83-#612.-11666

Geochemical and Geological Report

on the

J&L Claims

Similkameen Mining Division

NTS 92 H 10 W

120° 53'W, 49° 30'N

Owner: Richard Chapman

Operator: D.K. Platinum Corporation

Consultant: VLH Consultants Ltd.

Author: V. Ryback-Hardy, P.Eng.

September 30, 1983

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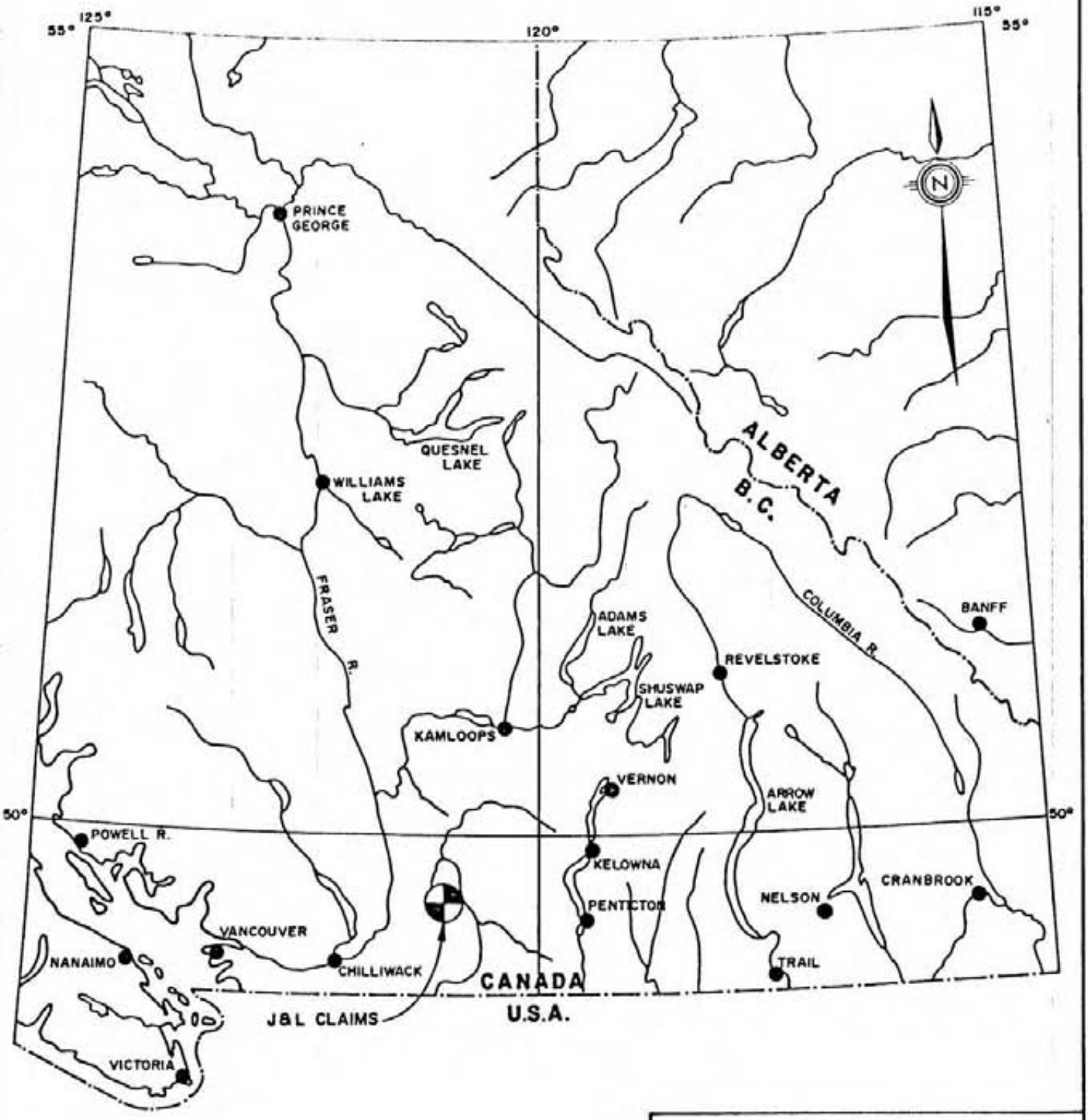


D.K. PLATINUM CORPORATION

LOCATION MAP

J&L CLAIMS
SIMILKAMEEN MINING DIVISION
BRITISH COLUMBIA

Date: July, 1983	Scale: 1" = 64 miles
Dwn. By: T.P.Quinn	Dwg. No.: 302-1

INTRODUCTION

The property is located in south-central British Columbia about 10 km west-southwest of the village of Tulameen and approximately 25 km west northwest of Princeton. The mineral claims extend southward from the Tulameen River up the north and west slope of Olivine Mountain. Slopes are generally steep though not precipitous. Elevations vary from about 1700 metres a.s.l. at the southeast end of the property to less than 920 metres along the Tulameen River (northwest corner of the property).

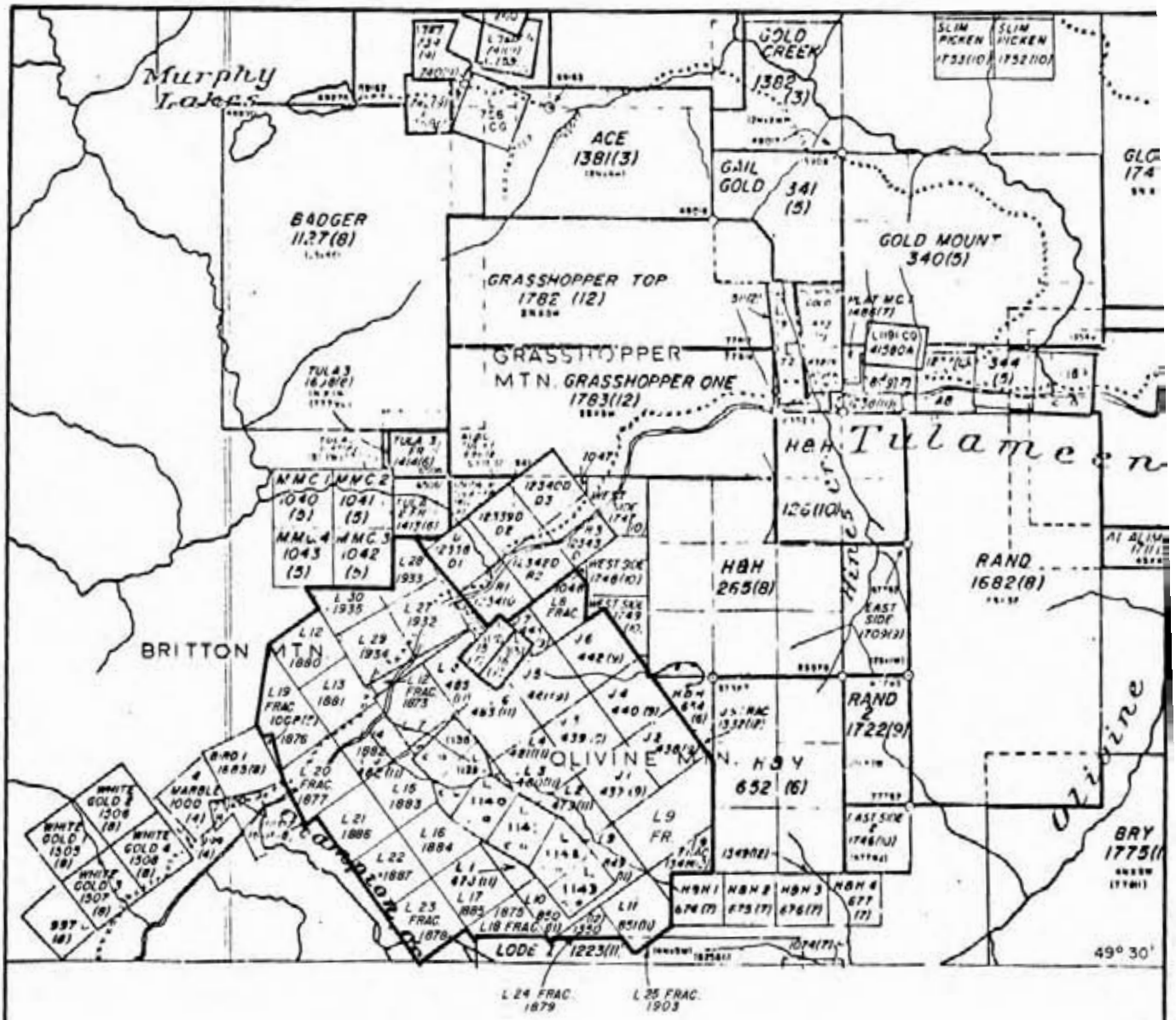
(i) Access

The property is reached by taking the Tulameen River road west from Princeton for about 25 km to the village of Tulameen. From there an unimproved gravel road continues west along the north side of the Tulameen River to Hines Creek, a distance of 12 km. A bridge (now unusable, except on foot or by motorcycle) crosses the Tulameen River near Hines Creek and a narrow jeep road climbs the north slope of Olivine Mountain to within 1/2 km of the eastern edge of the claims.

(ii) Property Definition

The mineral property consists of the following listed two-post claims and fractional claims:

Claim Name	Record Number	Record Date	Expiry Year
J1	437	Sept. 29, 1978	1983
J2	438	Sept. 29, 1978	1983
J3	439	Sept. 29, 1978	1983
J4	440	Sept. 29, 1978	1983
J5	441	Sept. 29, 1978	1983
J6	442	Sept. 29, 1978	1983
L1	478	Nov. 15, 1978	1983
L2	479	Nov. 15, 1978	1983
L3	480	Nov. 15, 1978	1983
L4	481	Nov. 15, 1978	1983
L5	482	Nov. 15, 1978	1983
L6	483	Nov. 15, 1978	1983
L7	484	Nov. 15, 1978	1983
L8	485	Nov. 15, 1978	1983
L9	849	Nov. 13, 1978	1983
L10	850	Nov. 13, 1978	1983
L11	851	Nov. 13, 1978	1983
L8 Fr	1347	Dec. 29, 1980	1984
L9 Fr	1348	Dec. 29, 1980	1984
L10 Fr	1349	Dec. 29, 1980	1984
L11 Fr	1350	Dec. 29, 1980	1984
L12 Fr	1873	Apr. 11, 1983	1984
L13 Fr	1874	Apr. 11, 1983	1984
L18 Fr	1875	Apr. 11, 1983	1984
L19 Fr	1876	Apr. 11, 1983	1984
L20 Fr	1877	Apr. 11, 1983	1984
L23 Fr	1878	Apr. 11, 1983	1984
L24 Fr	1879	Apr. 11, 1983	1984
L12	1880	Apr. 11, 1983	1984
L13	1881	Apr. 11, 1983	1984
L14	1882	Apr. 11, 1983	1984
L15	1883	Apr. 11, 1983	1984
L16	1884	Apr. 11, 1983	1984
L17	1885	Apr. 11, 1983	1984
L21	1886	Apr. 11, 1983	1984



DK PLATINUM CORPORATION

TULAMEEN AREA

SIMILKAMEEN MINING DIVISION, B.C.

CLAIM LOCATION MAP

KILOMETRES

0 0.5 1 1.5 2

VLH CONSULTANTS LTD.

L22	1887	Apr. 11, 1983	1984
L25 Fr	1903	May 16, 1983	1984
L26 Fr	1904	May 16, 1983	1984
L27	1932	June 13, 1983	1984
L28	1933	June 13, 1983	1984
L29	1934	June 13, 1983	1984
L30	1935	June 13, 1983	1984

Upon acceptance of this assessment report, all claims will be in good standing until 1986.

(iii) History

Platinum has been known to occur in placers along the Tulameen River for more than 100 years and from 1885 to 1910 approximately 10,000 ounces were produced. Intermittent small scale production has continued over the years but has never been a paying proposition.

It was recognized in the early years that the source of the placer platinum was the ultrabasic rocks and some prospecting was carried out for lode deposits.

The first recorded work on the ground now covered by the J and L claims was done in 1969 when it was known as the Tina-Cathy property. Consteel Explorations Ltd. carried out line cutting, geological mapping and a ground magnetic survey.

The ground has been held more or less continuously since the mid 1970's however only minor prospecting and trenching has been performed.

In May and June, 1983 reconnaissance geological mapping as well as geochemical soil sampling was carried out by D.K. Platinum Corporation.

(iv) Current Ownership

The claims are currently owned by Richard Chapman and Leslie Chapman of Penticton, B.C. The claims are presently under option to D.K. Platinum Corporation of Vancouver, B.C. who are the operators for the property.

(v) Economic Evaluation

The geochemical results indicate anomalous values of platinum and gold in soils. Platinum is found in minor amounts in several of the phases of ultrabasic rocks but is most concentrated in the dunite, particularly in chromite rich zones or areas of serpentinization. Platinum mineralization has been noted at several places on the subject property and while values are not high, the nature of the mineralization is such that there is a possibility of developing large tonnages of material which might be mined by low cost, mass mining methods. Further geochemical sampling, mapping, trenching,

and drilling will be required to fully test the potential of this property.

During the period of June 8 to 21, 1983 a preliminary program consisting of geochemical soil sampling (145 samples), rock chip sampling (63 samples) and geological mapping was conducted over portions of the J and L mineral claims.

Approximately 7.0 line kilometres of grid was established on the property. Due to the high magnetic suceptibility of the underlying rock, compass readings can be inaccurate, therefore the grid lines were run by setting range pickets (line of sight) along cut lines. Distances were measured by a hip chain.

Detailed Technical Data and Interpretation

The soils were collected from the B horizon at an average depth of 0.3 metres. The soils were air dried and shipped to Min-En Laboratories Ltd., Vanouver, where they were seived and the -80 mesh fraction was analyzed for nickel, chromium, gold, platinum and palladium, by atomic absorption techniques. Precious metal values were "finished" by fire assay.

A statistical study of the sample results was conducted and the following parameters were indicated.

	Ni (ppm)	Cr (ppm)	Au (ppb)	Pt (ppb)
Mean (u)	270	159	49	237
Standard Deviation (d)	147	121	136	145
Weakly Anomalous (u+d)	417	280	185	381
Moderately Anomalous (u+2d)	564	401	321	527
Strongly Anomalous (u+3d)	711	522	457	672

Note: Palladium values were invariably low and were not plotted.

The geochemical results were plotted and contoured using the above parameters and the following observations were made.

1) Only about one-quarter of the property was covered by the geochemical grid. it is imperative that the remainder of the property be covered by a geochemical survey to delineate several anomalous areas having high geochemical values in gold and platinum.

2) The background values for both platinum and gold are abnormally high, indicating a strong and widespread mineralizing system present in the area.

3) Although previous geological reports state that platinum values occur in the chromite, the present geochemical

results indicate that platinum may occur independent of the chronite. It is difficult to correlate chromium anomalies to platinum anomalies in soils due to the different physical and chemical properties of chromite and platinum. These differences result in different dispersion characteristics of the metals, even though the metals may occur together in the underlying rocks. In addition, chromite is highly resistant to physical abrasion and may occur as particles larger than -80 mesh in the soils. This would result in a loss of chromite during standard seiving operations. Platinum may be locked within these chromite grains and seiving may result in a loss of platinum as well. All further geochemical soil samples should be pulped (ground) to -100 mesh and then analyzed.

4) A platinum anomalous zone occurs near the central portion of J1, J10, and extends into L9 Fr. The anomaly trends southeast and is about 400 metres long and is open to the southeast. The anomaly is up to 200 metres wide. This area presents a high priority target for further evaluation consisting of fill-in geochemical sampling, trenching and drilling. A one station high (925 ppb Pt) occurs near the south limit of J10 and may be associated with the above anomaly. A high reading (1140 ppb Pt) occurs at 200 S 8 W on what may be L. 1138. (The exact position of these old crown grants is somewhat in doubt.)

5) Three zones highly anomalous in geochemical gold have been partially delineated on the property. The first zone is located near the northeast edge of the property near the common boundary of J4 and J2. The high values, although somewhat sporadic, occur both in soils and in the underlying rock. This anomalous zone requires further delineation to the northwest. The second zone occurs near the central portion of J10 and appears to extend into L9 Fr. This anomalous zone trends southeast and is partially coincident with a platinum anomaly discussed previously. The highest gold value in rock samples occurs at line 2+00 N 1+50 W and appears to be on trend to northwest of the soil anomaly on line 0+00N 1+50 to 2+00 W. The third zone is located near the southeast edge of L9. The highest value in soils (1237 ppb) occurs in this area (line 0+00 N. Stn. 5+50 W.) This anomaly requires further delineation to the southeast.

The soil sampling survey, although limited in extent, has partially delineated several areas highly anomalous in platinum and gold. These areas warrant follow-up work to completely delineate the anomalies. Areas showing high values in gold and platinum should be geologically examined in detail with a view to conducting surface trenching and sampling as soon as possible. In addition, all future geochemical soil

samples should be ground to -100 mesh and not seived. Drill targets should be identified contingent on the results of the trenching and geochemical work.

Respectfully submitted,

Victor Ryback-Hardy

V. Ryback-Hardy, P.Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
V. P. RYBACK-HARDY

STATEMENT OF QUALIFICATIONS

I, Victor Ryback-Hardy, 11691 Trumpeter Drive, Richmond, B.C., V7E 3X4, do hereby declare that:

1. I am a graduate of the University of British Columbia with a degree in Geological Engineering, BASc, 1970.

2. I am a registered Professional Engineer (Geological) in the province of British Columbia (Reg. No. 8825).

3. I have practiced my profession since 1972.

4. The work covered by this report was conducted under my direct supervision during June 8-21, 1983.

Victor Ryback-Hardy

Victor Ryback-Hardy, P.Eng.

ITEMIZED COST STATEMENT

Wages June 8-21, 1983

	No. of Days	Rate	Total
H. McFarlane	12	$133	$1,596.00
R. Tilden	12	100	1,200.00
J. Travis	12	113	1,130.00
J. Ziegler	14	173	2,422.00
V. Hardy	1	327	327.00
D. Nelles	0.5	133	66.50

Total Wages		$ 6,741.50
Consumable Field Supplies		150.00
Food and Accommodation June 8-21 50 man-days @ $40/man-day		2,000.00
Transportation and Fuel		391.00
Vehicle Rentals		1,010.00
Assays		4,329,05
Petrographic Work		1,916.00
Report Preparation (Professional Fee)		900.00
Typing and Blueprinting		200.00
Drafting		823.08
	TOTAL	$18,460.63

APPENDIX 1

GEOCHEMICAL LABORATORY PROCEDURES

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2-Air flame combination but the Molybdenum determination is carried out by C_2H_2-N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzit method using Ag $CS_2N(C_2H_5)_2$ as a reagent. The detection limit obtained is 1.2 ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

CHROMIUM ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

2.000 gram soil of minus 20 mesh is digested in beakers with the mixture of $HClO_4$-HNO_3 and HF for several hours. The samples are then taken to almost dryness and cooled.

15 ml of HCl is added and brought to a boil.

After cooling samples the volumes are made up to 50 ml and the solutions are analysed by Atomic Absorption Spectrophotometers using Acetylene-Nitrous Oxide flame.

Using a suitable range of 12 standards a graph is obtained and than samples are calculated from this graph.

PHONE 980-5814

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Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURES REPORT FOR ASSESSMENT WORK - PLATINUM, PALLADIUM, AND GOLD

Geochemical samples received for Platinum, Palladium, and Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver employing the following procedures.

After samples are prepared for analysis (grounded or sieved) a 30 gram subsample is weighed into crucibles and fluxed with Litharge and suitable flux material fire assayed down to the bead stage.

Then the bead is dissolved by Aqua Regia.

After cooling the sample solutions to room temperature they are made up to suitable volumes.

The solutions are analysed by computer operated Jarrell Ash 9000. Inductively Coupled Plasma Analyser.

Reports are given by the computer in parts per billion after the instrument is standardized with a suitable suite of standards.

APPENDIX II

GEOCHEMICAL RESULTS

PROJECT No.: 002

AREA Tylameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1983

COLLECTOR: R. Tilden

Sample Number	Date D	Date M	X West East	Y South North	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope	Rock	R. Sample	Min. +	Min. -	Bio -	Bio - Species	Bio from	Lab ev	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	Line 16	Station 22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66		68	69	71	74	77	80
5000			0N	835W			2	2	1	1	1	42				.2													
5001			0N	800W			2	2	1	1	1	42				.2													
5002			0N	750W			2	2	1	1	1	42				.1													
5003			0N	700W			2	2	1	1	1	25				.3													
5004			0N	650W			2	2	1	1	1	42				.1													
5005			0N	600W			2	2	1	1	1	42				.1													
5006			0N	550W			2	2	1	1	1	42				.1													
5007			0N	500W			2	2	1	1	1	42				.1													
5008			0N	450W			2	2	1	1	1	52				.1													
5009			0N	400W			2	2	1	1	1	52				.2													
5010			0N	350W			2	2	1	1	1	2				.2													
5011			0N	300W			2	2	1	1	1	24				.2													
5012			0N	250W			2	2	1	1	1	25				.1													
5013			0N	200W			2	2	1	1	1	24				.2													
5014			0N	150W			2	2	1	1	1	5				.1													
5015			0N	100W			2	2	1	1	1	5				.1													
5016			0N	50W			2	2	1	1	1	25				.2													
5017			2N	50W			2	2	1	1	1	24				.1													
5018			2N	100W			2	2	1	1	1	24				.1													
5019			2N	150W			2	2	1	1	1	25				.1													
5020			2N	200W			2	2	1	1	1	25				.1													
5021			2N	250W			2	2	1.5	1	1	23				.1													
5022			2N	300W			2	2	1.5	1	1	25				.1													
5023			2N	350W			2	2	1	1	1	23				.1													
5024			2N	400W			2	2	1.5	1	1	24				.2													
5025			2N	450W			2	2	1	1	1	2				.2													
5026			2N	500W			2	2	1	1	1	2				.3													
5027			2N	550W			2	2	1.5	1	1	24				.1													
5028			2N	600W			2	2	1	1	1	2				.1													
5029			2N	650W			2	2	1	1	1	24				.3													

PROJECT No.: 002

AREA Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST. NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1983

COLLECTOR: R. Tilden

Sample Number	Date D	Date M	X West East Line	Y South North Station	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope	Rock	R. Sample	Min. +	Bio -	Bio - Species	Bio from	Lab ev	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	16	22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66	68	69	71	74	77	80
5030			2N	700W			2	2	1	1	1	25	:			.2												
5031			2N	750W			2	2	1	1	1	25	:			.3												
5032			0N	50E			2	2	15	1	1	25	:			.1												
5033			0N	100E			2	2	15	1	1	25	:			.1												
5034			0N	150E			2	2	15	1	1	25	:			.2												
5035			0N	BL			2	2	15	1	1	2	:			.2												
5036			BL	50N			2	2	1	1	1	24	:			.3												
5037			BL	100N			2	2	15	1	1	24	:			.3												
5038			BL	150N			2	2	15	1	1	52	:			.3												
5039			BL	200N			2	2	51	1	1	52	:			.2												
5040			BL	250N			2	2	15	1	1	24	:			.1												
5041			BL	300N			2	2	15	1	1	24	:			.1												
5042			BL	350N			2	2	1	1	1	54	:			.2												
5050			GN	400W			2	2	2	1	1	2	:			.1												
5051			GN	350W			2	2	51	1	1	2	:			.1												
5052			GN	300W			2	2	2	1	1	24	:			.1												
5053			GN	250W			2	2	5	1	1	2	:			.1												
5054			GN	200W			2	2	15	1	1	24	:			.1												
5055			GN	150W			2	2	5	1	1	2	:			.1												
5056			GN	100W			2	2	5	1	1	2	:			.1												
5057			GN	50W			2	2	5	1	1	2	:			.1												
5060													:			:												
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PROJECT No.: 002

AREA Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1983

COLLECTOR: J. Travis

Sample Number (1–6)	Date D (7–8)	Date M (9–10)	X West East	Line (11–16)	Y South North	Station (17–22)	Photo Number (23–29)	Map Number (30–36)	Type (37)	Charact. (38)	Texture (39–41)	Origin (42–44)	Horizon (45–46)	Color (47–48)	pH (49–50)	Eh (51–54)	Width (55–56)	Depth (57–58)	Velocity (59)	Slope (60–62)	Rock R. Sample (63–64)	Min. +/− (65)	Bio - (66)	Bio - Species (67–68)	Bio from (69)	Lab ev. (70–71)	Field ev. (72–74)	X Cu ppm (75–77)	X H.M ppm (78–80)
6000			4N		7.50W				2	2	5	1	1	2	:			.1											
6001			4N		7.00W				2	2	5	1	1	2	:			.1											
6002			4N		6.50W				2	2	54	1	1	23	:			.1											
6003			4N		6.00W				2	2	5	1	1	2	:			.1											
6004			4N		5.50W				2	2	54	1	1	2	:			.1											
6005			4N		5.00W				2	2	2	1	1	2	:			.1											
6006			4N		4.50W				2	2	24	1	1	2	:			.1											
6007			4N		4.00W				2	2	5	1	1	2	:			.2											
6008			4N		3.50W				2	2	5	1	1	2	:			.1											
6009			4N		3.00W				2	2	21	1	1	2	:			.1											
6010			4N		2.50W				2	2	5	1	1	2	:			.1											
6011			4N		2.00W				2	2	5	1	1	21	:			.1											
6012			4N		1.50W				2	2	2	1	1	2	:			.1											
6013			4N		1.00W				2	2	5	1	1	2	:			.1											
6014			4N		50W				2	2	5	1	1	2	:			.1											
6015			4E		6.00N				2	2	5	1	1	2	:			.1											
6016			4E		6.50N				2	2	2	1	1	2	:			.1											
6017			4E		7.00N				2	2	5	1	1	2	:			.1											
6018			4E		7.50N				2	2	5	1	1	21	:			.2											
6019			4E		8.00N				2	2	5	1	1	21	:			.1											
6020			8N		3.50E				2	2	5	1	1	21	:			.1											
6021			8N		3.00E				2	2	5	1	1	21	:			.1											
6022			8N		2.50E		NO SAMPLE				SLIDE				:			:											
6023			8N		2.00E				2	2	5	1	1	13	:			.1											
6024			8N		1.50E				2	2	5	1	1	2	:			.2											
6025			8N		1.00E				2	2	5	1	1	21	:			.1											
6026			8N		50E				2	2	5	1	1	23	:			.1											
6027			8N		000				2	2	5	1	1	24	:			.1											
6028			2S		1.00W				2	2	5	1	1	32	:			.1											
6029			2S		9.50W				2	2	2	1	1	2	:			.1											

PROJECT No.: 002

AREA Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1983

COLLECTOR J. Travis

Sample Number	Date D	Date M	X West East (Line)	Y South North (Station)	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope	Rock	R. Sample	Min. +	Bio -	Bio - Species	Bio from	Lab ev.	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	16	22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66	68	69	71	74	77	80
6030			2S	900W			2	2	2	1	1	2				:1												
6031			2S	850W	NO SAMPLE				HUMUS																			
6032			2S	800W			2	2	5	1	1	3				:1												
6033			2S	750W			2	2	5	1	1	2				:1												
6034			2S	700W			2	2	5	1	1	2				:2												
6035			2S	650W	NO SAMPLE				ROCKS & HUMUS						NO	SOIL												
6036			2S	600W			2	2	2	1	1	2				:1												
6037			2S	550W			2	2	5	1	1	23				:1												
6038			2S	500W			2	2	2	1	1	23				:1												
6039			2S	450W			2	2	5	1	1	2				:1												
6040			2S	400W			2	2	5	1	1	2				:1												
6041			2S	350W			2	2	2	1	1	2				:1												
6042			2S	300W			2	2	5	1	1	23				:2												
6043			2S	250W			2	2	5	1	1	2				:1												

PROJECT #: 002

AREA Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1983

COLLECTOR: Zig

Sample Number (1–6)	Date D (7–8)	Date M (9–10)	X West East / Line (11–16)	Y South North / Station (17–22)	Photo Number (23–29)	Map Number (30–36)	Type (37)	Charact. (38)	Texture (39–41)	Origin (42–44)	Horizon (45–46)	Color (47–48)	pH (49–50)	Eh (51–54)	Width (55–56)	Depth (57–58)	Velocity (59)	Slope I+ (60–62)	Rock (63)	R. Sample (64)	Min. +/− (65)	Bio - (66)	Bio - Species (67–68)	Bio from (69)	Lab ev. (70–71)	Field ev. (72–74)	X Cu ppm (75–77)	X H.M ppm (78–80)
7000			4N	500E			2	2	5	1	1	2	:			:1												
7001			4N	450E			2	2	53	12	2	52	:			:1												
7002			4N	400E			2	2	51	12	1	2	:			:2												
7003			4N	350E			2	2	53	21	1	2	:			:1												
7004			4N	300E			2	2	54	12	1	2	:			:1												
7005			4N	250E			2	2	42	1	1	2	:			:1												
7006			4N	200E			2	2	24	1	1	2	:			:2												
7007			4N	150E			2	2	54	1	1	2	:			:2												
7008			4N	100E			2	2	42	1	1	42	:			:2												
7009			4N	50E			2	2	54	1	1	2	:			:1												
7010			4N	000BL			2	2	5	12	1	2	:			:1												
7011			BL	450N			2	2	4	1	1	2	:			:1												
7012			BL	500N			2	2	54	1	1	2	:			:1												
7013			BL	550N			2	2	54	1	1	24	:			:1												
7014			BL	600N			2	2	54	1	1	2	:			:1												
7015			6N	50E			2	2	54	1	1	2	:			:1												
7016			6N	100E			2	2	54	1	1	25	:			:2												
7017			6N	150E			2	2	54	1	1	23	:			:2												
7018			6N	200E			2	2	54	1	1	2	:			:1												
7019			6N	250E			2	2	54	1	1	2	:			:2												
7020			6N	300E			2	2	54	1	1	2	:			:1												
7021			6N	350E			2	2	54	1	1	2	:			:2												
7022			6N	400E			2	2	54	1	1	2	:			:1												
7023			6N	450E			2	2	54	1	1	2	:			:2												
7024			6N	500E			2	2	54	1	1	42	:			:1												
7025			BL	650N			2	2	54	1	1	2	:			:2												
7026			BL	700N			2	2	54	1	1	2	:			:2												
7100			8W	150S			2	2	52	2	1	3	:			:1												
7101			8W	100S			2	2	52	2	1	3	:			:3												
7102			8W	50S			2	2	25	1	1	23	:			:2												

PROJECT NO.: 002

AREA Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

F No.:

YEAR: 1983

COLLECTOR: Zig

Sample Number (1–6)	Date D M (7–10)	X West East Line (16)	Y South North Station (22)	Photo Number (29)	Map Number (36)	Type (37)	Charact. (38)	Texture (41)	Origin (44)	Horizon (46)	Color (48)	pH (50)	Eh (54)	Width (56)	Depth (58)	Velocity (59)	Slope + (62)	Rock (63)	R. Sample (64)	Min. + (65)	Bio - (66)	Bio - Species (68)	Bio from (69)	Lab ev. (71)	Field ev. (74)	X Cu ppm (77)	X H.M ppm (80)
7103		NBL	800W			2	2	25	1	1	23				.1												
7104		NBL	750W			2	2	24	1	1	2				.3												
7105		NBL	700W			2	2	54	1	1	2				.4												
7106		NBL	650W			2	2	54	1	1	23				.3												
7107		NBL	600W			2	2	52	1	1	3				.2												
7108		NBL	550W			2	2	54	1	1	2				.4												
7109		NBL	500W			2	2	45	1	1	2				.1												
7110		NBL	450W			2	2	45	1	1	23				.1												
7111		NBL	400W			2	2	45	1	1	23				.1												
—		NBL	350W	NO	SAMPLE			ON	CLIFF																		
7112		NBL	300W			2	3	54	1	1	2				.1												
—		NBL	250W	NO	SAMPLE			HUMUS																			
7113		NBL	200W			2	3	3	1	3	5				.3												
~~7114~~		NBL	150W	NO	SAMPLE			SWAMP																			
—		NBL	100W	"	"			"																			
7114		NBL	50W			2	2	54	1	1	23				.1												
7115		NBL	000			2	2	54	1	1	23				.1												

PROJECT: 002

AREA: Tulameen

3 of 3

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FILE No.:

YEAR: 1985

COLLECTOR: JSF

Sample Number	Date D	Date M	X West East (m) Line	Y South North (m) Station	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope +	Rock	R. Sample	Min. + −	Bio −	Bio - Species	Bio from	Lab ev	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	16	22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66	68	69	71	74	77	80
100CON/1	1	6	600E	300N	1,900														✓	✓								
ET/1	1	6	400E	400N	810														✓	✓								
2	1	6			900														✓	✓								
3	1	6			975														✓	✓								
4a	1	6			1020														✓	✓								
4b	1	6			1020														✓	✓								
100W/1	1	8	1000W	50S															✓	✓								
2	1	8		150															✓	✓								
3																												
200S/1	1	8	200W	~~1000~~	715														✓	✓								
2	1	8		~~1000~~	650														✓	✓								
3	1	8		~~1000~~	450														✓	✓								

PROJECT: 002

AREA: Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST. NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

FI. No.:

YEAR: 1983

COLLECTOR: HSM

Sample Number	Date D	Date M	X West East / Line	Y South North / Station	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope +	Rock	R. Sample	Min. +	Min. −	Bio -	Bio - Species	Bio from	Lab. ev	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	16	22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66	68	69	71	74	77	80	
20CN/8	12	06	W	225	N	200													√	√									
9	12	06		550		200													√	√									
10	12	06		710		130													√	√									
40CN/1	13	06	W	40	N	400													√	√									
2	13	06		120															√	√									
3	13	06		190															√	√									
4	13	06		250															√	√									
5	13	06		365															√	√									
6	13	06		680															√	√									
7	13	06	E	65															√	√									
8	13	06		125															√	√									
9	13	06		300															√	√									
10	13	06		400															√	√									
11	13	06		500															√	√									
60CN/1	13	06	W	100	N	600													√	√									
2	13	06		250															√	√									
3	13	06		400															√	√									
4	14	06	E	50															√	√									
5A	14	06		125															√	√									
5B	14	06		125															√	√									
6	14	06		225															√	√									
7	14	06		310															√	√									
80CN/1	16	06	E	275	N	800													√	√									
2	16	06		170															√	√									
3	16	06		60															√	√									
4	16	06		0															√	√									

PROJECT: 002

AREA: Tulameen

GEOCHEMICAL SAMPLE DATA SHEET

MIN-EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

1 of 3

No.:

YEAR: 1995

COLLECTOR: HSM

Sample Number	Date D	Date M	X West/East Line M	Y South/North Station M	Photo Number	Map Number	Type	Charact.	Texture	Origin	Horizon	Color	pH	Eh	Width	Depth	Velocity	Slope ±	Rock	R. Sample	Min. +	Bio -	Bio - Species	Bio from	Lab ev	Field ev.	X Cu ppm	X H.M ppm
1 6	7 8	10	16	22	29	36	37	38	41	44	46	48	50	54	56	58	59	62	63	64	65	66	68	69	71	74	77	80
B/1	1.1	06		S 110																✓								
2	1.1	06		S 70																✓								
3	1.2	06		N 100																✓								
4	1.2	06		250																✓								
5	1.2	06		375																✓								
6	1.3	06		460																✓								
7	1.3	06		600																✓								
8	1.4	06		650																✓								
9	1.4	06		700																✓								
CN/1	1.1	06	E 85	N 0																✓								
2	1.1	06	E 168																	✓								
3	1.1	06	W 92																	✓								
4	1.1	06	204																	✓								
5	1.1	06	310																	✓								
6	1.2	06	350																	✓								
7	1.2	06	417																	✓								
8	1.2	06	515																	✓								
9a	1.2	06	650																	✓								
9b	1.2	06	650																	✓								
9c	1.2	06	650																	✓								
10	1.2	06	840																	✓								
200N/1	1.1	06	E 0	N 200																✓								
2	1.1	06	32																	✓								
3	1.1	06	64																	✓								
4	1.1	06	134																	✓								
5	1.1	06	210																	✓								
6	1.2	06	W 50																	✓								
7	1.2	06	150																	✓								

MIN-EN Laboratories Ltd.

705 WEST 15th STREET,
NORTH VANCOUVER, B.C., CANADA V7M 1T2
TELEPHONE (604) 980-5814

D.F. Ale

ANALYTICAL REPORT

Project ..... Date of report July 19/83.

File No. 3-403 Date samples received June 21/83.

Samples submitted by: .....

Company: D.K. Platinum

Report on: ~~97~~ 145 soils, ~~111~~ 63 rocks Geochem samples

..... Assay samples

.....

Copies sent to:

1. D.K. Platinum, Vancouver, B.C.
2. .....
3. .....

Samples: Sieved to mesh -80 soil Ground to mesh -80 rock

Prepared samples stored ☒ discarded ☐

rejects stored ☐ discarded ☒

Methods of analysis: Cr-nitric, perchloric digestion, A.A., Ni-same.
Au, Pd, Pt-fire.

Remarks: .....

.....

.....

SPECIALISTS IN MINERAL ENVIRONMENTS

COMPA: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

F. No. 3-403

DATE: July 1 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
5000					52		•					30.6	1.3	115	4.8
01					55		•					3.9	1.9	160	<1
02					39		•					34.3	5	70	5.5
03					110		•					4.2	4.0	275	20.9
04					100		•					41.3	2.6	140	4.7
05					85		•					2	3.2	245	7.5
06					149		•					123.7	1.3	110	9.0
07					133		•					1	1.6	125	13.2
08					250		•					3	5	115	4.6
09					240		•					2	1.3	120	11.3
10					340		•					2	1.4	230	6.2
11					70		•					4	2.2	165	1.16
12					480		•					8	2.1	100	2.59
13					510		•					52.5	2.8	70	2.21
14					440		•					64.6	3.1	100	6.51
15					435		•					18	2.0	145	1.13
16					225		•					2	1.6	105	9.5
17					485		•					3.0	2.5	95	3.66
18					600		•					1	2.5	70	3.53
19					325		•					1	1.7	65	3.20
20					560		•					1.0	3.0	50	4.40
21					380		•					2	1.7	80	54
22					365		•					3.2	4.0	195	2.59
23					240		•					1.6	1.9	75	3.15
24					190		•					3.7	4.3	140	9.25
25					360		•					24	3.8	140	2.10
26					205		•					54	3.8	80	2.86
27					110		•					3	<1	125	2.33
28					157		•					5	7	135	182
5029					162		•					8	1.8	150	1.58

CERTIFIED BY

COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-403

DATE: July 1 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
5030					470		•					12	21	130	74
31					390		•					20	15	200	155
32					385		•					16	30	95	153
33					370		•					20	25	135	150
34					540		•					21	22	85	201
35					450		•					10	5	100	251
36					105		•					6	19	70	65
37					510		•					15	24	70	336
38					275		•					22	23	105	101
39					560		•					13	20	100	294
40					540		•					7	9	80	193
41					160		•					420	20	70	76
5042					340		•					40	21	85	167
5050					565		•					19	22	340	120
51					360		•					15	6	120	137
52					320		•					23	8	200	190
53					245		•					2	15	130	222
54					425		•					6	9	85	184
55					480		•					16	4	100	163
56					275		•					15	5	80	164
57					280		•					16	9	90	141
5060					no sample		•								
5045					260		•					22	2	155	177
46					480		•					45	11	130	257
47					510		•					22	10	85	303
48					585		•					17	14	110	211
5049					240		•					21	17	85	34
							•								
							•								
							•								

CERTIFIED BY

COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C V7M 1T2

PHONE (604) 980-5814

No. 3-403

DATE: July 1 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
6000					98		•					12	22	90	131
01					290		•					26	20	100	106
02					315		•					22	23	130	214
03					134		•					23	16	115	221
04					180		•					71	27	70	236
05					340		•					101	20	100	242
06					280		•					25	18	80	202
07					340		•					37	14	80	383
08					265		•					29	24	100	254
09					240		•					72	24	90	228
10					525		•					30	32	95	437
11					520		•					152	12	75	570
12					490		•					17	21	45	635
13					355		•					57	21	100	213
14					320		•					40	17	90	77
15					260		•					<1	2	345	145
16					162		•					15	3	120	271
17					500		•					14	10	340	248
18					325		•					8	6	155	283
19					200		•					7	8	390	245
20					240		•					8	8	510	271
21					340		•					2	10	270	330
22					no sample		•								
23					87		•					<1	7	285	143
24					345		•					37	7	195	242
25					128		•					<1	6	215	274
26					225		•					5	2	210	251
27					340		•					7	14	110	350
28					61		•					9	3	150	139
6029					64		•					20	7	120	216

CERTIFIED BY

COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-403

DATE: July 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
6030					225							86	17	175	188
31					no sample										
32					127							42	19	1140	331
33					126							11	13	285	245
34					185							22	15	95	273
35					no sample										
36					43							168	15	80	175
37					240							20	8	330	173
38					128							10	12	170	251
39					68							6	7	145	179
40					124							139	9	315	265
41					105							19	17	490	256
42					166							42	23	180	130
6043					172							12	17	195	258

CERTIFIED BY

COMPA. D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.

705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-403

DATE: July 1 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
7000					240		•					62	16	200	368
01					235		•					<1	17	310	317
02					325		•					30	22	145	447
03					164		•					12	11	275	208
04					505		•					10	15	110	319
05					520		•					24	15	200	421
06					500		•					11	11	145	417
07					275		•					10	12	140	362
08					340		•					20	12	85	285
09					350		•					22	16	70	251
10					485		•					13	16	35	326
11					300		•					14	17	65	358
12					170		•					11	8	120	359
13					300		•					12	13	280	234
14					285		•					25	14	130	321
15					220		•					130	17	100	210
16					280		•					7	17	115	286
17					86		•					10	16	325	367
18					166		•					<1	15	220	341
19					144		•					7	18	165	225
20					260		•					31	18	145	412
21					153		•					23	20	365	228
22					176		•					6	12	180	209
23					320		•					14	22	210	329
24					340		•					14	19	110	262
25					340		•					20	18	130	531
7026					300		•					11	12	120	462
7100					72		•					32	12	380	208
01					24		•					23	7	55	64
7102					90		•					21	5	210	64

CERTIFIED BY

COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-40

DATE: July 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
7103					84							9	8	155	56
04					180							7	9	175	148
05					118							55	29	180	941
06					48							14	2	90	113
07					35							21	6	280	148
08					160							23	15	275	324
09					134							5	3	190	146
10					170							6	10	150	150
7111					178							10	12	150	134
7112					200							13	25	200	69
7113					375							5	1	80	316
7114					200							3	3	225	231
7115					220							10	6	75	210
7027					495							23	13	60	63
28					420							9	5	55	44
7029					240							23	23	120	231
NL100W					no sample										
NL150W					no sample										
NL250					no sample										
NL350					no sample										

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COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-40

DATE: July 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
B 1					670		•					5	<1	90	<1
2					630		•					29	<1	70	240
3					560		•					352	20	100	215
4					600		•					103	9	320	64
5					640		•					31	22	115	132
6					625		•					85	8	65	88
7					580		•					61	4	100	53
8					600		•					27	5	200	324
B 9					580		•					28	8	210	58
ON 1					540		•					29	19	320	178
2					800		•					103	33	450	412
3					670		•					143	97	260	518
4					630		•					17	1	195	64
5					92		•					16	16	1180	137
6					49		•					14	4	160	112
7					250		•					14	2	260	274
8					74		•					2	6	450	120
9a					17		•					21	27	15	55
9b					18		•					20	31	30	141
9c					12		•					15	21	5	149
ON 10					18		•					23	20	20	138
200N/1					560		•					12	<1	120	148
2					600		•					16	<1	130	79
3					595		•					140	24	690	310
4					760		•					17	11	95	164
5					810		•					2	<1	110	63
6					570		•					25	21	390	448
7					650		•					1800	17	540	231
8					600		•					205	9	80	200
200N/9					120		•					21	15	250	279

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COMPA. D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

No. 3-402

DATE: July 19 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
200N/10					66		•					10	1	330	299
200S/1					62		•					24	13	200	323
2					35		•					56	<1	165	<1
200S/3					84		•					924	<1	400	104
400N/1					520		•					105	<1	70	153
2					560		•					228	<1	70	64
3					585		•					102	9	60	305
4					530		•					140	29	75	580
5					93		•					123	15	565	274
6					123		•					65	44	400	366
7					560		•					39	<1	120	69
8					680		•					343	38	95	455
9					490		•					172	29	85	232
400N/10					740		•					65	20	45	239
400N/11					540		•					29	29	50	325
600N/1					460		•					69	25	100	129
2					440		•					49	35	165	341
3					400		•					32	24	50	262
4					470		•					24	9	50	140
5a					520		•					20	26	190	244
5b					465		•					32	31	2000	3440
6					480		•					33	47	450	400
600N/7					460		•					13	2	150	236
800N/1					107		•					24	4	750	193
2					560		•					17	13	140	163
3					600		•					28	25	65	205
800W/4					580		•					17	16	100	415
1000N/1					580		•					24	17	65	265
1000W/1					44		•					25	25	65	252
1000W/2					24		•					23	125	20	257

CERTIFIED BY

COMPANY: D.K. Platinum

PROJECT No.:

ATTENTION: Dr. H. Drechsler

GEOCHEMICAL ANALYSIS DATA SHEET

MIN - EN Laboratories Ltd.
705 WEST 15th ST., NORTH VANCOUVER, B.C. V7M 1T2
PHONE (604) 980-5814

File No. 3-403

DATE: July 1 1983.

Sample Number	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Co ppm	Ag ppm	Fe ppm	Hg ppb	As ppm	Mn ppm	Au ppb fire	Pd ppb fire	Cr ppm	Pt ppb fire
ET 1												32	31	150	336
2												16	11	65	256
3												19	12	60	200
4												27	26	65	336
ET 4b												27	23	1640	3950

CERTIFIED BY

APPENDIX III

PETOGRAPHIC REPORTS

DONALDSON & ASSOCIATES LTD.
Consulting Engineers

2036 Columbia St., Vancouver, B.C. V5Y 3E1 • Tel. 879-8461, Telex 04-53453

PLATINUM ASSOCIATION IN SUBMITTED ROCK SAMPLES

Carried out for:

D. K. Platinum
1000 - 789 W. Pender
Vancouver, B. C.
V6C 1H2

Date: 1983 August 31
File No.: 4585

A. Lacis, Electron Microscopist

W. G. Bacon

Dr. W. G. Bacon, P.Eng.

ON, DONALDSON & ASSOCIATES LTD.
Consulting Engineers

2036 Columbia St., Vancouver, B.C. V5Y 3E1 • Tel. 879-8461, Telex 04-53437

1983 August 31 File No.: 4585

D. K. Platinum
1000 - 789 W. Pender
Vancouver, B. C.
V6C 1H2

Attention: Brian Gorval

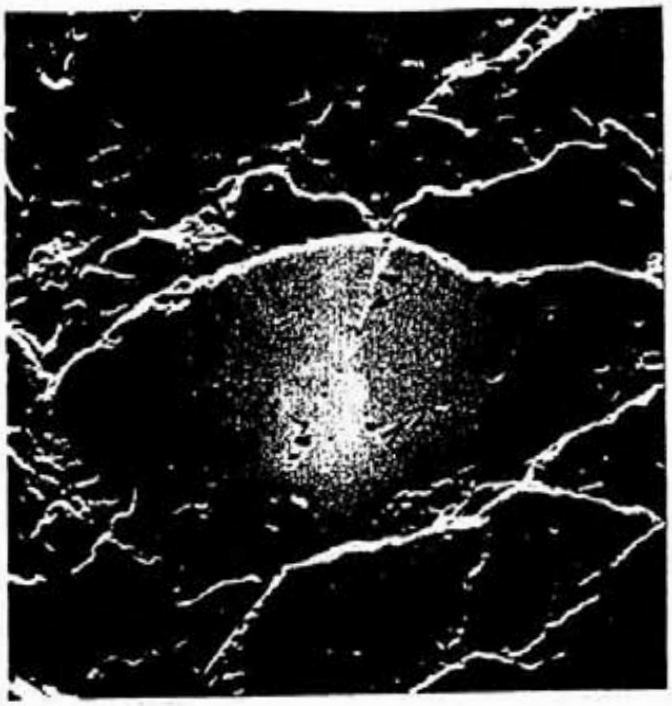
Dear Sir:

Re: Platinum Association
in Submitted Rock Samples

We have determined the association of platinum in the rock samples you submitted.

The rock samples were prepared for scanning electron microscopy by producing polished sections and coating with carbon by evaporation. The polished sections were analyzed by energy dispersive x-ray analysis.

Two photomicrographs are presented below:



Photograph No. 1 360x magnification

Photograph No. 2 1800x magnification

These photographs are both of the same stringer of platinum mineralization. No other occurrence was observed.

The small inked numerals on each photograph refer to the energy spectrum that follows. The areas marked with "1"s are platinum bearing with very little antimony, the chromium peak is from the matrix mineralization.

The small inclusions marked with "2"s are also platinum bearing with a large amount of antimony. Again the chromium peak is from the matrix mineralization.

The numeral "3" represents the matrix and spectra 3 shows the matrix is chromite.

Conclusions

The platinum occurs as stringers and inclusions in chromite ($FeO \cdot Cr_2O_3$). The platinum appears to be alloyed with antimony in one occurrence and unalloyed in the other occurrence.

Yours very truly,

Bacon, Donaldson & Associates Ltd.

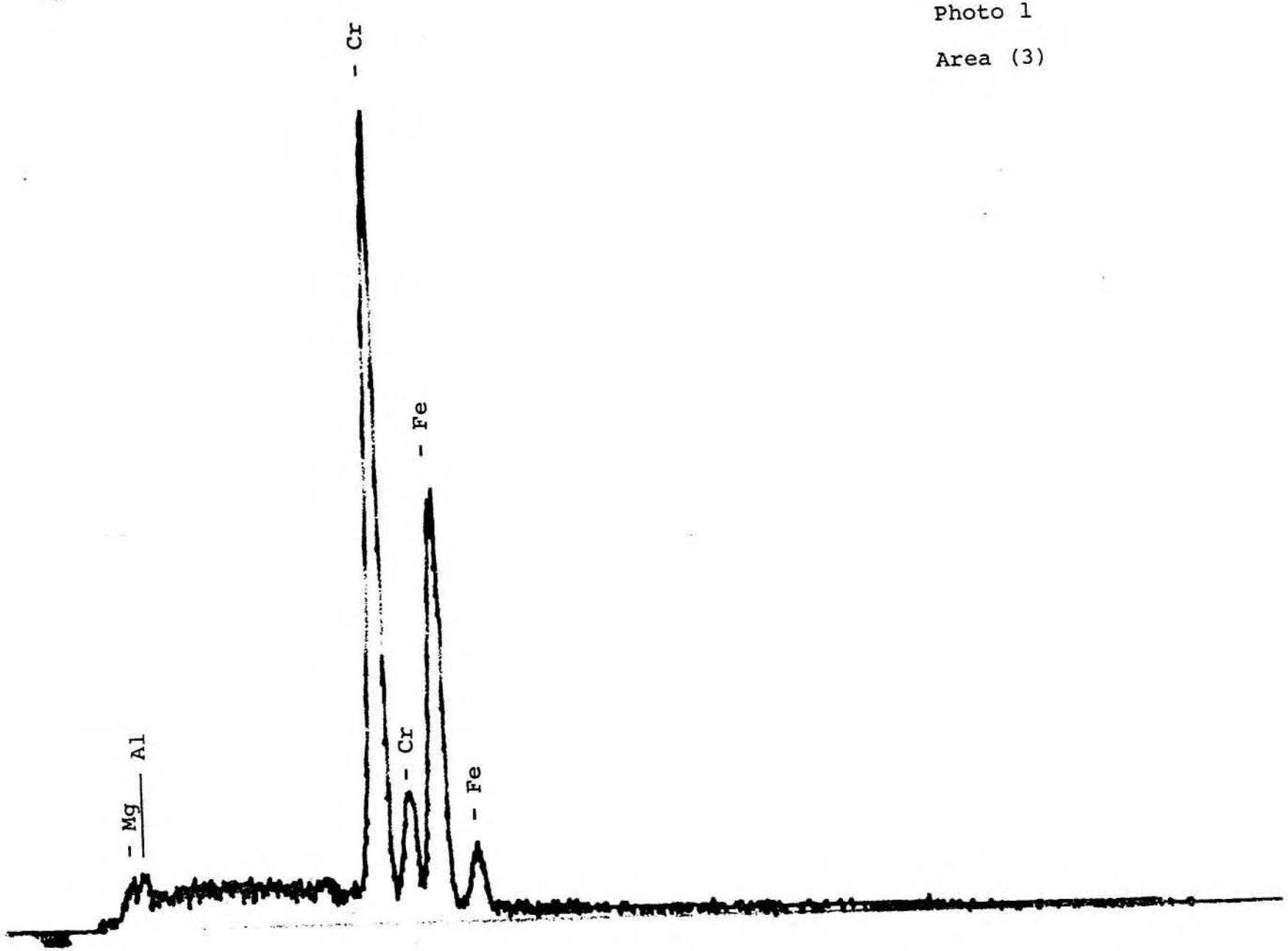
Arvid Lacis
Electron Microscopist

W. G. Bacon

Dr. W. G. Bacon, P.Eng.

Photo 1

Area (3)



Photos 1 & 2

Area (1)

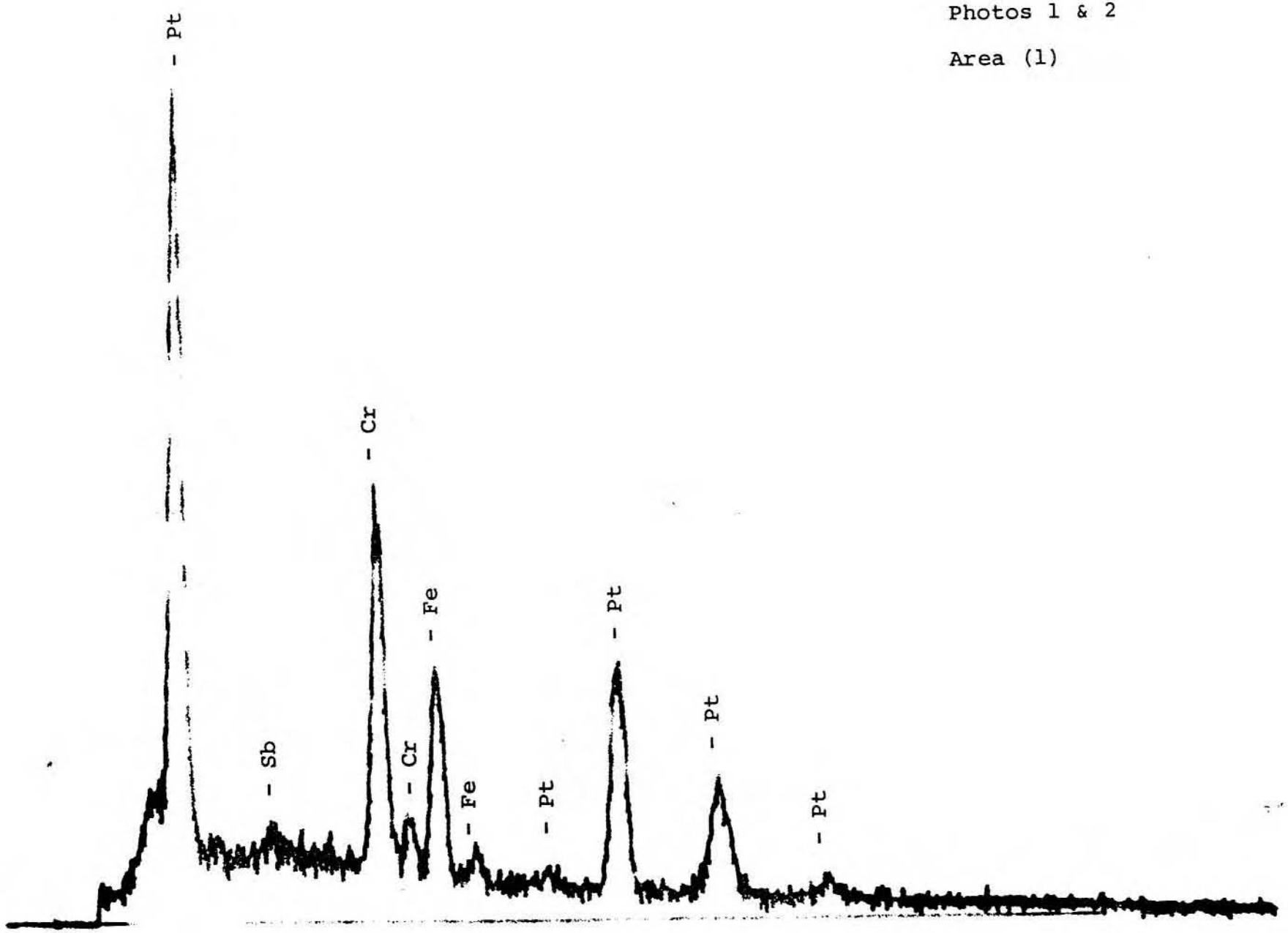
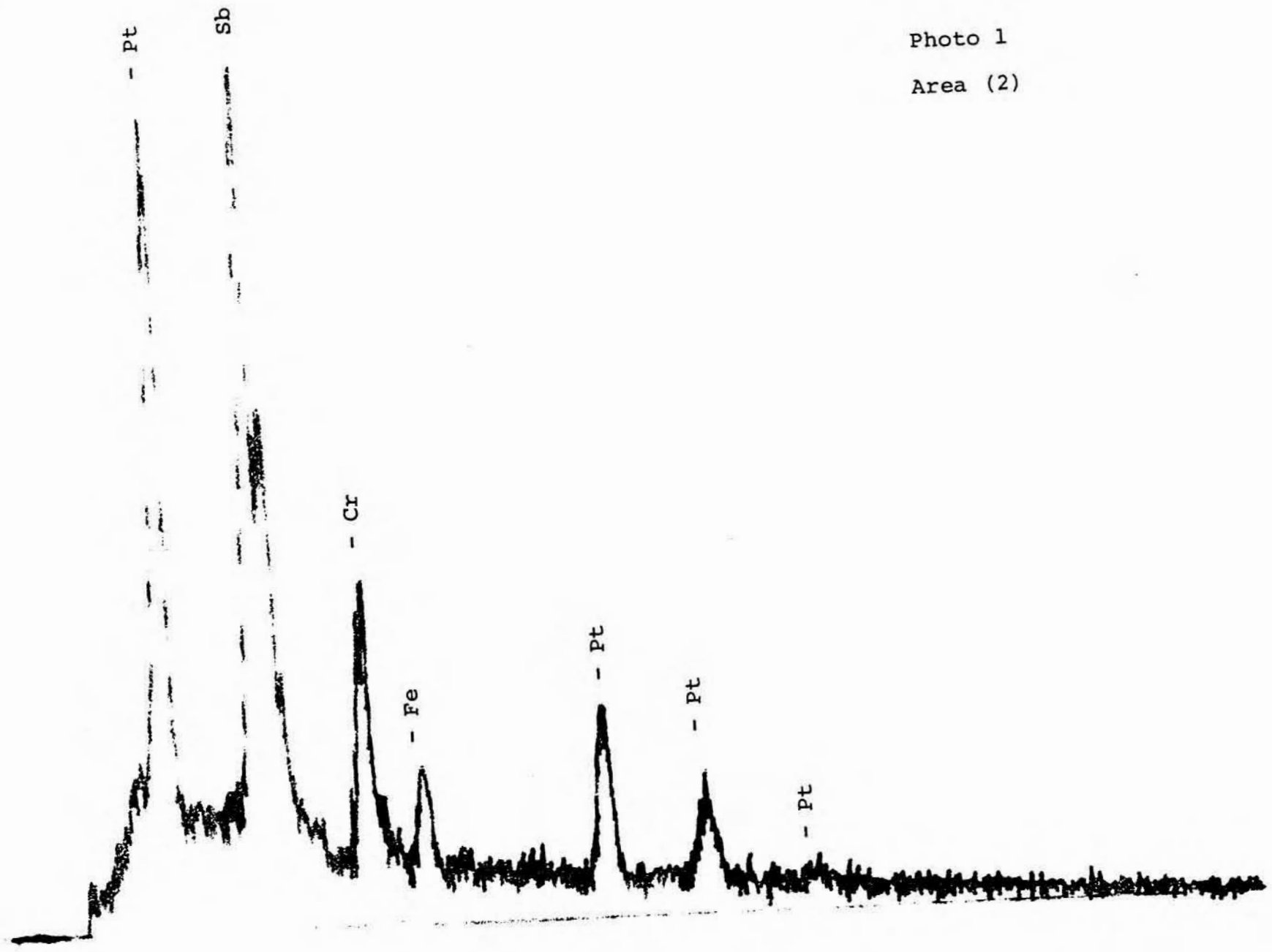


Photo 1

Area (2)



SEMCO

SEMCO MINING CORPORATION

D.K.Platinum Corporation,
1000 - 789 W.Pender Street,
Vancouver, B.C.
V6C 1H2

April 11, 1983.

Attention: Mr. V.Ryback-Hardy.

Dear Sirs: Re: Vancouver Petrographics Ltd.
Assay samples.

We received the enclosed encouraging report this morning.

We are looking forward to your comments regarding same.

Yours very truly,

Robert L. Kemeny, P. Eng.,
Consulting Mining Engineer,
SEMCO MINING CORPORATION.

/cmp

encl.

c.c. Mr.Brian Gorval.

Suite 713 - 744 W. Hastings St., Vancouver, B.C. V6C 1A5 Canada
Telephone (604) 688-8541 Telex: STOKEM VCR 04-53224

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 888-1323

Report for: Robert L. Kemany,
SEMCO MINING CORPORATION,
713 - 744 West Hastings Street,
Vancouver, B.C.
V6C 1A5

Invoice 3846

April 8, 1983.

Samples: Two serpentinites,two dunites and two massive chromite samples were submitted. A polished thin section of one of each was prepared.

Summary: JL Tulameen is a sepentinite with patches of chromite. Native platinum forms inclusions about 0.004mm in size within the chromite. No more than two inclusions occur in any one chromite.

FIVE is a massive chromite and platinum forms inclusions similar to those in sample JL Tulameen.

TWO is a dunite with a chromite seam. A single inclusion of platinum occurs in the chromite. An unidentified mineral occurs in thin serpentinite veinlets. It is possibly a Ni or Pt-bearing mineral.

A.L. Littlejohn

A.L.Littlejohn, M.Sc.

JL Tulameen Serpentinite with chromite (platinum inclusions)

This is a massive dark green rock consisting almost entirely of serpentine and chromite. Minerals are:

serpentine	57%
chromite	38
dolomite	4
magnetite	1
hematite	trace
platinum	trace

Serpentine forms interlocking bladed grains from 0.1 to 0.5mm in size which enclose patches and streaks of chromite grains. The chromite forms subcubic to rounded grains from 0.2 to 1.5mm in size, averaging about 0.4mm, which in places are crowded together. In places there is a narrow seam of magnetite joining adjacent chromite grains; some grains have narrow veinlets of magnetite within them and/or a discontinuous narrow rim of magnetite.

Dolomite forms a network of thin veinlets 0.02 to 0.1mm wide which cut through the serpentine and the chromite. Near intersecting veinlets there are a few ragged patches of dolomite. Hematite forms ragged grains about 0.002mm in size within the serpentine close to the carbonate veinlets.

Platinum forms cubic grains from 0.001 to 0.005mm in size which are included within the chromite grains. No more than two inclusions were seen in any one chromite. 13 grains were seen.

FIVE Massive chromite with platinum inclusions

This sample consists almost entirely of subcubic chromite grains packed closely together with very thin intergranular patches of serpentine. Grain size ranges from 0.5 to 5.0mm. Some grains have very thin veinlets of magnetite.

Platinum forms cubic inclusions within the chromite. These range insize from 0.002 to 0.1mm, averaging about 0.004mm. 11 grains were seen; no more than two occur in any one chromite grain.

TWO Dunite with chromite seam

This is a massive dark brown rock with a seam of black chromite in it. Minerals are:

olivine	80%
chromite	10
serpentine	7
dolomite	3
magnetite	trace
hematite	trace
unknown	trace
platinum	trace

Olivine forms rounded grains from 0.5 to 2.0mm in size,averaging about 1.0mm. Serpentine forms a network of very thin veinlets within and around each grain. Veinlets about 0.1mm thich cut through the rock. Intense serpentinisation has occured around a vein of dolomite which cuts through the rock. The vein is about 1.0mm thick. A few narrower discontinuous veinlets are also present. Small ragged grains of hematite occur in the serpentine associated with the dolomite. A few of the olivines contain small shapeless inclusions of magnetite(or other spinel).

Chromite forms rounded grains up to 1.5mm in size,averaging about 0.5mm,which are closely packed within a wedge-like seam up to 5mm thick. The olivine within the seam is highly serpentinised. Smaller cubic grains are disseminated interstitially in the rest of the rock. A few of the chromites have a narrow ragged rim of magnetite. A single grain of platinum,0.004mm in size,occurs within a chromite in the seam.

An unidentified mineral occurs in serpentine veinlets cutting through the olivine. It forms ragged,rounded grains about 0.03mm in size. It has fairly high reflectivity, is pale yellowish white in colour and is anisotropic. It is possibly awaruite (Ni_2Fe) or perhaps another platinum bearing mineral. It is not a Ni-sulphide or arsenide. Confirmation would have to be carried out by microprobe work. Four grains were seen.

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph. D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 888-1323

Report for: D.K. Platinum

Invoice 3972

The samples have been divided into 4 main rock types, with subdivisions within some of these on the basis of alteration intensity. The main rock types are as follows:

D 1. Dunite
C 2. Clinopyroxenite
A 3. Amphibolite
G 4. Gabbro

Dunite

Fresh dunite is light green in color with a brown weathering zone and a sugary texture. Disseminated chromite is visible in some samples, and its abundance varies moderately. The following samples are of fresh dunite, or dunite containing minor alteration and veining:

D a) Thin sections: 200 N/8, 400 N/1, 600 N/1, 800 N/3, 1000 N/1, B/5

b) Hand specimen only: 200 N/2, N/4, N/5, N/6, N/7
400 N/2 (+veins), N/3, N/7, N/9
600 N/4, N/5a
800 N/4
B/6, B/7 (+ veins), B/8, B/9
(B/6 has inclusion of clinopyroxenite)
ET/1, ET/3, ET/4a

Two samples are of chromite-rich segregations in fresh dunite. These are as follows:

600 N5b, ET/4b

Moderately altered dunite has a darker green color, commonly is strongly veined, and is softer and slightly smoother on cut surface than fresh dunite. Samples in this group are as follows:

D+ a) thin section: ON/2 (20% alteration), B/4 (25% alteration)

b) hand specimen only: 200/1, 600 N/2(+ veins), 600 N/3(+ veins), 600 N/7, ON/1, ON/3

Moderately to strongly altered dunite is not much different in hand sample from moderately altered dunite. However it is softer and in part darker green in color. Samples in this group are as follows:

D++ a) thin section: 200 N/3 (45% alteration), 400 N/4 (50% alteration)

Strongly altered dunite is dark green to nearly black in color, soft, and has a smooth cut surface. In the weathered zone it is light green in color. Samples in this group are as follows (next page)

(continued)

a) thin section: 800 N/2 (80% alteration), B/2 (99% alteration)

b) hand specimen only: 400 N/10, 400 N/11, B/1, B/3, ON/4

Clinopyroxenite

Fresh clinopyroxenite is pale green in color and is medium to coarse grained. Cleavage surfaces of pyroxene grains are prominent on broken surfaces. The rock is hard. Alteration of clinopyroxene is of two types. One consists of dark green to black patches dominated by serpentine, and the other consists of pervasive alteration to amphiboles. Magnetite is present in variable amounts, possibly being more common with amphiboles.

Samples in this group are as follows:

a) thin section: 200 N/9 (serp. veins)
800 N/1 (serp. veins and patches)
ON/8 (serpentine patches)

b) hand specimen only: 200 S/1 (serp. patches), 200 S/3
200 N/10 (serp. patches)
400 N/5, 400 N/6 (both with serp. patches)
ON/5 (epidote vein), ON/6, ON/7 (serp. patches)

Clinopyroxene altered to hornblende is slightly darker green in color and as alteration intensity increases, grain size diminishes. The following samples are in this subgroup:

a) thin section: 1000 W/1

b) hand specimen only: ET/2

Amphibolite

Amphibolite is generally fine to medium grained with a few coarse megacrysts. It is dark green in color and hard. Cleavage faces are prominent on broken surfaces. The following samples fit in this group:

a) thin section: 1000 W/2, ON/9b (contact with gabbro)

b) hand specimen only: 200 S/2, ON/9a (contact with gabbro: banded)
ON/10 (contact with gabbro)

Gabbro

This unit is considered to be an earlier intrusion, which was cut by the ultramafic rocks. It has a mottled white and medium green color, and commonly a foliated texture. It is strongly altered to epidote (plagioclase) and secondary amphiboles (after pyroxene). Hornblende may represent primary amphibole. Rocks in this group include the following:

a) thin section: ON/ 9b

b) hand specimen only: ON/9c, ON/9a (contact), ON/10 (contact)
400 N/8 (strongly sheared)
600 N/6 (strongly altered, cut by epidote vein)

(continued)

The purpose of the study is to evaluate the potential for economically recoverable concentrations of Pt-group metals in the Tulameen ultramafic intrusion. Almost invariably, in ultramafic intrusions, Pt-group metals are concentrated with chromite in dunite or in layered sequences of dunite and orthopyroxene (e.g., Bushveld intrusion, S.Africa).

In the samples, chromite occurs only with dunite. It occurs in two modes. More common is disseminated grains and clusters of a few grains. Locally, concentrations of chromite are up to a few cm. across (1-2 cm in the rocks in this study). Pt-group metals, specifically, native Platinum, was seen only in sample 600 N/5b. Here it forms several grains averaging 0.002-0.004 mm in size within chromite grains. It was not seen in the other chromite segregation in sample ET/4b. None of the disseminated chromite contains visible Pt-minerals.

In conclusion, the only hope of encountering an economically feasible Pt-deposit would be to find a large concentration of chromite. The geological data on the Tulameen intrusion, most notably the PhD thesis by Chris Findlay, indicate that this is at best a remote possibility.

John G. Payne,
July 1983

200 N/8 (225W) Dunite with Serpentine-Calcite vein

The sample is a massive, medium to coarse grained dunite with minor disseminated chromite. It is slightly altered to serpentine-hematite (after magnetite), with a few patches of calcite-hematite. It is cut by a main vein and several veinlets of serpentine-calcite-hematite, with minor pyrrhotite.

olivine	87-90%
serpentine	4- 5
chromite	1½-2
magnetite	0.5
calcite	0.2
vein	
serpentine	3- 4
calcite	1½-2
hematite	½- 1
pyrrhotite	minor

Olivine forms a granular aggregate of equant to slightly elongated grains from 0.7-1.5 mm in average size. Grains are slightly fractured and altered along fractures to serpentine with disseminated extremely fine grained magnetite (altered to hematite).

Chromite forms disseminated equant, anhedral to subhedral grains averaging 0.2-0.4 mm in size. They are slightly replaced by hematite along borders of grains.

Calcite and magnetite form a few replacement patches up to 0.7 mm in size. These consist of extremely fine grained aggregates with the calcite/magnetite ratio being 3/1 to 5/1.

The rock is cut by a major vein and several veinlets and irregular replacement patches dominated by serpentine and calcite, with patches of very fine to fine grained hematite. The main vein is partly banded, with zones rich in serpentine and others rich in calcite. Pyrrhotite fomrs a few anhedral patches up to 0.11 mm in size.

400N/1 (40W) Dunite with Disseminated Chromite

The sample is a massive, medium to coarse grained dunite with disseminated chromite. Alteration is slight to serpentine and hematitewith a trace of calcite. The rock is cut by veinlets of serpentine-magnetite.

olivine	88-90%
serpentine	5- 7
chromite	1½-2
hematite	0.5
calcite	trace
veins	
serpentine	2- 3
magnetite	0.3

Olivine forms equant to prismatic, anhedral grains averaging 0.7-1.5 mm in size. They are moderately fractured, and altered along fractures to serpentine and dusty to extremely fine grained hematite (after magnetite). Calcite occurs locally with serpentine as very fine grains and aggregates.

Chromite occurs as equant, subhedral to euehdral disseminated grains averaging 0.1-0.2 mm in size. It is slightly altered to hematite along grain borders. Chromite also occurs locally as equant grains averaging 0.02 mm in size enclosed in olivine grains.

The rock is cut by two veins of serpentine-magnetite with similar textures as in the alteration along fractures. Veins are up to 0.3 mm wide. Magnetite is altered to hematite as in the fracture-controlled alteration.

600 N/1 (100W) Dunite

The rock is a medium to coarse grained dunite with finely disseminated chromite. Alteration is minor, and is mainly confined to irregular vein-like zones of serpentine-magnetite(hematite)-calcite.

olivine	90-92%
serpentine	5- 7
chromite	1½-2
magnetite	1- 1½ (includes hematite)
calcite	0.2

Olivine forms a granular aggregate of equant grains averaging 1-1.5 mm in size. It is moderately fractured and slightly altered along fractures to serpentine and minor magnetite.

Serpentine also forms irregular patches of flakes up to 1 mm across, with individual flakes up to 0.3 mm long.

Chromite forms equant, subhedral grains averaging 0.05-0.2 mm in size; these are disseminated through the rock. Some have partial halos of hematite, formed during alteration.

The rock is cut by irregular veinlike zones up to 0.5 mm wide. These are dominated by serpentine with clusters of very fine grained magnetite-hematite, and a few patches of very fine grained calcite. Bordering some veinlike zones, olivine is moderately altered to dusty to extremely fine grained opaque Fe-oxide.

800 N/3 (60E) Dunite

The rock is a massive, medium to coarse grained dunite with disseminated chromite. Alteration is minor to serpentine-magnetite. The rock is cut by veinlets of serpentine-hematite(magnetite) with minor pyrite.

olivine	88-90%	talc	one flake
serpentine	7-10		
chromite	1½-2		
magnetite	½- 1		
pyrite	trace		

Olivine forms anhedral, equant to elongate grains averaging 0.7-1.5 mm in size, with a few up to 3 mm long. Many contain moderately abundant extremely fine grained inclusions (up to 0.02 mm long and 2 microns wide) oriented in one crystallographic direction in olivine. The composition of the inclusions is unknown; it appears that they are semiopaque to transparent.

Olivine is altered slightly along fractures to serpentine and minor magnetite, with the latter occurring in the centerlines of fractures.

Chromite forms anhedral to subhedral equant grains averaging 0.1-0.2 mm in size. These are mainly fresh, but a few are cut by thin veinlets of hematite and some have very thin partial rims of hematite. Secondary Fe-oxides nucleated on some chromite grains.

The rock is cut by veinlets of serpentine-Feoxides averaging 0.05 mm wide. One large vein 0.5 mm wide contains coarser grained serpentine and aggregates of very fine grained Fe-oxides. Pyrite is disseminated as equant, anhedral grains averaging 0.01-0.02 mm in size.

One flake 0.8 mm long probably is talc; it appears to be associated with serpentine-magnetite alteration.

The reason for the color variation in hand sample is not apparent in thin section.

1000 N/1 (300E) Dunite

The sample is a medium to very coarse grained dunite with moderately abundant disseminated chromite. Alteration is slight to serpentine, magnetite, and minor calcite; it is controlled in part by late fractures.

olivine	90-92%
serpentine	3- 5
chromite	3- 4
magnetite	½- 1
calcite	minor

Olivine forms a granular aggregate of anhedral grains averaging 0.8-2 mm in size, with one grain up to 4 mm long. The grains are fractured moderately to strongly, but alteration is slight. Serpentine occurs as scattered flakes, clusters of flakes, and in seams along fractures; grain size is up to 0.2 mm. Magnetite forms grains averaging 0.02-0.03 mm in size along fractures and grain borders, associated with serpentine.

Chromite forms disseminated subhedral to locally euhedral grains averaging 0.3-1 mm in size. A few show hematite alteration along fractures and a few have very thin partial rims of hematite.

A few vein-like zones contain serpentine with abundant magnetite and patches of calcite, all very fine grained. Minor calcite occurs with serpentine away from these fracture zones.

B/5 (375 N) Dunite

The sample is a medium to very coarse grained dunite with disseminated chromite. Alteration is slight to serpentine-Feoxides, and the rock is cut by a few veins of serpentine-Feoxides-calcite.

olivine	85-87%
serpentine	10-12
chromite	1- 1½
magnetite	½- 1
hematite	½- 1
calcite	0.3

Olivine forms a granular aggregate of equant to prismatic grains averaging 0.7-2 mm in size, with a few up to 5 mm long. Grains are moderately fractured and slightly altered along fractures to serpentine with minor Feoxides. Fractures average 0.02-0.03 mm wide.

Chromite forms disseminated, equant grains averaging 0.05-0.2 mm in size, with a very few from 0.3-0.6 mm across. It commonly is slightly altered to hematite along grain borders and fractures, and grains in serpentine-rich areas commonly are moderately altered.

The rock is cut by several veinlets up to 0.5 mm wide composed of serpentine with lesser magnetite-hematite and calcite. Commonly calcite occurs in very fine grained patches intergrown with abundant Fe-oxides. Magnetite and hematite are concentrated in the cores of narrower serpentine-rich veins, in places as bands parallel to the walls of the vein.

600N/5b Chromite Segregation in Dunite

The sample is a massive medium to coarse grained dunite with an irregular pod containing very abundant chromite and a trace of platinum. Alteration is slight to moderate to serpentine-magnetite. The rock is cut by a calcite veinlet.

olivine	55-60%
serpentine	15-20
chromite	15-20
magnetite	1- 1½
platinum	trace
calcite	1½-2
pyrite	trace

Olivine forms a granular aggregate of subhedral to anhedral equant to slightly prismatic grains averaging 0.7-1.2 mm in size. Grains are strongly fractured, with fracture spacing averaging 0.1-0.2 mm. Alteration along fractures (which average 0.02-0.05 mm wide) is to serpentine and dusty to very fine grained magnetite. Serpentine also forms irregular patches up to 0.5 mm across, composed of unoriented to subparallel flakes averaging 0.1-0.2 mm in length.

Chromite occurs as disseminated grains averaging 0.1-0.3 mm in size, and in a concentration with grains up to 1.2 mm across. Grains are equant and anhedral in outline. Alteration is minor to locally prominent to magnetite. The latter in places forms replacement patches and veinlets in chromite, but is more common as anhedral aggregates averaging 0.003-0.01 mm in size along borders of chromite. In the latter texture, magnetite appears to be in part an alteration of chromite and in part associated with serpentine as an alteration of olivine.

Platinum forms a few equant, angular grains averaging 0.002-0.004 mm in size. All are included in chromite grains.

Calcite forms an irregular veinlike patch up to 1 mm wide crossing the sample. Grains are coarse. One large chromite adjacent to the calcite vein is half altered to magnetite on the side of the grain against the calcite vein. Calcite also occurs as minor interstitial material associated with serpentine in the chromite-rich segregation.

Pyrite forms one grain 0.03 mm across associated with serpentine.

ET 4b (1020N) Chromite Segregation in Dunite

The sample is a massive medium to coarse grained dunite with a lens of chromite formed by early crystal accumulation in the magma. The rock is cut by veins of serpenitine-calcite, and the rock is altered to serpentine along the main vein.

olivine	45-50%
serpentine	5- 7 (after olivine in rock away from vein)
chromite	30-35
veins	
serpentine	5- 7
calcite	5- 7
magnetite	0.5

The sample contains two main zones. Dunite consists of a granular aggregate of olivine grains averaging 0.5-1.5 mm in size. These are cut by moderately abundant fractures averaging 0.01 mm wide, along which olivine was altered to serpentine. Magnetite is rare in these fractures. Chromite forms scattered subhedral grains averaging 0.1-0.2 mm in size.

The chromite segregation contains anhedral to subhedral chromite grains from 0.2-1.5 mm in size, with minor interstitial olivine. No platinum was noticed.

The rock is cut by three types of veins. The largest is up to 2 mm wide and consists of wavy, extremely fine grained serpentine with irregular to oval shaped patches of calcite up to 0.5 mm in size. Along the borders of this vein, the dunite is strongly altered to serpentine and moderately abundant, extremely fine grained magnetite; the alteration zone is up to 4 mm wide and fades out into only slightly altered dunite.

One vein averaging 0.15-0.2 mm wide is dominated by extremely fine grained calcite with scattered serpentine flakes. Along the borders of this, chromite is altered to an irregular aggregate of magnetite? which forms a rim 0.01-0.02 mm wide. The magnetite? (or possibly hematite) has a slightly brownish grey color and higher reflectivity against the medium grey chromite.

A few veinlets consist of fine grained calcite with a trace of serpentine. These do not have alteration halos.

ON/2 (168 E) Dunite

The rock is a medium grained dunite with irregular concentrations of chromite. Alteration is slight to moderate to serpentine-Feoxides. The rock is cut by several veins of serpentine-Feoxides-calcite-(pyrite).

olivine	75-80%
serpentine	15-17
chromite	2- 3
magnetite	1- 1½
veins	
serpentine	4- 5
Feoxides	0.5
calcite	0.5

Olivine forms a granular aggregate of grains averaging 0.5-1.5 mm in size. Locally one patch of grains conatins moderately abundant extremely fine grained disseminated opaque. Olivine is moderately fractured and altered along fractures to serpentine-Feoxides. Fractures average 0.02-0.05 mm in width. Generally magnetite is concentrated in the cores of fractures.

Chromite forms disseminated grains and irregular concentrations averaging 0.1-0.2 mm in grain size. They commonly are altered on fractures to hematite, and Feoxides formed during serpentinization are clustered on some chromite grains.

The rock is cut by several veins up to 0.5 mm wide. These are dominated by serpentine with patches of Fe-oxides and others of calcite, with or without Fe-oxides. Pyrite forms scattered grains averaging 0.002-0.005 mm in size, with a few grains 0.02 mm across.

B/4 (250 N) Dunite with Disseminated Chromite

The rock is a massive, medium to coarse grained dunite with disseminated chromite. It is slightly to moderately altered along fractures to serpentine-magnetite, and magnetite is partly altered to hematite. The rock is cut by a vein of serpentine-hematite-calcite-(pyrite).

olivine	70-75%
serpentine	20-25
chromite	2- 3
magnetite	2- 3
calcite	0.3
vein	
serpentine	2- 3
calcite	0.5
hematite	0.5
pyrite	trace

Olivine forms a granular aggregate of grains averaging 0.7-1.5 mm in size. Most are equant, but a few coarse grains up to 2 mm long are prismatic in habit. Grains are strongly fractured and altered along fractures to serpentine and magnetite. The latter is very variable in abundance. A few vein-like zones consist of serpentine with abundant magnetite. Part of the magnetite was altered to hematite.

Chromite forms disseminated anhedral to euhedral grains from 0.1-0.3 mm in average size. It generally is slightly altered to magnetite(hematite) along grain borders, and chromite grains formed nuclei for Fe-oxide precipitation during alteration.

The rock contains a few patches (grains?) from 0.3-0.7 mm in size which consits of extremely fine grained aggregates of calcite with abundant disseminated magnetite. The origin of these is uncertain, but they probably are secondary alteration patches which replaced the rock rather than being alteration of a different primary mineral, e.g., clinopyroxene.

The vein is up to 1 mm wide and is dominated by extremely to very fine grained serpentine with patches of very fine grained hematite and extremely fine grained calcite. Hematite forms equant to platy aggregates. Pyrite occurs as disseminated grains averaging 0.03 mm in size. One patch 0.05 mm across consists of several relic pyrite cores surrounded by hematite; the latter is darker grey in color than the hematite aggregates nearby.

200N/3 Dunite with Disseminated Chromite

The sample is a massive, medium to coarse grained dunite with moderately abundant disseminated chromite. Alteration is moderate to strong to serpentine and magnetite (the latter is mainly altered to hematite). Pyrite occurs in serpentine as widely scattered grains.

olivine	45-50%
serpentine	40-45
chromite	4- 5
magnetite	1- 1½
pyrite	trace

Olivine forms a granular aggregate of equant, anhedral grains averaging 0.7-1.5 mm in size. Fracturing is very prominent, with alteration to serpentine along fractures; fractures average 0.02-0.1 mm wide. Magnetite is present in some fractures, mainly concentrated along the centerlines as anhedral aggregates of grains averaging 0.005-0.02 mm in size. Because the rock is non-magnetic or only slightly so, magnetite must be altered to hematite.

Chromite forms disseminated anhedral to locally euhedral grains averaging 0.3-1 mm in size. A few are cut by alteration veinlets up to 0.01 mm wide of hematite after magnetite. Magnetite commonly forms concnetrations along borders of chromite grains; these are intergrown with serpentine and average 0.005-0.01 mm in grain size.

Pyrite occurs as scattered anhedral, equant grains averaging 0.01 mm across; these are all within serpentine, indicating that pyrite is a secondary alteration mineral.

One equant opaque grain 0.025 mm in size occurs within olivine. This probably is chromite, but identification was not certain.

The distinct color banding in hand sample from light to medium green was not obvious in thin section.

400N/4 (250 W) Altered Dunite

The sample is a massive, medium grained dunite which was moderately to strongly altered to serpentine-magnetite-(talc-calcite). It is cut by a vein of serpentine-hematite-calcite.

olivine	40-45%
serpentine	40-45
magnetite	4- 5
talc	0.3
calcite	0.2
chromite	0.3
vein	
serpentine	7- 8
hematite	1½-2
calcite	0.3

Olivine forms equant to prismatic, anhedral to subhedral grains averaging 0.5-1 mm in size. Fracturing of grains is strong, with alteration along fractures to serpentine with dusty magnetite (in part altered to hematite). Talc occurs in one part of the section as several subhedral flakes from 0.1-0.8 mm in length. Calcite forms a few patches up to 0.7 mm across, generally accompanied by abundant magnetite.

Chromite forms scattered subhedral to rounded interstitial grains averaging 0.1-0.3 mm in size. It is slightly altered on grain borders and fractures to hematite.

The vein is up to 2 mm wide and consists mainly of very fine to fine grained serpentine, in places forming subparallel aggregates of flakes up to 0.3 mm long. Hematite occurs as irregular, very fine grained equant to slightly tabular aggregates. Calcite occurs in irregular very fine grained patches.

800 N/2 (170E) Altered Dunite with Chromite

The rock is a strongly altered dunite with moderately abundant chromite as disseminations and lensy concentrations. Olivine is strongly replaced by serpentine-magnetite(hematite), and the rock is cut by veins of serpentine-hematite-(calcite-pyrite).

olivine	15-17%
serpentine	65-70
chromite	3- 4
magnetite-hematite	7- 8
veins	
serpentine	1- 2
hematite	0.3
calcite	0.2
pyrite	trace

Olivine forms an anhedral, granular aggregate of grains averaging 0.7-1.5 mm in size. It is strongly fractured and replaced by serpentine, which shows a variety of textures. In the light green part of the sample, serpentine is common as flakes up to 0.3 mm long; these are rare in the dark green part of the rock. As well, Fe-oxides are much more abundant in the light green part of the rock. Fe-oxides formed by the release of Fe from olivine during serpentinization are concentrated in centers of fractures and on grain borders; interiors of altered olivine grains are dominated by extremely fine grained serpentine.

Chromite forms equant, anhedral to subhedral grains averaging 0.3-0.7 mm in size. These are concentrated in a few lenses, generally only one grain width in thickness. Chromite is slightly altered along fractures to hematite. As well, grain borders are slightly altered to hematite-magnetite, and borders of chromite were loci for precipitation of Fe-oxides during serpentinization.

The rock is cut by veins up to 0.3 mm wide dominated by serpentine, in part in subparallel flakes. Calcite forms several concentrations of extremely fine grain size. Hematite forms very fine grained aggregates. Pyrite forms scattered grains up to 0.05 mm in size. Most are moderately to strongly altered to hematite (darker grey than hematite in the aggregates), except for grains enclosed in hematite aggregates which were unaltered during oxidation.

B/2 (70S) Altered Dunite(Peridotitic)

The sample is a dunite containing minor clinopyroxene. Both silicates are completely altered to serpentine-magnetite. Chromite forms disseminated grains and wispy concentrations. Calcite occurs as irregular vein-like zones and minor disseminations.

olivine	95-97%	(altered to serpentine-magnetite)
clinopyroxene	0.5	(altered to serpentine-magnetite)
chromite	1- 1½	
calcite	1- 1½	

Because of the alteration, the original grain size is difficult to determine. Probably olivine grains average 0.7-1.2 mm in size. Alteration is to serpentine, with magnetite concentrated along original fractures and grain borders.

Two grains are suspected to be clinopyroxene. They are 1-1.5 mm in size, and show relic cores with a vague orthogonal structure, in contrast to the structureless cores of olivine grains. They also are completely altered to serpentine, with magnetite concentrated along grain borders.

Chromite forms equant to slightly elongated grains from 0.1-0.5 mm in average size. They commonly are altered along fractures to hematite, especially near calcite, and contain very thin alteration rims of hematite. Secondary growths of Fe-oxides on chromite occurred during serpentinization. Chromite forms a few wispy concentrations, mainly one-grain width in thickness.

Calcite forms a few fine to medium grained, irregular to vein-like patches cutting the rock. It also occurs in very minor amounts along fractures in olivine and disseminated in altered cores of olivine.

200N/9 (550 W) Clinopyroxenite

The rock is a massive, medium to coarse grained clinopyroxenite with minor alteration to serpentine. Magnetite occurs as interstitial grains. Minor altered olivine? is present.

clinopyroxene	90-92%
serpentine	2- 3
magnetite	½- 1
olivine?	0.3
veins	
serpentine	2- 3
magnetite-hem.	1- 2
calcite	½- 1
pyrite	trace
chalcopyrite	trace

Clinopyroxene forms anhedral equant to slightly prismatic grains averaging 0.5-1.5 mm in size. Many show lamellar twinning. A few contain exsolution? lamellae of hematite as stubby to elongate lenses along cleavage. Alteration generally is slight, with local patches of serpentine developed along grain borders and in interstitial patches. Secondary magnetite-hematite is associated with serpentine. Most of the alteration is associated with veins (see below).

Magnetite forms anhedral, commonly interstitial grains averaging 0.03-0.15 mm in size.

Olivine? forms a few equant grains averaging 0.2 mm in size. They are completely altered to serpentine and are stained orange-brown by limonite?

The rock is cut by several veins up to 0.3 mm wide. These vary widely in composition, but contain serpentine, magnetite, calcite, and sulfides. Calcite generally is extremely fine grained, and is most common in the centers of veins. A few veins consist mainly of fine grained calcite. Serpentine is extremely fine to fine grained and forms unoriented to subparallel aggregates. Magnetite forms dusty to extremely fine grained aggregates intergrown with serpentine; magnetite probably is largely altered to hematite.

Pyrite and one grain of chalcopyrite occur as disseminations in the veins; grain size averages 0.01-0.02 mm.

800N/1 Clinopyroxenite

The sample is a massive, medium to coarse grained clinopyroxenite which was partly altered to serpentine and minor calcite and magnetite. Traces of Fe and Fe-Cu sulfides are present.

clinopyroxene	80-85%
serpentine	12-15
calcite	½- 1
magnetite	½- 1
chromite	trace
pyrite	trace
pyrrhotite	trace
chalcopyrite	trace
hematite?	trace

Clinopyroxene (diopside) forms an anhedral granular aggregate averaging 0.7-2 mm in grain size. Some grains show fine twin lamellae. In a few grains, elongate lenses up to 0.3 mm long and 0.005 mm wide of hematite? occur along one cleavage direction.

Clinopyroxene is altered along grain borders and in interstitial patches to an aggregate of serpentine with minor patches of calcite and disseminated magnetite. Serpentine forms unoriented to subparallel aggregates of flakes up to 0.2 mm in length. Contacts with pyroxene are very irregular in detail. Magnetite forms anhedral grains up to 0.05 mm in size. Calcite generally occurs near the center of alteration patches as very fine grained aggregates. Locally it forms veinlets in serpentine.

Chromite occurs as a few anhedral equant grains up to 0.05 mm across.

Sulfides, dominated by pyrite form a few anhedral grains averaging 0.005-0.01 mm in size, either enclosed by clinopyroxene or along grain borders. Some pyrite occurs in serpentine patches.

ON/8 (515W) Clinopyroxenite

The sample is a massive, coarse to medium clinopyroxenite with interstitial chlorite and patches of secondary serpentine-hematite-(calcite-actinolite). Magnetite forms interstitial primary grains.

clinopyroxene	88-90%
magnetite	0.5
calcite	minor
chlorite	4- 5
secondary patches	
serpentine	4- 6
calcite	0.3
hematite	0.5
actinolite	minor

Clinopyroxene forms anhedral grains averaging 0.7-2 mm in size, intergrown in a granular aggregate. Twin lamellae are uncommon.

Magnetite forms interstitial equant to amoeboidal grains averaging 0.05-0.15 mm in size. Some of these are partly altered to hematite.

Chlorite forms interstitial flakes from 0.3-1.2 mm in size, and locally forms patches up to 1.5 mm across. It is pale green with a brownish grey interference color. It appears to be a primary mineral or else pseudomorphs biotite (low Ti-variety).

Secondary patches up to several mm across are dominated by irregular aggregates of serpentine flakes from 0.01-0.2 mm in size. Calcite forms very fine grained aggregates in irregular patches intergrown with serpentine. Hematite forms granular aggregates of grain size 0.02-0.03 mm. Actinolite occurs in irregular patches up to 1 mm across as feathery to prismatic flakes intergrown with chlorite. Its distribution suggests that it is pseudomorphic after a primary mineral, but what that mineral is could not be determined.

Calcite also occurs as a secondary replacement in irregular patches and along cleavage planes in clinopyroxene.

1000W/1 (50S) Hornblende-Magnetite Clinopyroxenite

The rock is a coarse to pegmatitic clinopyroxenite with interstitial and replacement hornblende and disseminated magnetite-ilmenite aggregates.

clinopyroxene	70-75%
hornblende	15-17
magnetite	6- 7
ilmenite	½- 1
Ti-oxide	½- 1
actinolite	0.3
epidote	minor
hematite	trace
chlorite	trace
pyrite	one grain

Clinopyroxene forms anhedral equant to prismatic grains averaging 1-3 mm in size, with a few up to several mm long. A few grains, including the largest, contain very abundant opaque inclusions oriented in two orthogonal crystallographic directions in the clinopyroxene; these probably are of exsolution origin. They are up to 0.03 mm long and a few microns wide. They are too small to show on the polished surface, and thus could not be identified; most probably the mineral is ilmenite.

Hornblende occurs in two modes. The first is as irregular, interstitial grains up to 2 mm across. The second is as irregular replacement patches averaging 0.05-0.2 mm in size, which are uniformly distributed throughout some pyroxene grains, and locally comprise up to 50% of the grain. Hornblende is pleochroic from light yellowish green to light green.

Magnetite and much less ilmenite form equant grains and aggregates up to 1.5 mm in size, and irregular, interstitial clusters of grains averaging 0.3-0.7 mm in size. Some magnetite grains contain lensy to poddy exsolution blebs of ilmenite from 0.03-0.05 mm in average size; these commonly are oriented along crystallographic directions in magnetite. Ilmenite grains average 0.1-0.4 mm in size. They are completely altered to extremely fine grained aggregates of Ti-oxide.

Magnetite grains and magnetite-ilmenite aggregates commonly are rimmed by a zone up to 0.05 mm wide of extremely fine grained Ti-oxide.

Along the borders of magnetite grains and adjacent to fractures in the grains, magnetite is slightly altered to hematite. The latter mineral occurs as elongate lenses along two or three crystallographic dircetions in magnetite. Hematite lenses average 0.01-0.02 mm in length.

Actinolite occurs locally as irregular grains and aggregates associated with hornblende and probably formed by alteration of hornblende.

Epidote forms irregular grains averaging 0.03-0.1 mm in size. It generally is associated with magnetite or hornblende.

Chlorite forms a few grains associated with epidote-magnetite-hornblende.

Pyrite forms one equant grain 0.0025 mm in size included in a magnetite grain.

1000 W/2 (150 S) Magnetite-bearing Amphibolite

The sample is an irregular amphibolite which may have formed by alteration of a clinopyroxenite, such as that in sample 1000 W/1 (50 S). It contains abundant disseminated calcite and patches of magnetite-(ilmenite), and is cut by a veinlike zone containing abundant epidote.

actinolite	83-85%
magnetite	5- 7
calcite	4- 5
ilmenite	1- 1½
epidote	3- 4
biotite	trace
pyrite	trace
chalcopyrite	trace

Actinolite forms in two main habits. The first is an irregular aggregate of anhedral, prismatic grains averaging 0.5-0.7 mm in length. The second is scattered megacrysts up to 2.5 mm in size. Some of the latter contain two phases of amphibole with slightly different colors ranging from almost colorless to light to medium light green. The texture suggests that the rock may have formed by alteration of a clinopyroxenite, with sample 1000 W/1 being a less intense alteration of the same type.

Magnetite occurs in clusters of very fine to fine grain size, with patches up to 0.7 mm in size. Some of these are intergrown with ilmenite, which forms grains averaging 0.1-0.15 mm across. Ilmenite is completely altered to extremely fine grained Ti-oxide. Minor Ti-oxide forms partial rims on magnetite-ilmenite clusters. Magnetite is slightly altered on grain borders and fractures to hematite, which forms elongated grains up to 0.02 mm in length along crystallographic directions in magnetite. The alteration of oxides is identical to that in sample 1000 W/1.

Calcite occurs as anhedral, equant grains averaging 0.1-0.2 mm in size. These are scattered through the rock in intergrowths with actinolite. Locally, coarser grained calcite forms irregular veinlike zones.

Epidote occurs in one main veinlike zone as anhedral, slightly ragged grains and aggregates averaging 0.2-0.4 mm in size. It also forms a few grains disseminated in the rock; these average 0.05-0.15 mm in size, and as well are irregular in outline.

Biotite occurs locally with actinolite as a cluster of flakes averaging 0.05-0.1 mm in length. Pleochroism is from light to medium brown.

Pyrite forms scattered disseminated grains averaging 0.0025 mm in size. Chalcopyrite forms disseminated grains in one patch about 1 mm across; grains average 0.002-0.005 mm in size, with one grain 0.015 mm across. The large grain is rimmed by secondary hematite.

ON/9(b) (650W) Contact: Altered Gabbro and Amphibolite

The sample shows the contact between a medium grained, altered gabbro and a fine to medium grained amphibolite.

Gabbro

The rock is composed of plagioclase, completely altered to epidote and pyroxene-hornblende, now represented by actinolite. Oxides are moderately abundant.

plagioclase	55-60%
pyroxene	10-12
hornblende	25-30
magnetite	3- 4
ilmenite	½- 1
epidote	minor
sphene	0.3
apatite	minor
pyrite	trace

Plagioclase forms equant grains averaging 0.5-0.8 mm in size. They are completely altered to epidote, which ranges in grain size from extremely fine to 0.2 mm.

Clinopyroxene forms scattered megacrysts averaging 1.5-2 mm in size. They are completely or strongly altered to actinolite with pleochroism from very pale to light bluish green and yellowish green. Some of the pale actinolite contains patches of darker green actinolite-hornblende.

Hornblende forms anhedral interstitial grains averaging 0.1-0.5 mm in size. Pleochroism is from light yellowish green to medium olive green.

Magnetite and ilmenite form patches up to 0.5 mm across, consisting of aggregates of equant grains averaging 0.05-0.15 mm in size. Magnetite commonly contains minor exsolution ilmenite as irregular pods to elongated plates in crystallographic directions of magnetite. Magnetite is moderately altered to hematite, which forms plates in crystallographic directions in the host. Ilmenite is completely altered to Ti-oxide.

Epidote forms scattered grains up to 0.1 mm in size associated with hornblende and oxides.

Sphene forms scattered anhedral grains averaging 0.03-0.05 mm in size.

Apatite forms anhedral prismatic grains up to 0.2 mm long.

Pyrite forms a few equant grains up to 0.07 mm across; it is strongly altered to hematite.

Amphibolite

The purest amphibolite consists almost entirely of amphibole with interstitial magnetite. However, much of the amphibolite is contaminated by assimilation? of gabbro, and contains moderately abundant epidote, in part obviously after plagioclase, and in part probably not after plagioclase.

(continued)

Amphibolite (continued)

hornblende	60-65%
actinolite	12-15
epidote	12-15
magnetite	7- 6
ilmenite	minor

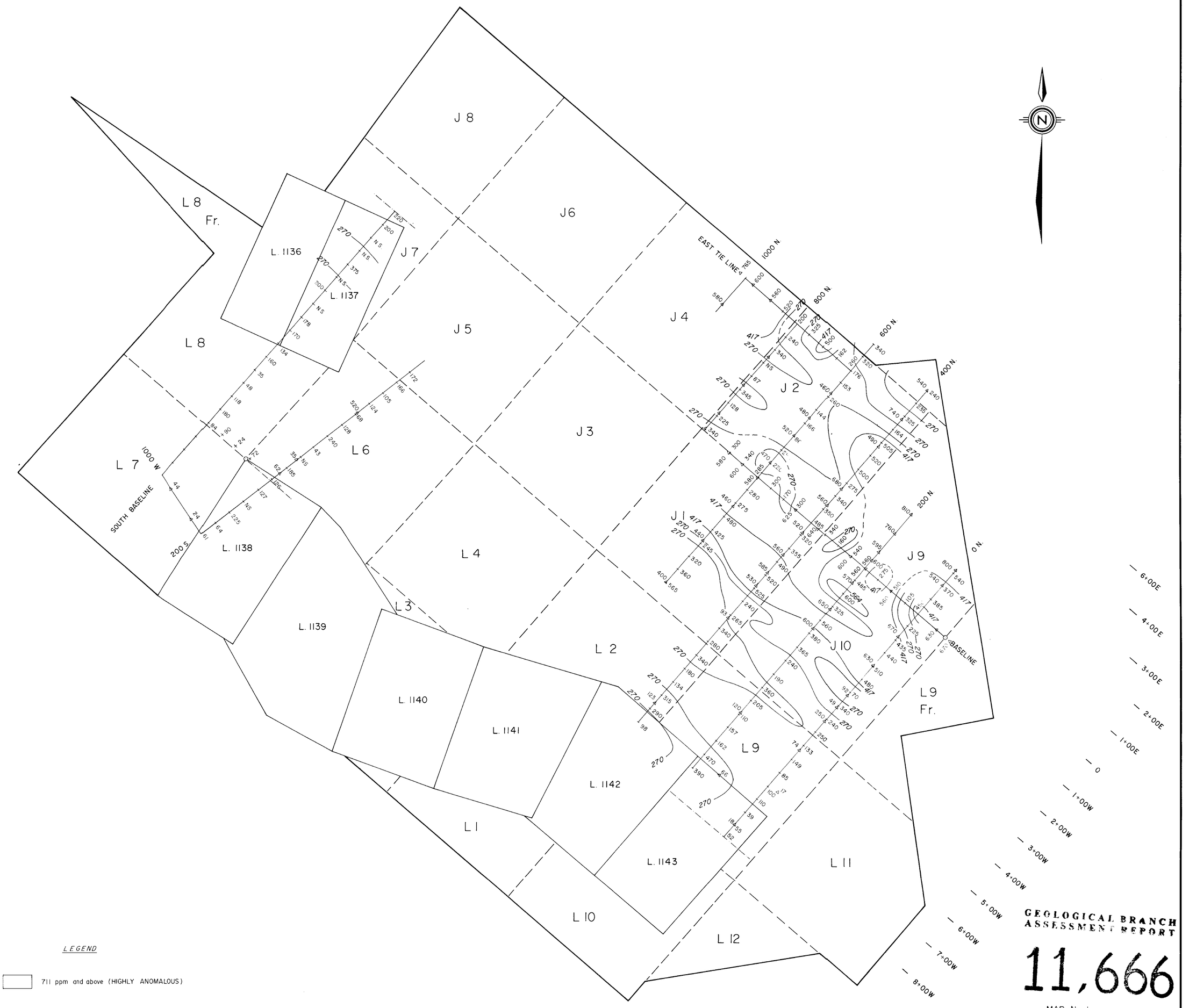
Hornblende occurs as anhedral equant grains averaging 0.3-0.7 mm in size, and as scattered equant to prismatic megacrysts up to 2 mm across. Pleochroism is from light to medium yellowish green to light to medium olive green.

Actinolite forms very pale green to bluish green interstitial grains averaging 0.2-0.3 mm in size.

Epidote forms patches up to 0.5 mm across after plagioclase, in which epidote forms irregular extremely fine to fine grained aggregates. It also occurs as isolated grains and clusters of grains averaging 0.1-0.2 mm in size.

Magnetite forms anhedral, equant grains and clusters averaging 0.05-0.15 mm in size. It is slightly altered to hematite as in the gabbro. Ilmenite forms a few grains up to 0.2 mm in size associated with magnetite; ilmenite is completely altered to Ti-oxide.

Apatite forms scattered anhedral to prismatic grains up to 0.1 mm long.



LEGEND

- 711 ppm and above (HIGHLY ANOMALOUS)
- 564 - 711 ppm (MODERATELY ANOMALOUS)
- 417 - 564 ppm (WEAKLY ANOMALOUS)
- 270 ppm (MEAN)
- △ ROCK CHIP SAMPLE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,666

MAP No. 1

VLH CONSULTANTS LTD.

DK PLATINUM CORPORATION

TULAMEEN, B.C.
SIMILKAMEEN MINING DIVISION

NICKEL IN P.P.M.

SCALE IN METRES
0 50 100 200 300 400 500

SCALE: 1:5000 | DATE: JUNE, 1983

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
V. P. RYBACK-HARDY

LEGEND

522 ppm & above (HIGHLY ANOMALOUS)

401 - 522 ppm (MODERATELY ANOMALOUS)

280 - 401 ppm (WEAKLY ANOMALOUS)

160 ppm (MEAN)

VLH CONSULTANTS LTD.

DK PLATINUM CORPORATION

TULAMEEN, B.C.
SIMILKAMEEN MINING DIVISION

CHROMIUM IN P.P.M.

SCALE IN METRES
0 50 100 200 300 400 500

SCALE: 1:5000

DATE: JUNE, 1983

LEGEND

- 457 ppb and above (HIGHLY ANOMALOUS)
- 321 - 457 ppb (MODERATELY ANOMALOUS)
- 185 - 321 ppb (WEAKLY ANOMALOUS)
- 50 ppb (MEAN)
- ROCK CHIP SAMPLE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,666

MAP No. 3

VLH CONSULTANTS LTD.

DK PLATINUM CORPORATION

TULAMEEN, B.C.
SIMILKAMEEN MINING DIVISION

GOLD IN P.P.B.

SCALE IN METRES
0 50 100 200 300 400 500

SCALE: 1:5000

DATE: JUNE, 1983

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
V. P. RYBACK-HARDY

LEGEND

672 ppm and above (HIGHLY ANOMALOUS)

527 - 672 ppm (MODERATELY ANOMALOUS)

381 - 527 ppm (WEAKLY ANOMALOUS)

237 ppm (MEAN)

△ ROCK CHIP SAMPLE

GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,666

MAP No. 4

VLH CONSULTANTS LTD.

DK PLATINUM CORPORATION

TULAMEEN, B.C.
SIMILKAMEEN MINING DIVISION

PLATINUM IN P.P.B.

SCALE IN METRES
0 50 100 200 300 400 500

SCALE: 1:5000

DATE: JUNE, 1983

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
V. P. RYBACK-HARDY

LEGEND

- GEOLOGICAL CONTACT – position uncertain
- OUTCROP
- 2 POST CLAIMS
- CORNER POST
- L. 1143 CROWN GRANTS
- GRID ESTABLISHED
- SURVEY LINE

VLH CONSULTANTS LTD.

DK PLATINUM CORPORATION

TULAMEEN, B.C.
SIMILKAMEEN MINING DIVISION

GEOLOGY MAP

SCALE IN METRES
0 50 100 200 300 400 500

SCALE: 1:5000

DATE: JUNE, 1983