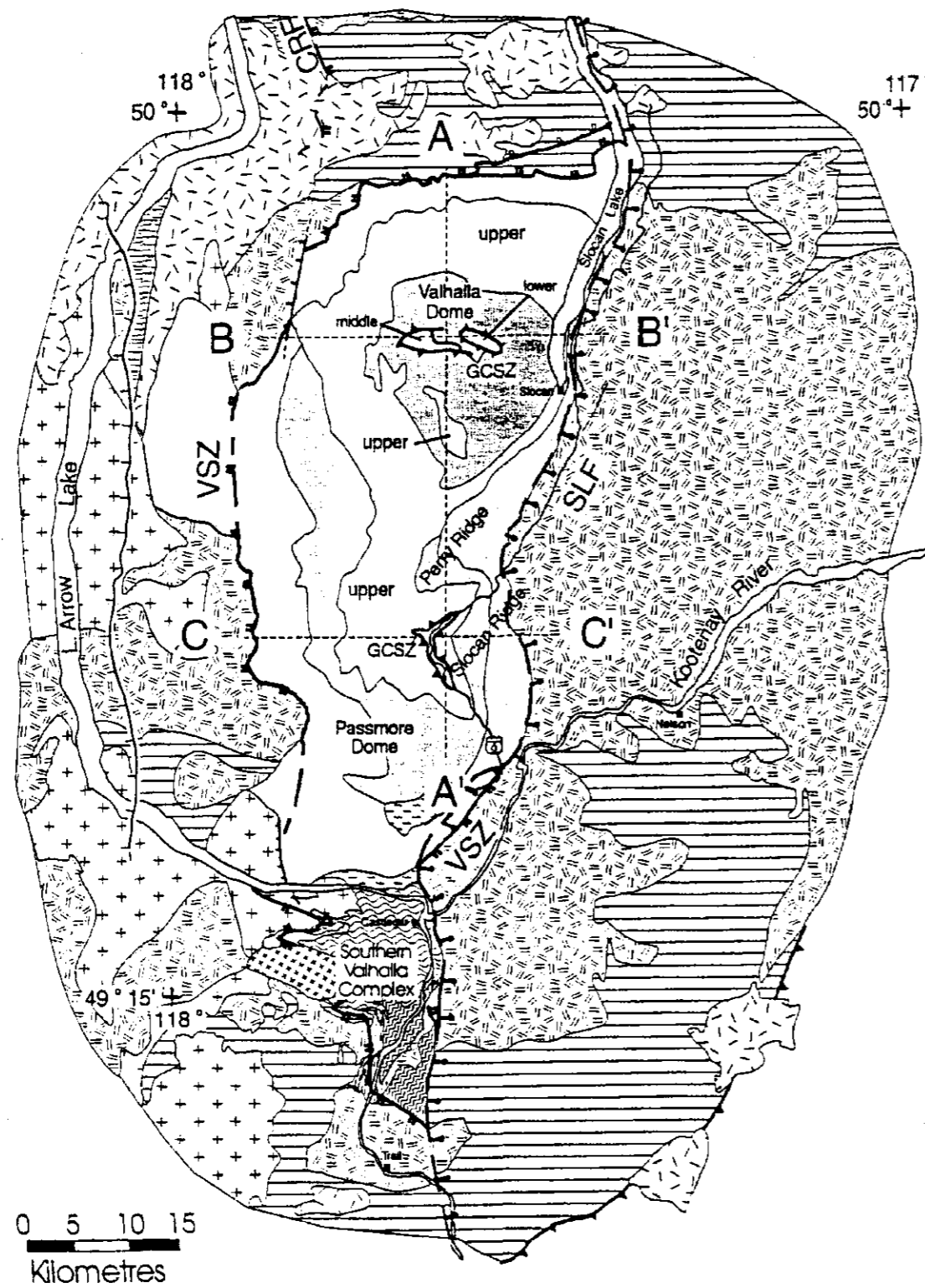


psammite, semipelitic and pelitic schist, quartzite, marble, and calc-silicate and amphibolite gneiss.

Schaubs and Carr (1998) have tentatively correlated the metamorphic rocks in this region with the sediments of the Lardeau trough, as observed in the Goat Ranges (Klepacki, 1985), based on bulk composition, order, thickness (although tectonic thinning of up to 60% would have had to have occurred) etc. More specifically they believe that the Rinda Ridge composite unit correlates with the Index Formation of the Lardeau Group while the Rinda marble (unit 9), and Quartzites (unit 10), correlate with the Index Formation, the Badshot Formation, and Hamill Group respectively. Should this correlation be correct, indications are that the section has been inverted.

## **PROPERTY GEOLOGY AND MINERALIZATION**

To date little detail is known about the geology of the Plant Group, although given the presence of graphite in a Calc-Silicate host, and the general similarities to the rocks of the Black Crystal area, it is felt that this area is underlain also by the upper units identified by Schaubs & Carr (1998). Initial investigations have indicated that the general stratigraphic section may be Calc-Silicate Gneiss, or Calc-Silicate Skarn overlying a Biotite/Quartz/Feldspar +/- Garnet Gneiss footwall. It is possible there is a similar Gneissic hangingwall, but while this has not been positively verified to date, chips from the drilling of Mill0106 indicate that this may be the case. It appears that where the zone has been fully preserved (Mill0106) the Calc-Silicate Gneiss zone of interest is up to 48.5 metres true width. From the few orientations taken prior to drilling, indications are that the strata here strike pretty much due east & dip northerly at approximately 32 degrees. The trench excavated prior to drilling exposed the apex of a tight fold, the axis of which strikes at approximately 89° Az, the south limb dips steeply at 65° while the north limb dips



- Upper Plate
- Middle Eocene Coryell syenite, granite
  - Eocene College Creek granite
  - Late Cretaceous granitic rocks
  - Middle Jurassic granitic rocks
  - Middle Paleozoic - Early Mesozoic rocks of allochthonous Quesnallia terrane
  - Paragneiss - age uncertain
- Valhalla complex (Lower Plate)
- Early Eocene Ladybird granite
  - Paleocene Airy Quartz Monzonite
  - Late Cretaceous Mulvey granodiorite
  - Late Cretaceous Kinnaird Gneiss
  - Middle Devonian Trail Gneiss
  - Metasedimentary rocks
  - Castlegar Gneiss
- Thrust fault
  - Steep normal fault
  - Geologic Contact
  - Slokan Lake fault
  - Vaikyr shear zone
- GCSZ Gwillim Creek shear zones  
 CRF Columbia River Fault

Figure 4 Local Geology (after Carr et al. [1987] and Simony and Carr [1997])

GEOLOGICAL SURVEY BRANCH  
 ASSESSMENT BRANCH

26,818 a

at 50°. This folding was identified also in petrographic sample number 3 which was taken from drill hole Mill0101, which is quite close to the trench location.

In the Mt Heimdal area it was noted that a fairly siliceous host rock, which carries a trace of calcium-carbonate, and which probably derived from a carbonate protolith, contained flake graphite mineralization. Here the foliation/relict layering strikes at 331° and dips 13° to the southwest.

## **WORK PROGRAM**

Claims were initially staked in the area prior to the author's engagement as consulting geologist, as it was felt by staff at that time, that the host rocks of the Black Crystal deposit extended down to the general area of the Koch Creek plant facilities. During a cursory examination of the beneficiation plant site grounds the author discovered calc-silicate mineralization ("Beau Zone") somewhat similar to that encountered at the Black Crystal area. Shortly thereafter it was trenched to determine if it was in-situ mineralization or if it was just an erratic. Trenching uncovered a sizable area of outcrop, and it was obvious that it warranted some follow up work. Accordingly staff conducted some prospecting work in the general area prior to starting a 5 hole, 232.85 metre diamond drill program in early September. The core from this program was geologically, and geotechnically logged, and split at Crystal Graphite's facility, and one half sent to Bondar Clegg laboratories in Vancouver for analyses. In all some 50 samples were generated by the NQ diamond drilling. Some prospecting was done during the program, and afterwards, in an attempt to discover more mineralization, or to extend the area of known mineralization. In November a two hole conventional drill program was undertaken utilizing a 152mm down the hole hammer drill. The first of these holes was drilled very close to the plant building, while the second was drilled in close proximity to the location of Diamond Drill hole Mill0104. Sixty-four samples were



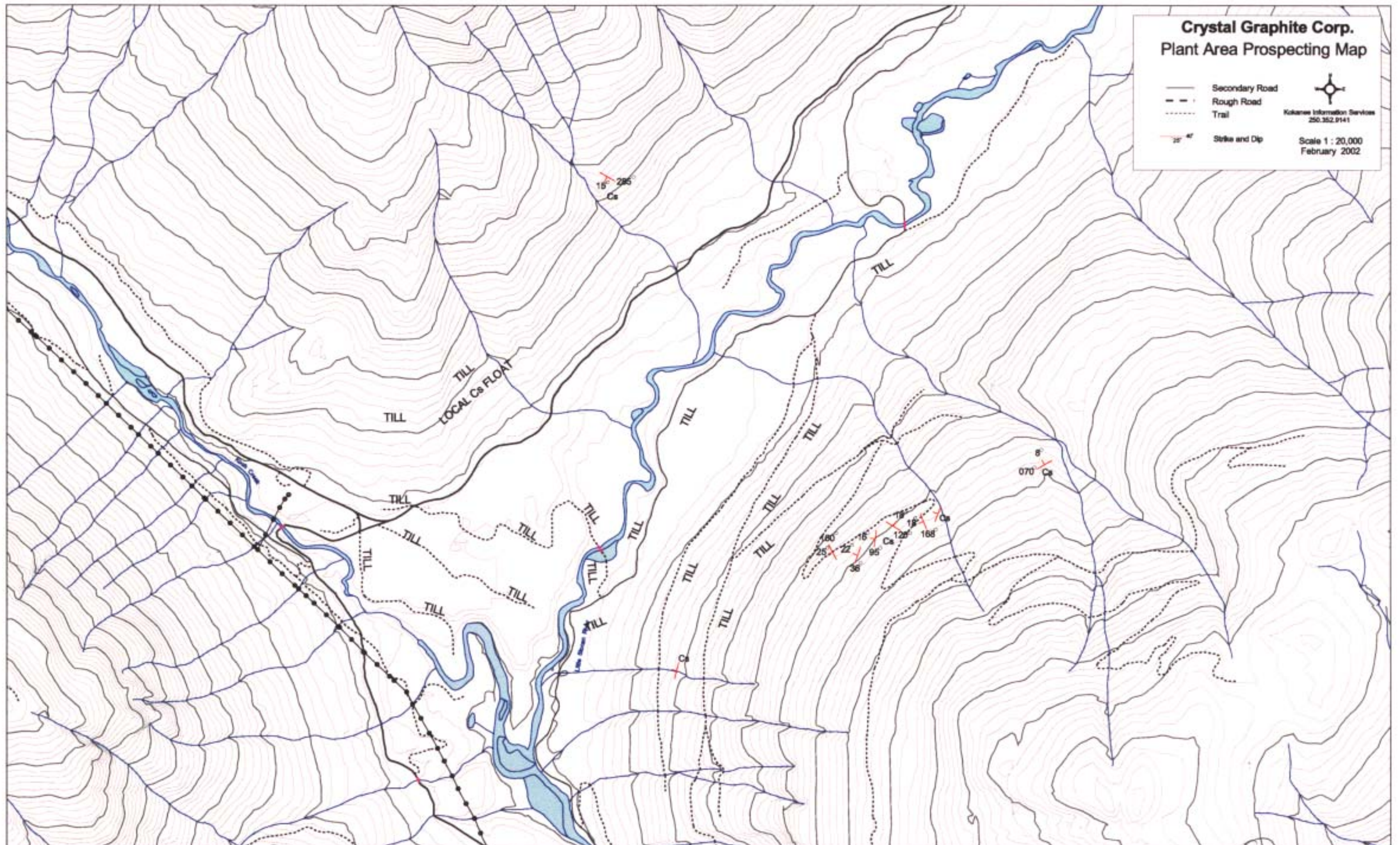


Figure 5 Plant Area Prospecting Map

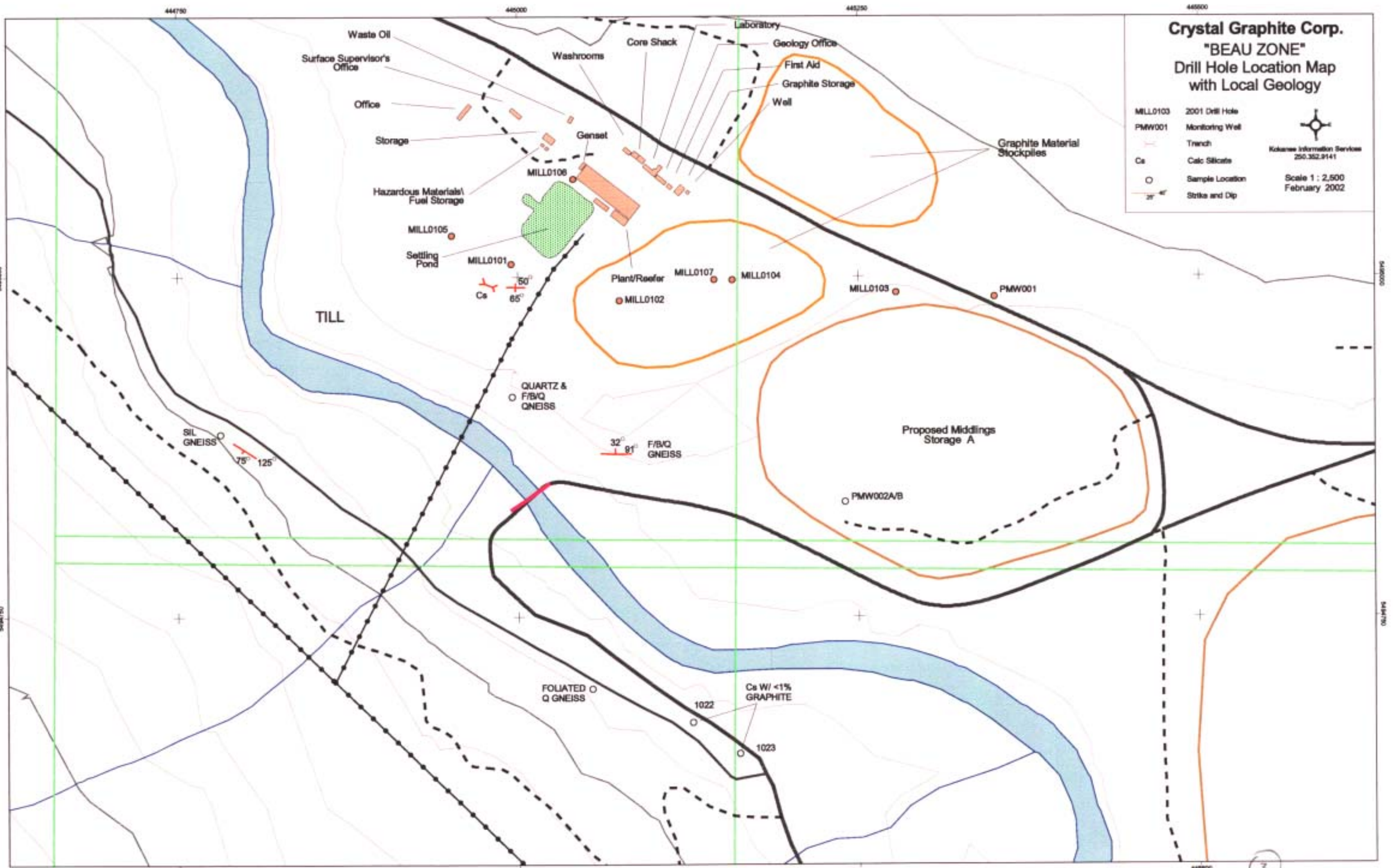
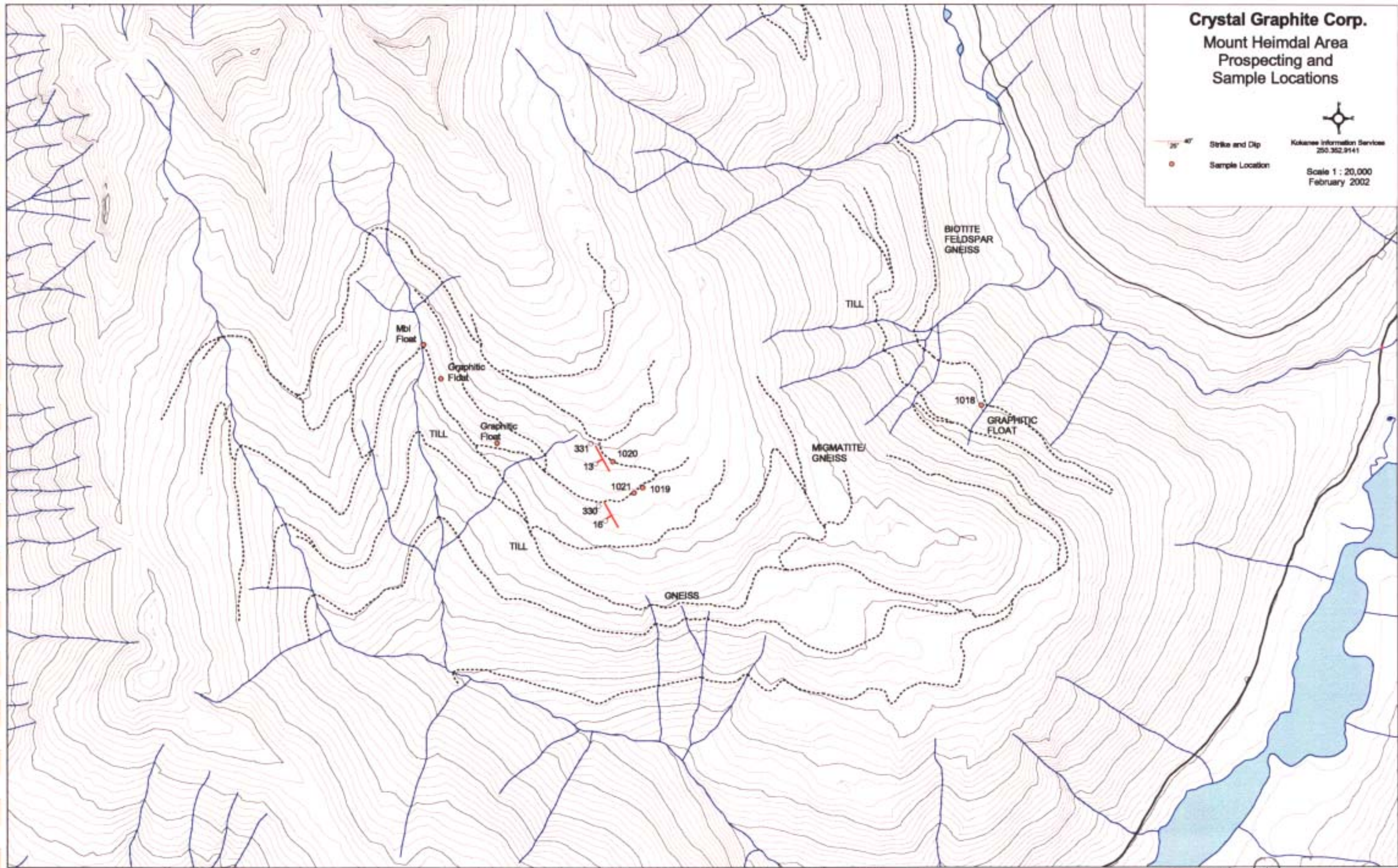


Figure 7 Drill Hole Location Map with Local Geology

26818 (3)



**Figure 6 Mount Heimdal Area Prospecting and Sample Locations**

26818 (4)

generated from this 216.4 metre drilling program, and they were prepared, and analyzed at CGC's Hoder Creek laboratory.

Also, in September a day of roadside prospecting was conducted up Berry Creek, where the author had noticed a graphite bearing boulder the previous year (sample 1018). Various roads were inspected, and eventually the author, and Mr. Chapman arrived at the east ridge of Mt Heimdal where more graphite mineralization (1019 – 1020) was noted by the author the year before also. On September 9th a helicopter flyover was made over the area. In part the flight was undertaken to determine logistics on the Plant Group, and also several loops were made in the vicinity of the two peaks of Mt Heimdahl, in a search for gossans or other tell-tale indicators of Calc-Silicate (or any other type) mineralization.

All samples were prepared and analyzed at Bondar Clegg in Vancouver, or at CGC's Hoder Creek lab facility. All were assayed utilizing the standard Leco Method. In this procedure after preparation, and hydrochloric acid leaching out of all inorganic carbon in the sample, a one gram sample is vaporized in a high frequency induction furnace. The gasses produced are then passed through a cell, where an Infrared detector determines the amount of absorption of IR energy by carbon dioxide, and then the onboard computer uses this information to determine the Total, or Fixed Carbon (FC) contained in the sample.

## **DISCUSSION**

Prospecting and geology to date have determined that a shallow to moderately northwesterly dipping graphite bearing unit or units occur in several locales on the property. Locally the graphitic host rock may be siliceous with little calcium carbonate, or it may be more calcareous, and lithologically similar to the Calc-Silicate host rocks seen in the Black Crystal area. Bright, emerald green spinel has been observed locally which is similar to that seen in the Black Crystal area,

and which mineral is the definitive indicator of the Cs2 unit. A sample of this Cs2 equivalent rock from the trench at the plant area, assayed 2.9% FC (Sample AS.01), while a sample of regular Calc Silicate Gneiss from this same trench assayed approximately 1.5% FC (Sample AS.03) The two areas which are initially of interest and which warrant follow-up work, with an eye to generating drill targets are the area to the south of the plant, across Koch Creek, and the area of the unnamed ridge which is to the east and south of the peak of Mt Heimdal. It was in a creek draining this area that a piece of Cs2 equivalent graphite bearing rock was found which ran (Sample #1018) 2.22% FC.

The diamond drilling program was quite successful in providing initial insight into the extensiveness of the Calc-Silicate zone in the general plant area, and it does indicate that additional exploration, and drilling are warranted in the general area. While the drilling did prove that the graphitic mineralization is quite laterally, and vertically extensive, the results were not overly impressive. It does appear there is some strong faulting (Mill0104) in the area.

Conventional hammer drilling was a good indicator technique, and drill hole Mill0107 which was drilled in the area of Mill0104 was useful in determining the overall validity of the technique. During the drilling of Mill0106 it was noted that quite a bit of graphite was lost due to flotation, which process is probably enhanced by the necessary addition of canola oil for hammer lubrication purposes during drilling. Microscopic investigation of the chips from this hole indicated that free graphite (that which is not attached to quartz, or other grains) is by and large absent, while the graphite which is present as partial, or whole inclusions in quartz is preserved at least in part. It is interesting to note that even with the flotation mentioned above that several interesting intercepts were encountered in Mill0106, where analytical results were better than any of those seen in any of the diamond drill holes.

Aside from a few local patches of increased hematitic/limonitic staining on the cliffs of Mt Heimdal and its eastern peak, no strong gossans or other obvious indicators of any sort of mineralization were noticed during the brief aerial inspection of the property. Logistically the property presents few problems, and even the upper reaches will be fairly easily accessible with only minor brushing, and hand repair of existing logging roads.

## CONCLUSIONS

1. The diamond drilling program was quite successful, and has indicated that graphitic Calc-Silicate hosted mineralization exists in the general area of the Koch Creek Beneficiation plant.
2. While conventional hammer, or reverse circulation drilling provides a larger diameter borehole, the recovery of graphite appears to be poor, because of losses to drilling fluid due to flotation. While this technique may be useful purely as an exploration tool, it is suggested (especially as there is no cost advantage) that this method not be utilized in the future.
3. Prospecting in the areas to the north has determined that graphite bearing calc-silicate mineralization (Cs<sub>2</sub> equivalent) exists in float in an unnamed drainage which flows south from Mt Heimdahl. Also, siliceous graphite mineralization was noted to occur to the north and west of this area, on the south flank of Mount Heimdahl.
4. Graphitic Calc-Silicate mineralization which warrants follow-up work was found on the south side of Koch Creek, across from the plant site.

## RECOMMENDATIONS

As the work performed up until now has been very positive a two phase program of extensive prospecting, sampling, and geological mapping, followed by a 500 metre diamond drill program is proposed for the general area.

All indications so far are that the mineralization continues at depth to the north of the main area of investigation, and also it should be encountered to the east along strike. A thorough program of mapping and prospecting should be undertaken in order to trace the mineralization in the general area (if possible) with an eye to determining those locations where easily accessible higher grade mineralization may exist. Additionally mapping/prospecting will better enable geological staff to:

1. Correlate the rocks seen here with those reported regionally,
2. Determine the property scale geological structure, so that this knowledge may then be applied in an effort to determine any structural controls on mineralization which can lead to a predictive structural model, which may aid in pinpointing areas which may host economically significant mineralization,
3. Locate areas where similar Graphite mineralized Calc-Silicate rocks, or other mineralized lithologies outcrop

After the above work has been performed a modest drilling program is proposed to further extend the "Beau Zone" area mineralization, and to test those areas which appear to be prospective of hosting economic grade Graphite mineralization.

**TABLE II - PROJECTED COSTS OF PROPOSED EXPLORATION**

<b>Phase I</b>	
Prospector	\$ 6,000
Geologist	\$ 8,000
100 Rock Samples @ \$20/sample	\$ 2,000
Accommodation & Food	\$ 3,000
ATV Rental	\$ 700
Chainsaw Rental	\$ 200
Transport	\$ 3,000
Shipping	\$ 300
Phone	\$ 300
Report Preparation & Drafting	\$ 1,500
Field Supplies	\$ 1,000
Contingency 10%	\$ 2,600
<b>SUBTOTAL PHASE I COSTS</b>	<b>\$28,600</b>
<b>Phase II</b>	
500m NQ drilling @ \$66/metre	\$33,000
Drill Mob & Demob – several distant sites	\$ 4,000
Road Rehabilitation/pad preparation	\$ 5,000
Geologist - Supervision & Core Logging	\$ 9,000
Field Supplies	\$ 1,000
Accommodation & Food	\$ 1,500
Transportation	\$ 2,000
200 Assays @ \$20/sample	\$ 4,000
Phone	\$ 500
Shipping	\$ 300
Report Preparation & Drafting	\$ 1,500
Remediation/cleanup	\$ 2,000
Contingency 10%	\$ 6,380
<b>SUBTOTAL PHASE II COSTS</b>	<b>\$70,180</b>
<b>TOTAL ESTIMATED COSTS</b>	<b>\$98,780</b>



TABLE III - PROJECT COSTS

	# UNITS	UNITS	\$/UNIT	COST
DRILLING	232.85	METRES	65.62	\$15279.62
DRILL MOBILIZATION & DEMOBILIZATION				\$1850
EXCAVATOR - TRENCHING/PAD PREP	5	HOURS	110	\$550
ANALYTICAL	50	ASSAYS	20	\$999.38
ANALYTICAL - IN HOUSE	7	ASSAYS	16	\$112
T LEWIS PROSPECTING	3	DAYS	350	\$1050
TRENCHING - SUPERVISION AUG 14	0.5	DAYS	350	\$175
LOGGING/SUPERVISION - SEP 15 - 23	9	DAYS	350	\$3150
REPORT WRITING SEP 29 & JAN 7-11	6	DAYS	350	\$2100
ACCOMODATION/FOOD	24	DAYS	50	\$1200
J CHAPMAN PROSPECTING - SEP 23 & SEPT25	2	DAYS	350	\$700
REVIEW SUPERVISION SEPT 22 & 24	2	DAYS	350	\$700
TRAVEL SEPT 03 & SEPT 30	2	DAYS	350	\$700
ACCOMODATION/FOOD	6	DAYS	50	\$300
S SCHMIDT - SPLITTING/GEOTECH SEP 22 - 24	3	DAYS	200	\$600
HELICOPTER	0.75	HOURS	1250	\$937.5
4x4 VEHICLE RENTAL	15	DAYS	60	\$900
GAS/OIL				\$200
SUPPLIES/TROPARI RENTAL				\$550
PHONE/FAX/ETC				\$50
CLERICAL	0.5	DAYS	200	\$100
DRAFTING/COLLATION				\$300
DTH PERCUSSION DRILLING	216.4	METRES	73.98	\$16009.27
T LEWIS WELL SUP - SAMPLING	2.5	DAYS	350	\$875
LOGGING/MICROSCOPIC EXAMINATION	2	DAYS	350	\$700
ANALYTICAL				
IN-HOUSE - PERCUSSION DRILLING	67	ASSAYS	16	\$1072
VANCOUVER PETROGRAPHIC				\$600
BONDAR - RARE EARTH	1	ASSAYS	44	\$44
SAMPLE SHIPMENT - GREYHOUND				\$92.85
<b>TOTAL EXPENDITURES</b>				<b>\$51,897</b>

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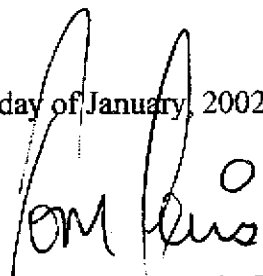
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## STATEMENT OF QUALIFICATIONS

I, Thomas M. Lewis of the City of Rossland, in the Province of British Columbia, hereby certify that:

1. I am a mineral exploration geologist, engaged in all facets of mineral exploration, and geological consulting, and I reside at #43-891 Monte Vista Drive, Rossland, B.C.
2. I am a graduate of Brandon University, Brandon Manitoba, with a BSc., with a major in Geology (1989).
3. I am a graduate of Mount Royal College, Calgary Alberta with a diploma in Petroleum & Mineral Land Management (1986), and of Fanshawe College, London Ontario with a diploma in Social Sciences, and Humanities (1975).
4. I am a fellow of the Geological Association of Canada.
5. I have worked in various capacities in the exploration field, both for hydrocarbons and mineral resources since 1975, and have been working primarily as a consulting mineral exploration geologist since graduation in 1989.
6. This report is based on actual observations I made while in the course of my duties as a geological consultant, while employed by Crystal Graphite Corporation, or from information obtained from the references cited.
7. This report is solely intended for use in support of Crystal Graphite's Assessment Report requirements on the Plant Group of mineral claims. Use for any other purpose is prohibited without the author's written permission.
8. I have no direct or indirect interest in Crystal Graphite, or any associated company as of the date of this report, nor do I expect to receive any in the future.

Dated at Slocan Park, British Columbia on this 30th day of January, 2002.



**Thomas M. Lewis, B.Sc., FGAC**  
Consulting Geologist

## **Appendix A: Diamond Drill Logs**





GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
From (m)	To (m)			Sample Interval		Pegmatites	SAMPLE NUMBER
				From (m)	To (m)	Cum. Total (m)	
27.82	51.64	CS	<p><b>CALC – SILICATE GNEISS</b></p> <p>Light grey with local greenish tinge Often tightly folded – convoluted – usual foliation varies within range of 40° to 70° to LCA Quite variable lithologically within section &amp; consist of:</p> <ul style="list-style-type: none"> <li>- 27.82 – 27.88 Coarse crystalline Feldspar/Quartz/Biotite Pegmatite</li> <li>- 27.88 – 29.57 Biotite/Feldspar/Quartz gneiss – greenish, strongly foliated @ varying angles, with local patches increased intensity pervasive greenish (diopsidic) alteration with graphite</li> <li>- 29.57 – 30.94 Pegmatite – medium coarse grained, with inclusions of sections up to 8 cm in width of graphitic Cs</li> <li>- 30.94 – 33.45 Siliceous Calc – Silicate Gneiss, locally greenish, foliated @ 40° to LCA, local blebs of pyrrhotite</li> <li>- 33.45 – 35.15 Dark Siliceous Graphitic Calc – Silicate Gneiss, with ~ 1% disseminated fine grained pyrite/pyrrhotite, and 3 – 5% disseminated fine grained graphite</li> <li>- 35.15 – 35.95 Biotite Gneiss with CaCO3. Dark brown, strongly foliated – exhibits much convoluted folding. Clay gouge filled fault @ 35.5m</li> <li>- 35.95 – 39.59 Calc – Silicate Gneiss Light grey, with 1 - 2 % disseminated fine grained graphite, &lt;.5% disseminated fine grained pyrite/pyrrhotite. Local Impure Marble sections with trace disseminated graphitic Pegmatite from 37.73 – 38.11</li> <li>- 39.59 – 40.55 Biotite Gneiss. Dark Brown, greenish tinge with local CaCO3</li> <li>- 40.55 – 41.59 Calc – Silicate Gneiss with 1 – 1.5% disseminated fine grained graphite</li> <li>- 41.59 – 41.86 Pegmatite – contacts @ 60° to LCA</li> <li>- 41.86 – 42.34 Calc – Silicate Gneiss</li> <li>- 42.34 – 42.79 Pegmatite – contacts @ 50° to LCA</li> <li>- 42.79 – 43.56 Dark grey/green gneissic skarn. Foliated @ 65° to LCA &lt;.5% disseminated Graphite</li> <li>- 43.56 – 44.63 Pegmatite</li> <li>- 44.63 – 45.98 Calc – Silicate Gneiss (CS2 Equivalent) Medium grey, convoluted foliation, trace dark green disseminated spinel, ~ 1% disseminated pyrite/pyrrhotite, 2 – 3 % disseminated fine grained graphite, local patches disseminated diopside</li> </ul>				
				33.45	35	0	3112
				35	36	0	3113
				36	37	0	3114
				37	38	0.27	3115
				38	39	0.14	3116
				39	40	0	3117
				40	41	0.42	3118
				41	42	0.40	3119
				42	43	0.44	3120
				43	44	0.42	3121
				44	45	0.59	3122
				45	46	0	3123
				46	47	0	3124
				47	48	0	3125
				48	49	0.04	3126
				49	50	0.06	3127
				50	51.64	0	3128





SURVEY DATA										DRILLING DATA		
SURVEY	DEPTH		DIP		TRUE AZIMUTH			GRID			GRID SYSTEM	MINE
	(R.)	(m)	True		Degrees	Minutes	Seconds	SYSTEM	NORTHING (m)	EASTING (m)	ELEVATION (m)	APPROX. NORTHING (m)
Collar												APPROX. EASTING (m)
Down Hole	(R.)	(m)	Read	True	Read	True						APPROX. ELEVATION (m)
1		49.37	-55	-55	153	171.5						DATE DRILLING STARTED
												DATE DRILLING ENDED
												(ft.) (m)
												TOTAL DEPTH
												51.81
												CASING DEPTH
												9.14
												CASING
												STEEL IN HOLE
											No	Ft.
												LOGGED BY
												T Lewis
												LOGGING DATE

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
FROM (m)	TO (m)			Sample Interval	Pegmatites	SAMPLE NUMBER	
				From (m)	To (m)	Cum. Total (m)	
0	9.14	CASE	<u>CASING - OVERBURDEN</u>				
9.14	19.28	CS	<u>CALC - SILICATE GNEISS</u> Medium grey, lightly to moderately foliated @ 30 - 70° to LCA Folding obvious, moderately tight, somewhat convoluted Local thin pegmatites up to 15 cm wide Disseminated fine grained pyrite/pyrrhotite up to 1% locally Overall 3 - 4% disseminated fine grained graphitic, grade varies locally Local trace fine grained Dark Green Spinel (patchy - tough to delimit) Local trace pale green fine grained disseminated diopside Overall rock is fairly siliceous with grey quartz comprising ~ 60 - 70% of total mass	9.20	10	0.02	3129
				10	11	0.11	3130
				11	12	0.02	3131
				12	13	0.03	3132
				13	14	0.03	3133
				14	15	0.14	3134
				15	16	0.20	3135
				16	17	0.06	3136
				17	18	0.12	3137
				18	19.28	0	3138



GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
From (m)	To (m)			Sample Interval	Pegmatites	SAMPLE NUMBER	
				From (m)	To (m)	Cum. Total (m)	
28.29	34.59	P	<p><b>PEGMATITE</b></p> <p>Feldspar/Quartz/Biotite Pegmatite – Creamy white to greyish                      Pegmatite does not display the clay alteration of the feldspars as noted in the pegmatite above                      Locally bands of Feldspar/Quartz/Biotite gneiss especially -33.20 - 33.60                      Top contact indistinct – ragged                      Bottom contact fairly sharp &amp; @ 75° to LCA                      Local (gneissic sections typically) trace fine to medium grained pinkish poorly formed (retrograde) garnet                      Overall foliation @ 50° to LCA</p>				
34.59	37.67	CS	<p><b>CALC – SILICATE GNEISS</b></p> <p>Light grey, locally greenish tinge, Moderately foliated @ 50° to LCA                      Narrow bands of Impure Marble                      Local more siliceous sections which are a darker bluish grey                      &lt; 1% disseminated fine grained pyrite/pyrrhotite                      1.5 – 3 percent disseminated fine grained graphitic locally grades up to 5 %, and as low as .5%                      Top of section pale green (diopsidic) skarn</p>	34.58	36	0.06	3142
				36	37.67	0.07	3143
37.67	39.00	FQBG	<p><b>FELDSPAR QUARTZ BIOTITE GNEISS</b></p> <p>Dark Brownish                      Strongly foliated @ 55° to LCA                      Abundant thin pegmatitic veins which are parallel to sub parallel to foliation                      Abundant fine grained pale pink poorly formed garnet</p>				

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
From (m)	To (m)			Sample Interval	Pegmatites	SAMPLE NUMBER	
				From (m)	To (m)	Cum. Total (m)	
39	43.38	QRM	<p><b><u>QUARTZ REPLACED MARBLE</u></b></p> <p>Very pale greenish tinge throughout, finely laminated, weakly foliated @ 40 - 50° to LCA Trace CaCO3 Local trace disseminated fine grained pyrite/pyrrhotite Local trace disseminated fine grained graphite</p>				
43.38	47.54	FQBG	<p><b><u>FELDSPAR QUARTZ BIOTITE GNEISS</u></b></p> <p>Brownish with local slight greenish tinge. Abundant feldspar/quartz bands – typically 2mm to 1 cm in width Moderately to strongly foliated @ 30 - 50° to LCA, crenulated folding present Locally obvious crenulations terminate on ancient (healed) slippage planes – parallel to normal foliation ~ 45 m's appears to be a possible thin foliated Quartz Monzonite dyke</p>				
47.54	51.81	QRM	<p><b><u>QUARTZ REPLACED MARBLE</u></b></p> <p>As 39.00 to 43.38 Top of interval abundant medium green poorly formed (retrograde) garnets Local sections of Feldspar/Biotite/Quartz Gneiss Foliated @ 50° to LCA. Convolute folding present &lt; .5% disseminated subhedral fine grained py Pegmatite @ ~ 51 m – appears to some local brecciation associated with emplacement</p>				













SURVEY DATA											DRILLING DATA			
SURVEY	DEPTH		DIP		TRUE AZIMUTH			GRID			GRID SYSTEM	MINE		
	(ft.)	(m)	True		Degrees	Minutes	Seconds	SYSTEM	NORTHING (m)	EASTING (m)	ELEVATION (m)	APPROX. NORTHING (m)		
Collar												APPROX. EASTING (m)		
Down Hole	(ft.)	(m)	Read	True	Read	True						APPROX. ELEVATION (m)		
1			°	90°	No Test	°						DATE DRILLING STARTED	November 19, 2001	
												DATE DRILLING ENDED	November 21, 2001	
													(ft.)	(m)
												TOTAL DEPTH	405	123.44
												CASING DEPTH	18	5.49
												CASING		
												STEEL IN HOLE	No	Ft.
												LOGGED BY	T Lewis	
												LOGGING DATE	November 20, 21	

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
FROM (m)	TO (m)			Sample Interval		Pegmatites	SAMPLE NUMBER
				From (m)	To (m)	Cum. Total (m)	
0	4.57	CASE	<b>OVERBURDEN - CASING</b> Well cased to ~ 5.49 meters				
4.57	6.10	QFBG	Quartz/Feldspar/Biotite - no CaCo3 - trace graphite				
6.10	7.62	QFBG	As above				
7.62	9.14	SK/P?	Quartz/Feldspar/trace biotite, trace CaCo3 Trace medium green (garnet/apatite?) mineral				
9.14	10.67	SK/P?	As above - trace pyrite, increase CaCo3				
10.67	11.27	SK/P?	As above - observed lithology change at ~37' depth in field while drilling				
11.27	12.19	QBFG	Quartz//Biotite/Feldspar - no CaCo3 - Dark fine grained bladed +/- mafic - Actinolite/Tremolite?				
12.19	19.81	QFBG	Quartz/Feldspar/Biotite				
19.81	24.38	QFBG	As above but with increased biotite				
24.38	28.95	BQFG	Biotite/Quartz/Feldspar Gneiss With abundant fine grained pyrite/pyrrhotite				

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG		
From (m)	To (m)			Sample Interval	Pegmatites	SAMPLE NUMBER
			From (m)	To (m)	Cum. Total (m)	
28.95	33.53	QFBG	Quartz/Feldspar/Biotite Gneiss			
33.53	42.67	BQFG	Biotite/Quartz/Feldspar Gneiss – abundant biotite – increases again in basal 1.5 meters			
42.67	46.63	FQBG	Feldspar/Quartz/Biotite – abundant feldspar grains			
46.63	46.94	FAULT	Makes ~ 4 gals water per minute			
46.94	48.76	BQFG	Biotite/Quartz/Feldspar Gneiss			
48.76	54.86	CS	Quartz/Feldspar – trace fine grained graphite, trace CaCo3, trace biotite, Biotite increases bottom 3 meters of interval	48.76	50.23	1101
54.86	56.38	FQBG	Feldspar/Quartz/Biotite Gneiss with <1% pyrite/pyrrhotite, no graphite, no CaCo3	50.23	51.81	1102
56.38	57.91	BQFG	Biotite/Quartz/Feldspar Gneiss	51.81	53.34	1103
57.91	59.43	BQFG	As above. Increase in pyrite/pyrrhotite – trace epidote	53.34	54.86	1104
59.43	64.00	CS	Quartz/Feldspar – moderate CaCo3 – trace biotite – .5 - 1% disseminated very fine grained graphite	59.43	60.96	1105
64.00	65.53	CS	Quartz/Feldspar/Biotite – trace epidote – trace pyrite/pyrrhotite – trace CaCo3	60.96	62.48	1106
65.53	67.05	CS	As above – trace very fine grained graphite – trace to moderate CaCo3	62.48	64.00	1107
67.05	68.58	CS	As above – with < 1% disseminated very fine grained graphite	64.00	65.53	1108
68.58	70.01	CS	Quartz/Feldspar – slight trace biotite/mafics – very slight trace epidote – abundant CaCO3, no pyrite/pyrrhotite noted <1% disseminated very fine grained graphite	65.53	67.05	1109
70.01	71.62	CS	As above – trace dark green Spinel	67.05	68.58	1110
71.62	73.14	CS	As above – decrease in CaCo3 – increase graphite to ~ 1% - slight increase in biotite content	68.58	70.10	1111
73.14	76.19	CS	Quartz/Feldspar/Biotite – slight increase in biotite from above section <1% disseminated graphite	70.10	71.62	1112
76.19	77.72	CS	Trace epidote, trace pyrite/pyrrhotite	71.62	73.15	1113
77.72	79.24	CS	Quartz/Feldspar abundant Biotite - trace Graphite, trace light pink garnet – trace epidote, slight trace CaCo3	73.15	74.67	1114
79.24	80.77	CS	Quartz/Feldspar with moderate Biotite, graphite increase to < 1%, trace pink garnet, trace epidote, trace CaCo3	74.67	76.20	1115
80.77	82.29	FAULT	Approximately 18 cm fault	76.20	77.72	1116
82.29	83.81			77.72	79.24	1117
				79.24	80.77	1118
				80.77	82.29	1119
				82.29	83.81	1120

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
From (m)	To (m)			Sample Interval	Pegmatites	SAMPLE NUMBER	
79.24	80.76	CS	Quartz/Feldspar/Biotite increased Quartz & Feldspar (i.e. less mafic than above) As above - (very fine grained sand) calcareous - extremely poor chip recovery - <1% disseminated fine grained graphite. See one dark siliceous chip with <b>Spinel</b>	From (m)	To (m)	Cum. Total (m)	
80.76	82.30	CS		83.81	85.34		1121
82.30	83.81	CS	Quartz/Feldspar/Epidote - ~ 1% disseminated fine grained graphite - moderate CaCo3 <.5% disseminated pyrite/pyrrhotite. Greenish hue overall	85.34	86.86		1122
83.81	85.34	CS		86.86	88.39		1123
85.34	86.86	CS	Quartz/Feldspar/Epidote - trace biotite, moderate CaCo3 <1% disseminated fine grained graphite Poor chip recovery	88.39	89.91		1124
86.86	88.39	CS		89.91	91.43		1125
88.39	89.91	CS	Feldspar/Quartz/Biotite/Epidote - trace CaCo3, trace fine grained disseminated graphite	91.43	92.96		1126
89.91	91.43	CS		92.96	94.48		1127
91.43	92.96	CS	Quartz/Feldspar/Epidote - trace biotite, moderate CaCo3 Trace disseminated fine grained graphite Poor chip recovery	94.48	96.01		1128
92.96	94.48	CS		96.01	97.53		1129
94.48	96.01	CS	As Above - better chip recovery	97.53	99.05		1130
96.01	97.53	CS		99.05	100.58		1131
97.53	99.05	CS	As Above - poor recovery - Strong CaCo3 - See fine grained <b>Spinel</b>	100.58	102.10		1132
99.05	100.58	CS		102.10	103.63		1133
100.58	102.10	CS	As Above - good chip recovery - 1% disseminated very fine grained graphite	103.63	105.15		1134
102.10	103.63	CS		105.15	106.67		1135
103.63	105.15	CS	As Above - increase in biotite - see siliceous chip with 3 - 4% disseminated very fine grained graphite - pyrite/pyrrhotite ~ .5%	106.67	108.19		1136
96.01	97.53	CS		108.19	109.72		1137
97.53	99.05	CS	Quartz Feldspar/Epidote - trace pyrite < .5% disseminated very fine grained graphite, Moderate CaCo3 0% Biotite <b>N.B. Noted moderate graphite floating on water flowing out of the hole from approximately 82.29 - 96.01</b>	109.72	111.25		1138
99.05	100.58	CS		111.25	112.77		1139
100.58	102.10	CS	As Above - Biotite from 5 - 10%	112.77	114.29		1140
102.10	103.63	CS					
103.63	105.15	CS	As Above - Biotite decreases to < 5%				
			Quartz/Feldspar/Slight Epidote - trace pyrite/pyrrhotite - <.5% disseminated very fine grained graphite Strong CaCo3 Poor chip recovery				
			As Above - slightly better chip recovery Moderate CaCo3				
			As Above - even better chip recovery - trace biotite				
			As Above - good chip recovery - < 5% biotite				



SURVEY DATA										DRILLING DATA		
SURVEY	DEPTH		DIP		TRUE AZIMUTH			GRID			GRID SYSTEM	MINE
	(ft.)	(m)	True	Degrees	Minutes	Seconds	SYSTEM	NORTHING (m)	EASTING (m)	ELEVATION (m)	APPROX. NORTHING (m)	
Collar											APPROX. EASTING (m)	
Down Hole	(ft.)	(m)	Read	True	Read	True					APPROX. ELEVATION (m)	
1		NO TESTS	"	90°	"	"					DATE DRILLING STARTED	November 21, 2001
											DATE DRILLING ENDED	November 22, 2001
											(ft.)	(m)
											TOTAL DEPTH	305 92.96
											CASING DEPTH	78 23.77
											CASING	
											STEEL IN HOLE	No Ft.
											LOGGED BY	T Lewis
											LOGGING DATE	November 23, 2001

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG			
FROM (m)	TO (m)			Sample Interval	Pegmatites	SAMPLE NUMBER	
				From (m)	To (m)	Cum. Total (m)	
0	21.64	CASE	<b>CASING - OVERBURDEN</b> Casing drilled into bedrock a further 2.13 meters				
21.64	22.86	Cs	Quartz/Feldspar < 5% Biotite Trace pyrite/pyrrhotite - local trace fine grained disseminated graphite. Slight trace CaCo3	21.64	22.86		1141
22.86	24.38	Cs	As Above Moderate CaCo3 Trace Biotite Trace pyrite/pyrrhotite <.5% disseminated fine grained graphite	22.86	24.38		1142
24.83	25.91	Cs	As Above Slight increase in CaCo3	24.83	25.91		1143
25.91	27.43	Cs	As Above	25.91	27.43		1144
27.43	28.95	Cs		27.43	28.95		1145
28.95	30.48	Cs	Quartz/Feldspar/Biotite/CaCo3 <.5% disseminated graphite Trace pyrite/pyrrhotite	28.95	30.48		1146
			As Above Trace graphite Trace epidote Trace pyrite/pyrrhotite	30.48	32.00		1147
			N.B. Above two intervals may be QFBC more properly - difficult to distinguish	32.00	33.53		1148
				33.53	35.05		1149

GEOLOGICAL INTERVAL		LITHO CODE	LITHOLOGICAL DESCRIPTION	SAMPLE LOG		
From (m)	To (m)			Sample Interval	Pegmatites	SAMPLE NUMBER
From (m)	To (m)		From (m)	To (m)	Cum. Total (m)	
30.48	32.00	Cs				
			Quartz/Feldspar/Biotite(< 5%) Moderate CaCo3 Trace epidote <.5% disseminated fine grained graphite			
32.00	33.53	Cs	Quartz/Feldspar Moderate/Strong CaCo3 .5% disseminated graphite Trace pyrite/pyrrhotite	35.05	36.57	1150
33.53	35.05	Cs	As above ~ 5% disseminated biotite	36.57	38.10	1151
35.05	36.57	Cs	As above Trace biotite	38.10	39.62	1152
36.57	38.10	Cs	As above Trace biotite	39.62	41.15	1153
38.10	39.62	Cs	Quartz/Feldspar/Weak to Moderate CaCo3 <.5% disseminated fine grained graphite Trace pyrite/pyrrhotite	41.15	42.67	1154
			As above Trace epidote	42.67	44.19	1155
39.62	41.15	Cs	As above	44.19	45.72	1156
41.15	42.67	Cs	As above	45.72	47.24	1157
42.67	44.19	Cs	As above Trace biotite	47.24	48.76	1158
44.19	45.72	Cs	Quartz/Feldspar/Moderate CaCo3 ~.5% disseminated fine grained graphite Trace epidote ~.5% disseminated pyrite/pyrrhotite	48.76	50.23	1159
45.72	47.24	Cs	As above but with <.5% disseminated fine grained graphite & diminished pyrite/pyrrhotite	50.23	51.81	1160
			As above Trace biotite	51.81	53.34	1161
47.24	48.76	Cs	As 47.24 - 48.76	53.34	54.86	1162
48.76	50.30	Cs	As 47.24 - 48.76 Abundant CaCo3	54.86	56.38	1163
50.30	51.81	Cs	FAULT	56.38	57.91	1164
51.81	53.34	Cs	Quartz/Feldspar/CaCo3(strong) Trace epidote <.5% disseminated fine grained pyrite/pyrrhotite ~.5% disseminated fine grained graphite			
			As above			
53.34	54.86	Cs	Quartz/Feldspar/Biotite(5-10%) Trace pink Garnet Trace graphite Trace pyrite/pyrrhotite Trace CaCo3 Transition from above lithology to QFBGG occurs somewhere within this interval			
54.86	56.38	Cs	Quartz/Feldspar/Biotite Trace graphite Trace pyrite/pyrrhotite Trace CaCo3			
56.38	57.91	QFBGG				
57.91	59.43	QFBG				





**Appendix B: Sample Descriptions**

3160

**Petrographic Report**  
**(5 drill core samples)**  
**prepared for**  
**Crystal Graphite Corporation**

**by**  
**K.E. Northcote & Associates Ltd.**  
**November 15, 2001**

MULLOISE Calc-silicate - 114 - 2001

**[2] Calc-silicate  
Summary Description**

Fine to medium grained calc-silicate, generally with granoblastic texture. The rock consists mainly of quartz, diopside, carbonate and feldspar. Opaques are fairly abundant - approximately 5% of the section. There is a weak preferred orientation of some platy minerals, mainly the opaques.

**Microscopic Description  
Transmitted Light**

Quartz; 30-35%, anhedral (0.1 to ~2 mm). Interlocking texture, with grain size varying more than pyroxene.

Clinopyroxene (diopside); 17-22%, anhedral to subhedral (0.1 to 1 mm). Granular, partly interlocking with quartz.

Carbonate; 17-22%, anhedral (0.01 to 1 mm). Interlocking and interstitial to pyroxene, and in some cases quartz.

Feldspar; 10-15%, anhedral (0.01 to 1 mm). Scattered irregular grains and small aggregates. The feldspar has some microscopic exsolution of K-feldspar (antiperthite).

Opaques; 5-7%, subhedral (0.01 to ~1 mm). Appears to be mainly graphite. Weak preferred orientation.

Amphibole (tremolite-actinolite); 3-5%, anhedral (0.01 to ~1 mm). Local sheaves of bladed or fibrous pale green amphibole. Probably localized alteration of the pyroxene.

Muscovite; 1-2%, anhedral (0.01 to ~1 mm). Scattered, commonly found with the opaques.

Sphene; 1-2%, anhedral to subhedral (0.1 to 0.5 mm). Somewhat unevenly scattered.

Apophyllite;  $\leq 1\%$ , anhedral to subhedral (0.1 to 0.5 mm). Fairly sparsely scattered, interlocking with quartz, feldspar, carbonate. Properties [one good cleavage, two others visible in some grains, uniaxial (-) interference figure, first order grey birefringence, moderate positive relief] are consistent with apophyllite.

Apatite;  $\leq 0.5\%$ , subhedral (0.05 to 0.3 mm). Sparsely scattered throughout the section.

Talc; trace, microcrystalline. Minor alteration of clinopyroxene.

### [3] Calc-silicate

#### Summary Description

Medium-grained calc-silicate. Tight fold seen in compositional banding. Mainly granular, partly interlocking. Some elongate and platy minerals roughly aligned with axial plane of small fold seen in the section.

#### Microscopic Description

##### Transmitted Light

Quartz; 35-40%, anhedral (0.1 to ~8 mm). Interlocking, but with widely ranging grain size and uneven distribution within the section. Some of the larger grains enclose pyroxene.

Clinopyroxene; 20-25%, subhedral to anhedral (0.1 to ~1 mm). Scattered, commonly in small, loose aggregates. Generally more granular than the quartz.

Carbonate; 20-25%, anhedral (0.1 to ~1 mm). Interlocking with quartz. Contacts with quartz and pyroxene commonly concave in carbonate.

Feldspar; 5-7%, anhedral (0.1 to ~1 mm). Similar to other samples of this suite, the feldspar is a microscopic intergrowth of plagioclase and K-feldspar. Unlike the other samples, the feldspar is concentrated in a narrow (3-4 mm) folded segregation.

Amphibole (tremolite-actinolite); 3-5%, anhedral (<0.01 to ~1 mm). Scattered patches of ragged pale green to colourless amphibole. Appears to be localized alteration of pyroxene.

Apophyllite;  $\leq 1\%$ , anhedral (0.1 to 0.5 mm). sparsely scattered.

Sphene; 1-2%, anhedral to euhedral (0.05 to ~1 mm). Scattered throughout, weakly aligned, with preferred orientation.

Opagues; 2-3%, anhedral to subhedral (0.01 to ~1 mm). Appears to be mainly graphite with a weak preferred orientation.

Apatite;  $\leq 1\%$ , subhedral (0.05 to 0.3 mm). Stubby prismatic apatite scattered throughout the section.

Muscovite; traces, anhedral (<0.01 to 0.5 mm). Not abundant. Commonly found with opagues.

Chlorite; traces, anhedral (<0.01 to 0.5 mm). Minor. Appears to be alteration of amphibole.

**[4] Calc-silicate (diopsidite)**  
**Summary Description**

Medium grained calc-silicate rock, consisting mainly of diopsidic clinopyroxene with lesser interstitial plagioclase. Sphene and opaques (pyrrhotite) are also present. One end of the sample is a segregation, vein or alteration patch of coarser quartz, carbonate and actinolite.

**Microscopic Description**  
**Transmitted Light**

Clinopyroxene (diopside); 70-75%, anhedral to subhedral (0.1 to ~ 7 mm). Partly interlocking, with some minor, patchy carbonate replacement.

Plagioclase; 10-15%, anhedral (0.1 to 1 mm). Interlocking, in some cases interstitial to pyroxene, and poikilitically enclosing smaller pyroxene crystals.

Quartz; 5-7%, anhedral (0.01 to cm scale). Concentrated at one edge of the section, with actinolite.

Amphibole (actinolite); 3-5%, subhedral to euhedral (0.1 to ~5 mm). pale green amphibole. Some minor alteration of clinopyroxene, but concentrated at one end of the section in aggregates of coarse bladed crystals with carbonate and quartz.

Carbonate; 1-3%, anhedral (<0.01 to ~8 mm). Weak patchy alteration and interstitial carbonate among the pyroxene. Carbonate is more abundant at one end of the section with actinolite and similarly coarse quartz.

Sphene; 1-3%, euhedral to anhedral (0.1 to 1 mm). Scattered throughout. Mostly anhedral. Sparser in the quartz-carbonate-actinolite area.

Opaques; 1-2%, anhedral (0.01 to ~1.5 mm). Somewhat unevenly disseminated blebby opaques. Appears to be mainly pyrrhotite in the hand specimen.

Chlorite;  $\leq 1\%$ , anhedral (0.01 to 0.2 mm). A few small aggregates, commonly between pyroxene grains.

Muscovite; traces, anhedral (<0.01 to 0.5 mm). A few scattered ragged flakes of colourless mica.

Chlorite; traces, anhedral (<0.01 to 0.5 mm). Some alteration of amphibole to chlorite.

**CRYSTAL GRAPHITE CORPORATION**  
**PLANT GROUP**  
**ROCK DESCRIPTIONS**

**1018** – Float – Boulder near Creek – Mod brown – slightly oxidized – foliated, Cs with trace fine grained spinel, 2 to 3% disseminated fine grained graphite

**1019** - Outcrop – road. Siliceous Cs with ~ 1% disseminated fine grained graphite

**1020** - Outcrop – road. Siliceous Cs with .5 to 1% disseminated fine grained graphite. Good surfaces for determining orientation

**1021** - Outcrop – road. Siliceous Cs with ~ 1% disseminated fine grained graphite

**1022** – Outcrop? near culvert – finely laminated, slightly siliceous Cs with ~ 1% disseminated fine grained graphite

**1023** – Definite outcrop by F.S.R. & powerline road junction. Calc-Silicate as above.

**AS. 01** – From Beau Zone Trench – brown oxidized calc-silicate gneiss, local trace of dark green spinel. 3 to 4% disseminated fine grained graphite.

**AS. 02** – From Beau Zone Trench – Calc-Silicate gneiss, with ~ 2% disseminated fine grained graphite.

## **Appendix C: Assay and Analytical Results**



BONDAR CLEGG



# Geochemical Lab Report

CLIENT: CRYSTAL GRAPHITE CORPORATION  
REPORT: V01-02538.0 ( COMPLETE )

DATE RECEIVED: 05-JAN-02

PROJECT: NONE GIVEN

DATE PRINTED: 11-JAN-02

PAGE 1 OF 3

SAMPLE NUMBER	ELEMENT UNITS	C Org PCT	SAMPLE NUMBER	ELEMENT UNITS	C Org PCT
D2 3101		0.24	D2 3141		0.62
D2 3102		0.27	D2 3142		1.35
D2 3103		0.44	D2 3143		1.33
D2 3104		0.28	D2 3144		0.20
D2 3105		0.28	D2 3145		0.37
D2 3106		0.28	D2 3146		0.11
D2 3107		0.36	D2 3147		0.39
D2 3108		0.17	D2 3148		0.28
D2 3109		0.29	D2 3149		0.17
D2 3110		0.22	D2 3150		0.17
D2 3111		2.05			
D2 3112		2.28			
D2 3113		0.38			
D2 3114		1.75			
D2 3115		0.76			
D2 3116		1.05			
D2 3117		1.14			
D2 3118		0.34			
D2 3119		0.91			
D2 3120		0.94			
D2 3121		<0.02			
D2 3122		1.36			
D2 3123		2.80			
D2 3124		0.77			
D2 3125		0.24			
D2 3126		0.05			
D2 3127		0.38			
D2 3128		0.21			
D2 3129		1.04			
D2 3130		0.68			
D2 3131		1.12			
D2 3132		0.88			
D2 3133		1.12			
D2 3134		1.55			
D2 3135		1.05			
D2 3136		0.75			
D2 3137		3.20			
D2 3138		1.54			
D2 3139		0.13			
D2 3140		0.46			



1023	0.2963	0.634	06/11/2001 9:10 Tom	1 Scoop Lecocel 11/1Cu
1023	0.3473	0.455	06/11/2001 9:16 Tom	1 Scoop Lecocel 11/1Cu
1023	0.2963	0.634	06/11/2001 9:10	1 Scoop Lecocel 11/1Cu
1023	0.3473	0.455	06/11/2001 9:16	1 Scoop Lecocel 11/1Cu
1022	0.3121	0.478	06/11/2001 9:19	1 Scoop Lecocel 11/1Cu
1022	0.2188	0.791	06/11/2001 9:53	1 Scoop Lecocel 11/1Cu
AS. 01	0.3225	2.99	19/09/2001 12:29 Bo-Mill Site	1 scoop Lecocel II/Cu
AS. 01	0.2329	2.9	19/09/2001 12:30	1 scoop Lecocel II/Cu
AS. 01	0.3157	2.96	19/09/2001 12:32	1 scoop Lecocel II/Cu
AS. 03	0.3041	1.4	19/09/2001 12:34 Bo-Mill Site	1 scoop Lecocel II/Cu
AS. 03	0.3691	1.55	19/09/2001 12:36	1 scoop Lecocel II/Cu
AS. 03	0.2479	1.41	19/09/2001 12:38	1 scoop Lecocel II/Cu

1101	0.2281	1.24	13/12/2001 13:22	Plant0106	1 scoop Lecocel	11/1Cu
1101	0.2265	1.3	13/12/2001 13:24	Plant0106	1 scoop Lecocel	11/1Cu
1102	0.233	1.39	13/12/2001 13:33	Plant0106	1 scoop Lecocel	11/1Cu
1103	0.2298	0.564	13/12/2001 13:34	Plant0106	1 scoop Lecocel	11/1Cu
1103	0.2406	0.664	13/12/2001 13:36	Plant0106	1 scoop Lecocel	11/1Cu
1104	0.2024	1.13	13/12/2001 13:38	Plant0106	1 Scoop Lecocel	11/1Cu
1104	0.2177	0.922	13/12/2001 13:41	Plant0106	1 Scoop Lecocel	11/1Cu
1105	0.223	0.957	13/12/2001 13:43	Plant0106	1 Scoop Lecocel	11/1Cu
1106	0.2432	0.633	13/12/2001 13:54	Plant0106	1 Scoop Lecocel	11/1Cu
1106	0.2055	0.723	13/12/2001 13:56	Plant0106	1 Scoop Lecocel	11/1Cu
1107	0.2462	0.633	13/12/2001 13:58	Plant0106	1 Scoop Lecocel	11/1Cu
1107	0.2514	0.642	13/12/2001 14:00	Plant0106	1 Scoop Lecocel	11/1Cu
1108	0.2507	0.573	13/12/2001 14:05	Plant0106	1 Scoop Lecocel	11/1Cu
1108	0.2539	0.244	13/12/2001 14:07	Plant0106	1 Scoop Lecocel	11/1Cu
1109	0.2487	1.36	13/12/2001 14:09	Plant0106	1 Scoop Lecocel	11/1Cu
1109	0.2265	0.574	13/12/2001 14:11	Plant0106	1 Scoop Lecocel	11/1Cu
1110	0.2114	0.548	13/12/2001 14:13	Plant0106	1 Scoop Lecocel	11/1Cu
1110	0.218	1.04	13/12/2001 14:15	Plant0106	1 Scoop Lecocel	11/1Cu
1111	0.2023	1.1	13/12/2001 14:16	Plant0106	1 Scoop Lecocel	11/1Cu
1111	0.2146	1.05	13/12/2001 14:18	Plant0106	1 Scoop Lecocel	11/1Cu
1112	0.2023	0.583	13/12/2001 14:20	Plant0106	1 Scoop Lecocel	11/1Cu
1112	0.24	0.429	13/12/2001 14:25	Plant0106	1 Scoop Lecocel	11/1Cu
1113	0.219	0.889	13/12/2001 14:27	Plant0106	1 Scoop Lecocel	11/1Cu
1113	0.2415	0.575	13/12/2001 14:30	Plant0106	1 Scoop Lecocel	11/1Cu
1114	0.2299	0.318	13/12/2001 14:32	Plant0106	1 Scoop Lecocel	11/1Cu
1114	0.2279	0.394	13/12/2001 14:34	Plant0106	1 Scoop Lecocel	11/1Cu
1115	0.2189	0.781	17/12/2001 13:24	Plant0106	1 Scoop Lecocel	11/1Cu
1115	0.2245	1.03	17/12/2001 13:25	Plant0106	1 Scoop Lecocel	11/1Cu
1116	0.2578	0.93	17/12/2001 13:39	Plant0106	1 Scoop Lecocel	11/1Cu
1116	0.241	1.7	17/12/2001 13:41	Plant0106	1 Scoop Lecocel	11/1Cu
1117	0.2411	1.13	17/12/2001 13:43	Plant0106	1 Scoop Lecocel	11/1Cu
1117	0.2611	0.608	17/12/2001 13:44	Plant0106	1 Scoop Lecocel	11/1Cu
1118	0.2289	0.565	17/12/2001 13:53	Plant0106	1 Scoop Lecocel	11/1Cu
1118	0.2887	1.03	17/12/2001 13:55	Plant0106	1 Scoop Lecocel	11/1Cu
1119	0.2469	1.58	17/12/2001 13:57	Plant0106	1 Scoop Lecocel	11/1Cu
1119	0.2331	0.679	17/12/2001 13:59	Plant0106	1 Scoop Lecocel	11/1Cu
1120	0.2247	0.767	17/12/2001 14:00	Plant0106	1 Scoop Lecocel	11/1Cu
1120	0.2557	0.764	17/12/2001 14:03	Plant0106	1 Scoop Lecocel	11/1Cu
1121	0.2209	0.884	17/12/2001 14:04	Plant0106	1 Scoop Lecocel	11/1Cu
1121	0.221	0.94	17/12/2001 14:11	Plant0106	1 Scoop Lecocel	11/1Cu
1122	0.2102	0.983	04/01/2002 12:57	Plant0106	1 Scoop Lecocel	11/1Cu
1122	0.1895	1.03	04/01/2002 12:59	Plant0106	1 Scoop Lecocel	11/1Cu
1123	0.1935	1.06	21/01/2002 9:42	Plant0106	1 Scoop Lecocel	11/1Cu
1124	0.2163	0.79	21/01/2002 9:46	Plant0106	1 Scoop Lecocel	11/1Cu
1124	0.1985	0.962	21/01/2002 9:48	Plant0106	1 Scoop Lecocel	11/1Cu
1125	0.1994	0.975	04/01/2002 12:59	Plant0106	1 Scoop Lecocel	11/1Cu
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1126	0.2323	0.549	21/01/2002 9:53	Plant0106	1 Scoop Lecocel	11/1Cu
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1127	0.2137	0.721	21/01/2002 9:59	Plant0106	1 Scoop Lecocel	11/1Cu

1128	0.2266	0.421	21/01/2002 10:01	Plant0106	1 Scoop Lecocel 11/1Cu
1128	0.209	0.608	21/01/2002 10:03	Plant0106	1 Scoop Lecocel 11/1Cu
1129	0.307	0.225	21/01/2002 10:09	Plant0106	1 Scoop Lecocel 11/1Cu
1129	0.221	0.294	21/01/2002 10:11	Plant0106	1 Scoop Lecocel 11/1Cu
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1130	0.2611	0.548	31/01/2002 12:58	Plant0106	1 Scoop Lecocel 11/1Cu
1131	0.2081	0.693	31/01/2002 13:00	Plant0106	1 Scoop Lecocel 11/1Cu
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1132	0.1755	0.705	31/01/2002 13:03	Plant0106	1 Scoop Lecocel 11/1Cu
1132	0.1921	0.575	31/01/2002 13:04	Plant0106	1 Scoop Lecocel 11/1Cu
1133	0.1996	0.526	31/01/2002 13:06	Plant0106	1 Scoop Lecocel 11/1Cu
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1134	0.2548	0.421	31/01/2002 13:10	Plant0106	1 Scoop Lecocel 11/1Cu
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1136	0.1981	0.602	31/01/2002 13:18	Plant0106	1 Scoop Lecocel 11/1Cu
1136	0.2553	0.421	31/01/2002 13:19	Plant0106	1 Scoop Lecocel 11/1Cu
1137	0.196	0.512	31/01/2002 13:21	Plant0106	1 Scoop Lecocel 11/1Cu
1137	0.1802	0.599	31/01/2002 13:24	Plant0106	1 Scoop Lecocel 11/1Cu
1138	0.1909	0.47	31/01/2002 13:26	Plant0106	1 Scoop Lecocel 11/1Cu
1138	0.1845	0.41	31/01/2002 13:27	Plant0106	1 Scoop Lecocel 11/1Cu
1139	0.1761	0.454	31/01/2002 13:29	Plant0106	1 Scoop Lecocel 11/1Cu
1139	0.1791	0.456	31/01/2002 13:31	Plant0106	1 Scoop Lecocel 11/1Cu
1140	0.2509	0.37	31/01/2002 13:42	Plant0106	1 Scoop Lecocel 11/1Cu
1140	0.1905	0.347	31/01/2002 13:44	Plant0106	1 Scoop Lecocel 11/1Cu
AVG		0.727237			

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1141	0.2264	0.524	31/01/2002 13:47	Plant0107	1 Scoop Lecocel 11/1Cu
1142	0.2044	1.09	31/01/2002 13:49	Plant0107	1 Scoop Lecocel 11/1Cu
1142	0.1804	1.25	31/01/2002 13:51	Plant0107	1 Scoop Lecocel 11/1Cu
1143	0.2079	1.35	31/01/2002 13:52	Plant0107	1 Scoop Lecocel 11/1Cu
1143	0.1761	1.37	31/01/2002 13:54	Plant0107	1 Scoop Lecocel 11/1Cu
1144	0.2122	1.2	31/01/2002 13:55	Plant0107	1 Scoop Lecocel 11/1Cu
1144	0.1827	1.24	31/01/2002 13:57	Plant0107	1 Scoop Lecocel 11/1Cu
1145	0.1863	0.709	31/01/2002 13:59	Plant0107	1 Scoop Lecocel 11/1Cu
1145	0.1776	0.692	31/01/2002 14:00	Plant0107	1 Scoop Lecocel 11/1Cu
1146	0.1763	0.551	31/01/2002 14:02	Plant0107	1 Scoop Lecocel 11/1Cu
1146	0.2499	0.547	31/01/2002 14:06	Plant0107	1 Scoop Lecocel 11/1Cu
1147	0.2499	0.51	31/01/2002 14:07	Plant0107	1 Scoop Lecocel 11/1Cu
1148	0.1806	0.643	31/01/2002 14:10	Plant0107	1 Scoop Lecocel 11/1Cu
1149	0.1674	0.673	31/01/2002 14:12	Plant0107	1 Scoop Lecocel 11/1Cu
1149	0.2083	0.487	31/01/2002 14:14	Plant0107	1 Scoop Lecocel 11/1Cu
1149	0.1713	0.494	31/01/2002 14:15	Plant0107	1 Scoop Lecocel 11/1Cu
1150	0.1778	0.563	31/01/2002 14:20	Plant0107	1 Scoop Lecocel 11/1Cu
1150	0.1947	0.506	31/01/2002 14:22	Plant0107	1 Scoop Lecocel 11/1Cu
1151	0.1914	0.455	31/01/2002 14:24	Plant0107	1 Scoop Lecocel 11/1Cu
1151	0.194	0.476	31/01/2002 14:25	Plant0107	1 Scoop Lecocel 11/1Cu

1152	0.2383	0.296	31/01/2002 14:27	Plant0107	1	Scoop Lecocel	11/1Cu
1152	0.1575	0.404	31/01/2002 14:28	Plant0107	1	Scoop Lecocel	11/1Cu
1153	0.2046	0.519	31/01/2002 14:30	Plant0107	1	Scoop Lecocel	11/1Cu
1153	0.2236	0.535	31/01/2002 14:32	Plant0107	1	Scoop Lecocel	11/1Cu
1154	0.337	0.447	31/01/2002 14:38	Plant0107	1	Scoop Lecocel	11/1Cu
1154	0.2845	0.448	31/01/2002 14:40	Plant0107	1	Scoop Lecocel	11/1Cu
1155	0.2176	0.493	31/01/2002 14:42	Plant0107	1	Scoop Lecocel	11/1Cu
1155	0.181	0.764	31/01/2002 14:44	Plant0107	1	Scoop Lecocel	11/1Cu
1156	0.228	0.493	30/01/2002 12:21	Plant0107	1	Scoop Lecocel	11/1Cu
1157	0.2094	0.52	30/01/2002 12:23	Plant0107	1	Scoop Lecocel	11/1Cu
1157	0.2287	0.377	30/01/2002 12:25	Plant0107	1	Scoop Lecocel	11/1Cu
1158	0.2033	0.303	30/01/2002 13:28	Plant0107	1	Scoop Lecocel	11/1Cu
1158	0.1799	0.421	30/01/2002 13:30	Plant0107	1	Scoop Lecocel	11/1Cu
1159	0.1894	0.523	30/01/2002 13:31	Plant0107	1	Scoop Lecocel	11/1Cu
1159	0.2002	0.562	30/01/2002 13:33	Plant0107	1	Scoop Lecocel	11/1Cu
1160	0.1976	0.302	30/01/2002 13:35	Plant0107	1	Scoop Lecocel	11/1Cu
1161	0.1585	0.577	30/01/2002 13:38	Plant0107	1	Scoop Lecocel	11/1Cu
1162	0.2343	0.323	30/01/2002 13:49	Plant0107	1	Scoop Lecocel	11/1Cu
1162	0.1996	0.42	30/01/2002 13:51	Plant0107	1	Scoop Lecocel	11/1Cu
1163	0.2017	0.454	30/01/2002 14:04	Plant0107	1	Scoop Lecocel	11/1Cu
1164	0.307	0.407	30/01/2002 14:06	Plant0107	1	Scoop Lecocel	11/1Cu
1164	0.2637	0.529	30/01/2002 14:08	Plant0107	1	Scoop Lecocel	11/1Cu
1164	0.1812	0.46	30/01/2002 14:09	Plant0107	1	Scoop Lecocel	11/1Cu
AVG		0.599841					

TITLE 09-10-01 10:19:51 V01-01958.0 UNKNOWN 03/10/01  
CLIENT CRYSTAL GRAPHITE CORPORATION  
PROJECT NONE GIVEN #SAMPLES: 23 REFERENCE: P.O. #010901-07  
SPECIAL VALUES

IS Insufficient Sample  
-9 No Value Recorded

Values above the upper limit are shown as +uplimt  
Values below the lower limit are shown as -lolmt (ie not detected)

DETERMINATIONS

ELNAME METHO ECO UNI #SAM LOLMT UPLIMIT COMMENTS  
01 C Org LECO EC5 PCT 23 0.02 100.00 Results Reported

SAMPLE PREPS

40 SAMPLE TYPE=D DRILL CORE  
41 PA2= 23 CRUSH/SPLIT & PULV.

\*\*\*\*

FORMAT (1X,A8,3X,A1,3X,A1,3X,A20,1X,1(1X,A7,2X,A1,1X))

BEGIN	Type	Frac	Sample ID	C Org
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19580002	D		2 1002	1.05
19580003	D		2 1003	1
19580004	D		2 1004	0.94
19580005	D		2 1005	1.5
19580006	D		2 1006	0.96
19580007	D		2 1007	1.38
19580008	D		2 1008	2.04
19580009	D		2 1009	1.16
19580010	D		2 1010	3.34
19580011	D		2 1011	1.65
19580012	D		2 1012	2.01
19580013	D		2 1013	1.42
19580014	D		2 1014	0.96
19580015	D		2 1015	0.48
19580016	D		2 1016	1.42
19580017	D		2 1017	1.42
19580018	D		2 1018	2.22
19580019	D		2 1019	1.34
19580020	D		2 1020	0.42
19580021	D		2 1021	1.3
19580022	D		2 3139	0.14
19580023	D		2 3140	0.46

END

TITLE 09-11-01 10:55:17 V01-02157.0 T. LEWIS 26/10/01  
 CLIENT CRYSTAL GRAPHITE CORPORATION  
 PROJECT NONE GIVEN #SAMPLES: 3 REFERENCE: P.O. #011015-01  
 SPECIAL VALUES

IS Insufficient Sample  
 -9 No Value Recorded

Values above the upper limit are shown as +uplimt  
 Values below the lower limit are shown as -lolmt (ie not detected)

DETERMINATIONS

ELNAME	METHO	ECO	UNI	#SAM	LOLMT	UPLIMT	COMMENTS
01 Ce	INAA	EC4	PPM	3	2	10000	Results Reported
02 Eu	INAA	EC4	PPM	3	0.5	1000.0	Results Reported
03 La	INAA	EC4	PPM	3	2	10000	Results Reported
04 Lu	INAA	EC4	PPM	3	0.1	1000.0	Results Reported
05 Nd	INAA	EC4	PPM	3	5	1000	Results Reported
06 Sc	INAA	EC4	PPM	3	0.1	5000.0	Results Reported
07 Sm	INAA	EC4	PPM	3	0.1	1000.0	Results Reported
08 Tb	INAA	EC4	PPM	3	1	1000	Results Reported
09 Th	INAA	EC4	PPM	3	0.5	5000.0	Results Reported
10 U	INAA	EC4	PPM	3	1	2000	Results Reported
11 Yb	INAA	EC4	PPM	3	1	1000	Results Reported
12 Cs	INAA	EC4	PPM	3	0.5	0000.0	Results Reported
13 Hf	INAA	EC4	PPM	3	0.5	2000.0	Results Reported
14 Ta	INAA	EC4	PPM	3	1.0	5000.0	Results Reported

SAMPLE PREPS

40 SAMPLE TYPE=D DRILL CORE  
 41 PA2= 3 CRUSH/SPLIT & PULV.

\*\*\*\*

FORMAT (1X,A8,3X,A1,3X,A1,3X,A20,1X,14(1X,A7,2X,A1,1X))

BEGIN	Type	Frac	Sample ID	Ce	Eu	La	Lu
21570001	D		2 41	7	0.7	5	-0.1
21570002	D		2 42	48	0.8	26	-0.1
21570003	D		2 43	34	0.6	20	0.1

END

*Handwritten note:* 21570001, 21570002, 21570003

Nd	Sc	Sm	Tb	Th	U	Yb
6	0.4	0.4	-1	1.4	6	-1
25	1.2	4.3	1	3.5	3	1
17	1.4	3.1	-1	7.2	4	1
	Cs	Hf	Ta			
	3.5	2.5	-1			
	3.8	-1	-1			
	8.6	1.5	2.3			