DIAMOND EXPLORATION &
STREAM SEDIMENT SAMPLING PROGRAM

ICE PROPERTY
ELKFORD DISTRICT, SOUTHEAST BRITISH COLUMBIA
FOR STEELE MINING DIVISION

NTS 82G/14E&15W & 82J/2W & 3E
Latitude: 50°05'N
Longitude: 114°58'W
UTM Coordinates: 5549000N – 644000E

Owners: Quest International Resources Corp. & Skeena Resources Limited

Operator: **SKEENA RESOUCES LIMITED**
Ste. 305, 675 West Hastings Street
Vancouver, British Columbia V6B 1N2

Report by:
J. R. Allan, P.Geol.
Skeena Resources Limited

June 29, 2000

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INTRODUCTION

This report briefly describes the results of a heavy mineral stream sediment sampling program designed to find kimberlite indicator minerals as a component of a diamond exploration program on the Ice Claims Project at Elkford in southeastern British Columbia. Work was done during the period August 1, 1999 to June 29, 2000. This report is in support of a Statement of Work filed on June 29, 2000.

LOCATION & ACCESS

The mineral claims comprising the Ice Property are located immediately west of the Elk River and north and south of the town of Elkford in the Fort Steele Mining Division on mapsheets 82G/14E & 15W and 82J/2W & 3E. The property is centered about UTM coordinates 5549000N and 644000E.

Access to the claims is available to the eastern portion of the property by logging roads from Elkford, and throughout the eastern part of the property via a series of 4 x 4 trails.

Road access to the eastern property boundary is 32 km north along Highway 43 from the town of Sparwood. The nearest major centre is the city of Fernie, 30 km south of Sparwood on Highway No. 3 (cf. Index Map, overpage).

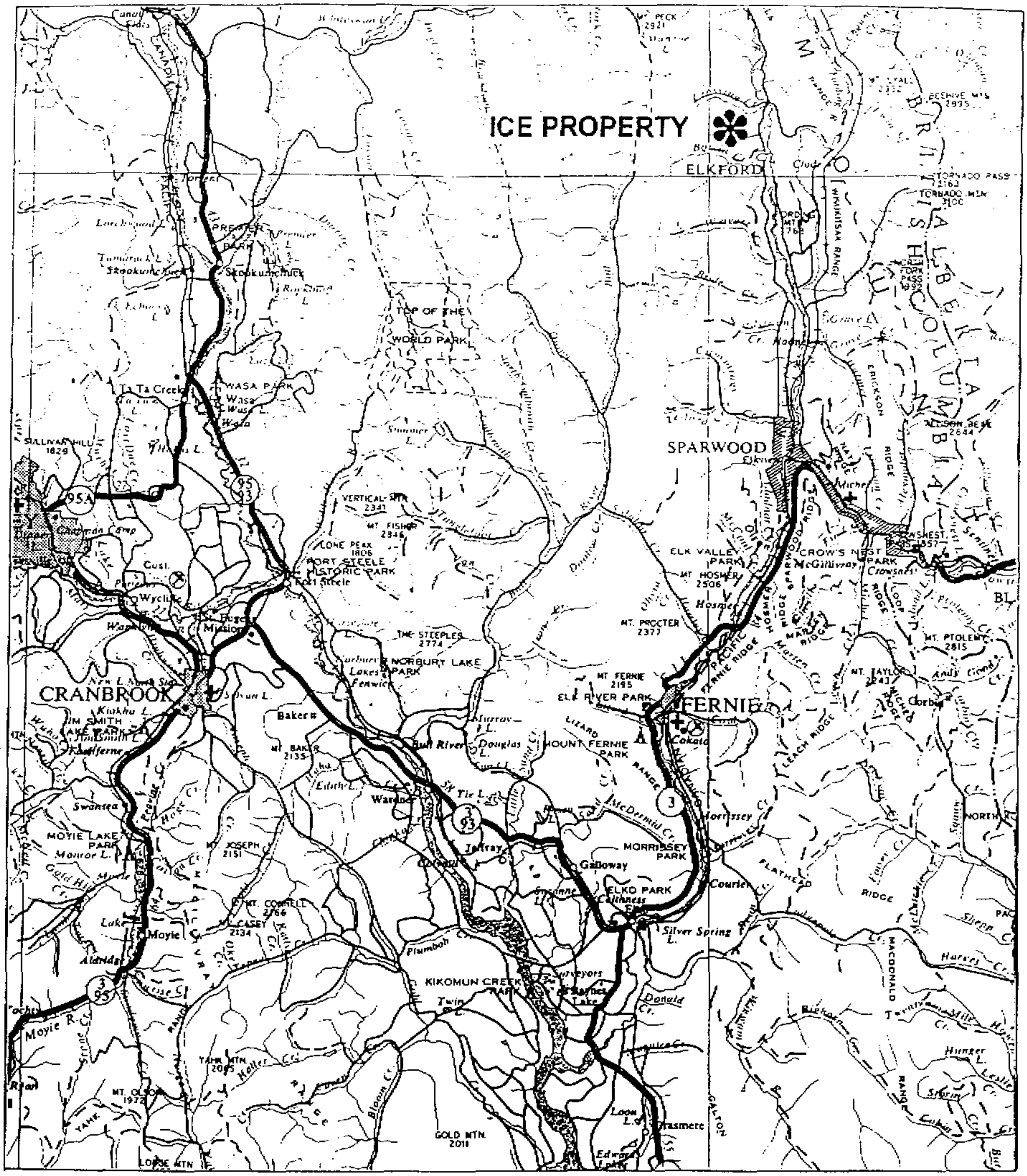
PHYSIOGRAPHY & CLIMATE

Topography in the claim area is rugged with relief in the order of 1,100 metres, from 1,565 metres ASL on the Elk River, to +2,600 metres ASL along the western property boundary. Cliffs in excess of 100 metres are common with cirques and hanging valleys evident throughout the region. Outcrop is locally abundant at upper elevations, but thick glacial deposits and talus cover are extensive at lower elevations. Drainages are generally immature V-shaped valleys. Forest cover is complete at lower elevations, becoming thinner and smaller at upper elevations. Coniferous trees, including spruce pine, balsam, and larch are the dominant type of vegetative cover evident at all elevations whereas subordinate deciduous trees, poplar and cottonwood, are present only at lower elevations. Underbrush consists of willows and alders together with assorted berry-bearing bushes. Commercial logging activity, often in the form of clear-cutting, is widespread.

The claims are located in the Main Ranges of the Rocky Mountains and as such are subject to heavy snowfall during the winter months. Average annual precipitation is approximately 90 cm, of which 30% is in the form of snow. Snow pack is likely present from late October through to late June. Most rain during the field season occurs from June to mid-July, with a relatively dry period from then to late September.

CLAIM STATUS

The Ice Property consists of the Ice, New Ice, Gem, Pipe, Gten and Kimberlite claims, totaling 415 units (approximately 130 square km) as set out overpage.



ICE PROPERTY

INDEX MAP

Table 1.

Ice Property - Fort Steele Mining District- Claim Status Current to June 22, 2000

Claim Name	Units	Tenure Number	Owner Number *	Map Number	Work Recorded To
ICE 1	1	311076	133205	082G096	20000629
ICE 2	1	311077	133205	082G096	20000629
ICE 3	1	311078	133205	082G096	20000629
ICE 4	1	311079	133205	082G096	20000629
ICE 5	1	311080	133205	082G096	20000629
ICE 6	1	311081	133205	082G096	20000629
ICE 7	1	311082	133205	082J006	20000629
ICE 8	1	311083	133205	082J006	20000629
ICE 9	1	311084	133205	082G096	20000707
ICE 10	1	311085	133205	082G096	20000707
ICE 11	1	311086	133205	082G096	20000707
ICE 23	15	371818	124845	082J006	20000905
ICE 34	10	371819	124845	082J006	20000906
ICE 37	20	371820	124845	082J016	20000904
GEM 1	1	310504	133205	082J006	20020618
GEM 2	1	310505	133205	082J006	20020618
GEM 3	1	310506	133205	082J006	20020618
GEM 4	1	310507	133205	082J006	20020618
PIPE 1	1	310508	133205	082J016	20020620
PIPE 2	1	310509	133205	082J016	20020620
PIPE 3	1	310510	133205	082J016	20020620
PIPE 4	1	310511	133205	082J016	20020618
PIPE 5	1	310512	133205	082J016	20020618
PIPE 6	1	310513	133205	082J016	20020618
PIPE 7	1	310514	133205	082J016	20020618
PIPE 8	1	310515	133205	082J016	20020618
PIPE 9	1	310516	133205	082J016	20020618
PIPE 10	1	310517	133205	082J016	20020618
PIPE 11	1	310518	133205	082J016	20020618
PIPE 12	1	310519	133205	082J016	20020618
PIPE 13	1	310520	133205	082J016	20020618
PIPE 14	1	310521	133205	082J016	20020618
PIPE 15	1	310522	133205	082J016	20020618
GTEN 1	1	310523	133205	082J006	20020620
GTEN 2	1	310524	133205	082J006	20020620
GTEN 3	1	310525	133205	082J006	20020620
GTEN 4	1	310526	133205	082J006	20020620
GTEN 5	1	310527	133205	082J006	20020619
GTEN 6	1	310528	133205	082J006	20020619
GTEN 7	1	310529	133205	082J006	20020619
GTEN 8	1	310530	133205	082J006	20020619
GTEN 9	1	310531	133205	082J006	20020619
GTEN 10	1	310532	133205	082J006	20020619

Ice Property - Fort Steele Mining District- Claim Status Current to June 22, 2000

Claim Name	Units	Tenure Number	Owner Number *	Map Number	Work Recorded To
GTEN 11	1	310533	133205	082J006	20020619
GTEN 12	1	310534	133205	082J006	20020619
GTEN 13	1	310535	133205	082J006	20020619
GTEN 14	1	310536	133205	082J006	20020619
GTEN 15	1	310537	133205	082J006	20020619
GTEN 16	1	310538	133205	082J006	20020619
GTEN 17	1	310539	133205	082J006	20020619
GTEN 18	1	310540	133205	082J006	20020619
GTEN 19	1	310541	133205	082J006	20020619
GTEN 20	1	310542	133205	082J006	20020619
KIMBERLITE 1	20	374974	124845	082J006	20010320
KIMBERLITE 2	20	374975	124845	082J006	20010320
KIMBERLITE 3	15	374976	124845	082J006	20010320
KIMBERLITE 4	15	374977	124845	082J006	20010320
KIMBERLITE 5	16	317911	133205	082J005	20000518
KIMBERLITE 7	1	322614	133205	082J005	20001031
KIMBERLITE 8	1	322615	133205	082J005	20001031
NEW ICE 12	20	377574	124845	082J006	20010602
NEW ICE 13	18	377569	124845	082J006	20010602
NEW ICE 13B	4	377582	124845	082J006	20010602
NEW ICE 14	16	377577	124845	082J006	20010603
NEW ICE 15	18	377570	124845	082J006	20010602
NEW ICE 16	18	377571	124845	082J006	20010602
NEW ICE 17	20	377572	124845	082J006	20010531
NEW ICE 18	20	377573	124845	082J006	20010531
NEW ICE 19	5	377580	124845	082J006	20010531
NEW ICE 21	18	377581	124845	082J006	20010531
NEW ICE 25	20	377579	124845	082J016	20010528
NEW ICE 32	1	377583	124845	082J006	20010531
NEW ICE 33	1	377584	124845	082J016	20010531
NEW ICE 34	1	377585	124845	082J016	20010531
NEW ICE 36	18	377578	124845	082J016	20010529
NEW ICE 38	12	377575	124845	082G095	20010602
NEW ICE 39	20	377576	124845	082G096	20010603
STONE 1**	1	326758	133205	082J006	20000608
STONE 2**	1	326760	133205	082J006	20000609

Total Units 415

* Note 133205= Quest International, 124845= Skeena Resources
** Note Placer claims

3.0 REGIONAL GEOLOGY (cf. Fig. 2)

The following description has been excerpted from a private company report entitled "Geological Summary Report, Ice Property" prepared for Skeena Resources Limited by Douglas Anderson, P.Eng., dated May 28, 1999.

The Ice Claims are within the part of the Rockies characterized by southwest-dipping thrust faults and associated folding and overfolding. The region is underlain by predominantly Cambrian to Permian carbonate and clastic sedimentary rocks. There are the intrusions of the RMAB with other known igneous rocks in the same belt including the Bull River amygdaloid and the White River diabasic sill complex with breccia dykes. More regionally, alkalic igneous rocks include the Devonian Ice River complex in Yoho National Park and the Late Cretaceous Crowsnest volcanics and Howell Creek intrusive rocks from the Crowsnest and Flathead areas respectively.

The diatremes of the Elkford area intrude sedimentary rocks which are part of the Rocky Mountain Fold and Thrust Belt where southwest-dipping, upwardly concave thrust faults and associated folds developed during the late Mesozoic Columbian orogeny. The underlying Proterozoic rocks, the Paleozoic platformal sequence of shallow marine carbonate and mature clastic rocks and a younger wedge of terrigenous clastic rocks were thrust to the northeast up the flank of the craton (Price and Mountjoy, 1970; Price, 1981).

3.10 Stratigraphy

The lowest rocks in the vicinity of the Ice property are the Middle and/or Upper Devonian through Mississippian sequences on the west which include the dark grey limestones and dolomitic limestone of the Palliser Formation and the black shale and cherty limestones/argillaceous limestones of the Exshaw and andBanff Formations. Rocks occurring on the claims in ascending stratigraphic order are:

3.11 Lower Carboniferous

Rundle Group

The group has been sub-divided into the basal Livingstone, Mt.Head, and uppermost Etherington formations which comprise over 760 metres of predominantly carbonate lithologies. In general, the rocks are crystalline grey limestone weathering white or grey. They are commonly crinoidal, coralline and fetid. Light-colored chert is conspicuous in parts of the sequence. There are thin-bedded dark, cherty limestones particularly in the lower part of the formation. The top of the sequence is recognized by the presence of green and red shales and two beds of sandstone a foot thick in crystalline limestone within the Etherington.

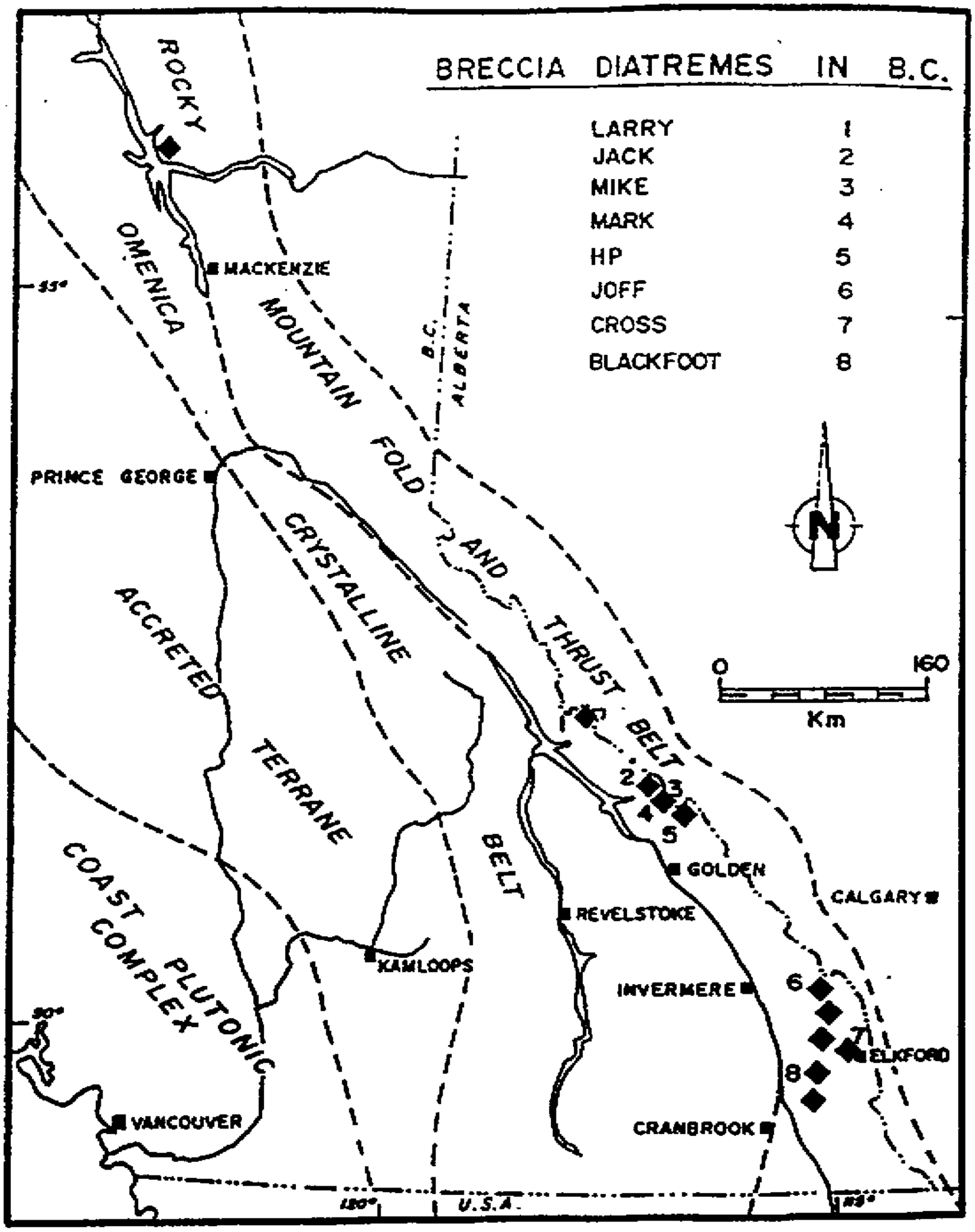
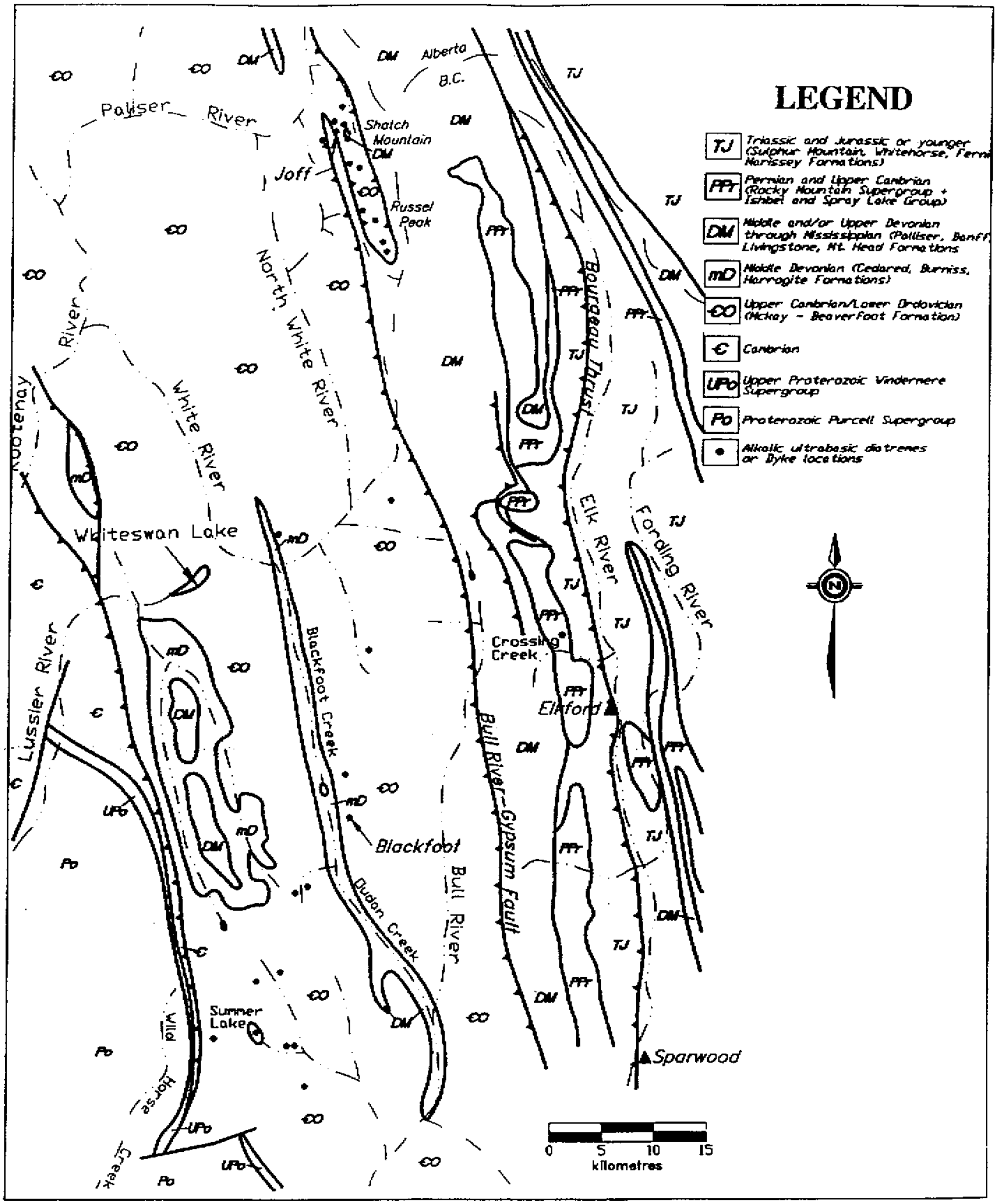


Figure CC-1: Location of Crossing Creek and other diatremes in the vicinity of Golden and Elkford, British Columbia. Modified after Pell (1986).



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General Geology
Elkford Area

Scale: As Depicted | Drawn by R. Pighin (99)

Map Reference:

FIGURE 2

3.12 Upper Carboniferous and Permian
Rocky Mountain Supergroup

This sequence is 240 to 300 metres in thickness, tentatively divided into three formations: the Tunnel Mountain, Kananaskis, and Ishbel Formations. Included are: quartzitic, dolomitic, and calcareous sandstone; dark grey sandstone; silty dolomite; cherty dolomite and chert. Tunnel Mountain is cliff forming siltstones and sandstones with carbonate content decreasing up section. The uppermost 125 metres is commonly a coarse, cross-bedded sandstone. The Kananaskis is present on the east as light grey silty dolomites with chert breccias together with nodular and bedded cherts. The Permian Ishbel consists of a possible regolithic chert member overlying dark cherty phosphatic, thin bedded siltstones. A phosphatic conglomerate separates the two units. At Crossing Creek, the Upper and Lower Ishbel are separated by an erosional surface representing over 700 feet of Middle Ishbel. Lower Ishbel is a recessive weathering 45 metres of dark grey to black, argillaceous, poorly sorted, thin bedded quartzitic siltstones which alternate rhythmically with black, platy, silty shales and occasional dolomite. There are intraformational siltstone conglomerates recurring through the sequence usually at bedding surfaces. The Upper Ishbel consists mainly of massive black, blue-grey or white chert with subordinate patches and lenses of sandstone and silicified carbonate with chert breccias and quartz veins common.

3.13 Triassic
Spray River Group

Between 360 to 450 metres thick, this sequence overlies an unconformity with the Rocky Mountain Group. Undivided portions are described as dark grey, silty shale and dolomitic or sideritic, argillaceous limestone. At some locales, the Spray River Group is divided into the Whitehorse Formation and the underlying Sulphur Mountain Formation. The lower Sulphur Mountain is calcareous and dolomitic siltstone and sandstone; silty limestone and dolomite; and lesser shale. The Whitehorse Formation is calcareous and dolomitic sandstone and siltstone with minor sandy, quartzose dolomite and limestone intervals; limestone; and some solution collapse breccias.

3.20 Structure

The structural picture in the region is complex, typical of the Rocky Mountain fold and thrust belt. Folding is throughout and generally asymmetrical and variable in magnitude. Faults are common as dip-slip thrust faults. Overall the structural grain is north-south, interpreted as resulting from local east-west compression rather than the southwest-northeast directed compression indicated for the Rocky Mountains generally.

The Ice property occurs in the hangingwall to the east verging Bourgeau Thrust which occupies the west side of the Elk River valley. There are smaller scale splay thrusts and widespread overturned anticlines and synclines in the hangingwall rocks. The splays exhibit transition into east verging, overturned folds. The folds and splay thrusts appear to have an en echelon relationship to one another as variations in the amount of deformation are accomodated by folding or in more extreme cases, faults. There is a change in the structural expression of the folds in the hangingwall of the uppermost splay thrust, from overturned folds to the east in the immediate hangingwall of the Bourgeau Thrust to an upright fold style farther west.

3.30 Economic Geology

Alkaline intrusive diatremes, dykes and sills have been documented in the north-south trending Rocky Mountain Alkaline Belt (RMAB). They are currently in two fields, the Golden cluster from 50 to 90 kilometres north of Golden consisting of dykes and pipe-like bodies, totalling fourteen occurrences. These alkaline intrusions have been classified as lamprophyres, kimberlites or lamproites. Microdiamonds have been recovered from heavy mineral separates from this area. The second field or belt is the Bull/White/Elk river cluster including the Crossing, Joff, and Elkford pipes. The majority of the more than 45 occurrences are classified as lamprophyres or basaltic diatremes. However, the Cross has long been identified as a kimberlite and the more recent recognition of the adjacent Bonus pipe and three diatremes some two kilometers to the east on the west flank of the Elk valley has extended the field. These appear to be kimberlites as well and macro-diamonds have been recovered from bulk samples of the three eastern pipes (discussed later).

4.00 History of Exploration for the Ice Property and Area

The exploration history with respect to diamond potential in the region starts with a 1957 recognition by Hovdebo of the Crossing Creek diatreme while employed as a field worker by California Standard. In 1976, a Cominco field party recognized the same feature and tentatively identified it as a kimberlite pipe. This initiated a large exploration program in the 1977 to 1980 period with drainage sampling for indicator minerals which along with visual detection from the air discovered some 40 diatremes and dykes in the Bull/White/Palliser rivers region. Some on the ground pursuit of these alkalic, ultramafic occurrences was completed as well.

The Cross diatreme and area became the focus and in 1980 Petra Gem Explorations and partners explored the Crossing kimberlite area and located more indicator minerals indicative of additional diatreme sources.

During the 1987 to 1990 period, CF Minerals Ltd. and partners along with Dia-Met Minerals Ltd. working north of Golden, B.C. discovered diatremes and dykes in a second cluster. Subsequent work documented micro-diamonds in heavy mineral separates from drainages and drill core. The multiple occurrences have been shown to be kimberlites, lamproites, or lamprophyres.

The Island-Arc and JV property covers the original Crossing pipe and the previously located indicator mineral anomalies of pyrope garnet and nickel soil anomalies. These include the Gem, Gten, and Pipe claims. In 1993, the owners undertook a field program of sampling the sands and gravels of the creek searching for placer diamond content. Panned concentrates were visually examined with a binocular microscope.

Consolidated Ramrod Gold Corp. began an independent evaluation of the above claims and the Ice claim block in spring, 1993. Soil samples were taken from the Ice, Gten, and Pipe claims exploring for additional kimberlite and/or ultramafic occurrences. Chromium and nickel were selected as ultramafic pathfinders because of the low background values in the host sedimentary lithologies. Also, a program of stream sediment sampling collected 72 samples covering an area of about 110 square kilometres. The samples were comprised of –10 mesh concentrate ranging between 20 and 30 kg. These samples were processed by labs in Vancouver for kimberlite indicator minerals with selected grains chemically analyzed by electron microprobe at the University of British Columbia.

In 1994, M.E. McCallum of Colorado State University examined the results for these 72 samples and reported that chemically confirmed kimberlite indicator minerals are recognized in at least 19 field samples from the Ice claims. Peridotitic garnets were noted as well as chrome diopside, ilmenite, and abundant chromite but no oxide mineral analyses were done. The presence of G9 pyrope garnets was described as very encouraging, indicating the likelihood of additional kimberlite occurrences in the area. Additional heavy mineral sampling was undertaken in 1994. Orientation work found that samples ½ cubic yard in size gave the most reliable results for streams and closely spaced ¼ yard soil samples were necessary.Each sample was processed through a 12' by 4" sluice box equipped with two cross riffles and two longitudinal riffles. The concentrate was then sieved through a 10 mesh standard sieve and panned by hand to produce a heavy mineral concentrate. Examined by binocular microscope, grains of pyrope garnet, chromite and ilmenite were picked by hand and sent to the Colorado State University research laboratory for micro-probe analysis.

This work successfully located four new kimberlite diatremes in the Elkford/Crossing creek area. The heavy mineral survey also found evidence to suggest there are more undiscovered diatreme bodies.

During the early, small scale sampling of the new diatremes called the Ram 5, Ram 6 and 6.5 the following ensued. A one-half yard sample of material was taken from the Ram 5 for heavy mineral separation by using a slice box/visual microscope inspection approach. One macro diamond was recovered during the process. A one-half yard sample was taken from each of the Bonus and Ram 6 diatremes during the same period. Macro diamond tests were to be done on each sample by Saskatchewan Research. However, it appears that the samples were mixed prior to testing, so a macro diamond recovered cannot be sourced to an individual pipe.

In 1996, an exploration program was launched which was designed to test the new pipes (Ram 5, Ram 6, and Ram 6.5) located on the west flank of the Elk River valley. It was hoped to get more information on the quality and size of diamonds. A 4-wheel drive road was constructed from the Elk river valley bottom, a total of about four kilometres. About 30 tons of surface material from each of the three pipes was collected from trenches and shipped to Fort Collins, Colorado for milling and diamond testing. This work was supervised by and reported on by M.E. McCallum of Colorado State University.

McCallum's report describes the samples and results as follows. Sample material processed included: 35 tons from the Ram 5 pipe (three batches from three trenches); 15 tons from the Ram 6 pipe (single batch from one trench); and 40 tons from the Ram 6.5 pipe (two batches from two trenches). It is important to note that material from all the sites was highly diluted by host rock shale, limestone, and clay-rich alteration products, much apparently from upslope. Weathered kimberlite products comprised less than 10% of any sample. The highest concentration of kimberlitic heavy minerals was recovered from the Ram 6.5 samples. A total of six diamonds were recovered from the processed samples:

Ram 5, Trench A – Stone 1 was ~0.185ct, ~4x3x2mm, a clear flattened elongate tetrahexahedron, no inclusions, good quality. Stone 2 ~0.045ct, ~3.5x2.0x1.0mm
clear, 50% of stone missing due to breakage, no inclusions, good quality.
Ram 5, Trench B – Stone 1 was ~0.025ct, ~1.75x1.5x1.0mm, clear, no inclusions, good quality.
Ram 6.5, Trenches A and B - ~0.015 to 0.02 ct in size, all ~ 2.0x1.0mm, 3 poor quality stones of grey or pale brown, abundant tiny inclusions.

McCallum says the number of stones from 90 tons appears discouraging but the very high dilution of the samples renders the results less than definitive regarding grade and quality of stones. Actually the Ram 5 is encouraging, getting three good quality stones from 35 tons of material of which 90% is probably nonkimberlitic. Kimberlite indicator minerals are abundant in concentrate recovered from all three pipe samples. Significantly appreciable numbers of small xenoliths of mantle peridotite and eclogite are present. McCallum has not completed additional chem work or evaluation of the xenoliths.

In the fall of 1998, hand-selected material totalling about 400 kilograms was collected from the Ram 5 (100kg), Ram 6 (100kg), and Bonus (200 kg) trenches. It was anticpated this material would eventually be used for micro-diamond tests.

5.00 PROPERTY GEOLOGY (see Figures 3 & 4)
5.10 Cross Kimberlite Pipe

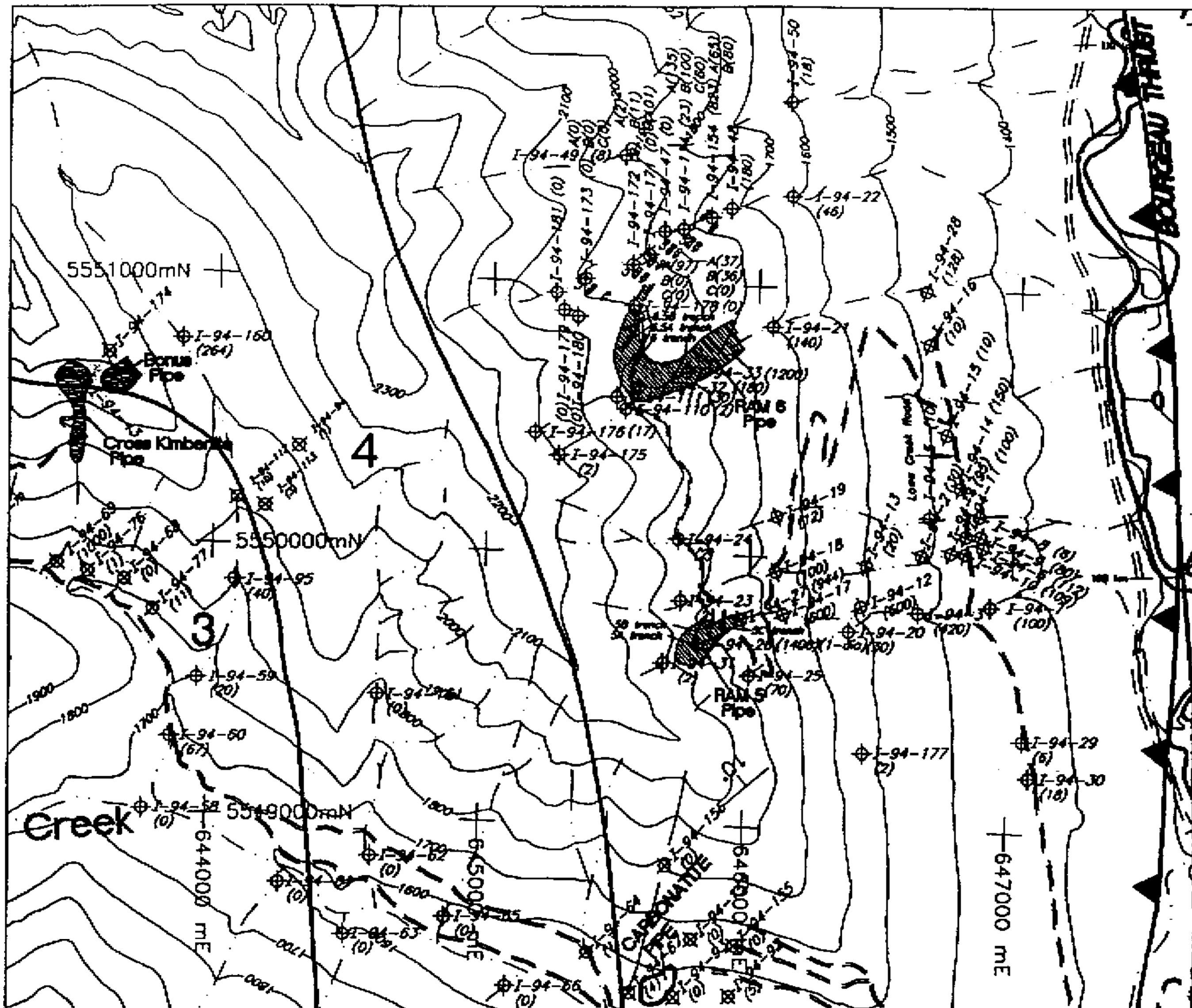
The Cross kimberlite is located on the north side of Crossing Creek, 8 kilometres northwest of the town of Elkford in southeastern B.C. It is exposed on a steep south facing slope at an elevation of 2200 m. A crude estimate of plan size is 2.4 Ha.

The diatreme intrudes sediments of the Permian Ishmel Group which are mostly close to flat-lying. There is no regional fault system at Cross but the eastern flank of the Cordillera has been the locus of repeated alkaline igneous activity since Devonian time (Currie, 1976). The alkaline diatremes west of the Cross pipe are aligned parallel to the western edge of the Alberta arch (Ziegler, 1969) and probably mark the location of a normal fault system in the Precambrian basement, active during Devonian rifting. It is probable that this normal fault affected the Alberta arch during the Permian and provided the channelway for the Cross kimberlite.

The xenoliths and xenocrysts within the diatreme are serpentinized ultrabasic xenoliths with spinel peridotites dominant over garnet peridotites. Spinel xenocrysts are common, garnet xenocrysts less so.

The age of the Cross pipe has best been determined by Grieve (1982) and confirmed by Smith et al (1988) as 240 to 250 Ma. These are Rb-Sr ages on phlogopite separates. This Upper Permian age is pre-Columbian orogen. This implies the pipe and other diatremes in the area may be dismembered at depth. Surface occurrences of kimberlite in the area may not reflect their true position at the time of emplacement inasmuch as large lateral displacements may have occurred in thrust sheets (Smith et al, 1988).

A bulk sample was investigated by Scott-Smith in 1988 from a sample collected by Dr. J. Pell on the talus slopes below the diatreme. The rock is composed of two generations of olivine in a groundmass composed of phlogopite, spinel, carbonate, and serpentine. It was classified as a hypabyssal facies opaque mineral (spinel)-rich phlogopite kimberlite. The rock has a distinctly inequigranular texture and conspicuous minerals are olivine and phlogopite. The olivine is totally pseudomorphed by pale green serpentine. Rare altered macrocrysts which are not olivine or phlogopite may be pyroxene.The groundmass is mostly spinel along with phlogopite, carbonate, serpentine with significant chlorite.



LEGEND

6 Jurrassic Fernie Group: grey, brownish grey, and black shale, siltstone and sandstone; limestone; glauconitic sandstone and shale.

5 Triassic Spray River Formation: dark grey silty shale, siltstone, and shale; light grey dolomitic or sideritic argillaceous siltstone

4 Pennsylvanian and Permian Rocky Mountain Formation: light grey quarzitic, dolomitic, and calcareous sandstone; dark grey sandstone; dolomite; cherty dolomite; chert

3 Mississippian RundLe Group (15-17) Etherington Formation: light grey limestone; cherty limestone; and calcarenitic limestone; dolomite; cherty dolomite; green and red shale; silstone; breccia; anhydrite.

THRUST FAULT

GEOLOGICAL CONTACT

I-94-160 (264) Stream or Soil sample location/number, Pyrope Garnets (# indicated) in Stream/Soil sample

0 500 1000 1500 2000

metres

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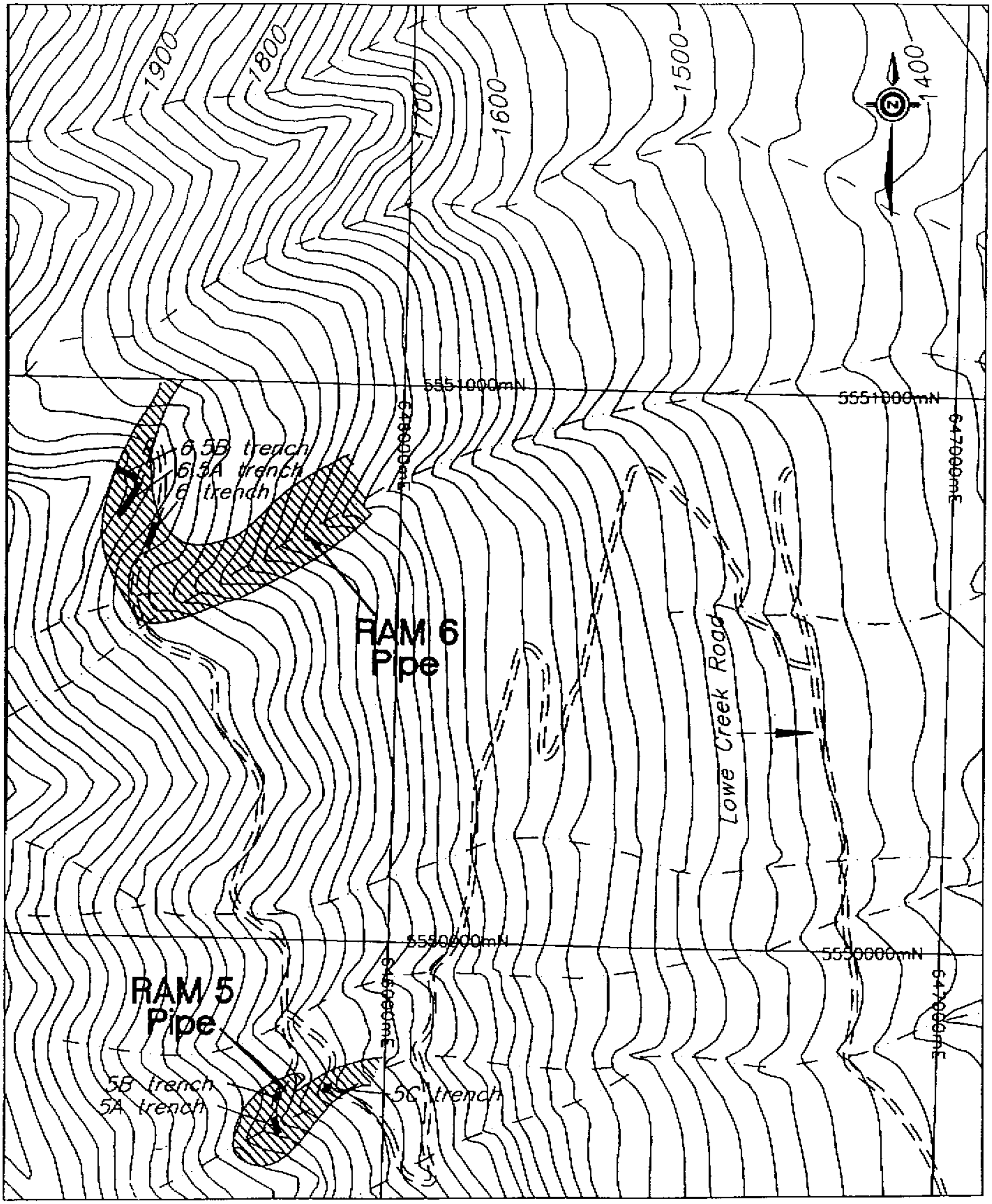
Known Kimberlite Pipes

Scale: 1:25000	Drawn by R. Pighin (99)
Map Reference:	

Last Update (Y/M/D):

CAD Filename:

FIGURE 3



0 125 250 375 500
metres

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Geology Map
Ram 5&6

Scale: 1:10000	Drawn by R. Pighin (99)
Map Reference:	

Last Update (Y/M/D):

CAD Filename:

FIGURE 4

5.20 Bonus Kimberlite Pipe

Located about 100 metres east of the Cross pipe this diatreme remains poorly known. It is exposed in one small hand dug pit and therefore it's size is unknown. Data on indicator minerals from heavy mineral concentrates is reported later.

5.30 Ram 5 Pipe

The Ram 5 diatreme is about 2.5 kilometres east-southeast of the Cross Pipe on the western flank of the Elk River valley. The dimensions of the Ram 5 are not well defined but it is a minium of 325 metres long by 125 metres wide. The size is difficult to predict based on small hand dug pits and three backhoe trenches.

The pipe intrudes Sulphur Mountain formation of the Spray River group. The geology after Price et al suggests Ram 5 intrudes an overturned anticlinal limb in mixed calcareous and dolomitic siltstone and sandstone and silty limestone and dolomite.

The trenches contain mostly slide rock of glacial till and clay with only 5% true kimberlite. The weathered kimberlite consists of abundant phlogopite, chromite, and ilmenite with scattered pyrope garnets and chrome diopside, scattered peridotite and eclogite xenoliths in a dark green, soft mud matrix. Data on indicator minerals is presented in a later section of this report.

5.40 Ram 6 (6.5) Pipe

The Ram 6 and 6.5 pipes were originally thought to be two separate pipes but recent work suggest these two pipes may in fact form one large boomerang-shaped pipe. It occurs about two kilometres east of the Cross and one kilometre north of the Ram 5. The dimensions of this irregular shape are not defined sufficiently but are estimated as a minimum of 800 metres in length by 125 metres wide. Again this is based on limited exposures.

The diatreme intrudes Sulphur Mountain formation along the axis of an overturned anticline as for Ram 5. Data on indicator minerals is presented in a later section of this report.

6.0 HELICOPTER-SUPPORTED STREAM SEDIMENT SAMPLING PROGRAM

The August-September, 1999 heavy mineral stream sediment sampling program was designed to follow-up on and to verify previously obtained anomalous kimberlitic indicator minerals found in stream sediments in surveys conducted in 1993 and 1997.

Thirty samples (I-99-01 to I-99-30, inclusive), each one/half cubic yard (16 – 5 gallon plastic pails of fine, but unscreened stream sediments) were acquired by a helicopter-supported 4-man crew under the direction of C.H. Aussant, P.Geo. of Taiga Consultants Ltd. of Calgary. Each individual sample of 16 pails was placed in a 'Super Sac' and flown by helicopter to the nearest convenient landing site, and then trucked to Cranbrook for processing.

The sample sites are plotted at a 1:20,000 scale on the compilation map "Geology, Geophysics & Heavy Mineral Sampling" included in the map folder to this report.

The samples were processed under the direction of David L. Pighin, P.Geo. at the Vine Property, 35 km south of Cranbrook. Each ½ cubic yard sample was wet processed through a 12 foot sluice box. The heavy material captured by the sluice box riffles was concentrated further by hand panning to an end product with an average weight of 50 grams. Each individual sample was placed in a glass vial and numbered

The heavy mineral concentrates were shipped to Loring Laboratories Ltd. in Calgary where they were further processed by liquid heavy media separation into two products; the first with a specific gravity of 2.9 to 3.3 and the second with a specific gravity of greater than 3.3. The concentrate weights as processed by Pighin and subsequently by Loring Laboratories, are presented in Appendix I.

The recovered heavy mineral concentrates were shipped to Dr. M.E. McCallum at HDM Laboratories in Loveland, Colorado where they were examined by binocular microscope and the favorable indicator minerals were hand-picked for analysis by electron microprobe.

Dr. McCallum's report, dated June 15, 2000 is included in its entirety in this report as Appendix II.

7.0 CONCLUSIONS & RECOMMENDATIONS

The previously obtained (1993 and 1997 surveys) anomalous kimberlite indicator minerals in stream sediments have been verified and better delineated. At least 20 more stream sediment sites should be sampled prior to undertaking detailed soil sampling and prospecting of the anomalous areas.

J. R. Allan, P.Geol.
October 12, 2000

SKEENA RESOURCES LIMITED
STATEMENT OF EXPENDITURES

ICE PROPERTY, ELKFORD BC
FORT STEELE MINING DIVISION

Kimberlite Indicator Heavy Mineral Stream Sediment Sampling Program
August 1, 1999 – June 29, 2000

1. GEOLOGICAL REPORT, SUPERVISION, FIELD ADMINISTRATION & SAMPLE PREPARATIONS

Aug. 31/99 Super Group Holdings Ltd., #99-43	330.00	
Nov. 8/99 Super Group Holdings Ltd., Anderson Geol Rept	4,107.50	
Dec. 23/99 Super Group Holdings Ltd.	375.00	
May 18/99 Cold Stream Exploration Ltd, 6.5 days x $400/day	2,600.00	
June 23/99 Cold Stream Exploration Ltd., 2.5 days x $400	1,000.00	
Aug. 10/99 Cold Stream Exploration Ltd., 1.0 days x $400	400.00	
Aug. 10/99 Cold Stream Exploration Ltd. , 0.5 days x $400	200.00	
Oct. 12/99 Cold Stream Exploration Ltd. , 7.0 days x $400	2,800.00	
Oct. 12/99 BMTS Management Ltd.	917.50	
Dec. 31/99 Cold Stream Exploration Ltd., 1.0 days x $400	400.00	
June 2000 Cold Stream Exploration Ltd., 2.0 days x $500/day	1,000.00	14,130.00

2. ANALYSES

Sept. 9/99 Lakefield Research, " ", #M1550	93.27	
Oct. 29/99 Loring Laboratories, conc. - HM separation, #41529-D	1,350.00	
June 16/00 HDM Labs, grain sort, microprobe analyses, $5,025US	7,437.00	8,880.27

3. STREAM SEDIMENT SAMPLING PROGRAM

Sept 27/99 Taiga Consultants Ltd., stream sed sampling, #99-069	21,588.71	
Oct. 31/99 Taiga Consultants Ltd., #99-084	53.90	
Dec. 23/99 Taiga Consultants Ltd.	74.36	
Sept 9/99 Big Horn Helicopters, #0125	16,018.36	
Sept 30/99 Super Group Holdings Ltd., #99-48	8,367.15	
Oct. 31/99 Super Group Holdings Ltd., #99-54	500.50	46,602.98

4. SHIPPING, TRUCK TRANSPORT, TRAVEL EXPENSES

Aug. 31/99 Super Group Holdings Ltd.	1,177.66	
July 22/99 Canadian Airlines	26.18	
Sept. 8/99 Canadian Airlines	1,005.19	
Sept. 29/99 Canadian Airlines	24.47	
Sept. 8/99 Super Group Holdings Ltd.	330.00	
Oct. 7/99 J.R. Allan, expenses	818.32	

Sept 22/99 J. R. Allan, expenses	896.28	
Sept 30/99 Pighin Welding Ltd., #539 - trucking	1,140.00	
Dec. 23/99 Taiga Consultants Ltd.	51.33	5,469.43

5. DRAFTING, MAPS & REPRODUCTIONS

Nov. 8/99 Super Group Holdings Ltd.	140.00	
Dec. 23/99 Taiga Consultants Ltd.	362.37	
Dec. 23/99 Super Group Holdings Ltd.	216.50	
Dec. 23/99 Geographic Data Services Inc.	742.50	
Dec. 31/99 Dominion Blueprint	12.56	
Apr. 15/00 Terry Lee, computer drafting	37.50	
July 5/00 Terry Lee, computer drafting	212.50	1,723.93

SUB-TOTAL $ 76,806.61

6. ADMINISTRATION

Skeena Resources Limited, @ 10% 7,680.66

TOTAL **$ 84,487.27**

Rupert Allan

J. R. Allan, P.Geol.

STATEMENT OF QUALIFICATION

I, James Rupert Allan, of 8915 Lochside Drive, Sidney, British Columbia, do hereby certify that:

1. I am a graduate of the University of Alberta in Geology (1969) and have practiced my profession continuously since graduation.
2. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta, and I am a Fellow of the Geological Association of Canada.
3. I am the author of the report entitled "Diamond Exploration and Stream Sediment Sampling Program, Ice Property" on behalf of Skeena Resources Limited, dated June 29,2000. I visited the property before and during the course of the subject work program.
4. I am president of and own a share position in Skeena Resources Limited

Dated at Vancouver, British Columbia, this 12th day of October, 2000.

J. Rupert Allan, P.Geol.

PROFESSIONAL GEOLOGIST ALBERTA
RUPERT ALLAN

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APPENDIX I

Loring Laboratories Ltd. - Concentrate Weights

LORING LABORATORIES LTD.
629 Beaverdam Road N.E. Calgary, Alberta T2K 4W7
Tel : (403) 274-2777 Fax : (403) 275-0541

TO: SKEENA RESOURCES LTD.
Vancouver, B.C.,
ATTN: Mr. Rupert Allan

LLL FILE #: 41529
DATE : Oct 27, 1999
REPORT BY : DAVID KO

SAMPLE I.D.	AS REC. WEIGHT (g)	HEAVY MINERALS RECOVERY	
		2.9 x 3.3 S.G. SINK (g)	>3.3 S.G. SINK (g)
I-99-01	52.1	2.0	2.1
I-99-02	35.1	1.3	1.2
I-99-03	22.2	0.8	1.2
I-99-04	32.3	0.6	0.9
I-99-05	88.1	8.5	20.7
I-99-06	69.1	5.4	4.0
I-99-07	40.5	1.4	2.8
I-99-08	38.6	2.3	8.8
I-99-09	54.5	4.5	10.7
I-99-10	41.7	0.5	1.4

ASSAYER

LORING LABORATORIES LTD.
629 Beaverdam Road N.E. Calgary, Alberta T2K 4W7
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TO: SKEENA RESOURCES LTD.
Vancouver, B.C.,
ATTN: Mr. Rupert Allan

LLL FILE # : 41529
DATE : Oct 27, 1999
REPORT BY : DAVID KO

SAMPLE I.D.	AS REC. WEIGHT (g)	HEAVY MINERALS RECOVERY	
		2.9 x 3.3 S.G. SINK (g)	>3.3 S.G. SINK (g)
I-99-11	32.1	0.4	0.6
I-99-12	64.8	2.2	1.4
I-99-13	53.2	0.9	1.2
I-99-14	33.2	0.8	2.0
I-99-15	30.8	0.3	0.3
I-99-16	39.9	1.9	4.0
I-99-17	29.3	1.0	3.4
I-99-18	37.2	3.5	4.2
I-99-19	57.0	3.1	6.4
I-99-20	42.8	0.6	1.4

David Ko
ASSAYER

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TO: SKEENA RESOURCES LTD.
Vancouver, B.C.,
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DATE : Oct 27, 1999
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SAMPLE I.D.	AS REC. WEIGHT (g)	HEAVY MINERALS RECOVERY	
		2.9 x 3.3 S.G. SINK (g)	>3.3 S.G. SINK (g)
I-99-21	35.2	2.2	0.7
I-99-22	50.3	4.3	2.8
I-99-23	24.4	0.2	0.5
I-99-24	27.1	2.6	2.0
I-99-25	32.6	3.1	7.8
I-99-26	146.9	10.3	82.3
I-99-27	44.0	2.1	2.1
I-99-28	36.2	2.8	4.0
I-99-29	31.1	1.3	2.9
I-99-30	29.4	0.3	0.8

ASSAYER

APPENDIX II

Chemistry of Definite and Probable/Possible Kimberlite Indicator Minerals From Heavy Mineral Concentrate Recovered From Samples Collected in 1999 for Skeena Resources From The Ice Prospect, Southeastern British Columbia

CHEMISTRY OF DEFINITE AND PROBABLE/POSSIBLE KIMBERLITE INDICATOR MINERALS FROM HEAVY MINERAL CONCENTRATE RECOVERED FROM SAMPLES COLLECTED IN 1999 FOR SKEENA RESOURCES FROM THE ICE PROSPECT, SOUTHEASTERN BRITISH COLUMBIA

Introduction

Representative definite and probable/possible kimberlite indicator minerals recovered from heavy mineral concentrate samples from 30 in-fill stream sediment sites in the ICE Prospect area of southeastern British Columbia were chemically analyzed by electron microprobe. More than 400 mineral grains were analyzed and a very significant percentage of these are confirmed as kimberlite indicator minerals. Absolute percentages cannot be established as many of the chromite and ilmenite grains could have either kimberlitic or non-kimberlitic sources. However, very few of the definite and probable indicator grains can be established as definitely non-kimberlitic. Analyzed grains include 162 garnets, 189 opaque spinels (chromite?), 54 ilmenites, 31 probable/possible chrome diopsides, and one possible moissanite

Results

The majority of mineral grains selected for analysis are good indicators of kimberlitic sources. However, a number of possible eclogitic garnet grains proved to be magnesian almandines and some of the very weakly magnetic chromite(?) grains are titanomagnetites (Table 1). Most of the very tiny grains of possible Cr-diopside are actually Cr-amphibole. The single tiny fragment of possible moissanite proved to be ferroan corundum

Results of chemical analyses confirm all but one of the preliminary designations of anomalous sample sites based on visual examination of indicator minerals (see preliminary sorting report of June 5 in previously submitted Preliminary Mineral Evaluation Report). Sample #24 designated as questionably anomalous (anomalous?) on the basis of single grains of chromite(?) and Cr-diopside(?) might better be considered very questionable (Table 1) as the chromite cannot be established as definitely kimberlitic, and the Cr-diopside(?) contains very little Cr (Cr_2O_3-0.1%), has low Mg (MgO-13.57%), and high Fe^{3+} (Fe_2O_3-9.38%). The two other samples designated as questionably anomalous (samples #23 and #27) should remain as such based on mineral grain chemistry. Sample #21 is more weakly anomalous than originally suspected in that none of the five chromites(?) appear to be kimberlitic. However, three Mg-ilmenites in that sample do suggest a kimberlitic source.

Samples #4, #8 and #26 clearly are the most anomalous of the sample suite. In addition to containing the greatest numbers of peridotitic/eclogitic garnet grains and chromites (Table 1), they also exhibit some of the best chemistry in terms of diamond inclusion field (DIF) correlation. Although G10 garnets are rare in the overall heavy mineral population, one garnet grain from sample #4 is a G10, two grains from sample #8 plot essentially on the G10/G9 line, and three grains from sample #26 plot just inside the G9 field (Cr_2O_3:CaO plots; Figures 1 and 2). Eclogitic garnet grains are most abundant in samples #4 and #8 (7 and 9 grains respectively) and nearly a third of these in both samples plot in the diamond inclusion field (TiO_2:Na_2O plots; Figures 3 and 4). Sample #26 exhibits the best chromite chemistry, 37% of the analyzed grains plotting in the diamond inclusion field (DIF)(Cr_2O_3:MgO plot; Figure 6). Although only single grains from samples #4 and #8 plot in the chromite diamond inclusion field, an additional four grains from sample #4 plot very close to that field (Cr2O3:MgO plot; Figure 5). Based on chromite Cr2O3:MgO plots that include a broader range of Cr2O3 values, grains from samples #4 and #26 show very similar distributions, whereas the majority of the plots for sample #8 chromite grains suggest at least in part a very different source more akin to sample #30 (Figures 7 and 8). Similar relationships can be observed on Cr2O3:TiO2 plot diagrams (Figures 9 and 10). No picroilmenite (Mg-ilmenite) was recovered from samples #4 and #8, and only a single grain was recognized in sample #26 concentrate. However, based on Cr2O3:MgO plots, the ilmenite grain from sample #26 (Figure 11) does reflect intermediate reducing conditions that would have been favorable to diamond preservation (intermediate levels of resorption). Chrome diopside is sparse in all of the processed samples, and analyses of many tiny grains of possible Cr-diopside have proven to be Cr-amphiboles (Table 1). Two Cr-diopside grains were recovered from both sample #4 and sample #26, but only a single grain from sample #8. Although these chrome diopsides probably reflect a kimberlite source, grain chemistry is not definitive regarding diamond potential.

Samples #14 and #29 each contain single grains of G10 pyrope, although the sample #14 grain is just barely in the G10 field (Figures 1 and 2). Sample #14 also contains 7 eclogitic garnets, but none of these plot in the diamond inclusion field (Figure 4). Chromite is relatively abundant in both samples, but only a single grain from sample #29 plots in the diamond inclusion field (Figures 5 and 6). Both samples contain picroilmenite grains in which the chemistry of most grains reflects intermediate levels of preservation of diamonds that might be present (Figure 11). The single picroilmenite grain analyzed from sample #29 has the highest MgO content (11.22 wt%) of all grains analyzed. Only one Cr-diopside grain was recovered from these two samples (from sample #14), and the tiny, greenish blue fragment that was very tentatively identified as possible moissanite in sample #14 (Table 1) is ferroan corundum. Both samples #14 and #29 indicate a kimberlitic source contribution for their heavy mineral assemblages.

Samples #9 and #13 are significant in that one third of the analyzed chromite grains from both samples plot in the diamond inclusion field (Figure 5). Although only six grains were analyzed from each sample, the high percentage of DIF grains in such small populations is impressive. Sample #9 also contains two lherzolitic garnets (G9s) (Figure 1) and a single low Mg-ilmenite (Figure 11) of questionable origin. A single Cr-diopside was recovered from sample #13. These samples reflect good potential kimberlite source targets.

Samples #20, #25, and #30 are moderately rich in chromite and all contain single grains in their analyzed populations that plot in the diamond inclusion field (Figure 6). All three samples also contain 2-4 grains each of lherzolitic pyrope (Figure 2), and samples #20 and #30 each contain 3 grains of eclogitic pyrope (Figure 4), 6 and 8 grains respectively of picroilmenite, and 1 and 3 grains respectively of Cr-diopside (Table 1). These samples reflect good potential kimberlite source targets.

Analyzed indicator mineral grains recovered from other anomalous samples in the 1999 ICE Prospect sample population do not plot in diamond inclusion fields. However, three of these samples (#5, #18 and #19) appear to have excellent potential for kimberlite source targets. Sample #5 is particularly significant in that it contains abundant lherzolitic (13) and eclogitic (6) pyropes, along with chromite and Mg-ilmenite (13 and 10 grains analyzed respectively). Although most of the analyzed chromite grains plot well below the diamond inclusion field

(Figures 5 and 7), many do appear to be well within the range of kimberlitic chromite. Furthermore, all of the picroilmenite grains exceed 7% MgO (Figure 11), have a low MnO content (< 0.7 wt%), and correspond well compositionally with picroilmenites from many kimberlite occurrences. Samples #18 and #19 contain considerably fewer pyrope grains (1 and 5 respectively lherzolitic pyropes, and 2 eclogitic pyrope grains in sample #18; see Figures 1 and 4), and fewer analyzed chromites (8 each; Figures 5 and 7) and picroilmenites (5 and 6 respectively; Figure 11) than sample #5. However, general chemical trends are quite similar, and the indicator mineral populations probably reflect the same or similar kimberlite sources.

Samples #1, #7 and #22 are characterized by a limited number of indicator mineral grains, but chemistries of most of these grains suggest a kimberlitic source. Each sample contains a single lherzolitic pyrope of very similar composition (Figures 1 and 2). Opaque oxides are most abundant in sample #22. Five chromite grains and four Mg-ilmenite grains were analyzed from this sample and these are compositionally very similar to comparable grains analyzed from samples #5, #18 and #19 (Figures 5, 7 and 11). A common or similar source is inferred. Two chromite grains were analyzed from the sample #1 heavy mineral population, and these also are compositionally similar to analyzed chromites from samples #5, #18 and #19 (Figure 7). The anomalous designation for sample #7 is based solely on the presence of single lherzolitic pyrope (Table 1).

Conclusions

Chemical analyses of definite, probable and possible indicator minerals recovered from the 1999 ICE Prospect samples indicate the presence of one or more kimberlite targets. A very positive aspect of the chemical results is the presence of a significant number of indicator minerals that plot in diamond inclusion fields on various major oxide diagrams. Although no reasonable speculations can be made regarding diamond potential of probable source kimberlite occurrences, the chemistry strongly suggests a diamondiferous source (or sources).

The chemically best samples in the population based on abundance of kimberlite indicator minerals and number of indicator minerals that plot in diamond inclusion fields on garnet and chromite chemical plots are samples #4, #8 and #26. Indicator minerals in these samples are chemically similar to those from the Bonus Pipe analyzed in 1998 (Chemical Assessment Report submitted to Quest International, March 1998 by M.E. McCallum [invoice never paid]). As with the Bonus Pipe indicator mineral population, lherzolitic G9 pyrope garnets prevail although a few marginal G10 grains are present. Eclogitic pyrope grains are most important in both populations in that nearly one quarter of those analyzed from Bonus Pipe concentrate plot in the diamond inclusion field and nearly one third of those in samples #4 and #8 plot in that field (Figure 3). Another common characteristic of these sample populations is the lack of picroilmenite and the rarity of Cr-diopside. The nature of samples #4 and #8 suggest a source from the Bonus Pipe or a kimberlite of similar composition. It would appear that diamonds that might be present from the source kimberlite likely would be predominantly of eclogitic affiliation. Although no DIF eclogitic pyropes were recovered from sample #26, chemistry of lherzolitic pyropes and chromites are, in general, quite similar to those from Bonus Pipe concentrates. Compositions of chromites from sample #8 exhibit a rather wide distribution (Figures 5 and 7) and suggest multiple sources. It is recommended that initial follow-up exploration efforts scheduled for the 2000 field season be focused on targeting the source or sources of indicator minerals present at sample sites #4, #8 and #26.

Early follow-up efforts also should be directed to the areas of sample sites #9, #13, #14 and #29. Single marginal G10 garnet grains were recovered from both samples #14 and #29, and both contain significant numbers of chromite (1 from sample #29 in DIF), and picroilmenite grains. Samples #9 and #13 are noteworthy in that one third of their analyzed chromite grains plot in the diamond inclusion field (Figure 5). Furthermore, two lherzolitic pyrope grains (G9s) were recovered from sample #9.

Subsequent efforts should be directed toward the areas of samples #20, #25 and #30, all of which contain relatively abundant chromite (single grain from each sample plots in DIF), 2-4 grains each of lherzolitic pyrope (G9s), and some eclogitic pyropes (3 grains each in samples #20 and #30). Picroilmenite is present in all samples as also are trace amounts of Cr-diopside.

As time permits, follow-up work should also involve all other anomalous sample sites. Limited numbers of indicator minerals were recovered from sample sites #5, #18, #19, #1, #7, #21 and #22, but kimberlitic sources definitely are inferred. The lowest priority sites for follow-up work within the anomalous sample group are #23 and #27. Additional work might be warranted in these areas only if they are isolated from other more anomalous sample sites.

Mineralogical and chemical results derived from heavy mineral concentrate obtained from the 30 samples collected in 1999 from in-fill stream sediment sites in the ICE Project area strongly suggest the presence of additional kimberlite occurrences. Follow-up exploration work during the 2000 field season should be scheduled based on a sample site priority scheme that reflects the relative significance of indicator mineral populations and chemistry at each site. Considering the highly anomalous nature of some samples, there is a very strong probability that new kimberlite occurrences will be located during the 2000 field season.

June 15, 2000
M. E. McCallum
Consulting Geologist

Skeena Resources | B.C. Ice Project | June 15, 2000

Prefix	Sample Number	Sample Nature	Peroditic Pyrope Garnets Number Analyzed	Number of G10	Percent G10	Eclogitic Garnets Number Analyzed	Number in DIF	Percent in DIF	Chromites Number Analyzed	Number in DIF	Percent in DIF	Mg Ilmenites Number Analyzed	Chrome Diopsides Number Analyzed	Other Number Analyzed
41529	1	Anomalous	1						2					
41529	2	Barren												1 Mg Almandine
41529	3	Barren												
41529	4	Highly Anomalous	20	1	5%	7	2	~29%	19	1	~5%		2	1 Mg Almandine
41529	5	Highly Anomalous	13			6			13			10	1	4 Cr Amphibole, 3 Mg Almandine, 1 Ti Magnetite
41529	6	Barren												
41529	7	Anomalous	1											
41529	8	Highly Anomalous	17	2 on G10/G9 Line		9	3	~33%	32	1	~3%		1	2 Cr Amphibole, 2 Ti Magnetite
41529	9	Anomalous	2						6	2	~33%	1		1 Mg Almandine
41529	10	Barren												
41529	11	Barren												
41529	12	Barren												
41529	13	Anomalous							6	2	~33%		1	1 Mg Almandine
41529	14	Highly Anomalous	12	1	~8%	7			15			7	1	4 Cr Amphibole, 1 Mg Almandine, 2 Ti Magnetite, 1 Ferroan Corundum
41529	15	Barren												
41529	16	Barren												
41529	17	Barren												
41529	18	Anomalous	1			2			8			5	1	1 Mg Almandine
41529	19	Highly Anomalous	5						8			6	2	2 Mg Almandine, 1 Ti Magnetite
41529	20	Highly Anomalous	2			3			8	1	~12%	6	1	2 Cr Amphibole, 1 Mg Almandine
41529	21	Anomalous							1			3		4 Ti Magnetite
41529	22	Anomalous	1						5			4		
41529	23	Anomalous?				1			1					
41529	24	Anomalous???							1					1 Ferroan Diopside
41529	25	Anomalous	4						6	1	~17%			2 Mg Almandine, 1 Fe Ilmenite, 1 Ti Magnetite
41529	26	Highly Anomalous	18	3 close to G10 field		1			19	7	~37%	1	2	2 Mg Almandine
41529	27	Anomalous?											1	
41529	28	Barren												
41529	29	Anomalous	2	1	50%				7	1	~14%	1		3 Ti Magnetite
41529	30	Highly Anomalous	4			3			15	1	~7%	8	3	2 Cr Amphibole, 3 Mg Almandine, 4 Ti Magnetite
		Individual Total	103			39			172			53	16	53
		Grand Total	436 grains analyzed											

Table 1. Chemically analyzed definite and probable/possible indicator minerals.

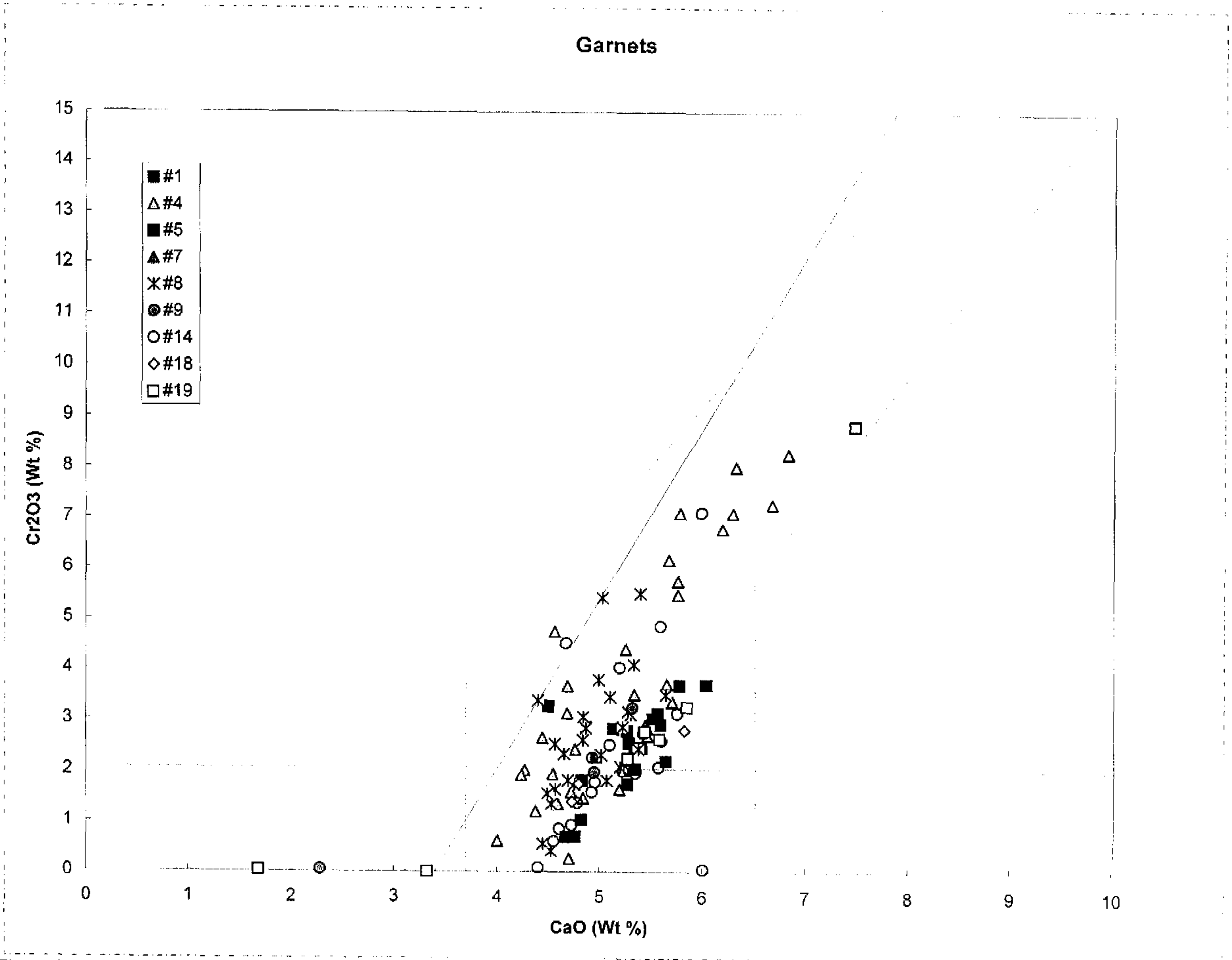


Figure 1. Cr2O3:CaO (wt%) plot of garnets. Solid inclined line-boundary G10 (left), G9 (right); dotted horizontal line at 2% Cr2O3-boundary between eclogitic (below) peridotitic; short dashed lines define approx. field of therzolitic garnets.

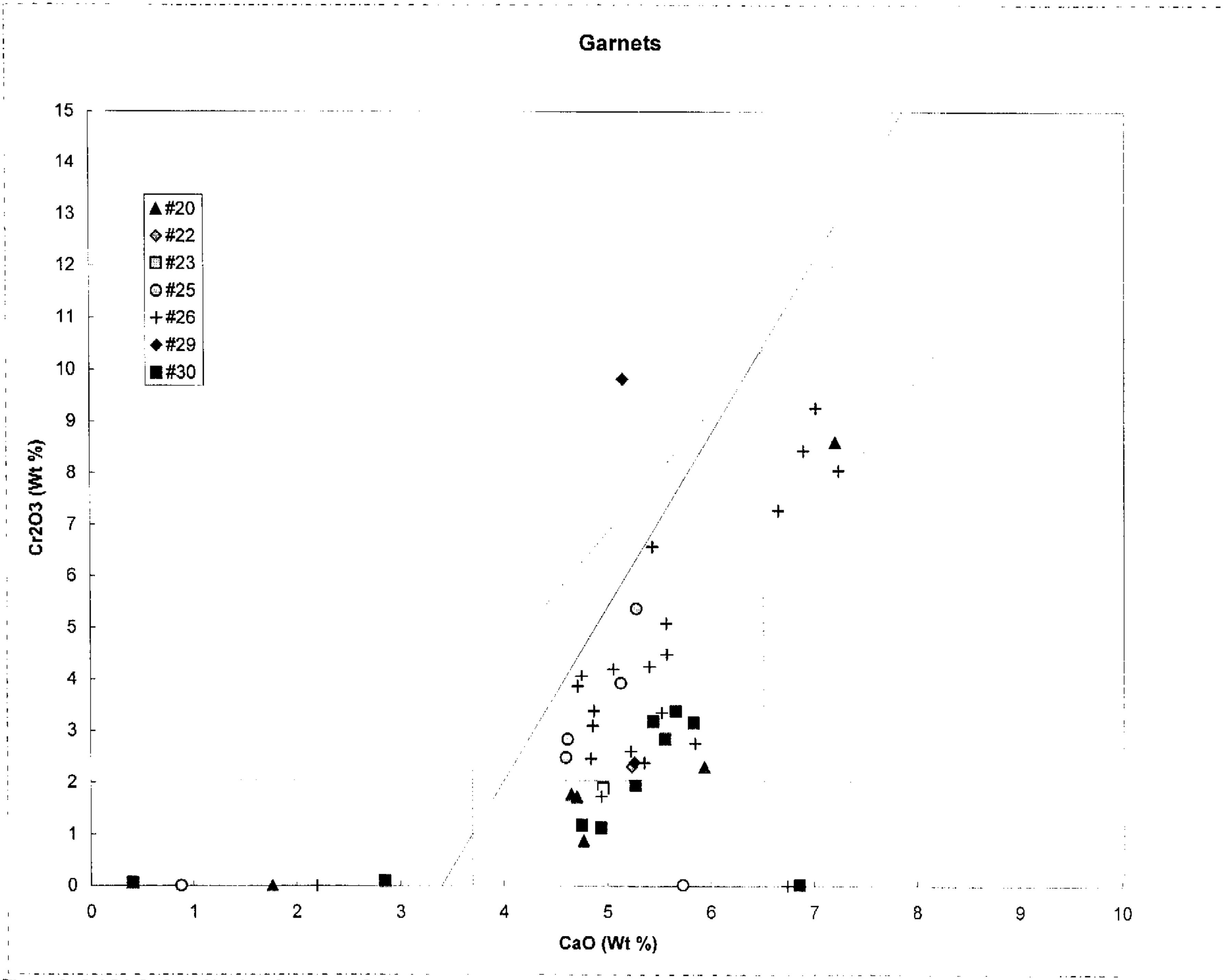


Figure 2. Cr2O3:CaO (wt%) plot of garnets. Solid inclined line-boundary G10 (left), G9 (right); dotted horizontal line at 2% Cr2O3-boundary between eclogitic (below) peridotitic; short dashed lines define approx. field of lherzolitic garnets.

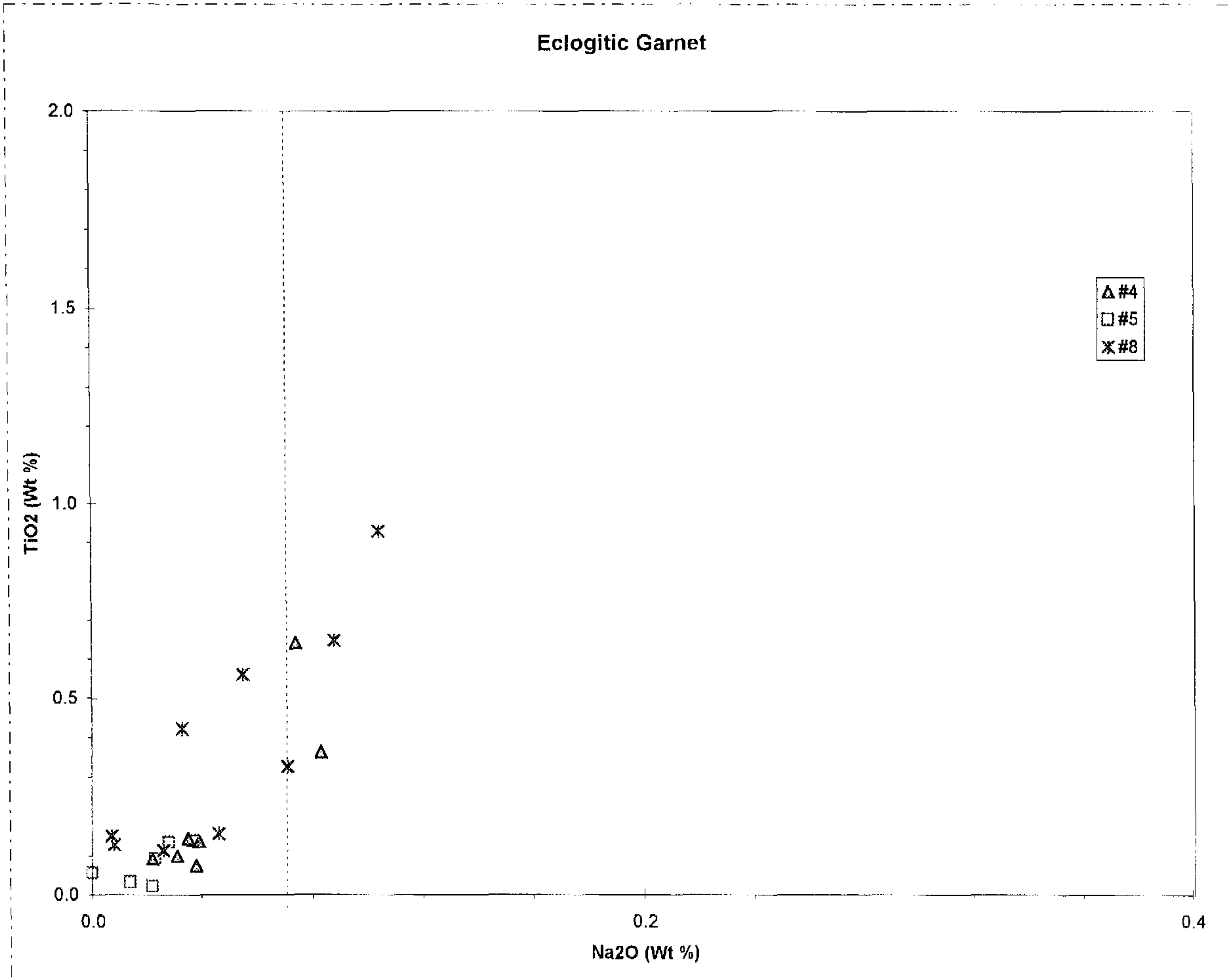


Figure 3. TiO2:Na2O (wt%) plot of eclogitic garnets (diamond inclusion field to right of dotted vertical line at 0.07% Na2O).

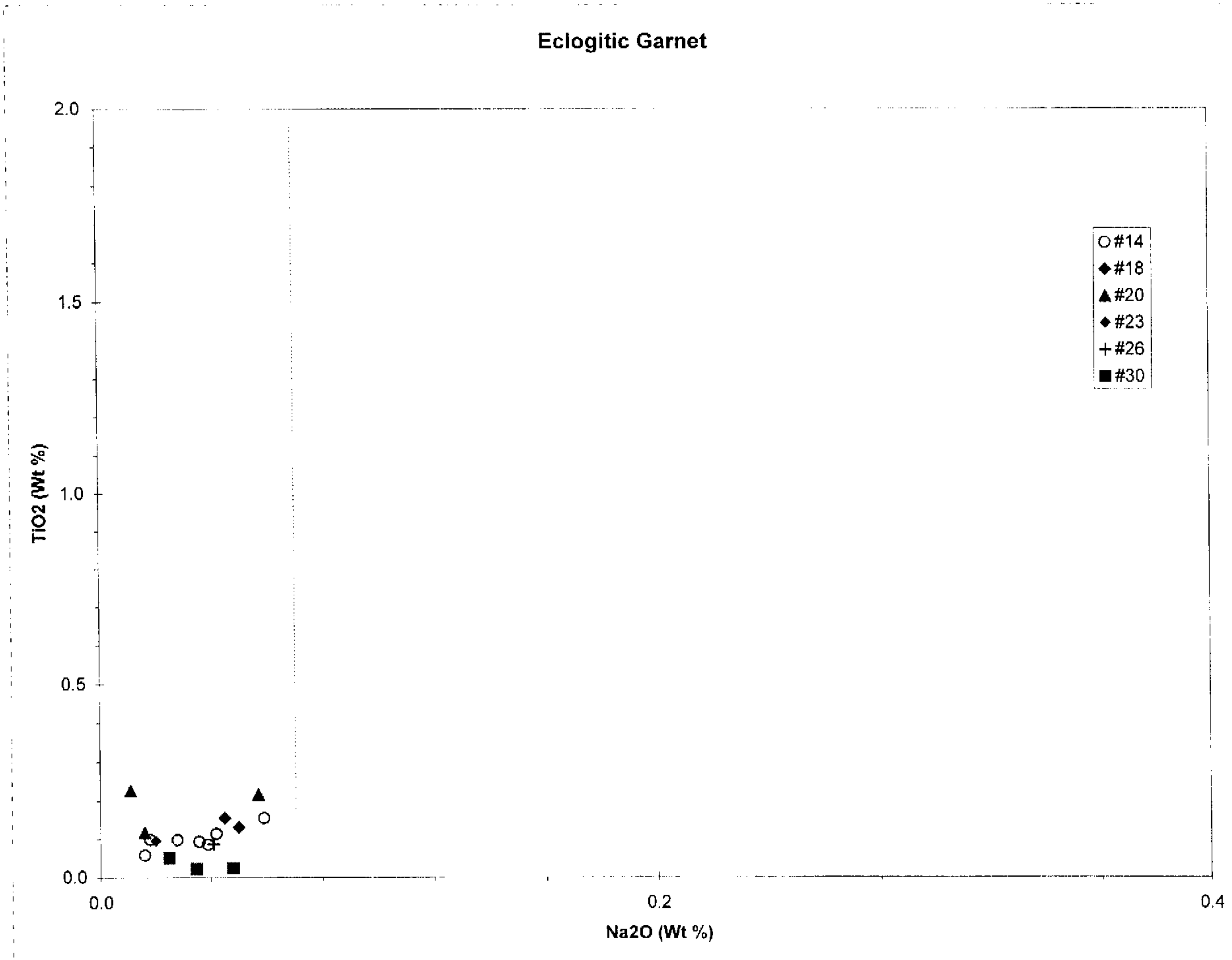


Figure 4. TiO2:Na2O (wt%) plot of eclogitic garnets (diamond inclusion field to right of dotted vertical line at 0.07% Na2O).

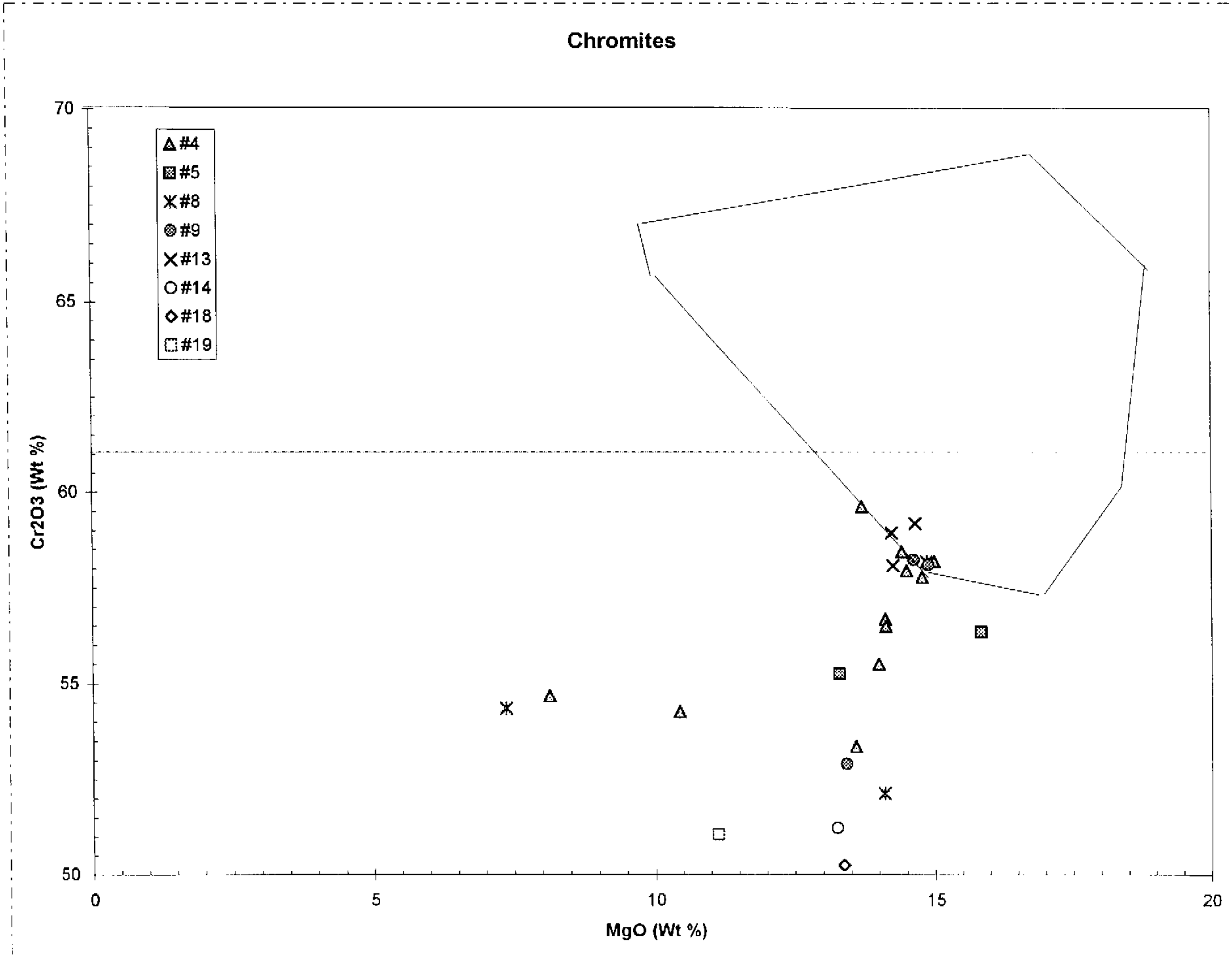


Figure 5. Cr 2O 3:MgO (wt%) plot of chromites (enclosed area is approximate range of peridotitic diamond inclusion field).

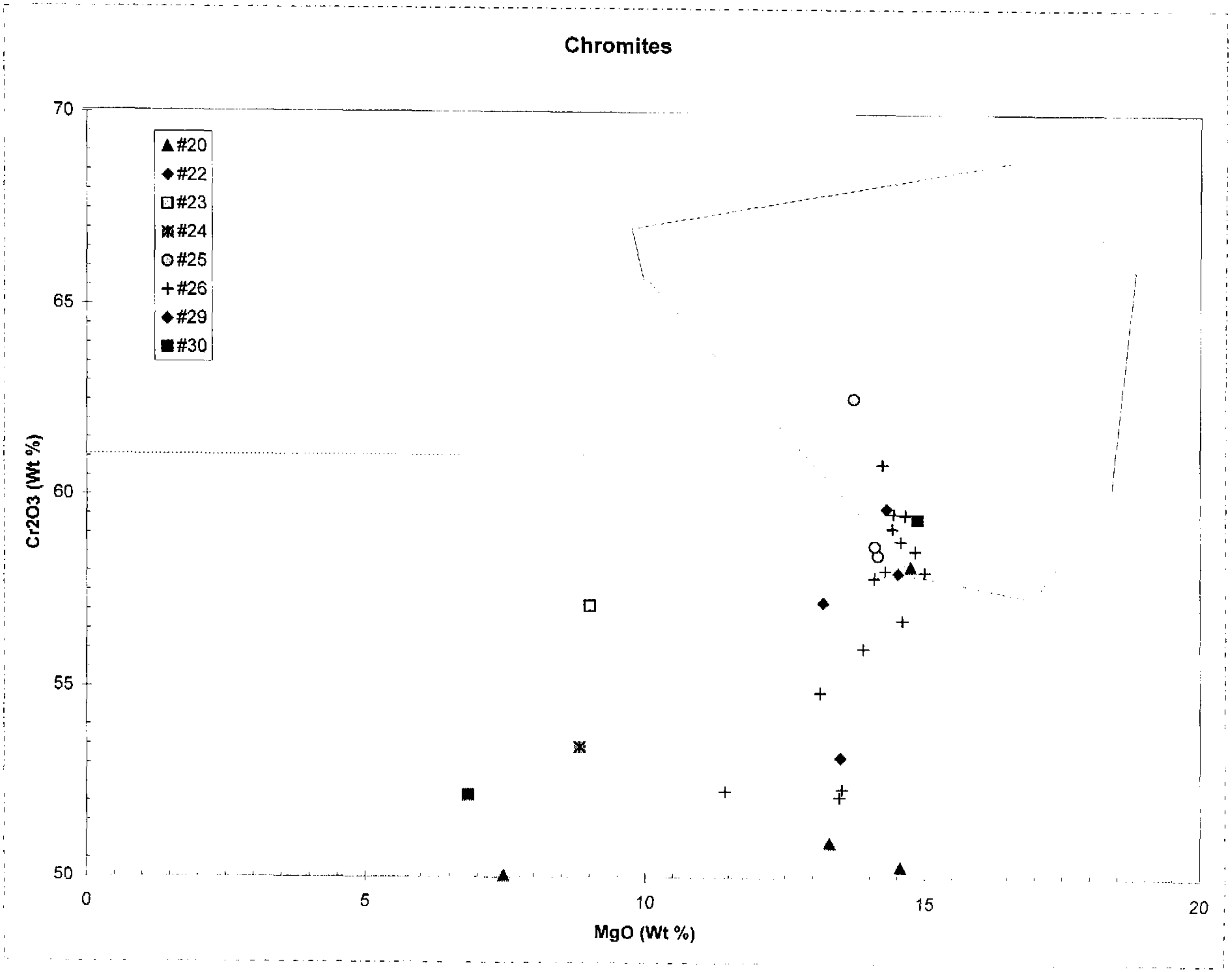


Figure 6. Cr 2O 3:MgO (wt%) plot of chromites (enclosed area is approximate range of peridotitic diamond inclusion field).

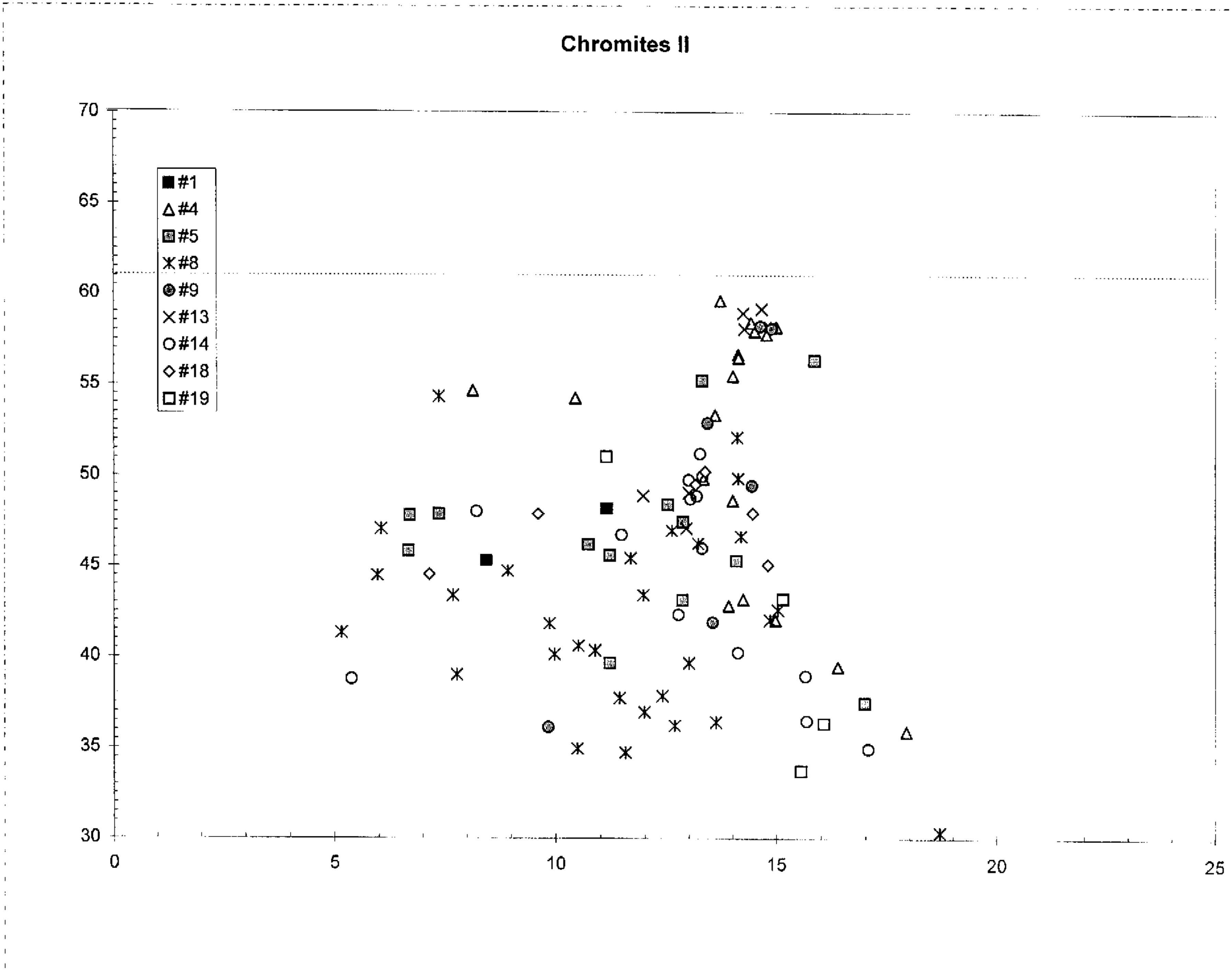


Figure 7. Cr2O3:MgO (wt%) plot of chromites.

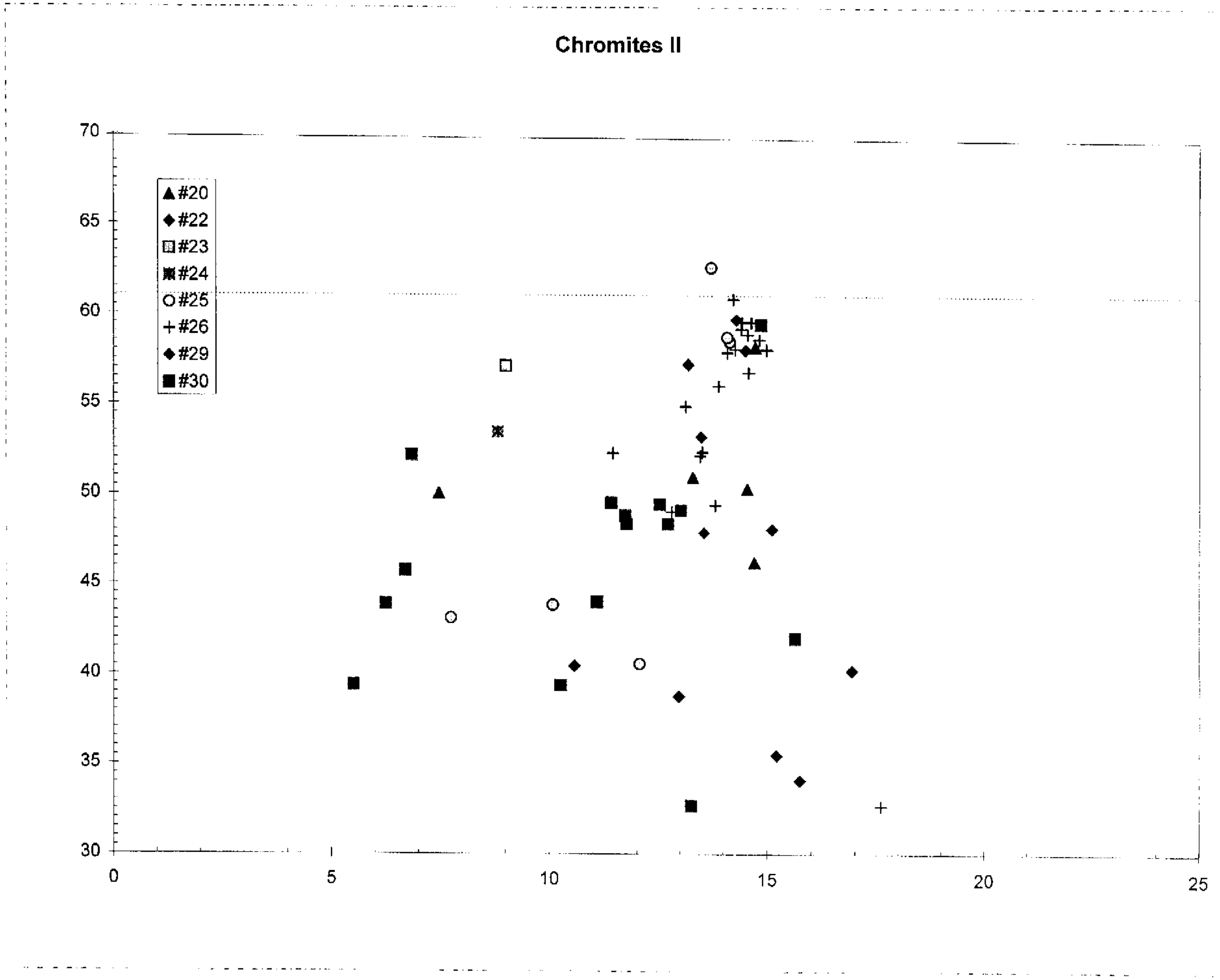
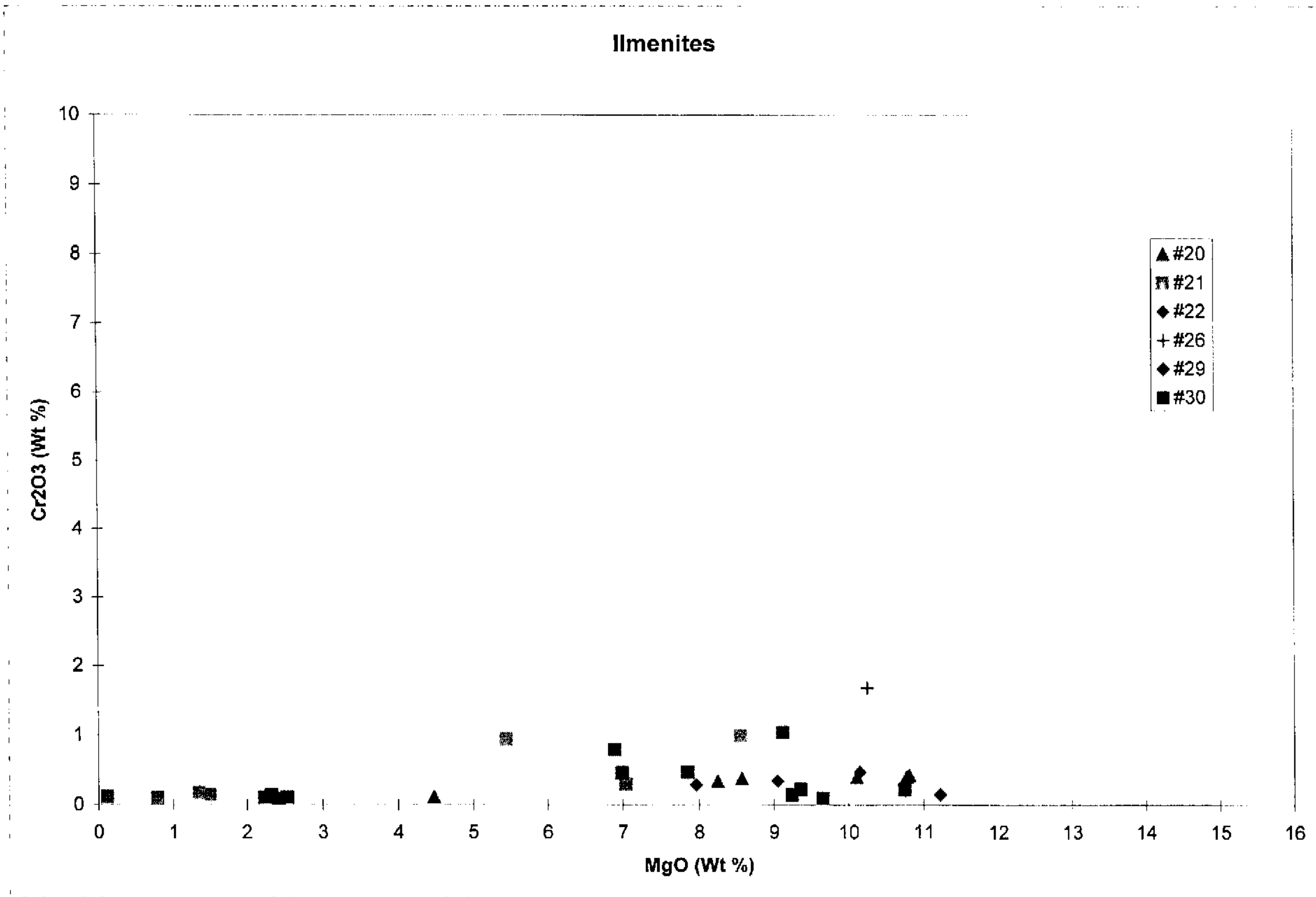


Figure 8. Cr2O3:MgO (wt%) plot of chromites.



Cr2O3:MgO plot (wt%) of ilmenites.

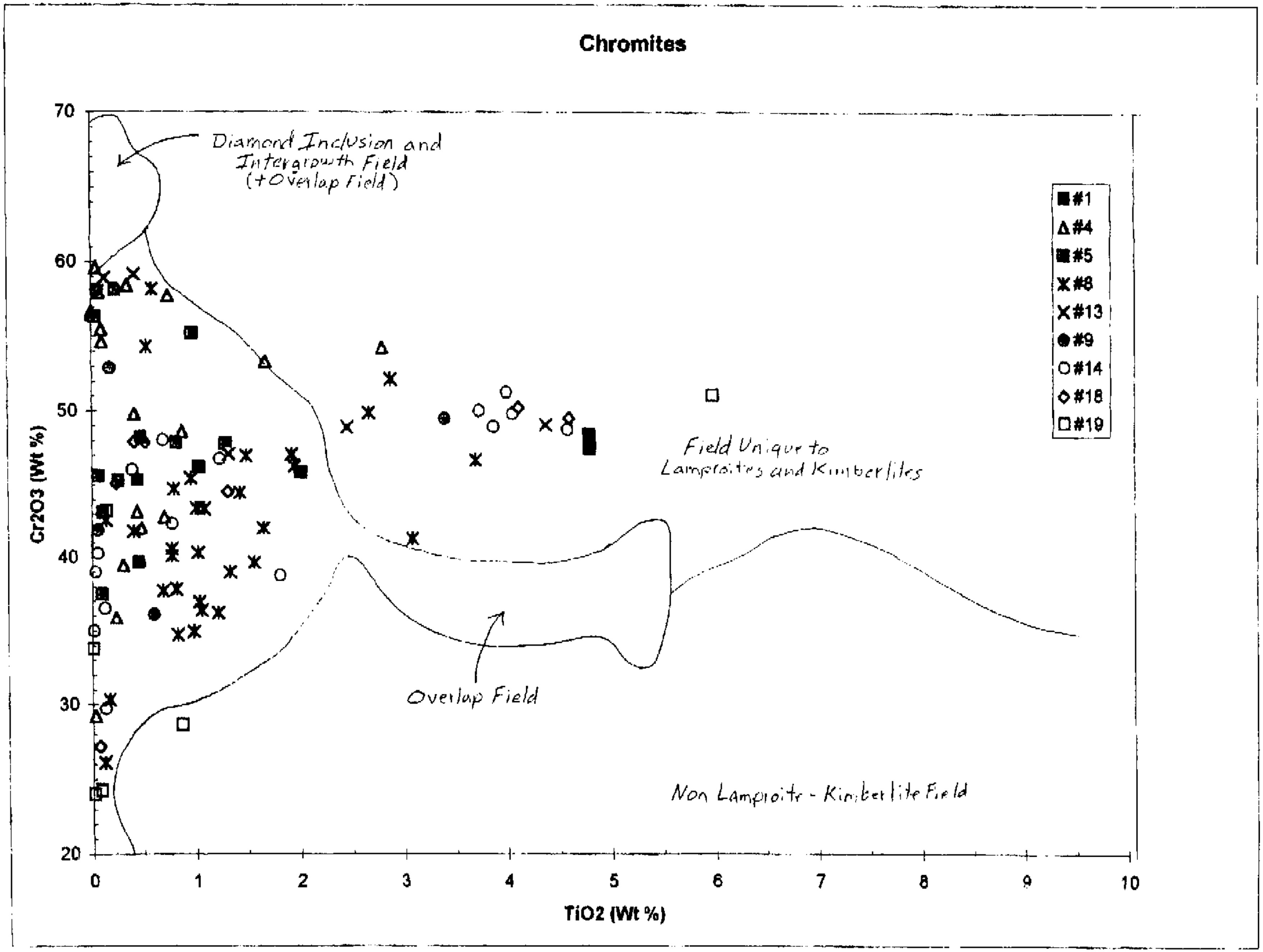


Fig. 9. Cr2O3:TiO2 wt % plot of Chromite.

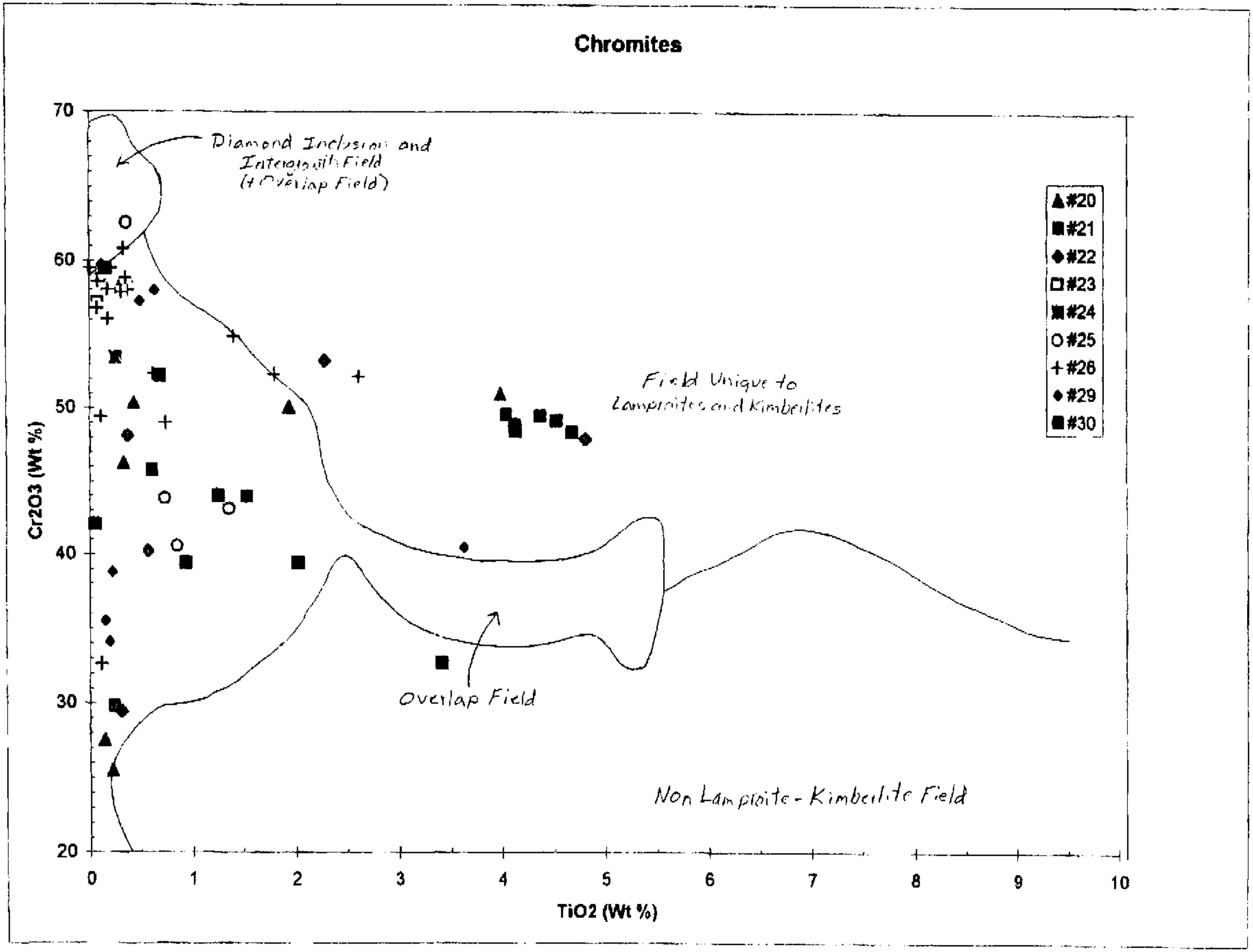


Fig 10. Cr2O3:TiO2 wt % plot of Chromite.

Skeena Gt Chemistry-Preliminary Data with low totals June 14, 2000

Pyrope Garnet Plot Data

Position	Sample #	CaO (Wt %)	Corrected	Cr2O3 (Wt %)	Corrected
#1	#1	4.46	4.97	2.02	2.25
#2	#2	0.82	0.93	0.06	0.07
#3	#4	6.15	6.84	7.44	8.27
#5	#4	5.78	6.33	7.32	8.01
#6	#4	5.22	5.77	5.20	5.75
#7	#4	5.86	6.30	6.58	7.10
#8	#4	5.30	5.79	6.50	7.10
#9	#4	5.26	5.77	4.99	5.48
#10	#4	5.64	6.20	6.18	6.79
#11	#4	6.15	6.68	6.71	7.28
#12	#4	5.40	5.68	5.86	6.17
#13	#4	4.25	4.56	4.43	4.75
#14	#4	5.05	5.34	3.29	3.50
#15	#4	5.34	5.71	3.13	3.35
#16	#4	4.96	5.26	4.15	4.40
#17	#4	5.23	5.47	2.57	2.68
#18	#4	5.25	5.66	3.43	3.70
#19	#4	4.40	4.69	3.44	3.66
#20	#4	5.05	5.20	1.59	1.64
#21	#4	4.73		1.58	
#22	#4	4.84		1.46	
#23	#4	4.69		3.12	
#24	#4	4.76		2.41	
#25	#4	4.60		1.34	
#26	#4	4.38		1.19	
#27	#4	4.55		1.93	
#28	#4	4.44		2.63	
#29	#4	4.27		2.00	
#30	#4	4.71		0.26	
#31					

#32	#4	4.24	1.91
#33	#4	4.01	0.61
#34	#4	0.01	0.06
#35	#4	21.13	0.86
#36	#4	6.11	0.00
#37	#5	6.04	3.70
#38	#5	5.58	3.13
#39	#5	4.50	3.26
#40	#5	5.65	2.19
#41	#5	5.35	2.43
#42	#5	4.83	1.80
#43	#5	5.41	2.45
#44	#5	5.53	3.03
#45	#5	5.29	2.55
#46	#5	5.78	3.67
#47	#5	5.14	2.81
#48	#5	5.28	2.79
#49	#5	5.60	2.90
#50	#5	5.28	1.74
#51	#5	5.35	2.03
#52	#5	4.76	0.70
#53	#5	4.68	0.69
#54	#5	4.83	1.03
#55			
#56			
#57			
#58			
#59			
#60			
#61	#5	22.33	0.69
#62	#5	11.66	1.64
#63	#5	22.26	1.04
#64	#5	21.56	1.41
#65	#5	20.70	1.33

#66	#7	5.45	2.86
#67	#8	5.23	3.49
#68	#8	5.65	3.10
#69	#8	5.31	2.30
#70	#8	5.02	3.16
#71	#8	5.28	2.43
#72	#8	5.38	5.51
#73	#8	5.40	5.42
#74	#8	5.03	3.78
#75	#8	4.99	4.10
#76	#8	5.34	2.52
#77	#8	4.57	2.87
#78	#8	4.87	1.80
#79	#8	5.08	2.07
#80	#8	5.20	2.60
#81	#8	4.84	3.05
#82	#8	4.85	2.83
#83	#8	4.87	1.74
#84	#8	4.76	3.44
#85	#8	5.10	1.81
#86	#8	4.70	3.37
#87	#8	4.40	1.64
#88	#8	4.57	2.33
#89	#8	4.66	0.55
#90	#8	4.45	0.41
#91	#8	4.53	1.35
#92	#8	4.53	1.54
#93	#8	4.49	0.60
#94	#8	10.39	1.67
#95	#8	9.16	1.58
#96	#8	18.73	0.09
#97	#9	5.32	3.23
#98	#9	5.43	2.73
#99	#9	4.95	1.97

#100	#9	2.28	0.04
#101	#13	0.86	0.04
#102	#13	22.64	1.28
#103	#14	0.00	0.11
#104	#14	5.60	4.86
#105	#14	5.99	7.12
#106	#14	5.20	4.03
#107	#14	5.76	3.12
#108	#14	5.61	2.59
#109	#14	4.67	4.52
#110	#14	5.10	2.50
#111	#14	5.23	2.00
#112	#14	4.93	2.25
#113	#14	4.96	1.77
#114	#14	5.36	1.96
#115	#14	5.58	2.06
#116	#14	5.29	2.01
#117	#14	4.93	1.58
#118	#14	4.78	1.37
#119	#14	4.73	0.93
#120	#14	4.60	0.85
#121	#14	4.56	0.61
#122	#14	4.40	0.07
#123	#14	6.01	0.05
#124	#14	20.26	1.06
#125	#14	6.51	0.86
#126	#14	18.56	1.57
#127	#14	13.52	0.69
#128	#14	10.32	0.37
#129	#18	5.83	2.79
#130	#18	4.80	1.74
#131	#18	4.74	1.39
#132	#18	14.47	0.06
#133	#18	0.01	0.04

#134	#18	20.28	1.19
#135	#19	7.49	8.83
#136	#19	5.59	2.62
#137	#19	5.45	2.77
#138	#19	5.86	3.25
#139	#19	5.28	2.24
#140	#19	3.32	0.00
#141	#19	1.68	0.02
#142	#19	22.45	1.38
#143	#19	22.76	1.11
#144	#20	7.21	8.62
#145	#20	5.94	2.31
#146	#20	4.65	1.77
#147	#20	1.76	0.00
#148	#20	4.71	1.72
#149	#20	4.77	0.88
#150	#20	23.72	0.56
#151	#20	10.92	1.47
#152	#20	11.58	1.61
#153	#22	5.24	2.31
#154	#23	4.96	1.90
#155	#24	20.28	0.10
#156	#25	5.28	5.37
#157	#25	4.62	2.84
#158	#25	5.13	3.93
#159	#25	4.60	2.48
#160	#25	5.73	0.02
#161	#25	0.00	0.08
#162	#25	0.88	0.00
#163	#26	7.03	9.27
#164	#26	7.25	8.06
#165	#26	6.66	7.28
#166	#26	6.90	8.44
#167	#26	5.44	6.57

#168	#26	5.41	4.25
#169	#26	5.85	2.75
#170	#26	5.58	4.48
#171	#26	4.75	4.06
#172	#26	5.23	2.61
#173	#26	5.53	3.35
#174	#26	5.57	5.09
#175	#26	4.71	3.87
#176	#26	5.06	4.20
#177	#26	5.36	2.39
#178	#26	4.86	3.10
#179	#26	4.87	3.38
#180	#26	4.94	1.73
#181	#26	2.20	0.00
#182	#26	4.84	2.46
#183	#26	6.74	0.00
#184	#26	20.69	0.77
#185	#26	20.80	1.14
#186	#27	21.87	1.12
#187	#29	5.16	9.83
#188	#29	5.26	2.39
#189	#30	5.45	3.18
#190	#30	5.67	3.38
#191	#30	5.84	3.16
#192	#30	5.56	2.84
#193	#30	5.27	1.94
#194	#30	4.75	1.18
#195	#30	4.94	1.13
#196	#30	1.01	0.09
#197	#30	3.63	0.14
#198	#30	0.41	0.06
#199	#30	2.85	0.09
#200	#30	0.00	0.05
#201	#30	6.86	0.02

#202	#30	22.82	1.01
#203	#30	20.71	1.33
#204	#30	3.71	0.40
#205	#30	13.81	0.57
#206			
#207			
#208			
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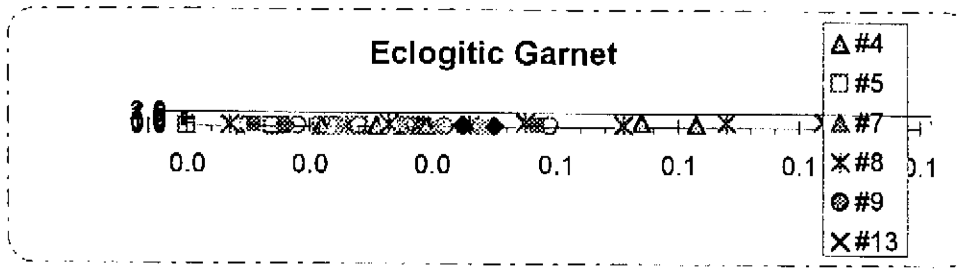
#210			
#211			
#212			
#213			
#214			
#215			
#216			
#217			
#218			
#219			
#220			

Skeena (Eclogitic Garnet

Position	Sa	2O (wt	onverte	2 (Wt	onverte	Cr2O3	Corrected
#1	#1					2.02	2.25
#2	#2	0.02	0.02	0.00	0.00	0.06	0.07
#3	#4					7.44	8.27
#4	#4					7.85	8.87
#5	#4					7.32	8.01
#6	#4					5.20	5.75
#7	#4					6.58	7.10
#8	#4					6.50	7.10
#9	#4					4.99	5.48
#10	#4					6.18	6.79
#11	#4					6.71	7.28
#12	#4					5.86	6.17
#13	#4					4.43	4.75
#14	#4					3.29	3.50
#15	#4					3.13	3.35
#16	#4					4.15	4.40
#17	#4					2.57	2.68
#18	#4					3.43	3.70
#19	#4					3.44	3.66
#20	#4					1.59	1.64
#21	#4	0.03		0.10		1.58	
#22	#4	0.04		0.07		1.46	
#23	#4					3.12	
#24	#4					2.41	
#25	#4	0.04		0.14		1.34	
#26	#4	0.04		0.14		1.19	
#27	#4					1.93	
#28	#4						
#29	#4						
#30	#4	0.02		0.09		0.26	
#31	#4					0.00	
#32	#4	0.08		0.36		1.91	
#33	#4	0.07		0.64		0.61	
#34	#4	0.00		0.49		0.06	

#35	#4	0.42	0.14	0.86
#36	#4	0.37	0.04	0.00
#37	#5			3.70
#38	#5			3.13
#39	#5			3.26
#40	#5			2.19
#41	#5			2.43
#42	#5	0.02	0.09	1.80
#43	#5			2.45
#44	#5			3.03
#45	#5			2.55
#46	#5			3.67
#47	#5			2.81
#48	#5			2.79
#49	#5			2.90
#50	#5	0.01	0.03	1.74
#51	#5			2.03
#52	#5	0.02	0.02	0.70
#53	#5	0.00	0.06	0.69
#54	#5	0.03	0.14	1.03
#55	#5	0.04	0.14	0.89
#56	#5			0.03
#57	#5			0.03
#58	#5			0.00
#59	#5			0.04
#60	#5			0.00
#61	#5	0.96	0.14	0.69
#62	#5	3.70	0.08	1.64
#63	#5	1.27	0.13	1.04
#64	#5	1.71	0.35	1.41
#65	#5	1.26	0.10	1.33
#66	#7			2.86
#67	#8			3.49
#68	#8			3.10
#69	#8			2.30
#70	#8			3.16
#71	#8			2.43



#72	#8			5.51
#73	#8			5.42
#74	#8			3.78
#75	#8			4.10
#76	#8			2.52
#77	#8			2.87
#78	#8	0.01	0.13	1.80
#79	#8			2.07
#80	#8			2.60
#81	#8			3.05
#82	#8			2.83
#83	#8	0.01	0.15	1.74
#84	#8			3.44
#85	#8	0.05	0.16	1.81
#86	#8			3.37
#87	#8	0.03	0.42	1.64
#88	#8			2.33
#89	#8	0.10	0.93	0.55
#90	#8	0.09	0.65	0.41
#91	#8	0.06	0.56	1.35
#92	#8	0.07	0.33	1.54
#93	#8	0.03	0.11	0.60
#94	#8	3.76	0.14	1.67
#95	#8	4.02	0.31	1.58
#96	#8	0.46	0.17	0.09
#97	#9			3.23
#98	#9			2.73
#99	#9			
#100	#9			
#101	#13			
#102	#13			
#103	#1⁄	0.00	####	0.11
#104	#14			4.86
#105	#14			7.12
#106	#14			4.03
#107	#14			3.12
#108	#14			2.59

#109	#14			4.52
#110	#14			2.50
#111	#14			2.00
#112	#14			2.25
#113	#14	0.02	0.10	1.77
#114	#14			1.96
#115	#14			2.06
#116	#14			2.01
#117	#14	0.02	0.06	1.58
#118	#14	0.06	0.16	1.37
#119	#14	0.04	0.09	0.93
#120	#14	0.03	0.10	0.85
#121	#14	0.04	0.09	0.61
#122	#14	0.04	0.11	0.07
#123	#14			
#124	#14	1.62	0.16	1.06
#125	#14	3.41	0.02	0.86
#126	#14	1.70	0.05	1.57
#127	#14	1.18	0.00	0.69
#128	#14	0.86	0.01	0.37
#129	#18			2.79
#130	#18	0.05	0.13	1.74
#131	#18	0.05	0.16	1.39
#132	#18			0.06
#133	#18	0.00	####	0.04
#134	#18	1.93	0.47	1.19
#135	#19			8.83
#136	#19			2.62
#137	#19			2.77
#138	#19			3.25
#139	#19			2.24
#140	#19			0.00
#141	#19			0.02
#142	#19	1.06	0.06	1.38
#143	#19	0.93	0.03	1.11
#144	#20			8.62
#145	#20			2.31

#146	#2(	0.01	0.23	1.77
#147	#20			0.00
#148	#2(	0.06	0.22	1.72
#149	#2(	0.02	0.12	0.88
#150	#2(	0.61	0.05	0.56
#151	#2(	3.58	0.20	1.47
#152	#2(	3.05	0.23	1.61
#153	#22			2.31
#154	#2:	0.02	0.10	1.90
#155	#2‹	1.16	0.06	0.10
#156	#25			5.37
#157	#25			2.84
#158	#25			3.93
#159	#25			2.48
#160	#2!	0.02	0.00	0.02
#161	#2!	0.00	0.64	0.08
#162	#2!	0.00	0.00	0.00
#163	#26			9.27
#164	#26			8.06
#165	#26			7.28
#166	#26			8.44
#167	#26			6.57
#168	#26			4.25
#169	#26			2.75
#170	#26			4.48
#171	#26			4.06
#172	#26			2.61
#173	#26			3.35
#174	#26			5.09
#175	#26			3.87
#176	#26			4.20
#177	#26			2.39
#178	#26			3.10
#179	#26			3.38
#180	#2(	0.04	0.09	1.73
#181	#26			
#182	#26			

#183	#26			
#184	#2(	0.41	0.22	0.77
#185	#2(	1.73	0.05	1.14
#186	#27	0.90	0.19	1.12
#187	#29			9.83
#188	#29			2.39
#189	#30			3.18
#190	#30			3.38
#191	#30			3.16
#192	#30			2.84
#193	#3(	0.03	0.05	1.94
#194	#3(	0.04	0.02	1.18
#195	#3(	0.05	0.03	1.13
#196	#3(	0.01	0.01	0.09
#197	#3(	0.02	0.01	0.14
#198				
#199				
#200	#3(	0.00	0.47	0.05
#201	#30			0.02
#202	#3(	0.88	0.05	1.01
#203	#3(	1.51	0.49	1.33
#204	#3(	3.38	0.04	0.40
#205	#3(	1.00	0.03	0.57
#206				
#207				
#208				
#209				
#210				
#211				
#212				
#213				
#214				
#215				
#216				
#217				
#218				

#219
#220

Eclogitic Garnet

Sa	2O (wt	onverte	2 (Wt	onverte	Cr2O	Corrected
#1	0.02	0.02	0.01	0.01	2.02	2.25
#2	0.02	0.02	0.00	0.00	0.06	0.07
#4	0.02	0.02	0.05	0.06	7.44	8.27
#4	0.02	0.03	0.09	0.11	7.85	8.87
#4	0.02	0.03	0.15	0.16	7.32	8.01
#4	0.02	0.02	0.05	0.05	5.20	5.75
#4	0.02	0.02	0.00	0.00	6.58	7.10
#4	0.01	0.01	0.04	0.05	6.50	7.10
#4	0.04	0.04	0.10	0.11	4.99	5.48
#4	0.02	0.02	0.13	0.14	6.18	6.79
#4	0.01	0.01	0.03	0.04	6.71	7.28
#4	0.03	0.03	0.14	0.15	5.86	6.17
#4	0.05	0.05	0.23	0.25	4.43	4.75
#4	0.02	0.03	0.05	0.06	3.29	3.50
#4	0.01	0.01	0.02	0.02	3.13	3.35
#4	0.04	0.04	0.20	0.22	4.15	4.40
#4	0.03	0.03	0.04	0.04	2.57	2.68
#4	0.02	0.02	0.03	0.04	3.43	3.70
#4	0.05	0.06	0.26	0.27	3.44	3.66
#4	0.02	0.02	0.09	0.09	1.59	1.64
#4	0.03		0.10		1.58	
#4	0.04		0.07		1.46	
#4	0.05		0.19		3.12	
#4	0.03		0.16		2.41	
#4	0.04		0.14		1.34	
#4	0.04		0.14		1.19	
#4	0.06		0.27		1.93	
#4	0.04		0.20		2.63	
#4	0.07		0.34		2.00	
#4	0.02		0.09		0.26	
#4	0.01		0.03		0.00	
#4	0.08		0.36		1.91	
#4	0.07		0.64		0.61	
#4	0.00		0.49		0.06	

#4	0.42	0.14	0.86
#4	0.37	0.04	0.00
#5	0.01	0.00	3.70
#5	0.01	0.01	3.13
#5	0.01	0.02	3.26
#5	0.01	0.00	2.19
#5	0.01	0.00	2.43
#5	0.02	0.09	1.80
#5	0.01	0.05	2.45
#5	0.02	0.04	3.03
#5	0.02	0.06	2.55
#5	0.04	0.06	3.67
#5	0.01	0.08	2.81
#5	0.00	0.06	2.79
#5	0.00	0.00	2.90
#5	0.01	0.03	1.74
#5	0.01	0.03	2.03
#5	0.02	0.02	0.70
#5	0.00	0.06	0.69
#5	0.03	0.14	1.03
#5	0.04	0.14	0.89
#5	0.02	0.00	0.03
#5	0.04	0.00	0.03
#5	0.00	0.01	0.00
#5	0.02	0.00	0.04
#5	0.01	0.16	0.00
#5	0.96	0.14	0.69
#5	3.70	0.08	1.64
#5	1.27	0.13	1.04
#5	1.71	0.35	1.41
#5	1.26	0.10	1.33
#7	0.02	0.05	2.86
#8	0.04	0.11	3.49
#8	0.02	0.03	3.10
#8	0.01	0.05	2.30
#8	0.05	0.06	3.16
#8	0.00	0.05	2.43

#8	0.04	0.30	5.51
#8	0.03	0.06	5.42
#8	0.03	0.40	3.78
#8	0.04	0.39	4.10
#8	0.04	0.00	2.52
#8	0.05	0.30	2.87
#8	0.01	0.13	1.80
#8	0.01	0.11	2.07
#8	0.02	0.13	2.60
#8	0.00	0.04	3.05
#8	0.03	0.05	2.83
#8	0.01	0.15	1.74
#8	0.03	0.27	3.44
#8	0.05	0.16	1.81
#8	0.06	0.47	3.37
#8	0.03	0.42	1.64
#8	0.09	0.74	2.33
#8	0.10	0.93	0.55
#8	0.09	0.65	0.41
#8	0.06	0.56	1.35
#8	0.07	0.33	1.54
#8	0.03	0.11	0.60
#8	3.76	0.14	1.67
#8	4.02	0.31	1.58
#8	0.46	0.17	0.09
#9	0.01	0.14	3.23
#9	0.03	0.05	2.73
#9	0.03	0.13	1.97
#9	0.00	0.00	0.04
#1:	0.00	0.00	0.04
#1:	1.00	0.08	1.28
#14	0.00	####	0.11
#14	0.02	0.05	4.86
#14	0.01	0.09	7.12
#14	0.03	0.00	4.03
#14	0.00	0.03	3.12
#14	0.01	0.11	2.59

#14	0.04	0.30	4.52
#14	0.03	0.06	2.50
#14	0.02	0.03	2.00
#14	0.04	0.10	2.25
#14	0.02	0.10	1.77
#14	0.03	0.03	1.96
#14	0.04	0.03	2.06
#14	0.04	0.08	2.01
#14	0.02	0.06	1.58
#14	0.06	0.16	1.37
#14	0.04	0.09	0.93
#14	0.03	0.10	0.85
#14	0.04	0.09	0.61
#14	0.04	0.11	0.07
#14	0.02	0.11	0.05
#14	1.62	0.16	1.06
#14	3.41	0.02	0.86
#14	1.70	0.05	1.57
#14	1.18	0.00	0.69
#14	0.86	0.01	0.37
#18	0.02	0.00	2.79
#18	0.05	0.13	1.74
#18	0.05	0.16	1.39
#18	0.02	0.07	0.06
#18	0.00	####	0.04
#18	1.93	0.47	1.19
#19	0.02	0.09	8.83
#19	0.03	0.04	2.62
#19	0.02	0.08	2.77
#19	0.04	0.03	3.25
#19	0.06	0.15	2.24
#19	0.02	0.01	0.00
#19	0.00	0.00	0.02
#19	1.06	0.06	1.38
#19	0.93	0.03	1.11
#20	0.03	0.10	8.62
#20	0.04	0.06	2.31

#2(	0.01	0.23	1.77
#2(	0.00	0.00	0.00
#2(	0.06	0.22	1.72
#2(	0.02	0.12	0.88
#2(	0.61	0.05	0.56
#2(	3.58	0.20	1.47
#2(	3.05	0.23	1.61
#2:	0.02	0.06	2.31
#2:	0.02	0.10	1.90
#2⁄	1.16	0.06	0.10
#2!	0.02	0.05	5.37
#2!	0.03	0.23	2.84
#2!	0.03	0.23	3.93
#2!	0.03	0.10	2.48
#2!	0.02	0.00	0.02
#2!	0.00	0.64	0.08
#2!	0.00	0.00	0.00
#2€	0.04	0.18	9.27
#2€	0.00	0.00	8.06
#2€	0.04	0.00	7.28
#2€	0.04	0.12	8.44
#2€	0.04	0.11	6.57
#2€	0.01	0.04	4.25
#2€	0.04	0.04	2.75
#2€	0.03	0.10	4.48
#2€	0.04	0.24	4.06
#2€	0.03	0.11	2.61
#2€	0.02	0.16	3.35
#2€	0.01	0.18	5.09
#2€	0.09	0.47	3.87
#2€	0.06	0.43	4.20
#2€	0.06	0.10	2.39
#2€	0.04	0.46	3.10
#2€	0.02	0.05	3.38
#2€	0.04	0.09	1.73
#2€	0.02	0.00	0.00
#2€	0.04	0.47	2.46

#2(	0.00	0.04	0.00
#2(	0.41	0.22	0.77
#2(	1.73	0.05	1.14
#27	0.90	0.19	1.12
#2(	0.01	0.21	9.83
#2(	0.04	0.04	2.39
#3(	0.00	0.11	3.18
#3(	0.00	0.01	3.38
#3(	0.04	0.05	3.16
#3(	0.04	0.10	2.84
#3(	0.03	0.05	1.94
#3(	0.04	0.02	1.18
#3(	0.05	0.03	1.13
#3(	0.01	0.01	0.09
#3(	0.02	0.01	0.14
#3(	0.01	0.02	0.06
#3(	0.03	0.00	0.09
#3(	0.00	0.47	0.05
#3(	0.02	0.04	0.02
#3(	0.88	0.05	1.01
#3(	1.51	0.49	1.33
#3(	3.38	0.04	0.40
#3(	1.00	0.03	0.57

Chromite HDM-SK-1

Grain #	Sample #	MgO (Wt %)	Cr2O3 (Wt %)	TiO2
1	#1	8.45	45.31	0.44
2	#1	11.14	48.20	0.47
3	#4	18.30	29.25	0.03
4	#4	10.44	54.26	2.79
5	#4	16.38	39.47	0.30
6	#4	14.00	48.65	0.88
7	#4	14.24	43.17	0.44
8	#4	13.59	53.35	1.68
9	#4	15.00	58.18	0.23
10	#4	14.78	57.77	0.74
11	#4	13.91	42.82	0.70
12	#4	13.33	49.84	0.41
13	#4	14.12	56.67	0.00
14	#4	8.13	54.67	0.10
15	#4	13.71	59.63	0.05
16	#4	14.98	42.03	0.48
17	#4	14.13	56.49	0.00
18	#4	14.50	57.94	0.07
19	#4	17.93	35.92	0.23
20	#4	14.42	58.43	0.35
21	#4	14.00	55.50	0.10
30	#5	13.30	55.24	0.98
31	#5	12.86	47.46	4.79
32	#5	0.30	0.01	0.00
33	#5	11.22	39.65	0.45
34	#5	6.70	47.80	1.29
35	#5	10.73	46.21	1.04
36	#5	11.21	45.60	0.07
37	#5	6.67	45.85	2.01
38	#5	14.09	45.32	0.25
39	#5	7.36	47.87	0.82
40	#5	16.99	37.48	0.10
42	#5	12.85	43.12	0.10
44	#5	15.85	56.34	0.03

45	#5	12.52	48.43	4.79
46	#8	5.15	41.31	3.08
47	#8	19.71	16.75	0.00
48	#8	18.74	26.13	0.11
49	#8	14.86	58.18	0.59
50	#8	15.04	42.59	0.13
51	#8	18.70	30.34	0.16
52	#8	0.00	0.15	0.00
53	#8	0.03	0.20	0.00
54	#8	9.86	41.83	0.40
55	#8	14.85	42.03	1.65
56	#8	5.96	44.48	1.43
57	#8	12.39	37.85	0.82
58	#8	12.99	39.66	1.57
59	#8	10.51	40.61	0.78
60	#8	11.67	45.47	0.96
61	#8	11.96	43.42	1.01
62	#8	10.87	40.34	1.03
63	#8	6.05	47.08	1.93
64	#8	9.97	40.13	0.78
65	#8	11.43	37.74	0.69
66	#8	14.13	49.88	2.66
67	#8	14.10	52.13	2.87
68	#8	14.19	46.67	3.70
69	#8	13.21	46.27	1.95
70	#8	10.49	34.96	0.98
71	#8	7.68	43.37	1.09
72	#8	13.62	36.42	1.06
73	#8	11.99	36.96	1.04
74	#8	11.56	34.74	0.83
75	#8	12.68	36.23	1.22
76	#8	12.61	46.99	1.49
77	#8	7.36	54.35	0.53
78	#8	8.93	44.73	0.80
79	#8	7.77	39.01	1.33
80	#9	14.63	58.22	0.23
81	#9	14.44	49.47	3.40

82	#9	14.89	58.10	0.06
83	#9	13.54	41.90	0.06
84	#9	13.42	52.90	0.18
85	#9	9.84	36.13	0.60
87	#13	14.26	58.08	0.07
88	#13	12.99	49.08	4.37
89	#13	11.96	48.90	2.45
90	#13	12.93	47.12	1.32
91	#13	14.66	59.19	0.42
92	#13	14.24	58.94	0.13
93	#14	0.02	0.01	0.53
102	#14	12.99	49.77	4.05
103	#14	13.17	48.89	3.86
104	#14	13.30	49.98	3.72
105	#14	13.03	48.73	4.57
106	#14	17.06	34.96	0.01
107	#14	2.36	0.14	7.63
108	#14	14.12	40.24	0.05
109	#14	5.38	38.76	1.81
110	#14	15.68	36.49	0.11
111	#14	11.47	46.74	1.23
112	#14	8.21	48.03	0.69
113	#14	13.29	46.01	0.39
114	#14	12.76	42.33	0.77
115	#14	15.65	38.95	0.03
116	#14	16.29	29.70	0.12
117	#14	13.25	51.22	3.99
123	#18	13.14	49.53	4.59
124	#18	7.14	44.54	1.32
125	#18	9.61	47.90	0.52
126	#18	14.46	47.94	0.41
127	#18	13.37	50.23	4.11
128	#18	18.42	27.19	0.07
129	#18	20.27	14.54	0.05
130	#18	14.80	45.09	0.24
136	#19	16.07	36.35	0.34
138	#19	1.10	0.03	5.97

140	#19	11.14	51.05	0.86
141	#19	18.43	28.64	0.13
142	#19	15.15	43.18	0.08
143	#19	19.47	24.24	0.00
144	#19	15.56	33.74	0.01
145	#19	19.23	24.01	0.08
151	#20	13.30	50.94	3.97
152	#20	14.74	58.16	0.29
153	#20	14.72	46.21	0.33
155	#20	20.11	15.48	0.04
156	#20	19.29	25.46	0.21
157	#20	16.93	27.52	0.13
158	#20	14.56	50.30	0.42
159	#20	7.47	50.05	1.94
163	#21	0.83	0.16	7.74
164	#21	0.14	0.10	9.60
165	#21	1.54	0.16	6.33
166	#21	1.41	0.12	6.25
168	#21	18.16	29.73	0.23
173	#22	13.55	47.88	4.80
174	#22	17.69	29.41	0.30
175	#22	16.93	40.21	0.57
176	#22	13.48	53.18	2.28
177	#22	15.12	48.07	0.37
178	#23	9.01	57.10	0.08
179	#24	8.83	53.43	0.25
183	#25	10.08	43.83	0.74
184	#25	13.71	62.58	0.36
185	#25	12.06	40.56	0.85
186	#25	0.49	0.04	0.00
187	#25	14.15	58.45	0.37
188	#25	14.09	58.70	0.10
189	#25	7.75	43.11	1.36
190	#26	17.59	32.65	0.11
191	#26	13.89	56.02	0.18
193	#26	19.77	16.38	0.15
194	#26	13.51	52.35	0.62

195	#26	14.41	59.16	0.13
196	#26	14.44	59.54	0.00
197	#26	13.12	54.86	1.41
198	#26	14.99	58.02	0.38
199	#26	14.09	57.85	0.31
200	#26	14.82	58.57	0.08
201	#26	13.82	49.39	0.11
202	#26	11.44	52.29	1.80
203	#26	14.64	59.53	0.21
204	#26	14.28	58.04	0.18
205	#26	14.59	56.76	0.07
206	#26	12.80	49.04	0.75
207	#26	14.56	58.84	0.36
208	#26	14.23	60.84	0.34
209	#26	13.46	52.14	2.61
210	#26	4.39	0.06	0.13
211	#29	0.03	0.00	0.00
213	#29	2.26	0.17	7.48
214	#29	2.47	0.08	7.63
215	#29	2.38	0.11	7.76
216	#29	14.51	57.99	0.64
217	#29	10.57	40.45	3.62
218	#29	14.30	59.68	0.12
219	#29	12.97	38.76	0.22
220	#29	15.75	34.08	0.19
221	#29	13.18	57.20	0.49
222	#29	15.22	35.49	0.14
231	#30	14.87	59.41	0.15
232	#30	11.73	48.81	4.12
233	#30	13.26	32.68	3.41
234	#30	11.41	49.53	4.03
235	#30	12.72	48.34	4.67
236	#30	13.02	49.11	4.52
237	#30	12.53	49.44	4.36
238	#30	11.76	48.36	4.13
239	#30	2.64	0.08	7.45
240	#30	2.28	0.13	7.57

241	#30	6.84	52.17	0.69
242	#30	11.09	44.00	1.25
243	#30	2.51	0.09	7.64
245	#30	2.48	0.14	7.51
246	#30	10.26	39.37	0.93
247	#30	15.64	42.00	0.05
248	#30	6.24	43.89	1.53
249	#30	5.51	39.38	2.02
250	#30	6.69	45.74	0.61

9.00 STATEMENT OF QUALIFICATIONS

1) MALCOLM E. McCALLUM

I, Malcolm E. McCallum, a U.S. citizen and consulting geologist, do hereby certify that:

1. I am a Professor Emeritus of Geology and Research Geologist at Colorado State University, Fort Collins, CO., where I was involved from 1962 through 1995 in minerals exploration related teaching and research. I served as thesis advisor for more than 60 graduate students, and am currently directing the research of two additional students.

2. I retired from the teaching faculty of Colorado State in 1995 to devote more time to minerals exploration consulting, but am still affiliated with the University as a senior research scientist.

3. I am a co-founder of HDM Laboratories Inc. (1302 East First Street, Loveland, CO., 80537) which specializes in diamond and gold exploration sample processing and evaluation.

4. I am a graduate of Middlebury College, The University of Tennessee, and The University of Wyoming with a A.B., M.S., and Ph.D. respectively in Geology.

5. I am a fellow of the Geological Society of America, the Mineralogical Society of America and the Association of Exploration Geochemists, and am a member of the Society of Economic Geologists, the Mineralogical Association of Canada, and the Geochemical Society.

6. I was employed as a part time (WAE) field research geologist with the U.S. Geological Survey from 1956 through 1984, with an emphasis on minerals evaluation of Precambrian crystalline rocks.

7. I have been a part time consulting geologist for mineral exploration companies since 1985, and have practiced in the United States, Canada, South America, Africa and Europe.

8. I have been involved in kimberlite and diamond related research and exploration since 1964, and was a major participant in the discovery of a number of diamondiferous kimberlites in Colorado, Wyoming, Venezuela, Canada, and South Africa.

1302 First Street
Loveland, CO 80537

Malcolm E. McCallum

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5539000mN
5538000mN
5537000mN
5536000mN
5535000mN
639000mE
640000mE
641000mE
642000mE
643000mE
644000mE
645000mE
646000mE
647000mE
648000mE
ELK RIVER
ELK RIVER
ELKFORD
KIMBERLITE DYKES
LEGEND
– GEOLOGY –
6 JURASSIC
FERNIE GROUP: grey, brownish grey, and black shale, siltstone and sandstone; limestone; glauconitic sandstone and shale.
5 TRIASSIC
SPRAY RIVER FORMATION: dark grey silty shale, siltstone, and shale; light grey dolomitic or sideritic argillaceous siltstone.
4 PENNSYLVANIAN AND PERMIAN
ROCKY MOUNTAIN FORMATION: light grey quartzitic, dolomitic, and calcareous sandstone; dark grey sandstone; dolomite; cherty dolomite; chert.
3 MISSISSIPPIAN
RUNDLE GROUP (15–17)
ETHERINGTON FORMATION: light grey limestone, cherty limestone, and calcarenitic limestone; dolomite; cherty dolomite; green and red shale; siltstone; breccia; anhydrite.
Thrust Fault
Geological Contact
– AIRBORNE (DIGEM) GEOPHYSICS –
ElectroMagnetic Anomalies
Resistivity Anomalies
– HEAVY MINERAL STREAM SAMPLING –
Sample Site
Kimberlite indicator mineral anomalous sample including G9 Pyrope Garnets
1999 Heavy Mineral Stream Sample Site
0 1 2
kilometres
SKEENA
Resources Limited
GEOLOGICAL SURVEY BRANCH
26,343
ICE PROPERTY
GEOLOGY, GEOPHYSICS & HEAVY MINERAL SAMPLING
Scale: 1:20,000
Revised by P. Osmond
Map Reference: 82J005, 82J006, 82G096