SUMMARY OF 1987 FIELD WORK
HEATHER PROPERTY
VICTORIA MINING DIVISION
NTS 92C/15,16

G. S. Wells

January 22, 1988

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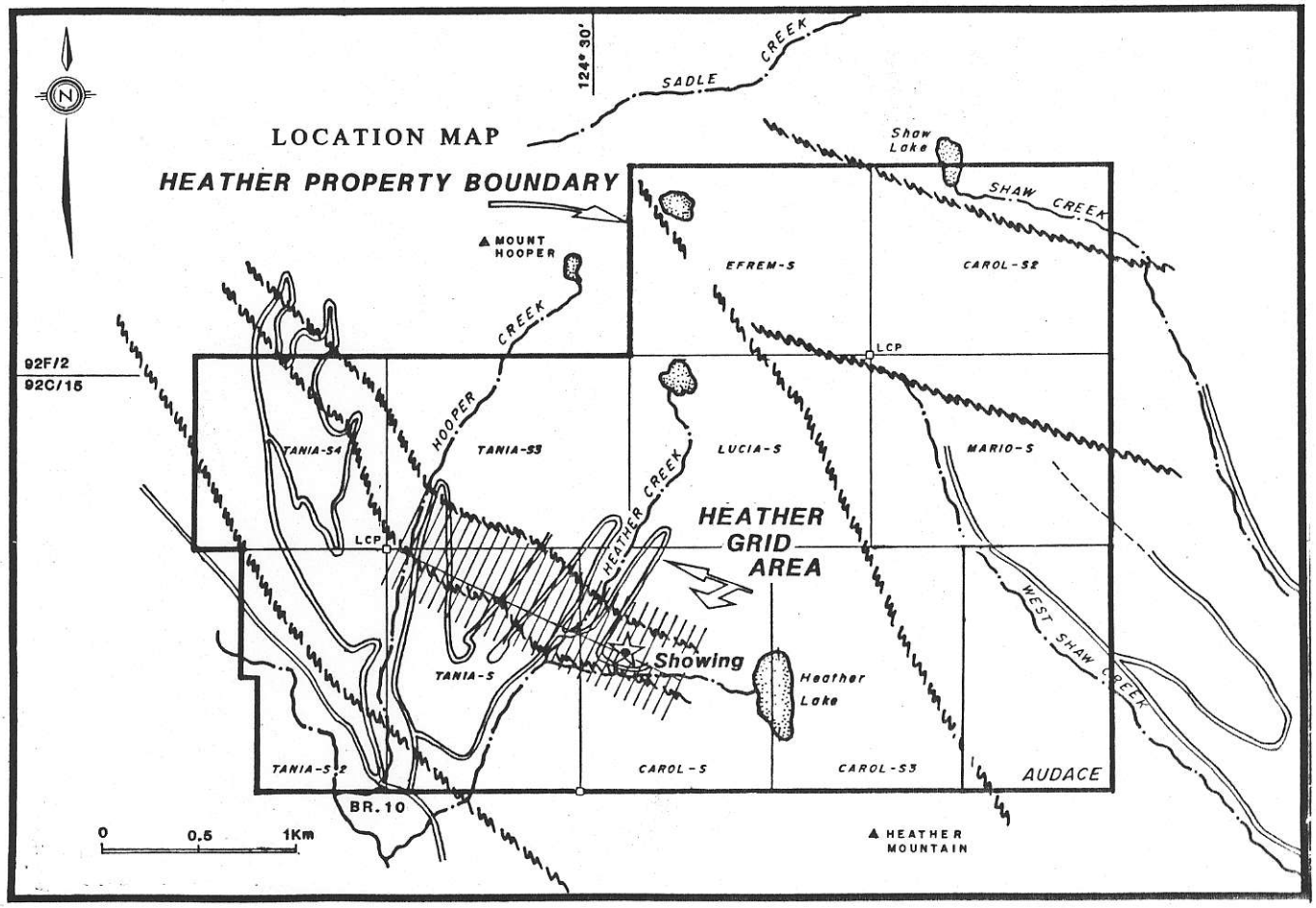
HEATHER PROPERTY

1. Introduction

The Heather property is underlain primarily by volcanic rocks of the Paleozoic Sicker Group. It was optioned from Canamin Resources in May 1986 to evaluate its gold and base metal massive sulphide potential. Minnova is exploring this property under a joint venture agreement with International Cherokee Developments Ltd. In 1986 reconnaissance and detailed geological and lithogeochemical surveys were carried out. In addition, VLF, IP and magnetic surveys were conducted on the detailed geology grid (Figure 1). Five diamond drill holes totalling 547 metres tested VLF, IP and quartz-pyrite alteration zones with anomalous gold contents. No significant zones of gold mineralization were intersected in the diamond drilling.

Minnova continued to evaluate the property's economic potential during 1987. Detailed geological mapping, trenching and chip sampling were carried out in the vicinity of geophysical anomalies and altered zones. A soil geochemical survey was conducted over the detailed geology grid. Additional reconnaissance traverses were carried out in the Shaw and west Shaw creek valleys. Five diamond drill holes totalling 588.6 metres tested the extent and gold potential of the Main Showing



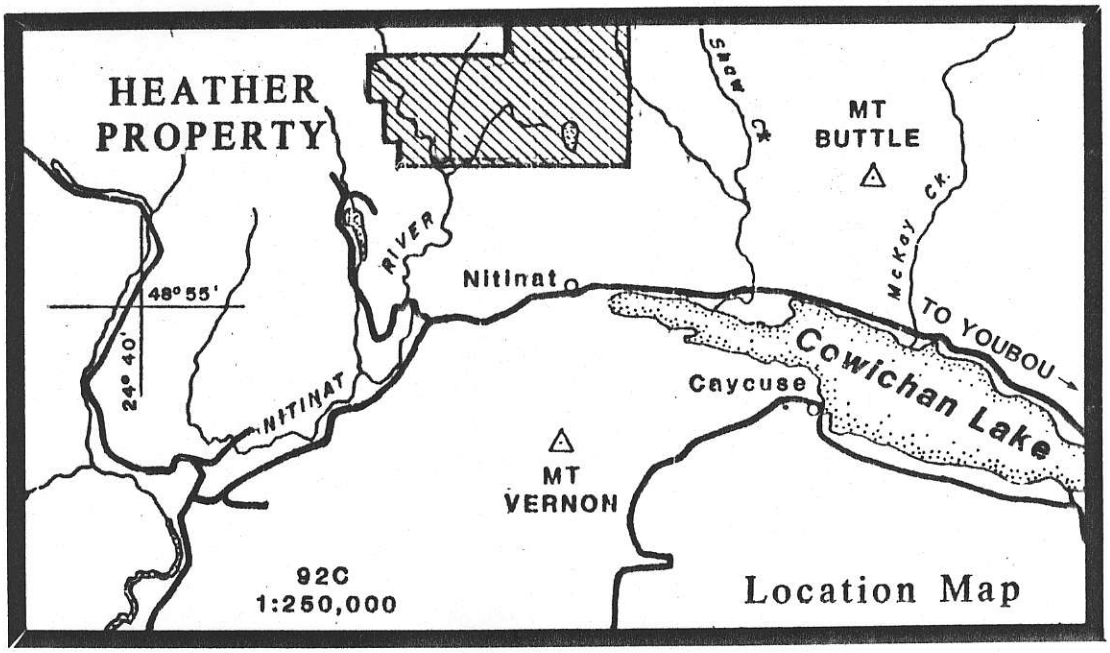


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FIGURE 1

(Figure 2). This report describes the results of the 1987 exploration program.

a) Location, Access and Physiography

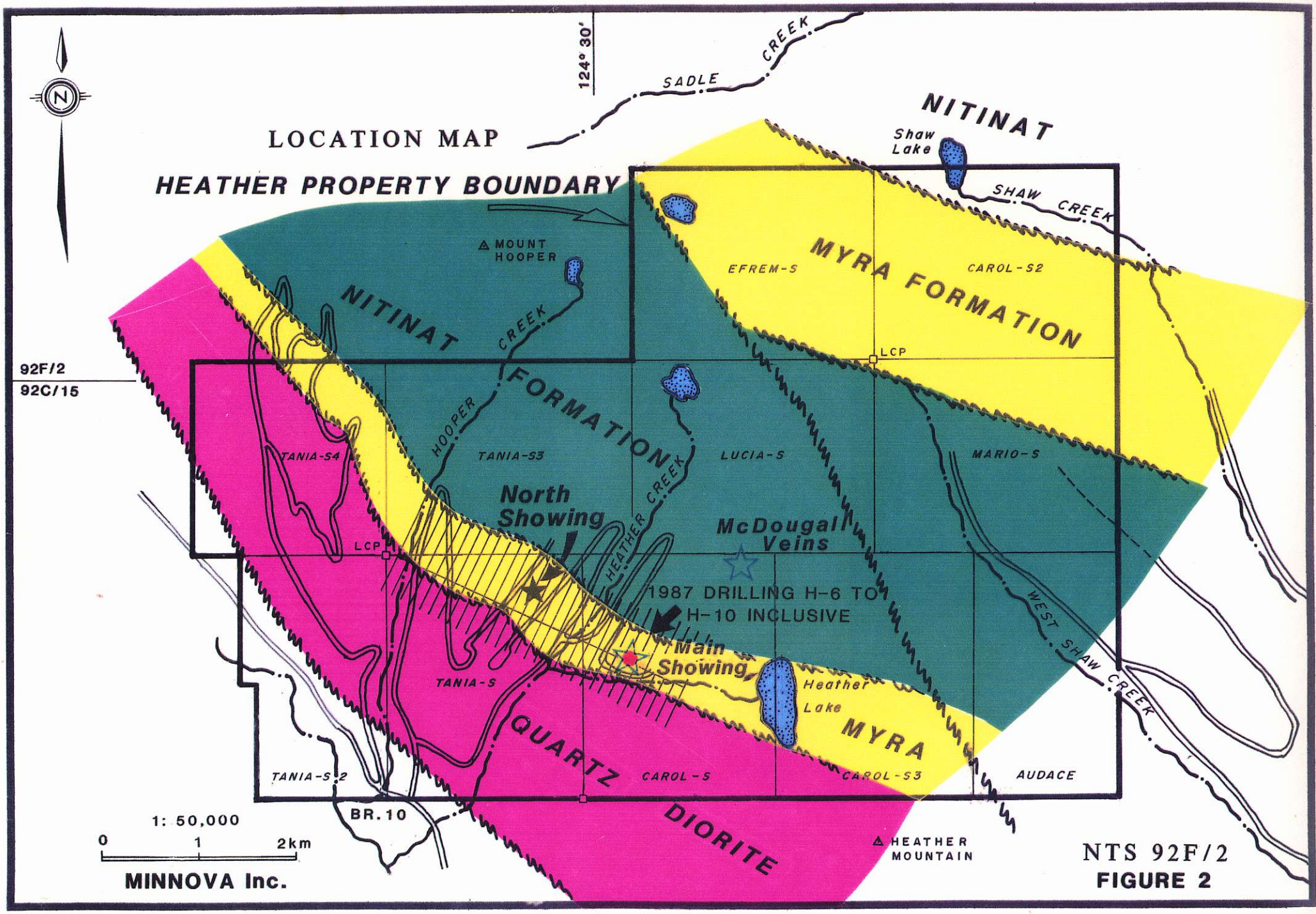
The Heather property is located on Vancouver Island approximately 40km southeast of Nanaimo and 7km north of the west end of Cowichan Lake (Figure 1). A network of logging roads from Youbou provides access to the property for 2 and 4-wheel drive vehicles.

Clear-cut logging by Crown Forest in the early 1970's has resulted in excellent outcrop exposures especially along the old roads. Current logging operations are restricted to the Shaw Creek and West Shaw Creek areas.

Topographic relief varies between 200 and 1400 metres and locally the terrain is quite steep.

b) Property Status

The Heather property consists of 11 claims (206 units) which cover an area of approximately 5150 hectares. Details of the property claim status are given below:


LOCATION MAP
HEATHER PROPERTY BOUNDARY
124° 30'
SADLE CREEK
NITINAT
Shaw Lake
SHAW CREEK
MOUNT HOOPER
NITINAT FORMATION
HOOPER CREEK
EFREM-S
CAROL-S2
MYRA FORMATION
LCP
92F/2
92C/15
TANIA-S4
TANIA-S3
LUCIA-S
MARIO-S
North Showing
McDougall Veins
HEATHER CREEK
LCP
1987 DRILLING H-6 TO H-10 INCLUSIVE
Main Showing
WEST SHAW CREEK
Heather Lake
MYRA
TANIA-S
QUARTZ DIORITE
TANIA-S2
CAROL-S
CAROL-S3
AUDACE
BR.10
HEATHER MOUNTAIN
1: 50,000
0 1 2km
MINNOVA Inc.
NTS 92F/2
FIGURE 2

Claim Name	No. of Units	Record No.	Expiry Date
		Carol Group	
Carol S	20	644	August 3, 1990
Marino S	20	647	August 3, 1990
Carol S-2	20	648	August 3, 1990
Carol S-3	20	686	October 5, 1990
Audace	15	1567	September 19, 1990
		Tania Group	
Tania S	20	645	August 3, 1990
Lucia S	20	646	August 3, 1990
Efrem S	20	649	August 3, 1990
Tania S#3	20	684	October 5, 1990
		Ungrouped Claims	
Tania S#2	15	683	October 5, 1990
Tanis S#4	16	685	October 5, 1990

c) Previous Work

Canamin Resources Limited staked the property in 1982 after E. Specogna, a local prospector, discovered several polymetallic, sulphide-rich boulders in the Heather Creek area. The property was optioned to Falconbridge Limited in 1982 and they discovered the McDougall quartz vein which returned assays of up to 0.35 oz/T Au. In 1983, Falconbridge and Chevron Canada Resources Limited formed a joint venture partnership with Chevron as the operator. Over the next 2 years they carried out reconnaissance-style mapping and soil geochemical surveys over the property

using the many logging roads as control. They also contracted helicopter-mounted INPUT E.M. and magnetic surveys over the property and ground follow-up of anomalies with an EM-37 system. The best mineralization encountered was a sulphide-rich section of what is now known as the Main showing. It yielded assays of 0.25 oz/ton Au and 0.18% Cu. Chevron tested this showing with 2 diamond drill holes totalling 338 metres. The best intersection from this program was 3.0 g/T Au over 1.5 metres and they subsequently dropped the option in early 1985. Minnova acquired the Heather property in May 1986 and has been actively exploring the ground for base and precious metals with International Cherokee Developments Ltd. as a joint venture partner. Five diamond drill holes totalling 547 metres were drilled on the property in 1986 to test geophysical and lithogeochemical anomalies associated with a quartz-pyrite shear zone.

A more detailed review of previous work and Minnova's 1986 exploration program is given in M. Gray's "Summary Report of 1986 field work on the Heather Option".

2. Results of the 1987 Minnova Exploration Program

A) Geology

a) 1986 Grid

Additional detailed mapping was carried out on the 1986 grid to evaluate the gold potential of altered zones previously defined. Sample locations are plotted on the geology maps (Figures 3a,b)

and analyses are presented in Appendix I. Gold values of these samples are generally low with only 4 samples from scattered locations having values higher than 20 ppb Au.

The 1986 mapping and IP surveys indicated that the quartz-pyrite zone exposed at the Main Showing could be traced from line 5W to line 16W. More detailed work in 1987 revealed differing mineralization and alteration styles along strike. Outcrops in the creek valley near lines 10W and 11W exhibit a quartz-carbonate alteration with little pyrite and low Au values. Outcrops in the vicinity of the North Showing (lines 13W to 15W) are part of a quartz-pyrite alteration zone similar to that observed at the Main Showing. The rusty zone at 17W, 2+25N is due to pyritic argillite beds within a chert to cherty tuff sequence. Gold values of this zone are also low (10 ppb). Detailed chip sampling of a 30 metre wide quartz-carbonate zone outcropping in Hooper Creek (29+00W, 0+50S) yielded low gold values (Appendix I).

b) Reconnaissance Geology of Heather Property

Reconnaissance traverses in the northern part of the Heather claim group were continued in 1987 to evaluate the base and precious metal potential of this large property. Litho-geochemical samples were routinely taken and analysed for major and trace elements (SiO_2, TiO_2, Al_2O_3, Fe_2O_3, MgO, Na_2O, K_2O, CaO, MnO_2, Cu, Pb, Zn, Au, Ag, Sb, Zr, Sr) using ICP and atomic absorption methods. Sample locations are plotted on the geology

maps and individual analyses are presented in Appendix I (Figures 4a, b, c).

The Myra-Nitinat contact which is believed to correlate with Westmin's H-W horizon has been defined in the Shaw and West Shaw Creek areas. However no alteration zones have been outlined in the underlying Nitinat formation. The geological data is supported by the lithogeochemical data as no sodium, copper, zinc, gold or barium anomalies have been outlined during the reconnaissance work.

B) Soil Geochemistry

A soil geochemical survey was carried out over the 1986 grid. A total of 564 samples of the "B" soil horizon were collected and analysed for Au, Ag, Cu, Zn, Pb, As, and Sb at Min-En Laboratories in North Vancouver. Results have been included in Appendix I and Cu, Zn, Au and As values are plotted in Figures 5a and 5b. Statistical evaluation of the geochemical data is presented in Table 1.

Weak 1 or 2 sample gold anomalies are present throughout the survey area. A coincident copper, zinc, gold and weak arsenic anomaly occurs downslope of the Main Showing. A similar but somewhat weaker multi-element soil anomaly is associated with the North showing located on the opposite side of the valley from the Main Showing.

Table 1: Soil Geochemistry - Statistics

Element	N	Minimum	Maximum	X_N	σ_N	μ_N	σ_N	Type of Distribution
Au(ppb)	635	3	800	8.5	6.0	7.1	1.7	log normal
Ag(ppm)	635	0.1	4.2	0.8	0.4			normal
As(ppm)	635	1	140	17.2	11.5	12.3	2.6	log normal
Cu(ppm)	635	2	1842	72.2	42.3			normal
Zn(ppm)	635	4	949	50.9	20.6			normal
Pb(ppm)	635	3	33	12.3	5.9			normal
Sb(ppm)	635	1	38	5.0	4.1	3.6	2.2	log normal

A weak but extensive gold anomaly occurs to the east of Hooper Creek. Detailed follow-up in this area failed to find any auriferous zones which could explain the anomaly.

A total of 74 soil samples were collected from a small grid in the McDougall vein area. A 4 sample gold anomaly with one value of 800 ppb is associated with rusty cherts which overly the Nitinat flow breccia. Cu, Zn and As values are low throughout the area. There are no anomalous soil samples associated with the McDougall veins.

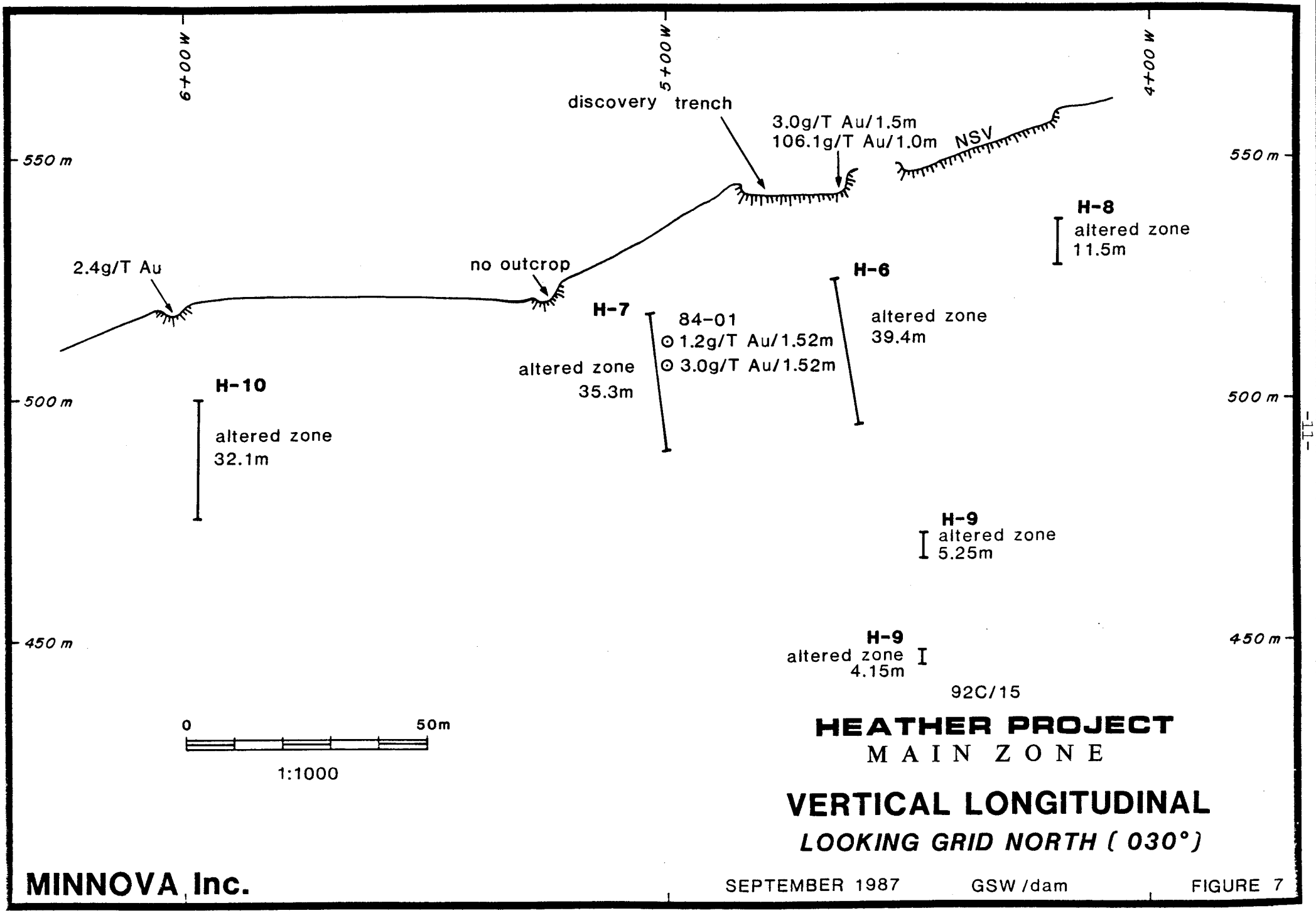
C) Drilling

Five diamond drill holes totalling 588.6 metres tested the Main Showing mineralization at shallow depths over a strike length of 175 metres. Detailed drill logs are presented in Appendix II, drill sections are included as Figure 6 and drill holes are plotted in plan on Figure 3a. All of the holes intersected an altered zone consisting of 10 to 15% quartz-carbonate veins and 3 to 5% very fine-grained pyrite. It varies in thickness from 4.15m to 39.4m as shown on a vertical longitudinal (Figure 7). No significant gold values are associated with the altered zone.

D) Mineralized Occurrences

a) Main Showing

The Main Showing was the focus of a large amount of detailed work in 1987. The soil survey indicated that it was the most highly anomalous area in the southern part of the Heather claim group.



MINNOVA Inc.

SEPTEMBER 1987 GSW /dam FIGURE 7

Backhoe trenching and sampling was carried out to try and establish the orientation and extent of the mineralized zone (Figure 8). A 70 metre wide rusty quartz-pyrite zone is exposed in the Main Showing trench. The intense foliation noted in the trench has a strike of 115° to 140° and dips of 50° to 80° to the northeast. There are 2 sets of quartz veins - one set parallel to the foliation and another set at a 15° to 20° angle to the foliation. Pyrite content increases adjacent to some of the quartz veins. The best gold values obtained in the trenches are located adjacent to a narrow quartz-pyrite-chalcopyrite vein which had previously returned high gold values (106.1 g/T Au over 1.0m) (Figure 8). Five diamond drill holes which test the Main Zone in 1987 indicated that the alteration has a southwesterly dip (50° to 60°). This is opposite to that obtained from the surface measurements. Assay results from the surface sampling and diamond drilling indicate that there is no significant economic gold mineralization associated with the Main Showing altered zone.

b) North Showing

The North Showing is located at 14+25W, 0+50N on the opposite side of the valley from the Main Showing. A sample of andesitic tuff with pervasive quartz-pyrite alteration which was taken in 1986 yielded 5.0 g/T Au. Detailed prospecting and sampling in the vicinity of this outcrop failed to discover any similar gold mineralization. An 11.2m trench across the 5.0 g/T Au outcrop was made by blasting. The zone is characterized by 1% quartz-

carbonate veins and well-foliated andesitic tuff which is locally weakly pyritic (1-2%). Chip sampling of the trench yielded anomalous gold values of 248 ppb Au over 6.0 metres. The individual assays and intervals are listed below:

Sample #	Interval(m)	Au(ppb)	Cu(ppm)	Zn(ppm)	Ag(ppm)
NS-1	1.5	10	103	145	1.3
NS-2	1.5	100	105	180	1.5
NS-3	1.5	125	102	220	1.4
NS-4	1.5	240	85	200	1.2
NS-5	1.5	525	100	410	1.3
NS-6	1.5	40	87	180	1.2
NS-7	2.2	10	83	155	1.4

The quartz-pyrite zone at the North Showing is expressed as an IP chargeability anomaly. Diamond drill hole H-4 tested this anomaly 125 metres east of the showing but no anomalous gold values were obtained.

c) McDougall Vein

Additional work in the McDougall vein area was prompted by the high gold values (0.25 oz/T) associated with the quartz veins. Soil geochemistry and geological mapping was carried out in the area (Figure 9). Several other thin quartz veins were located and sampled but no anomalous gold values were obtained. The McDougall vein itself was exposed by blasting and trenching after initial chip sampling of the surface exposure yielded gold values

of 50 g/T over 0.3 metres. The vein is composed of 3 small, en-echelon quartz veins with dimensions of 12m by 0.3m, 4.5m by 0.3m and 2.0m by 0.2m. The best gold values occur in the larger vein where a 6.5m by 0.25m panel sample yielded assays of 9.15 g/T Au. Malachite-stained and chalcopyrite-rich (2-3%) pods occur locally within the veins and appear to be intimately associated with the higher gold contents. Chip and panel samples of the vein have been included in Appendix I.

3. Conclusions and Recommendations

Detailed and reconnaissance geological, soil geochemical and geophysical surveys have been completed on the Heather property over the last 2 years. Three gold showings occur on the property - the Main Showing, the North Showing and the McDougall vein. Backhoe trenching, sampling and diamond drilling (8 holes/813.5m) have been done in the Main Showing area. The altered zone is characterized by 10 to 15% quartz-carbonate veins in a pyritic (5-10%) andesitic tuff. Gold values within this zone are generally low (5-10 ppb range). Previous high-grade samples obtained from the Main showing (106.1 g/T Au over 1.0m) are intimately associated with a narrow discontinuous quartz vein. Further work in the Main Showing area is not warranted at this time.

Trenching and chip sampling in the North Showing area confirmed that there is a zone with anomalous gold content (248 ppb Au over

6.0m). Similar work in the McDougall vein area yielded some of the highest gold values obtained on the property (up to 50 g/T Au over 0.3m widths). Diamond drilling is planned to test both of these showings at shallow depths.

Reconnaissance geological and lithogeochemical surveys have been completed on all of the accessible areas of the Heather property. No geochemically anomalous zones or alteration haloes characteristic of a volcanogenic massive sulphide hydrothermal system have yet been defined. Further reconnaissance work requiring helicopter support is planned to evaluate the northern and south central parts of the property which are largely inaccessible.

Gary Wells

Gary S. Wells

4. References

Gray, M. J. (1987): Summary Report of 1986 Fieldwork on the Heather Option, NTS 92C/15,16, Minnova internal report.

Muller, J. E. (1980): The Paleozoic Sicker Group of Vancouver Island, B. C., GSC Paper 79-30.

APPENDIX I

Analyses: Soils, Rocks

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:882Z7) PAGE 1 OF 1

PROJECT NO: 224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-5259/P1+2

ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 10, 1987

Soils - 1986 Grid

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP1001	.1	12	129	7	3	97	5
1002	1.6	1	115	9	7	53	5
1003 40M	.1	1	12	3	1	56	5
HP1004	.8	35	157	13	7	84	10
HP1005	1.2	33	102	11	1	55	5
HP1006	1.3	23	34	10	5	29	5
HP1007	.3	5	76	12	4	41	15
HP1008	1.4	17	230	9	3	70	220
HP1009	.8	8	60	16	1	43	5
HP1010	.3	32	124	17	3	98	5
HP1011 40M	1.1	30	89	9	1	95	5
HP1012	.8	4	49	11	3	36	5
HP1013	1.3	43	48	20	2	45	5
HP1014	1.5	14	88	23	2	47	5
HP1015	.6	23	51	19	3	34	10
HP1016	1.0	11	76	13	1	61	5
HP1017	.8	35	59	18	4	53	5
HP1018	1.3	44	130	10	4	58	5
HP1019	.8	11	59	15	6	57	5
HP1020	.4	21	38	5	8	58	5
HP1021	.6	7	72	17	7	62	10
HP1022	1.0	38	202	23	3	97	15
HP1023	.6	17	44	18	3	42	5
HP1024	.4	12	25	9	6	23	5
HP1025	1.0	1	150	16	1	55	5
HP1026	1.3	1	70	16	2	123	90
1027	.5	3	65	13	7	73	5
HP1028	1.0	35	107	3	6	200	10
HP1029	.1	24	35	13	3	38	5
HP1030	.3	1	106	19	9	50	5
HP1031	1.9	2	51	19	4	47	5
HP1032	1.1	8	48	3	1	47	5
HP1033	1.1	23	57	6	4	39	5
HP1034	.8	22	157	5	3	42	5
HP1035	1.3	22	104	14	5	45	10
HP1036	.8	14	97	15	4	47	5
HP1037	.8	7	45	18	2	38	15
HP1038	1.0	17	86	10	3	39	10
HP1039	.6	18	26	8	2	33	5
HP1040	1.1	3	33	6	2	34	5
HP1041	1.5	11	95	13	3	36	30
HP1042	1.2	3	58	12	3	57	10
HP1043	.6	19	63	9	4	46	5
HP1044	.8	26	103	19	1	42	10
HP1045	.5	3	32	4	7	26	10
HP1046	.8	8	74	10	1	51	5
HP1047	.7	32	62	15	2	41	5
HP1048	.8	20	61	12	3	42	5
HP1049	.8	22	53	7	3	39	5
HP1050	.8	16	84	15	2	45	10
1051	.9	1	77	3	3	54	5
1052	.9	7	72	4	3	49	5
HP1053	1.0	1	58	8	6	36	5
HP1054	.7	21	60	21	2	42	10
HP1055	.7	20	69	16	4	51	10
HP1056	.7	31	115	15	1	39	15
HP1057	1.0	8	76	8	3	52	35
HP1058	.8	9	47	17	2	42	5
HP1059	1.0	22	98	15	2	37	5

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP1061	1.2	37	95	7	1	59	5
HP1062	4.2	14	102	17	7	137	55
HP1063	1.5	32	394	16	9	368	15
HP1064	1.4	25	1842	21	9	705	15
HP1065	1.1	40	191	6	9	471	15
HP1067	1.4	10	179	5	6	268	10
HP1068	.9	39	73	3	9	86	5
HP1069	1.7	28	87	18	3	85	5
HP1070	1.3	20	66	7	9	60	10
HP1071 40M	1.1	23	19	16	7	22	5
HP1072	1.2	26	25	8	5	18	5
HP1073	1.0	21	66	10	6	37	5
HP1074	1.1	21	33	12	4	43	5
HP1075	1.4	23	32	7	6	30	5
HP1076	1.2	34	81	24	2	64	5
HP1077	.9	15	182	9	12	310	10
HP1078	1.5	5	180	7	4	414	10
HP1079	1.6	29	132	5	15	225	5
HP1080	1.4	5	73	11	14	206	5
HP1081	1.3	20	252	21	16	244	15
HP1082	1.4	46	190	26	11	138	5
HP1083	1.8	38	242	26	17	60	15
HP1084	1.5	10	202	7	7	140	5
HP1085	1.4	37	89	20	9	77	10
HP1086	1.6	19	132	22	8	94	5
HP1087	1.4	12	42	15	6	40	5
HP1088	1.2	33	72	13	5	49	5
HP1089	1.2	25	48	20	7	56	10
HP1090	1.1	20	38	6	6	29	5
HP1091	.6	6	50	17	6	47	5
HP1092	1.1	22	29	9	11	66	5
HP1093	.8	14	23	4	4	27	5
HP1094	.7	18	38	7	8	47	5
HP1095	.8	14	105	5	4	74	5
HP1096	.6	12	82	17	3	45	10
HP1097	.9	21	32	13	6	32	5
HP1098	.6	13	25	17	7	37	5
HP1099	.9	13	23	6	7	15	5
HP1100	.7	4	46	21	8	36	15
HP1101	1.2	12	39	5	16	59	5
HP1102	.7	15	48	7	24	62	5
HP1103	1.3	22	37	6	4	39	10
HP1104	.8	13	55	13	1	40	5
HP1105 40M	.6	1	11	4	1	44	5
HP1106	.6	23	42	11	2	36	5
HP1107	.8	9	33	6	1	34	20
HP1108	.7	2	176	20	3	102	10
HP1109	.6	7	59	15	2	63	5
HP1110	.7	6	50	21	5	40	5
HP1111	.9	28	50	17	4	25	5
HP1112	.7	32	53	14	3	31	5
113	.9	4	34	3	1	42	5
HP1114	.7	36	56	18	3	30	5
HP1115	.7	6	27	9	1	32	10
HP1116	.6	18	54	8	3	31	40
HP1117	1.1	8	51	7	3	34	5
HP1118	.9	16	280	16	5	134	15
HP1119	.1	12	300	7	5	125	35
HP1120	1.4	20	206	20	10	67	95

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FF8
HP1122	1.0	11	464	26	14	142	75
123	.7	34	83	17	9	65	10
124	.6	26	183	23	5	125	15
HP1125	1.0	5	99	12	8	68	5
HP1126	1.6	22	201	12	7	113	5
HP1127	1.6	46	51	20	9	66	5
HP1128	1.4	37	47	21	20	57	5
HP1129	1.2	140	82	20	38	94	5
HP1130	1.3	23	50	18	14	45	10
HP1131	.7	23	46	10	6	39	5
HP1132	.7	21	61	20	3	62	5
HP1133	.6	18	73	5	2	71	5
HP1134	.7	30	59	12	1	68	5
HP1135	.6	34	82	10	5	118	10
HP1136	1.0	6	50	3	3	31	5
HP1137	1.1	2	39	8	6	84	5
HP1138 40M	1.0	7	91	17	2	82	5
HP1139A	1.3	18	26	15	3	12	5
HP1139B	1.6	57	34	7	9	37	5
HP1140	1.1	35	65	7	5	39	10
HP1141	1.2	20	73	20	5	44	5
HP1142	1.2	17	28	11	2	25	5
HP1143	.7	29	112	19	4	79	5
HP1144	.9	6	102	19	3	59	5
HP1145 40M	.9	3	68	5	5	72	10
HP1146	.6	24	58	7	2	31	5
47	.7	13	40	13	3	28	5
HP1148	.5	8	33	7	5	24	5
HP1149	.6	25	44	8	10	26	5
HP1150	.8	31	123	28	4	172	5
HP1151	.8	10	70	17	1	79	10
HP1152	1.1	28	151	18	3	90	10
HP1153	1.3	36	35	3	6	33	5
HP1154	.8	2	156	6	2	133	45
HP1155	.5	18	32	8	7	21	15
HP1156	.9	21	101	19	11	89	20
HP1157	.8	8	75	10	1	46	5
HP1158	1.2	39	136	24	11	90	15
HP1159	.8	49	368	11	4	151	560
HP1160	.7	17	74	18	2	61	25
HP1161	1.2	32	57	6	1	33	15
HP1162	1.1	1	34	18	6	45	5
HP1163	.8	17	89	19	5	48	5
HP1164	.9	44	63	20	1	34	5
HP1165	1.1	39	138	19	7	40	10
HP1166	1.5	50	106	4	5	65	5
HP1167	.8	10	25	9	3	24	25
HP1168	1.1	8	20	21	9	46	5
HP1169	1.1	32	30	26	15	45	5
HP1170	.7	21	49	20	9	37	10
171	1.2	31	40	3	6	39	5
172	.8	24	50	11	6	44	5
HP1173	.5	9	114	8	1	135	25
HP1174	.8	1	54	15	2	57	5
HP1175	1.1	36	73	18	3	65	10
HP1176	.6	25	87	15	4	47	5
HP1177	.7	16	74	13	3	31	5
HP1178	.3	4	23	8	1	14	10
HP1179	.2	13	33	13	5	15	15

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:GE027) PAGE 1 OF 1

PROJECT NO: 224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-5259/P749

ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 10, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP1181	1.4	6	44	16	5	80	5
1182	1.3	19	43	16	5	35	5
1183	1.1	17	42	5	5	29	5
HP1184	1.2	34	94	11	6	47	5
HP1185	1.3	24	24	8	8	29	10
HP1186	1.2	24	20	4	2	21	5
HP1187	1.3	11	95	13	6	59	5
HP1188	1.3	11	164	9	9	75	5
HP1189	1.0	34	66	10	1	43	5
HP1190	.8	27	40	18	4	28	5
HP1191	.8	13	28	4	6	18	5
HP1192	.9	21	24	5	5	9	10
HP1193	1.1	27	53	17	3	25	5
HP1194	1.2	1	58	11	1	51	5
HP1195	.8	1	28	9	2	11	5
HP1196	.8	9	38	14	4	25	5
HP1197	1.3	39	50	14	1	36	5
HP1198	.7	15	41	8	1	21	5
HP1199	.9	41	129	23	4	55	5
HP1200	.8	16	125	16	2	70	40
HP1201	.8	4	94	4	1	53	5
HP1202	.6	7	135	4	1	99	10
HP1203	.9	6	103	10	1	147	5
HP1204	.7	9	84	12	1	42	20
HP1205	.7	6	72	6	4	92	5
HP1206	1.1	12	85	6	3	48	10
207	1.0	1	86	16	1	43	5
1208	.8	24	28	14	3	8	5
HP1209	.9	4	33	11	4	23	5
HP1210	1.1	24	37	13	2	32	5
HP1211	.9	22	59	17	1	39	10
HP1212	1.4	18	94	14	1	54	5
HP1213	1.2	20	60	6	1	34	20
HP1214	1.2	20	95	4	2	33	10
HP1215	.5	1	81	14	2	75	5
HP1216	.8	31	62	7	2	32	5
HP1217	1.0	7	73	17	3	34	15
HP1218	1.6	21	73	19	2	24	10
HP1219	1.2	32	45	12	1	17	20
HP1220	.7	12	123	11	2	35	5
HP1221	1.2	26	86	19	2	34	10
HP1222	.6	7	33	11	4	30	5
HP1223	1.1	15	92	13	1	40	5
HP1224	1.5	15	134	19	2	63	5
HP1225	1.4	26	60	11	4	21	5
HP1226	1.8	22	95	18	4	60	5
HP1227	.9	3	72	12	2	59	5
HP1228	.8	25	76	7	1	59	5
HP1229	1.1	8	91	6	2	62	30
HP1230	1.2	6	157	16	3	37	10
1231	.6	30	89	12	3	59	5
232	.6	21	62	7	1	56	5
HP1233	.4	3	58	14	2	47	5
HP1234	.6	15	80	12	3	57	20
HP1235	.5	3	63	13	3	51	5
HP1236	.6	25	36	9	2	34	5
HP1237	.6	17	63	8	2	65	5
HP1238	.9	25	45	6	2	42	5
HP1239	.5	20	40	7	3	42	5

COMPANY: MINNOVA INC.
PROJECT NO: 224
ATTENTION: G.WELLS/S.LEAR

MIN-EN LABS ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

(ACT:GE927) PAGE 1 OF 1
FILE NO: 7-5259/P3
* TYPE SOIL GEOCHEM * DATE:JUNE 10, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP1241	.9	28	67	13	5	54	5
'242	1.7	14	48	15	3	44	10
,243	.9	34	131	7	4	87	5
HP1244	.9	7	41	8	2	32	5
HP1245	1.2	15	141	26	5	96	15
HP1246	1.1	10	482	7	7	949	95
HP1247	1.2	25	219	4	4	323	20
HP1248	.9	22	73	4	7	46	5
HP1249	1.1	19	74	3	2	44	15
HP1250	.9	4	74	13	4	56	5
HP1251	.9	40	117	4	6	58	5

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:GE027) PAGE 1 OF 1
PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-547/P1+2
ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 12, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FFB
HP2001	.4	18	97	8	8	61	5
HP2002	.1	10	31	8	8	61	5
HP2003	.3	22	39	14	10	69	5
HP2004	.5	4	122	7	8	95	5
HP2005	.7	20	90	22	11	75	10
HP2006	.7	2	97	20	7	128	25
HP2007	.9	7	93	13	10	239	10
HP2008	.8	19	62	17	13	122	30
HP2009	1.1	4	135	6	10	218	5
HP2010	.8	5	167	14	6	154	5
HP2011	.9	7	147	13	7	99	10
HP2012	.9	24	247	24	9	151	5
HP2013	.7	19	94	23	9	117	5
HP2014	.7	21	98	21	11	67	5
HP2015	1.1	20	99	15	10	90	5
HP2016	.9	17	114	15	8	99	5
HP2017	.6	10	189	19	5	731	5
HP2018	1.1	22	144	22	8	585	10
HP2019	.6	20	208	14	7	94	5
HP2020	.5	16	148	11	6	119	5
HP2021	.9	1	190	4	5	226	5
HP2022	.4	22	88	12	2	75	5
HP2023	.4	8	65	11	5	93	5
HP2024	.7	19	141	6	4	113	5
HP2025	1.1	7	96	11	4	60	5
HP2026	.8	24	84	10	5	81	10
HP2027	.6	6	115	8	7	654	15
HP2028	1.0	3	98	19	2	159	5
HP2029	.5	9	83	22	8	89	5
HP2030	.4	21	46	13	10	61	5
HP2031	.4	7	48	12	13	57	5
HP2032	.5	8	145	17	4	77	10
HP2033	.7	17	129	5	8	82	5
HP2034	.9	16	63	12	6	47	5
HP2035	1.0	12	159	8	13	93	5
HP2036	.9	4	90	23	2	61	5
HP2037 40MESH	.6	7	86	10	7	68	5
HP2038	.6	14	115	23	2	53	5
HP2039	.8	28	113	5	14	78	35
HP2040 40MESH	.8	6	51	14	6	76	5
HP2041	.7	10	127	13	12	416	10
HP2042	.8	15	100	23	10	238	10
HP2043	.7	34	170	4	7	112	5
HP2044	.8	19	93	8	8	142	5
HP2045	.4	7	94	8	6	91	5
HP2046	.8	14	134	5	4	64	5
HP2047	.8	23	124	11	7	91	175
HP2048	.7	18	60	19	6	85	20
HP2049	.8	11	129	18	4	56	15
HP2050	.7	20	77	13	7	54	30
HP2051	.7	25	173	17	9	70	10
HP2052	1.3	3	134	19	5	82	5
HP2053	.9	24	101	14	9	108	5
HP2054	.9	5	65	14	9	72	20
HP2055	1.2	33	166	3	8	115	10
HP2056	.5	40	91	12	4	98	25
HP2057	.1	12	5	12	2	21	30
HP2058	.3	16	50	3	5	69	15
HP2059	.3	31	81	18	19	57	5

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:GE027) PAGE 1 OF 1
PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-547/P3+4
ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 12, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP2061	.6	34	219	24	3	79	10
HP2062	.6	39	164	9	5	76	25
HP2063	.5	21	67	15	5	70	5
HP2064	.9	28	134	22	1	73	10
HP2065	.9	13	100	10	2	77	5
HP2066	.4	29	51	18	4	56	5
HP2067	.1	5	67	16	3	63	5
HP2068	.8	26	82	11	2	74	10
HP2069	.6	29	165	11	8	71	30
HP2070	.9	47	88	23	4	88	5
HP2071	.6	4	60	6	8	82	50
HP2072	.8	26	116	16	8	69	5
HP2073	.4	28	193	4	10	91	15
HP2074	.9	24	51	20	9	61	5
HP2075	.6	4	115	15	2	85	5
HP2076	1.2	3	231	25	10	237	10
HP2077	1.1	38	152	33	7	310	10
HP2078	.7	32	104	20	6	194	5
HP2079	1.1	25	119	18	4	125	5
HP2080	.9	48	83	12	5	66	5
HP2081	.9	40	84	19	5	59	10
HP2082	.6	3	42	16	2	42	5
HP2083	.4	13	32	4	4	45	5
HP2084	.7	34	86	15	3	41	5
HP2085	.6	40	66	19	5	46	5
HP2086	.8	34	139	16	4	57	5
HP2087	1.1	41	157	8	6	60	10
HP2088	.7	41	116	7	8	65	5
HP2089	.4	28	123	13	9	66	5
HP2090	.7	11	171	17	13	69	5
HP2091	1.0	13	61	5	6	67	5
HP2092	.9	42	82	23	14	85	10
HP2093	.8	22	90	3	10	118	5
HP2094	.6	24	98	15	14	78	5
HP2095	1.1	26	69	17	13	101	5
HP2096	1.0	13	59	20	10	89	5
HP2097	.8	22	100	19	6	80	5
HP2098	.7	11	64	18	9	67	10
HP2099	.9	8	45	23	13	58	5
HP2100	.7	15	58	8	10	59	5
HP2101	1.1	21	61	15	14	61	50
HP2102	1.1	33	55	11	14	54	20
HP2103	.9	4	78	17	6	59	5
HP2104	.7	6	58	6	2	49	5
HP2105	.6	24	36	13	2	43	5
HP2106	.9	6	29	4	5	32	5
HP2107	.8	6	62	15	7	50	10
HP2108	1.0	22	60	11	11	58	15
HP2109	.7	10	33	10	8	41	65
HP2110	.7	19	49	13	8	48	5
HP2111	.7	28	47	13	9	69	5
HP2112	.8	6	61	7	8	76	5
HP2113	.8	14	68	6	14	76	10
HP2114	.7	13	93	5	10	72	5
HP2115	.7	24	42	12	16	69	5
HP2116	.9	22	41	10	17	60	5
HP2117	.9	36	98	5	12	82	5
HP2118	.7	28	77	10	14	58	3
HP2119	.7	37	66	6	18	72	35

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:GE027) PAGE 1 OF 1

PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-547/P5+6

ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 12, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FFB
HP2121	.5	6	37	5	5	41	5
HP2122	.8	18	53	13	8	41	5
HP2123	1.7	17	58	12	11	54	5
HP2124	.7	46	71	26	14	69	10
HP2125	.5	44	93	19	7	64	5
HP2126	.8	33	52	18	3	32	5
HP2127	.9	46	161	4	4	80	5
HP2128	1.3	32	80	6	3	49	5
HP2129	.6	7	39	20	4	57	5
HP2130	.9	42	57	16	6	60	10
HP2131	.5	17	61	21	5	59	5
HP2132	1.0	26	69	21	22	78	5
HP2133	.7	19	30	15	5	24	5
HP2134	.8	39	63	8	8	50	10
HP2135	.4	4	43	5	6	42	15
HP2136	1.0	11	109	3	9	97	25
HP2137	1.0	2	83	17	7	57	35
HP2138	.7	15	27	12	1	19	5
HP2139	1.0	24	36	16	1	29	5
HP2140	.9	3	19	11	1	22	5
HP2141	1.2	36	84	3	2	36	10
HP2142	1.3	34	34	13	5	30	5
HP2143	1.0	26	74	19	1	48	5
HP2144	1.0	37	39	19	5	38	5
HP2145	1.0	16	20	15	1	30	5
HP2146	.9	17	49	13	3	51	5
HP2147	.5	16	13	13	1	19	5
HP2148	.7	27	59	7	6	47	5
HP2149	.8	30	44	7	7	41	10
HP2150	1.0	4	67	20	1	58	5
HP2151	.5	21	24	9	4	27	5
HP2152	.6	21	28	10	5	21	5
HP2153	.8	24	46	21	5	38	15
HP2154	.7	6	57	17	3	52	5
HP2155	.8	20	55	7	4	48	10
HP2156	1.0	11	49	5	5	40	5
HP2157	1.1	25	63	18	5	52	5
HP2158	.9	18	33	8	9	40	35
HP2159	.6	25	44	14	11	35	10
HP2160	.1	10	7	4	1	23	330
HP2161	.5	5	26	4	10	30	5
HP2162	.7	16	43	7	13	49	5
HP2163	1.0	26	19	13	16	42	10
HP2164	.9	43	82	5	15	82	30
HP2165	.5	11	26	12	7	41	5
HP2166	.9	22	45	19	5	42	5
HP2167	.9	25	64	6	6	50	5
HP2168	.6	16	48	14	8	43	5

COMPANY: MINNOVA INC. MIN-EN LABS ICP REPORT (ACT:GE027) PAGE 1 OF 1

PROJECT NO: 703-224 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 FILE NO: 7-3689/P1+2

ATTENTION: G.WELLS/S.LEAR (604)980-5814 OR (604)988-4524 * TYPE SOIL GEOCHEM * DATE:JUNE 19, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FPB
HP1252	.1	13	111	13	4	47	10
HP1253	.5	11	25	15	3	23	5
254	1.1	28	34	18	2	38	5
HP1255	.9	35	69	16	5	61	5
HP1256	.3	2	27	11	2	24	30
HP1257	1.0	26	26	19	4	26	5
HP1258	.7	5	73	15	1	49	50
HP1259	.5	26	44	15	2	58	5
HP1260	.9	23	153	17	1	85	5
HP1261	.7	32	35	17	3	60	5
HP1262	.7	15	77	23	6	64	15
HP1263	.5	18	22	13	4	52	5
HP1264	.7	14	93	9	11	61	5
HP1265	.5	14	93	5	8	63	5
HP1266	.5	3	70	3	4	60	10
HP1267	.7	16	74	11	1	58	5
HP1268	.7	14	75	9	4	53	5
HP1269	.7	26	51	3	3	49	5
HP1270	.8	18	52	12	2	66	5
HP1271	.5	11	50	10	5	68	5
HP1272	.8	9	125	22	3	63	5
HP1273	.5	14	64	21	7	61	25
HP1274	.5	8	103	14	13	53	40
HP1275	.8	15	99	18	6	79	20
HP1276	.7	21	116	13	3	62	45
HP1277	.5	1	34	5	6	75	5
HP1278	.5	29	40	17	7	62	5
279	.5	6	41	5	5	76	5
HP1280	.2	7	56	10	4	63	5
HP1281	.3	4	12	9	9	22	5
HP1282	.9	3	66	13	1	63	5
HP1283	1.3	2	200	10	12	98	10
HP1284	.8	56	113	17	28	45	5
HP1285	2.4	37	122	12	24	73	25
HP1286	.7	1	66	14	3	68	5
HP1287	.8	10	88	5	2	67	5
HP1288	.6	29	45	20	4	54	5
HP1289	1.3	33	81	10	5	49	40
HP1290	1.1	7	60	16	3	60	10
HP1291	.8	18	22	11	2	30	5
HP1292 N/S							
HP1293 N/S							
HP1294 N/S							
HP1295 N/S							
HP1296 N/S							
HP2169	.4	28	93	4	3	48	210
HP2170	1.4	9	35	13	3	29	45
HP2171	1.2	14	49	4	2	40	5
HP2172	1.3	30	108	7	3	58	5
HP2173	1.3	14	46	14	2	32	60
HP2174	.6	15	18	4	2	24	30
175	.6	8	81	22	2	62	10
HP2176	.7	31	81	4	4	58	30
HP2177	.9	1	91	17	5	79	60
HP2178	1.2	20	42	16	7	37	5
HP2179	1.3	4	43	16	4	34	30
HP2180	1.1	1	55	10	1	45	5
HP2181	1.3	34	74	15	4	55	5
HP2182	1.0	10	112	10	1	43	510
HP2183	1.2	20	137	22	6	58	10

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PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-5688/P3+4
ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 19, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FFB
HP 2184	.5	12	70	17	2	40	5
HP 2185	.4	19	44	3	3	34	5
2186	.7	27	58	18	3	47	5
HP 2187	.1	2	28	9	5	15	5
HP 2188	.5	10	26	14	5	27	10
HP 2189	.5	13	85	14	2	53	5
HP 2190	.7	7	89	22	2	57	25
HP 2191	.7	2	44	4	2	33	5
HP 2192	.5	1	27	16	7	28	5
HP 2193	.7	22	57	8	4	34	10
HP 2194	.6	18	151	11	13	74	10
HP 2195	.7	12	128	6	6	58	5
HP 2196	.9	7	96	17	1	74	5
HP 2197	.4	13	18	6	2	10	5
HP 2198	1.4	20	51	17	7	35	5
HP 2199	.8	13	88	8	4	54	10
HP 2200	1.2	29	64	11	1	35	5
HP 2201	.5	30	70	9	4	66	5
HP 2202	.9	8	72	17	5	60	5
HP 2203	.7	1	89	21	9	68	30
HP 2204	.7	1	31	11	8	31	5
HP 2205	.8	22	35	9	8	31	5
HP 2206	.6	9	48	18	4	37	5
HP 2207	.6	2	32	7	9	33	5
HP 2208	.7	27	17	11	1	26	10
HP 2209	.4	20	48	4	7	38	5
HP 2210	.5	21	46	17	5	40	5
2211	.7	26	88	16	2	48	5
HP 2212	.5	12	97	12	2	56	5
HP 2213	.3	6	51	5	5	35	5
HP 2214	.3	1	64	14	1	61	5
HP 2215	.6	5	27	16	8	26	10
HP 2216	.6	10	89	7	5	52	10
HP 2217	.6	15	44	15	1	44	15
HP 2218	.6	10	55	23	3	43	30
HP 2219	.5	33	83	8	6	54	65
HP 2220	.4	36	66	6	1	39	20
HP 2221	.7	58	378	16	4	83	10
HP 2222	.6	20	68	8	9	54	20
HP 2223	.3	15	101	19	4	55	10
HP 2224	.4	7	166	12	4	76	10
HP 2225	1.1	6	131	17	1	91	20
HP 2226	.4	4	38	11	3	36	5
HP 2227	.6	13	111	24	4	95	15
HP 2228	.9	18	108	20	6	68	5
HP 2229	.2	39	56	17	3	58	50
HP 2230	.4	2	100	6	5	67	30
HP 2231	.6	18	98	18	2	50	80
HP 2232	.7	8	188	7	3	86	35
HP 2233	.6	32	121	17	6	87	10
HP 2234	.8	20	115	10	2	69	20
2235	.6	8	119	18	4	67	15
HP 2236	.6	21	83	18	2	67	10
HP 2237	.8	1	62	10	5	49	5
HP 2238	.5	16	102	14	3	57	10
HP 2239	.6	17	105	12	7	61	10
HP 2240	.5	4	149	10	6	64	30
HP 2241	.8	16	159	14	3	84	10
HP 2242	1.2	12	192	15	1	77	40
HP 2243	.4	36	155	19	1	56	20

COMPANY: MINNOVA INC. MIN-EN LABS ICP REPORT (ACT:GE027) PAGE 1 OF 1

PROJECT NO: 703-224 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 FILE NO: 7-5685/F5

ATTENTION: G.WELLS/S.LEAR (604)980-5814 OR (604)988-4524 * TYPE SOIL GEOCHEM * DATE:JUNE 19, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FPB
HP 2244	.5	14	115	8	3	86	20
HP 2245	.6	28	109	20	2	70	35
HP 2246	.6	35	173	28	5	62	10
HP 2247	.8	22	147	3	1	76	10
HP 2248	.6	16	77	11	4	51	5
HP 2249	.6	4	111	7	3	51	10
HP 2250	.4	27	135	21	4	60	5
HP 2251	.7	22	156	19	4	52	5
HP 2252	.5	2	131	9	2	62	5
HP 2253	.5	8	115	8	2	67	10
HP 2254	.6	8	60	13	1	48	5
HP 2255	.8	18	140	17	5	44	5
HP 2256	.9	5	95	10	3	72	15
HP 2257	.8	1	62	15	2	36	5
HP 2258	.3	20	103	21	4	70	10
HP 2259	1.0	40	113	20	2	58	20
HP 2260	.8	8	61	19	4	40	5
HP 2261	.6	21	73	14	3	42	5
HP 2262	.6	39	74	19	2	37	5
HP 2263	.8	6	108	22	1	38	5
HP 2264	.4	29	112	9	1	37	5
HP 2265	.8	20	80	6	3	49	10
HP 2266	.8	24	134	7	1	65	5
HP 2267	.7	11	55	17	3	86	5
HP 2268	.8	32	112	15	2	81	10
HP 2269	.6	21	98	14	1	56	20
HP 2270	.8	14	163	19	2	82	5

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:G16) PAGE 1 OF 1
PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-623/F1+2
ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 29, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-PPB
HP 3001	1.1	33	49	20	5	43	5
HP 3002	.7	3	9	8	3	13	10
HP 3003	.3	2	8	5	1	18	25
HP 3004 20M	.3	7	15	5	1	24	5
HP 3005	.9	14	11	12	3	21	10
HP 3006	.7	14	5	4	1	20	25
HP 3007	1.6	6	20	5	1	4	15
HP 3008 40M	.6	6	14	8	1	15	5
HP 3009 20M	.3	2	2	3	1	29	5
HP 3010 20M	.7	10	94	8	3	53	10
HP 3011 20M	.3	1	4	6	1	30	10
HP 3012 20M	.5	14	40	11	1	78	5
HP 3013	.3	24	148	15	2	95	10
HP 3014	.9	35	132	11	1	57	15
HP 3015 20M	.3	15	44	3	1	34	5
HP 3016	.5	16	136	8	3	63	25
HP 3017	.1	5	8	5	3	8	55
HP 2018	.9	27	60	16	5	53	15
HP 2019	.5	10	29	11	1	33	15
HP 3020	.9	10	42	8	2	49	20
HP 3021	.2	5	9	8	1	18	5
HP 3022	1.1	17	15	9	1	18	10
HP 3023	.3	8	14	8	6	28	95
HP 3024	.9	34	59	21	2	43	5
HP 3025	.9	2	45	13	3	51	5
HP 3026	.8	1	51	6	1	39	10
HP 3027	.7	20	22	7	4	37	10
HP 3028	1.0	14	18	16	3	29	25
HP 3029	.7	17	37	10	4	42	5
HP 3030	.8	6	67	20	2	49	15
HP 3031	.8	1	16	6	1	19	5
HP 3032	1.1	76	132	5	4	97	5
HP 3033 40M	1.3	25	13	13	2	20	10
HP 3034 20M	.6	1	27	4	1	35	10
HP 3035	.9	24	16	9	2	47	5
HP 3036 20M	.2	4	5	4	1	22	15
HP 3037	1.1	11	18	5	4	25	10
HP 3038 40M	.3	7	16	7	1	20	55
HP 3039 40M	1.0	3	21	5	1	16	800
HP 3040	.5	14	25	13	11	38	75
HP 3041	.6	12	34	10	3	33	5
HP 3042 40M	.4	13	22	4	5	22	5
HP 3043	.9	23	47	10	2	42	10
HP 3044	1.8	9	21	13	4	24	5
HP 3045	.9	5	18	11	2	33	5
HP 3046 40M	.6	6	16	10	2	31	5
HP 3047	.8	31	32	12	3	27	20
HP 3048 40M	.8	11	65	11	2	54	5
HP 3049	.8	5	34	8	2	25	10
HP 3050	.8	9	13	13	1	19	5
HP 3051 20M	.2	2	11	4	1	33	5
HP 3052 40M	.3	1	9	4	2	21	5
HP 3053 20M	.2	9	10	7	1	30	5
HP 3054	.5	2	20	4	3	29	15
HP 3055	.3	20	21	11	2	27	20
HP 3056	1.5	2	94	12	3	42	20
HP 3057 20M	.4	2	12	4	1	28	5
HP 3058 40M	.3	4	9	4	1	28	5
HP 3059	1.1	5	115	14	3	147	5

Soils
McDougall Vein area

COMPANY: MINNOVA INC. | MIN-EN LABS ICP REPORT | (ACT:916) PAGE 1 OF 1

PROJECT NO: 703-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-623/P3

ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE SOIL GEOCHEM * | DATE:JUNE 29, 1987

(VALUES IN PPM)	AG	AS	CU	PB	SB	ZN	AU-FFB
HP 3061	.4	13	17	8	1	16	25
HP 3062	.4	15	24	6	1	43	5
HP 3063	.8	15	8	8	3	20	5
HP 3064	1.0	7	38	16	3	53	10
HP 3065	.4	3	14	4	1	21	5
HP 3066	.4	2	13	12	1	38	5
HP 3067	.5	14	87	8	1	65	15
HP 3068	.4	7	12	7	1	54	25
HP 3069	.4	2	4	5	1	18	5
HP 3070	.5	6	7	4	2	11	10
HP 3071	.4	2	3	4	1	41	5
HP 3072	1.0	8	25	7	3	32	75
HP 3073	.7	6	9	6	1	22	10
HP 3074	.7	15	98	10	1	62	15

Soils.

McDougall Vein Area.

MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 MC

Certificate of GEOCHEM

Company: MINNOVA INC.
Project: 701-224
Attention: G.WELLS/S.LEAR

File: 7-588/P1
Date: JUNE [illegible]/87
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AG PPM	AU-WET PPB
HP87-4	0.2	15
HP87-5	0.6	5<
HP87-6	0.4	5<
HP87-7	0.7	5
HP87-8	1.0	10<
HP87-9	0.5	5<
HP87-10	0.6	5<
HP87-11	1.0	5<
HP87-12	0.6	5<
HP87-13	0.5	10<
HP87-14	0.6	5<
HP87-15	0.5	5
HP87-16	0.4	5<
HP87-17	0.5	5<
HP87-18	0.4	245<
HP87-19	0.5	90<
HP87-20	0.4	5<
HP87-21	0.4	5<
HP87-21A	0.5	5<
HP87-22	0.2	20<
HP87-23	0.4	10<
HP87-24	0.2	5<

1986 Grid
Altered Zones Figures 3a, b

Certified by

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MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of GEOCHEM

Company:MINNOVA INC.
Project:701-224
Attention:G.WELLS/S.LEAR

File:7-569/P1
Date:JUNE 17/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	PB PPM	ZN PPM	AG PPM	AU-WET PPB	
HP87-25				1.2	135	
HP87-26				0.9	5	
HP87-27				0.7	20	
HP87-28				1.0	5	
HP87-29	1290	10	29	3.4	940	- associated with q.v (cp)
HP87-30				1.1	5	
HP87-31					5	
HP87-32					10	
HP87-33					10	
HP87-34					5	
HP[illegible]35					5	
HP[illegible]-36					65	
HP[illegible]-37					10	
HP87-38					5	
HP87-39					5	Hooper Creek carbonate zone.
HP87-40					5	
HP87-41					10	
HP87-42					5	
HP87-43					5	
HP87-44					5	
HP87-45					5	
HP87-46					5	
HP87-47				0.4	5	

Certified by [signature]

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MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524 TELEX: VIA USA 7501047 UC

Certificate of GEOCHEM

Company: MINNOVA INC.
Project: 701-224
Attention: G. WELLS/S.LEAR

File: 7-631/P1
Date: JUNE 24/87
Type: ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-WET PPB	
HP87-50	5	
HP87-51	35	
HP87-52	1000	McDougall Vein Area.
HP87-53	10	
HP87-54	5	
HP87-55	670	
HP87-57	5	
HP87-58	265	
HP87-59	15	
HP87-60	65	
TJP87-01	18000	
TJP87-02	50000	
TJP87-03	800	
TJP87-03B	980	
TJP87-04	500	
TJP87-05	5200	
TJP87-06	160	
TJP87-07	1000	
TJP87-08	50000	
TJP87-09	110	McDougall Vein
TJP87-10	3500	
TJP87-11	2250	
TJP87-12	3250	
TJP87-13	65	
TJP87-14	1150	
TJP87-15	650	
TJP87-16	1100	
TJP87-17	575	
TJP87-18	5200	
TJP87-19	6200	

*SOME OF THESE SAMPLES SHOULD HAVE BEEN REQUESTED FOR ASSAY.

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of Geochem

Company:MINNOVA INC.
Project:701-224
Attention:G. WELLS/S.LEAR

File:7-621/T2
Date:JUNE 24/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-WET PPB
TJP87-20	5000
TJP87-21	5000
TJP87-22	1600
TJP87-23	2900
TJP87-24	5200
TJP87-25	3200
TJP87-26	6000
TJP87-27	4500
TJP87-28	3500
TJP87-29	1300
TJP87-31	5000
TJP87-32	1900

McDougall Vein

*SOME OF THESE SAMPLES SHOULD HAVE BEEN REQUESTED FOR ASSAY.

Certified by

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Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PH...04)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of GEOCHEM

Company:MINNOVA INC.
Project:701-224
Attention:G.WELLS/S.LEAR

File:7-699/P1
Date:JULY 9/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-WET PPB
HP87-153	300
HP87-154	95
HP87-155	55
HP87-156	65

West Shaw Creek - Reconn.
qtz veins.

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 MC

Certificate of GEOCHEM

Company:MINNOVA INC. File:7-[illegible]
Project:701-224 Date:JUNE [illegible]/87
Attention:G.WELLS/S.LEAR Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	CU PPM	ZN PPM	AG PPM	AU-NET PPB	
MCD 1	120	24	0.7	910	-qtz vein McDougall Vein area.
HP87-1	133	107	1.2	19	
HP87-2	40	23	0.4	5	
HP87-3	66	51	1.5	5	

Certified by

MIN-EN LABORATORIES LTD.

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Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE (604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of GEOCHEM

Company:MINNOVA INC.
Project:701-224
Attention:G.WELLS/S.LEAR

File:7-662/P1
Date:JUNE 29/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB
HP87-61	5
HP87-62	3
HP87-63	1
HP87-64	1
HP87-65	520
HP87-66	21
HP87-67	92
HP87-68	6
HP87-69	3
HP87-70	2
HP87-71	1
HP87-72	5
HP87-73	2
HP87-74	3
HP87-75	2
HP87-76	1
HP87-77	47
HP87-78	1
HP87-79	2
HP87-80	5
HP87-81	1
HP87-82	5
HP87-83	25
HP87-84	250
HP87-85	3000
HP87-86	240
HP87-87	55
HP87-88	30
HP87-89	7
HP87-90	2

Backhoe Trenches - Main Showing

Certified by

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.
Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE (604)980-5814 OR (604)988-4524 TELEX:VIA USA 7401057 UC

Certificate of GEOCHEM

Company:MINNOVA INC. File:7-662/PG
Project:701-224 Date:JUNE 29/87
Attention:G.WELLS/S.LEAR Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB
HP87-91	1
HP87-92	1
HP87-93	2
HP87-94	51
HP87-95	5
HP87-96	1
HP87-97	1
HP87-98	1
HP87-99	2
HP87-100	1
HP87-101	1
HP87-102	8
HP87-103	37
HP87-104	10
HP87-105	5
HP87-106	1
HP87-107	10
HP87-108	2
HP87-109	2
HP87-110	7
HP87-111	30
HP87-112	30
HP87-113	2
HP87-114	8
HP87-115	26
HP87-116	27
HP87-117	15
HP87-118	1
HP87-119	49
HP87-120	18

Backhoe Trenches - Main Showing

Certified by

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Specialists in Mineral Environments
705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE (604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of GEOCHEM

Company:MINNOVA INC.
Project:701-224
Attention:G.WELLS/S.LEAR

File:7-662/P3
Date:JUNE 29/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	AU-FIRE PPB
HP87-121	14
HP87-122	23
HP87-123	2
HP87-124	3
HP87-125	3
HP87-126	2
HP87-127	6
HP87-128	8
HP87-129	4
HP87-130	10
HP87-131	63
HP87-132	23
HP87-133	11
HP87-134	39
HP87-135	6
HP87-136	26
HP87-137	3
HP87-138	2
HP87-139	3
HP87-140	45
HP87-141	155
HP87-142	9
HP87-143	3
HP87-144	50
HP87-145	15

Backhoe Trenches - Main Showing.

Certified by

MIN-EN LABORATORIES LTD.

COMPANY: MINNOVA INC. MIN-EN LABS ICP REPORT (ACT:LI26) PAGE 1 OF 1

PROJECT NO: 701-224 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 FILE NO: 7-699

ATTENTION: G.WELLS/S.LEAR (604)980-5814 OR (604)988-4524 * TYPE ROCK GEOCHEM * DATE:JULY 9, 1987

(VALUES IN %)	AL203	BA	CAO	FE203	K20	MGO	MNO2	NA20	SIO2	SR	TIO2	ZR	TOT(%)
HP87-148	15.51	.083	6.48	10.67	3.61	6.37	.22	3.13	49.60	.05	.78	.005	96.50
HP87-149	5.38	.029	.13	3.25	.87	2.03	.22	.35	82.00	.01	.26	.005	94.52
HP87-150	18.28	.082	5.83	9.59	.81	6.14	.33	4.81	50.08	.05	.79	.005	96.80
HP87-151	10.24	.135	1.57	4.81	1.89	2.22	.17	1.92	74.53	.04	.48	.005	98.02
HP87-152	8.34	.054	.83	3.19	1.07	1.27	.24	2.18	80.47	.04	.32	.005	98.02
HP87-158	9.66	.051	.91	3.82	.42	1.66	.13	3.41	77.55	.04	.40	.005	98.07
HP87-159	17.65	.020	6.04	9.07	.45	5.34	.31	4.19	52.48	.04	.84	.005	96.42
HP87-160	15.37	.020	7.74	8.61	2.17	9.78	.25	2.10	48.57	.03	.80	.005	95.43
HP87-161	16.72	.033	2.10	7.93	.88	4.03	.20	4.20	61.26	.04	.70	.005	98.10
HP87-162	16.10	.085	5.54	8.09	1.73	4.05	.22	2.05	58.98	.07	.77	.005	97.68
HP87-200	17.65	.044	5.72	9.90	3.60	8.14	.30	1.68	48.99	.05	1.00	.006	97.07
HP87-201	7.40	.018	.75	3.43	.25	1.51	.18	2.79	81.25	.01	.32	.005	97.93
HP87-202	10.27	.154	.41	5.70	1.84	.93	.06	1.98	76.17	.02	.42	.005	97.97
HP87-203	17.32	.064	4.93	8.82	.80	5.02	.24	4.72	53.75	.08	.71	.005	96.46
HP87-204	12.87	.085	10.80	8.13	1.98	6.07	.19	1.06	44.13	.16	.60	.005	86.08
HP87-205	17.17	.633	2.51	7.96	5.28	4.37	.12	1.27	53.71	.02	.84	.005	93.89
HP87-206	3.17	.149	3.29	2.65	.80	1.01	.22	.03	82.49	.01	.11	.005	93.93
HP87-207	3.78	.154	.06	3.07	1.02	.42	.02	.06	88.81	.01	.16	.005	97.55
HP87-208	14.03	.041	11.62	8.41	1.80	6.03	.31	3.16	44.10	.05	.83	.005	90.39
HP87-209	16.43	.068	3.78	9.24	4.69	4.89	.18	2.89	47.33	.05	.85	.007	90.42
HP87-210	18.46	.082	3.99	8.73	.58	5.07	.26	5.66	52.67	.07	.71	.005	96.29

1987 reconn - West Shaw Creek.

PROJECT NO: 701-224 | 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 | FILE NO: 7-677

ATTENTION: G.WELLS/S.LEAR | (604)980-5814 OR (604)988-4524 | * TYPE ROCK GEOCHEM * | DATE:JULY 9, 1987

(VALUES IN PPM)	AG	AS	B	CU	PB	SB	ZN	AU-PPB
HP87-148	.8	14	6	126	8	2	52	5
HP87-149	.1	10	2	20	9	2	45	5
HP87-150	1.3	15	9	62	9	3	59	5
)7-151	.8	8	2	42	6	2	44	10
nr87-152	.5	7	2	21	6	1	27	5
HP87-158	.5	7	2	31	7	1	32	10
HP87-159	1.4	12	22	54	5	4	50	5
HP87-160	1.2	16	16	110	11	4	40	10
HP87-161	1.0	14	9	54	3	3	67	5
HP87-162	1.1	11	12	80	3	3	53	10
HP87-200	1.3	16	11	16	17	3	58	5
HP87-201	.4	10	2	28	12	1	31	20
HP87-202	.6	45	2	37	22	1	88	75
HP87-203	1.3	12	11	60	18	3	65	10
HP87-204	.8	9	11	90	12	1	39	15
HP87-205	.1	16	10	75	13	2	71	5
HP87-206	.4	7	2	29	22	1	22	5
HP87-207	.3	18	2	24	16	3	26	20
HP87-208	1.4	9	4	110	15	2	41	10
HP87-209	1.8	17	8	155	7	3	65	5
HP87-210	1.0	17	9	62	5	4	61	10

1987 reconn - West Shaw Creek

1986 Reconn. Samples

Code	Rock type
10	Nitinat basaltic flow/breccia
15	Qtz/Carb alt. in Nitinat
	Myra
21	Lapilli Tuff
22	Ash + Chert
22.5	Argillite
23	Green/purple phyllites
25	Jasper
30	Diorite
35	Shear zone in Diorite with sulph/QV
37	Felsic intrusion
40	Quartz vein

SAMPLE NO.	ROCK	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	AG	AU	BA	ZR	*TOT(%)
HE-001	24.	75.43	8.8	3.58	1.92	0.17	1.67	6.27	0.19	0.47	83.	52.	0.005	1.	25.	0.157	0.005	98.66
HE-002	24.	44.77	10.37	16.51	10.17	0.04	0.36	14.16	0.38	0.89	24.	94.	0.009	2.3	5.	0.672	0.005	98.34
HE-003	15.	52.	17.29	6.1	5.4	0.49	6.32	9.44	0.2	0.9	610.	81.	0.005	2.6	80.	0.055	0.01	98.2
HE-004	40.	94.92	1.76	0.02	0.23	0.01	0.54	1.15	0.03	0.06	470.	13.	0.005	5.6	10000.	0.007	0.005	98.73
HE-005	40.	93.98	1.74	0.05	0.76	0.01	0.27	1.71	0.03	0.08	96.	27.	0.005	0.4	3150.	0.005	0.005	98.62
HE-006	15.	46.06	16.85	11.95	6.13	0.04	6.39	8.99	0.32	0.95	127.	60.	0.014	1.5	95.	0.041	0.01	97.74
HE-007	40.	95.03	1.48	0.02	0.3	0.01	0.33	1.34	0.02	0.05	220.	17.	0.005	1.1	585.	0.005	0.005	98.59
HE-008	15.	51.2	16.87	8.26	5.08	0.69	5.48	9.2	0.28	0.97	121.	67.	0.008	0.9	25.	0.049	0.009	98.1
HE-009	15.	94.92	1.35	0.01	0.18	0.01	0.39	1.62	0.03	0.1	5300.	13.	0.005	6.4	9000.	0.005	0.005	98.62
HE-010	40.	95.56	1.37	0.05	0.32	0.01	0.32	1.03	0.03	0.07	270.	14.	0.005	2.3	9100.	0.005	0.005	98.75
HE-011	15.	51.75	18.91	8.44	3.46	2.64	5.21	8.37	0.19	0.94	26.	42.	0.005	1.1	30.	0.036	0.01	97.96
HE-012	40.	94.43	1.47	0.03	0.45	0.01	0.26	1.74	0.01	0.07	285.	16.	0.005	2.2	3500.	0.005	0.005	98.48
HE-013	40.	95.58	0.94	0.03	0.13	0.01	0.21	1.48	0.01	0.05	840.	11.	0.005	3.5	3750.	0.005	0.005	98.44
HE-014	40.	89.06	0.18	0.01	0.07	0.01	0.01	8.72	0.01	0.01	5400.	10.	0.005	2.4	280.	0.005	0.005	98.03
HE-015	24.	56.6	10.73	13.45	5.47	0.03	3.62	7.75	0.21	0.45	150.	37.	0.008	2.1	30.	0.018	0.005	98.34
HE-016	40.	86.45	3.38	4.97	0.72	0.01	1.08	1.69	0.1	0.07	20.	22.	0.005	0.3	5.	0.013	0.005	98.47
HE-017	40.	89.97	8.72	0.06	1.19	0.02	0.81	2.96	0.12	0.07	23.	32.	0.005	0.3	15.	0.009	0.005	98.92
HE-018	40.	80.22	6.14	5.47	1.08	0.67	1.69	2.8	0.09	0.24	740.	22.	0.005	1.7	10.	0.023	0.005	98.43
HE-019	15.	52.49	18.48	6.12	2.73	1.85	5.39	9.53	0.25	1.05	164.	68.	0.005	1.	10.	0.067	0.009	97.96
HE-020	40.	50.91	16.28	8.58	8.81	0.63	3.27	8.89	0.24	0.79	1160.	75.	0.017	4.8	200.	0.035	0.005	98.47
HE-021	40.	91.73	1.9	2.58	0.25	0.04	0.7	1.07	0.04	0.04	22.	10.	0.005	0.6	5.	0.097	0.005	98.45
HE-022	40.	61.61	8.74	19.88	1.56	0.25	2.11	3.86	0.15	0.25	51.	34.	0.005	1.9	5.	0.034	0.005	98.44
HE-023	35.	54.97	8.78	5.21	1.83	0.06	0.22	25.54	0.16	0.43	5200.	9000.	0.008	4.2	135.	0.006	0.005	97.21
HE-024	35.	37.55	13.38	5.69	4.53	0.9	0.1	34.15	0.16	0.58	15000.	84.	0.013	8.3	170.	0.007	0.005	97.06
HE-025	24.	60.99	19.42	0.52	1.46	3.07	4.	7.54	0.13	1.	83.	43.	0.005	1.	45.	0.027	0.005	98.16
HE-026	24.	42.02	12.56	19.63	8.69	0.8	2.56	10.72	0.54	0.6	34.	47.	0.011	2.1	5.	0.03	0.005	98.15
HE-027	35.	44.53	15.85	11.7	6.01	1.35	0.1	17.65	0.4	0.58	2680.	460.	0.006	2.3	5.	0.005	0.005	98.17
HE-028	35.	43.77	15.16	10.48	9.07	0.14	0.06	18.32	0.33	0.7	640.	64.	0.014	1.8	25.	0.005	0.005	98.03
HE-030	35.	45.34	15.18	4.45	11.8	0.07	0.02	20.3	0.46	0.35	1970.	89.	0.008	2.3	15.	0.005	0.005	97.99
HE-031	35.	53.42	11.22	26.25	1.79	1.2	0.07	3.62	0.85	0.13	41.	21.	0.005	1.1	5.	0.006	0.005	98.56
HE-032	23.	55.86	12.36	9.13	6.75	2.33	0.57	10.25	0.28	0.92	38.	53.	0.005	1.7	5.	0.029	0.005	98.49
HE-033	30.	49.87	14.47	6.69	7.55	3.05	1.09	14.54	0.13	0.78	176.	22.	0.011	1.2	10.	0.013	0.005	98.19
HE-034	35.	5.1	1.51	0.97	0.56	0.01	0.04	41.16	0.01	0.03	10200.	19.	0.015	3.2	330.	0.005	0.005	49.37
HE-035	35.	10.64	5.43	0.26	2.99	0.01	0.27	77.96	0.06	0.25	980.	31.	0.049	3.4	3550.	0.003	0.005	97.92
HE-036	35.	49.32	15.64	1.22	5.44	1.65	2.	22.19	0.1	0.71	115.	47.	0.009	1.7	105.	0.017	0.005	98.29
HK-003	-99.	54.58	19.13	5.44	3.2	2.53	2.84	9.55	0.19	0.79	123.	80.	0.006	1.3	75.	0.038	0.007	98.29
HK-004	40.	94.36	1.46	0.17	0.64	0.2	0.06	1.6	0.03	0.05	34.	16.	0.005	0.4	5.	0.005	0.005	98.57
HK-005	15.	51.49	13.62	12.56	6.47	1.25	3.15	8.66	0.24	0.79	112.	54.	0.005	1.6	5.	0.021	0.005	98.26
HK-006	15.	52.16	16.99	10.44	6.77	1.32	2.54	7.66	0.25	0.44	13.	42.	0.005	1.4	5.	0.017	0.005	98.58
HE-110		60.17	15.73	2.57	4.33	3.75	0.12	10.01	0.65	0.71	78.	91.	0.016	2.	5.	0.033	0.005	98.08
HE-111		95.	1.29	0.01	0.75	0.01	0.07	1.3	0.09	0.05	15.	10.	0.005	1.2	5.	0.005	0.005	98.57
HE-112		72.26	13.56	0.37	1.9	3.29	1.75	4.81	0.09	0.36	44.	56.	0.005	1.5	80.	0.08	0.009	98.49
HE-113		80.32	8.55	0.07	4.35	0.71	0.03	6.37	0.18	0.05	20.	52.	0.005	1.6	10.	0.005	0.005	98.62
HE-114		54.2	13.94	4.1	9.95	2.04	0.22	12.51	0.33	0.83	136.	79.	0.019	1.7	5.	0.019	0.005	98.15
HE-115		67.93	11.23	6.31	2.12	1.28	1.99	6.81	0.26	0.41	32.	42.	0.005	1.2	5.	0.045	0.005	98.4
HE-116		59.5	12.18	7.81	5.51	3.86	0.8	8.2	0.29	0.4	335.	45.	0.006	1.6	15.	0.028	0.005	98.58
HE-117		47.8	22.15	4.65	4.47	4.87	1.01	11.25	0.15	1.28	118.	47.	0.011	1.4	10.	0.042	0.005	97.68
HE-120	35.	35.19	18.45	8.53	5.7	0.04	0.01	24.99	0.23	0.63	13250.	83.	0.019	3.6	85.	0.005	0.005	93.78
HE-121	30.	56.56	14.25	8.65	4.33	2.82	1.89	8.56	0.37	0.71	91.	54.	0.005	1.7	5.	0.04	0.005	98.17
HE-122	30.	65.99	10.61	9.39	3.13	1.11	1.61	5.67	0.27	0.48	104.	36.	0.005	1.9	5.	0.079	0.005	98.34
HE-123	30.	49.22	18.22	10.94	3.24	3.6	3.14	8.4	0.19	0.83	76.	60.	0.01	1.8	20.	0.041	0.005	97.83
HE-124	30.	55.19	18.42	3.27	4.14	2.08	2.41	11.14	0.27	0.9	115.	98.	0.006	1.9	5.	0.029	0.005	97.86
HE-125	30.	59.59	8.47	12.54	7.77	1.12	1.23	6.72	0.29	0.42	60.	39.	0.005	1.6	5.	0.013	0.005	98.16
HE-126	23.	63.93	11.52	5.32	2.78	2.15	2.19	8.72	0.34	0.55	69.	82.	0.005	1.4	10.	0.017	0.005	97.52
HE-127	23.	52.67	14.94	9.14	6.64	1.52	2.96	9.19	0.18	0.73	143.	51.	0.005	1.7	5.	0.084	0.005	98.06
HE-128	23.	62.57	13.04	0.55	5.18	3.65	0.01	11.9	0.25	1.24	47.	325.	0.005	2.	15.	0.005	0.005	98.39
HE-129	23.	64.78	12.59	0.01	4.91	2.85	0.35	10.89	0.45	1.	51.	284.	0.005	1.8	5.	0.005	0.005	97.83
HE-130	23.	62.04	12.36	4.6	3.96	5.93	0.03	7.73	0.95	0.79	74.	360.	0.005	1.6	10.	0.005	0.005	98.39
HE-131	23.	55.35	18.63	2.56	4.95	3.6	1.29	12.45	0.34	1.19	100.	380.	0.005	1.8	10.	0.006	0.005	98.37
HE-132	21.	66.23	12.8	3.32	3.3	4.51	0.13	7.7	0.16	0.5	96.	46.	0.005	1.1	5.	0.013	0.005	98.67

SAMPLE NO.	ROCK	SIO2	AL203	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	AG	AU	BA	ZR	%TOT(Z)
HE-133	22.	55.51	19.27	3.29	3.15	2.53	2.81	10.75	0.22	0.71	127.	77.	0.005	1.5	5.	0.106	0.005	98.35
HE-134	23.	50.48	17.92	5.52	8.19	5.35	0.7	9.31	0.2	0.7	83.	67.	0.005	1.6	10.	0.005	0.005	98.38
HE-135	23.	51.05	20.2	2.48	6.29	3.02	3.91	10.1	0.18	0.78	95.	75.	0.015	1.3	5.	0.032	0.005	98.06
HE-136	23.	47.86	20.06	3.99	7.87	4.22	2.6	10.57	0.26	0.77	9.	100.	0.017	1.3	5.	0.026	0.005	98.25
HE-137	23.	52.02	16.17	8.56	7.44	3.17	0.88	9.17	0.27	0.69	36.	57.	0.005	2.	15.	0.006	0.005	98.39
HE-138	23.	82.52	8.58	0.22	0.63	0.2	2.32	3.37	0.04	0.59	65.	150.	0.005	1.1	10.	0.013	0.005	98.47
HE-139	30.	74.5	15.06	0.01	0.28	4.03	2.61	1.94	0.06	0.24	10.	25.	0.005	1.6	70.	0.071	0.008	98.79
HE-140	23.	82.08	7.6	0.77	0.73	1.88	0.83	4.39	0.15	0.24	31.	43.	0.005	1.	5.	0.038	0.005	98.7
HE-141	23.	76.63	9.36	1.75	1.79	1.12	1.59	5.55	0.16	0.37	62.	70.	0.005	1.1	5.	0.038	0.005	98.36
HE-142	23.	66.9	14.44	0.35	1.55	0.66	4.09	9.18	0.27	0.67	88.	56.	0.005	0.7	90.	0.063	0.005	98.19
HE-143	23.	70.32	9.81	5.64	1.9	0.73	2.22	6.87	0.35	0.44	57.	44.	0.005	0.7	10.	0.032	0.005	98.32
HE-144	23.	53.5	14.5	10.17	6.42	0.85	1.53	10.26	0.33	0.7	32.	76.	0.005	1.3	15.	0.027	0.005	98.3
HE-145	30.	53.46	4.66	13.58	15.98	0.46	0.15	9.62	0.23	0.31	108.	12.	0.005	0.4	5.	0.005	0.005	98.48
HE-146	30.	52.05	17.53	6.85	6.47	3.62	1.33	9.73	0.09	0.77	56.	12.	0.005	0.4	5.	0.012	0.005	98.44
HE-147	22.	75.11	8.21	5.52	2.02	0.91	0.98	5.2	0.31	0.2	44.	24.	0.005	0.7	5.	0.057	0.005	98.53
HE-148	22.	75.1	13.33	0.54	0.77	1.61	1.68	4.91	0.17	0.36	36.	33.	0.005	0.5	10.	0.072	0.005	98.55
HE-149	10.	58.33	16.27	2.71	4.34	5.86	0.36	9.63	0.17	0.76	120.	79.	0.005	1.3	5.	0.012	0.005	98.45
HE-150	22.	54.17	16.1	4.38	6.05	4.54	1.42	10.33	0.24	0.92	112.	68.	0.005	1.	10.	0.059	0.005	98.22
HE-151	23.	65.53	9.16	9.33	3.91	1.01	0.83	7.81	0.47	0.41	36.	40.	0.005	0.8	10.	0.058	0.005	98.51
HE-152	22.	63.14	15.66	0.22	2.04	1.5	1.21	12.81	0.38	0.85	68.	120.	0.005	0.7	10.	0.074	0.005	97.89
HE-153	23.	50.18	19.45	0.13	6.57	3.56	2.3	13.95	0.1	1.46	56.	102.	0.013	1.3	20.	0.044	0.007	97.76
HE-154	23.	49.28	20.99	0.01	5.58	3.25	3.63	13.61	0.41	1.37	10.	120.	0.011	1.2	5.	0.041	0.006	98.18
HE-155	40.	73.27	9.59	3.72	2.29	0.84	2.88	5.37	0.13	0.22	12.	28.	0.005	0.7	105.	0.02	0.005	98.34
HE-156	22.	78.66	9.28	0.07	2.63	0.52	1.92	4.82	0.25	0.37	44.	64.	0.005	0.4	10.	0.055	0.005	98.57
HE-157	22.5	84.1	3.51	0.28	0.46	0.07	0.88	3.46	0.03	0.11	22.	48.	0.005	0.8	5.	0.143	0.005	93.04
HE-158	23.	59.99	16.21	0.02	4.02	4.83	0.37	11.74	0.34	1.14	240.	112.	0.005	1.3	5.	0.007	0.005	98.68
HE-159	23.	62.44	13.62	1.8	4.7	3.96	0.21	10.42	0.46	0.94	28.	60.	0.005	1.5	5.	0.005	0.005	98.55
HE-160	23.	56.88	15.83	0.48	6.71	1.1	2.21	13.6	0.4	1.02	45.	510.	0.005	1.5	95.	0.037	0.005	98.27
HE-161	23.	54.14	12.96	7.67	9.75	3.23	1.02	8.56	0.25	0.64	94.	52.	0.005	1.7	5.	0.007	0.005	98.25
HE-162	23.	47.92	13.72	14.75	8.36	0.41	3.66	8.29	0.24	0.73	92.	54.	0.005	1.5	5.	0.006	0.005	98.08
HE-163	23.	59.84	9.6	9.3	5.03	3.01	0.33	10.01	0.58	0.65	56.	102.	0.005	1.2	10.	0.005	0.005	98.35
HE-165	23.	49.18	12.58	13.33	7.64	3.67	1.27	9.49	0.34	0.62	104.	52.	0.005	1.3	10.	0.016	0.005	98.14
HE-167	23.	84.73	4.24	0.01	2.16	0.17	0.59	6.56	0.03	0.32	800.	388.	0.005	5.	5000.	0.005	0.005	98.8
HE-168	23.	56.82	14.31	0.05	8.5	1.7	0.02	15.37	0.23	1.38	80.	188.	0.005	1.7	5.	0.005	0.005	98.37
HE-169	23.	46.9	17.13	8.11	11.08	2.91	0.24	10.66	0.32	0.94	12.	61.	0.005	1.5	20.	0.005	0.005	98.31
HE-170	23.	54.75	14.88	6.53	6.32	4.31	0.31	10.08	0.42	0.94	108.	88.	0.005	1.3	30.	0.005	0.005	98.56
HE-171	35.	35.15	0.76	0.01	0.38	0.04	0.23	38.21	0.01	0.02	136.	13.	0.005	1.7	205.	0.01	0.005	74.79
HE-172	35.	82.83	4.56	1.71	1.08	0.09	1.14	5.35	0.06	0.17	64.	638.	0.005	1.	20.	0.049	0.005	97.04
HE-173	22.5	56.97	18.73	3.91	4.02	1.71	1.87	10.02	0.17	0.8	136.	84.	0.005	1.5	10.	0.101	0.005	98.29
HE-174	22.5	73.02	5.29	0.01	0.5	0.08	1.57	5.59	0.02	0.27	36.	46.	0.005	1.3	75.	0.158	0.005	86.49
HE-175	22.5	74.61	4.33	0.01	0.42	0.04	1.34	4.18	0.02	0.2	21.	24.	0.005	0.3	10.	0.123	0.005	85.31
HK-013	15.	47.42	18.45	6.82	7.62	1.66	2.41	12.4	0.21	0.95	76.	68.	0.015	1.	10.	0.028	0.005	97.98
HK-014	15.	48.29	14.86	11.36	10.23	0.31	3.78	8.3	0.26	0.75	8.	24.	0.007	1.2	5.	0.021	0.005	98.18
HK-015	23.	70.64	13.78	0.27	2.	0.56	2.77	7.15	0.23	0.67	64.	40.	0.005	0.8	120.	0.05	0.005	98.13
HK-016	23.	90.67	2.26	0.01	0.25	0.2	0.32	4.44	0.24	0.07	44.	16.	0.005	0.3	10.	0.007	0.005	98.47
HK-017	21.	67.26	13.39	0.38	0.42	7.26	0.15	7.75	0.31	1.18	268.	26.	0.005	0.7	55.	0.005	0.005	98.12
HK-018	21.	56.32	17.15	0.01	5.81	6.2	0.03	11.21	0.03	1.49	100.	68.	0.005	1.3	30.	0.005	0.006	98.25
HK-019	23.	86.13	4.79	0.01	0.79	0.07	0.86	5.56	0.08	0.18	80.	34.	0.005	0.4	10.	0.022	0.005	98.49
HK-20	23.	63.84	6.61	0.2	2.81	0.06	0.11	19.39	0.03	0.29	72.	172.	0.005	2.7	115.	0.011	0.005	93.36
HK-21	23.	51.84	16.91	3.78	4.49	5.06	1.22	12.48	0.25	1.21	136.	66.	0.005	1.3	20.	0.01	0.005	97.25
HK-22	23.	62.	13.83	1.81	6.69	3.58	0.27	9.04	0.25	0.95	56.	82.	0.005	1.3	10.	0.009	0.005	98.44
HK-23	23.	51.28	18.17	0.36	7.79	1.58	2.63	14.21	0.08	1.35	128.	108.	0.013	1.7	10.	0.019	0.005	97.48
HK-24	23.	55.38	17.42	0.48	2.88	5.59	1.64	13.41	0.15	1.36	112.	70.	0.005	2.3	40.	0.013	0.005	98.27
HK-25	23.	61.19	14.81	3.24	2.82	2.67	3.28	9.1	0.31	0.63	248.	52.	0.005	1.	5.	0.027	0.005	98.08
HK-26	30.	54.28	17.32	5.33	4.87	3.77	0.43	10.99	0.2	0.78	168.	76.	0.005	1.2	20.	0.01	0.005	97.97
HK-27	21.	54.14	11.03	9.66	8.51	3.57	1.15	7.66	0.35	0.58	80.	44.	0.005	1.	5.	0.012	0.005	96.66
HK-28	22.	77.86	2.26	0.01	0.43	0.03	0.3	13.06	0.05	0.11	40.	120.	0.005	0.7	65.	0.027	0.005	94.12
HK-29	23.	86.72	3.71	0.03	0.75	0.06	0.62	6.23	0.06	0.11	16.	33.	0.005	0.3	10.	0.024	0.005	98.31
HK-30	23.	51.24	8.6	22.44	6.29	0.75	1.45	6.5	0.42	0.4	48.	56.	0.005	1.7	5.	0.079	0.005	98.17
HKL-46	10.	47.7	18.29	9.51	5.9	0.89	1.24	13.47	0.21	0.98	140.	76.	0.01			0.015	0.005	98.2

SAMPLE NO.	ROCK	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	AG	AU	BA	ZR	*TOT(%)
HKL-47	10.	50.44	14.22	10.39	9.22	1.75	1.42	9.72	0.27	0.8	86.	68.	0.005			0.014	0.005	98.24
HKL-48	23.	52.54	17.14	8.81	4.8	4.13	0.12	9.47	0.27	0.88	45.	56.	0.005			0.022	0.005	98.18
HKL-49		49.66	15.06	7.38	8.06	3.58	0.04	12.43	0.26	1.45	20.	80.	0.006			0.005	0.005	97.94
HKL-50	21.	56.46	18.49	1.13	4.56	6.36	0.89	9.38	0.23	0.81	84.	89.	0.005			0.023	0.005	98.32
HKL-51		51.21	14.82	8.05	8.85	2.4	0.84	9.61	0.28	0.79	88.	64.	0.005			0.02	0.005	96.88
HEL-92		53.08	17.84	4.38	7.48	2.95	1.06	10.51	0.27	0.7	100.	80.	0.005			0.042	0.005	98.32
HEL-93	23.	71.27	11.96	0.04	3.1	0.82	2.22	7.76	0.43	0.69	48.	68.	0.005			0.177	0.005	98.47
HEL-94	10.	51.56	14.81	8.1	9.82	2.35	0.7	9.75	0.23	0.75	82.	72.	0.005			0.018	0.005	98.08
HEL-95	10.	52.51	16.01	6.03	6.09	4.01	2.47	9.34	0.24	0.75	107.	55.	0.005			0.051	0.005	97.51
HEL-96	22.	80.6	5.85	0.33	1.43	0.3	1.08	4.3	0.03	0.19	39.	39.	0.005			0.226	0.005	94.34
HEL-97	22.	74.7	11.43	0.28	2.55	1.95	2.1	4.75	0.08	0.59	35.	36.	0.005			0.068	0.005	98.51
HEL-98	22.	75.52	10.67	0.86	2.18	2.15	1.5	4.92	0.16	0.43	88.	45.	0.005			0.064	0.005	98.48
HEL-99	25.	87.95	4.9	0.49	1.34	0.58	0.77	2.48	0.15	0.2	9.	31.	0.005			0.018	0.005	98.86
HEL-100	22.	82.75	6.21	0.08	1.51	0.88	1.1	4.64	0.05	0.18	21.	25.	0.005			0.101	0.005	97.51
HEL-101	10.	52.71	17.63	6.82	5.46	3.27	0.34	9.51	0.24	0.91	109.	62.	0.005			0.022	0.005	96.91
HEL-102	10.	56.45	21.2	4.39	3.36	3.11	2.47	6.24	0.11	0.8	52.	59.	0.005			0.086	0.008	98.22
HEL-103	22.5	64.67	15.24	0.22	2.94	1.84	1.2	10.31	0.23	0.58	75.	101.	0.005			0.104	0.005	97.34
HEL-104	21.	54.97	17.5	6.91	5.36	2.65	0.64	9.29	0.27	0.73	74.	52.	0.005			0.036	0.005	98.36
HEL-105	21.	64.41	17.04	1.32	4.42	2.39	2.6	5.47	0.11	0.54	38.	61.	0.005			0.113	0.012	98.43
HEL-106	22.	83.65	7.	0.12	1.58	0.47	1.87	3.3	0.09	0.29	16.	17.	0.005			0.061	0.005	98.44
HEL-107	22.	78.79	9.47	0.3	1.8	2.39	1.17	3.89	0.16	0.34	50.	23.	0.005			0.172	0.005	98.49
HEL-108	10.	53.28	16.51	4.42	6.8	0.67	3.5	11.57	0.19	0.94	89.	60.	0.005			0.028	0.008	97.91
HP87-148	10.	49.6	15.51	6.48	6.37	3.13	3.61	10.67	0.22	0.78	6.	8.	126.	0.8	5.	0.083	0.005	96.5
HP87-149	22.	82.	5.38	0.13	2.03	0.35	0.87	3.25	0.22	0.26	2.	9.	20.	0.1	5.	0.029	0.005	94.52
HP87-150	10.	50.08	18.28	5.83	6.14	4.81	0.81	9.59	0.33	0.79	9.	9.	62.	1.3	5.	0.082	0.005	96.8
HP87-151	22.	74.53	10.24	1.57	2.22	1.92	1.89	4.81	0.17	0.48	2.	6.	42.	0.8	10.	0.135	0.005	98.02
HP87-152	22.	80.47	8.34	0.83	1.27	2.18	1.07	3.19	0.24	0.32	2.	6.	21.	0.5	5.	0.054	0.005	98.02
HP87-158	22.	77.55	9.66	0.91	1.66	3.41	0.42	3.82	0.13	0.4	2.	7.	31.	0.5	10.	0.051	0.005	98.07
HP87-159	22.	52.48	17.65	6.04	5.34	4.19	0.45	9.07	0.31	0.84	22.	5.	54.	1.4	5.	0.02	0.005	96.42
HP87-160	10.	48.57	15.37	7.74	9.78	2.1	2.17	8.61	0.25	0.8	16.	11.	110.	1.2	10.	0.02	0.005	95.43
HP87-161	22.	61.26	16.72	2.1	4.03	4.2	0.88	7.93	0.2	0.7	9.	3.	54.	1.	5.	0.033	0.005	98.1
HP87-162	22.	58.98	16.1	5.54	4.05	2.05	1.73	8.09	0.22	0.77	12.	3.	80.	1.1	10.	0.085	0.005	97.68
HP87-200	10.	48.99	17.65	5.72	8.14	1.68	3.6	9.9	0.3	1.	11.	17.	16.	1.3	5.	0.044	0.006	97.07
HP87-201	22.	81.25	7.4	0.75	1.51	2.79	0.25	3.43	0.18	0.32	2.	12.	28.	0.4	20.	0.018	0.005	97.93
HP87-202	22.	76.17	10.27	0.41	0.93	1.98	1.84	5.7	0.06	0.42	2.	22.	37.	0.6	75.	0.154	0.005	97.97
HP87-203	22.	53.75	17.32	4.93	5.02	4.72	0.8	8.82	0.24	0.71	11.	18.	60.	1.3	10.	0.064	0.005	96.46
HP87-204	10.	44.13	12.87	10.8	6.07	1.06	1.98	8.13	0.19	0.6	11.	12.	90.	0.8	15.	0.085	0.005	86.08
HP87-205	10.	53.71	17.17	2.51	4.37	1.27	5.28	7.96	0.12	0.84	10.	13.	75.	0.1	5.	0.633	0.005	93.89
HP87-206	22.5	82.49	3.17	3.29	1.01	0.03	0.8	2.65	0.22	0.11	2.	22.	29.	0.4	5.	0.149	0.005	93.93
HP87-207	22.	88.81	3.78	0.06	0.42	0.06	1.02	3.07	0.02	0.16	2.	16.	24.	0.3	20.	0.154	0.005	97.55
HP87-208	10.	44.1	14.03	11.62	6.03	3.16	1.8	8.41	0.31	0.83	4.	15.	110.	1.4	10.	0.041	0.005	90.39
HP87-209	10.	47.33	16.43	3.78	4.89	2.89	4.69	9.24	0.18	0.85	8.	7.	155.	1.8	5.	0.068	0.007	90.42
HP87-210	22.	52.67	18.46	3.99	5.07	5.66	0.58	8.73	0.26	0.71	9.	5.	62.	1.	10.	0.082	0.005	96.29

SAMPLE NO.	ROCK	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	BA	ZR
HEL029	50.	84.98	5.52	1.05	1.5	0.05	1.5	3.75	0.28	0.29	8.	60.	0.005	0.018	0.005
HEL030	10.	61.96	16.65	0.68	4.36	4.05	2.26	7.6	0.2	0.59	60.	86.	0.005	0.066	0.009
HEL031	22.	83.03	7.54	0.52	2.16	0.2	2.02	3.19	0.06	0.3	60.	40.	0.005	0.036	0.005
HEL032	10.	53.58	11.86	11.05	10.44	1.51	0.38	8.44	0.21	0.82	100.	44.	0.005	0.028	0.005
HEL033	10.	53.19	16.02	6.38	7.99	1.9	2.65	8.77	0.28	1.03	148.	56.	0.005	0.039	0.005
HEL034	10.	51.94	16.05	6.77	4.45	4.26	3.51	10.07	0.19	0.86	46.	54.	0.005	0.066	0.007
HEL035	22.	73.81	11.48	1.78	2.5	1.79	2.05	4.48	0.11	0.44	40.	48.	0.005	0.057	0.005
HEL036	10.	51.54	17.66	4.02	7.8	0.89	4.9	9.77	0.19	1.09	96.	84.	0.	0.066	0.011
HEL037	10.	52.14	16.67	4.93	6.51	2.42	4.32	10.09	0.17	0.91	72.	68.	0.005	0.059	0.009
HEL038	10.	50.75	17.05	6.5	8.05	1.93	3.29	9.3	0.29	0.86	136.	88.	0.011	0.055	0.008
HEL039	21.	60.97	16.88	2.45	4.69	3.67	2.76	6.32	0.21	0.63	40.	80.	0.005	0.063	0.
HEL040	10.	54.76	17.47	2.4	5.96	4.92	1.27	10.34	0.22	0.86	132.	96.	0.009	0.024	0.006
HEL041	21.	53.38	16.92	5.56	6.64	3.86	0.96	9.63	0.27	0.86	106.	104.	0.005	0.037	0.007
HEL042	22.	56.96	18.59	5.07	2.26	1.62	4.8	8.01	0.21	0.69	72.	68.	0.005	0.1	0.005
HEL043	22.	83.96	7.26	0.02	0.53	0.06	2.12	4.14	0.06	0.28	45.	36.	0.005	0.06	0.005
HEL044	10.	61.43	15.43	0.42	6.22	1.11	3.61	8.72	0.25	0.83	52.	64.	0.005	0.05	0.005
HEL045	10.	54.16	17.66	1.18	6.78	3.04	4.11	10.03	0.18	0.89	32.	92.	0.005	0.054	0.005
HEL046	10.	53.96	18.02	2.67	5.14	3.28	3.74	10.17	0.2	0.9	88.	88.	0.007	0.056	0.006
HEL047	22.	75.81	10.87	0.76	2.98	2.11	1.66	4.13	0.12	0.38	40.	64.	0.005	0.05	0.005
HEL048	10.	56.58	18.68	1.36	5.45	0.26	6.23	8.67	0.18	0.89	88.	80.	0.005	0.052	0.006
HEL049	10.	49.96	16.79	9.23	7.07	3.36	1.48	9.09	0.23	0.97	120.	78.	0.005	0.027	0.005
HEL050	10.	52.09	18.19	1.6	10.64	1.35	2.63	10.15	0.27	1.	122.	84.	0.005	0.034	0.005
HEL051	10.	47.73	13.7	9.	12.54	1.77	0.42	11.74	0.28	0.84	124.	72.	0.007	0.011	0.005
HKL001	10.	51.3	16.4	7.95	7.82	0.99	2.65	9.75	0.25	0.92	132.	80.	0.005	0.046	0.008
HKL002	10.	48.97	18.92	3.62	8.29	2.5	3.89	10.03	0.27	1.2	128.	92.	0.008	0.08	0.011
HKL003	21.	83.24	7.36	0.72	1.18	1.55	1.21	2.93	0.08	0.26	30.	36.	0.005	0.04	0.005
HKL004	10.	47.94	17.22	11.53	4.41	2.89	4.39	8.5	0.22	0.87	10.	64.	0.011	0.049	0.007
HKL005	10.	51.92	17.05	7.14	5.91	2.38	2.43	9.91	0.23	0.86	152.	80.	0.007	0.041	0.007
HKL006	10.	52.43	17.08	5.36	7.23	2.2	3.52	9.52	0.21	0.83	120.	89.	0.005	0.052	0.007
HKL007	10.	51.48	16.31	8.21	5.06	2.16	4.99	8.76	0.16	0.76	500.	68.	0.015	0.051	0.006
HKL008	21.	51.83	16.26	8.19	7.41	3.19	0.71	9.41	0.23	0.87	180.	76.	0.005	0.019	0.005
HKL009	21.	55.41	18.23	5.44	4.07	4.66	0.95	8.48	0.21	0.87	84.	72.	0.005	0.031	0.005
HEL13	10.	55.1	20.99	2.54	3.11	4.37	4.19	6.97	0.33	0.68	23.	124.	0.005	0.053	0.
HEL14	22.	76.31	10.11	1.36	1.88	1.31	1.92	5.01	0.12	0.45	32.	60.	0.005	0.085	0.005
HEL15	10.	49.22	17.12	11.22	6.75	1.58	3.4	7.96	0.38	0.85	270.	82.	0.005	0.041	0.006
HEL16	10.	49.06	17.06	11.19	6.73	1.58	3.39	7.94	0.38	0.85	98.	73.	0.005	0.041	0.006
HEL52	10.	51.28	14.21	7.22	12.98	1.98	0.38	9.26	0.22	0.86	108.	56.	0.008	0.011	0.005
HEL53	30.	52.67	18.56	5.76	8.12	2.05	0.35	9.74	0.27	0.79	58.	67.	0.007	0.011	0.005
HEL54	10.	50.12	17.69	3.04	9.22	2.78	0.2	13.7	0.31	1.01	83.	134.	0.016	0.043	0.005
HEL55	10.	58.88	12.9	1.95	5.04	3.28	0.18	13.58	0.25	2.27	250.	195.	0.005	0.005	0.009
HEL56		50.24	1.56	42.28	3.29	0.02	0.01	0.89	0.1	0.08	22.	31.	0.005	0.005	0.005
HEL57	10.	49.69	17.04	7.55	6.22	2.05	3.66	10.96	0.3	0.99	145.	84.	0.005	0.053	0.007
HEL58	22.	61.91	14.04	5.12	3.84	1.86	2.48	8.06	0.25	0.7	132.	100.	0.005	0.02	0.005
HEL59	22.5	64.92	14.15	3.24	3.09	1.89	1.82	8.19	0.21	0.69	99.	83.	0.005	0.093	0.005
HEL60	25.	53.37	17.94	3.75	5.92	1.96	2.4	11.7	0.15	0.96	107.	58.	0.012	0.024	0.005
HEL61	22.	55.88	16.7	5.32	5.58	4.03	0.7	9.21	0.17	0.93	80.	42.	0.005	0.017	0.005
HEL62	22.	54.26	19.11	4.32	4.85	4.76	1.66	8.11	0.13	0.91	182.	36.	0.005	0.027	0.005
HEL63	22.	56.02	16.62	7.5	4.66	1.28	0.88	10.2	0.25	0.85	11.	45.	0.005	0.014	0.005
HEL64	30.	52.24	15.42	10.89	8.25	2.23	1.09	7.79	0.24	0.48	28.	29.	0.005	0.018	0.005
HEL65	37.	61.26	18.53	4.02	1.48	4.12	1.4	6.92	0.35	0.39	23.	330.	0.005	0.045	0.005
HEL66	10.	51.25	17.09	0.14	7.15	0.17	1.2	19.41	0.28	1.47	196.	75.	0.015	0.024	0.005
HEL67	21.	52.75	15.54	5.95	9.	4.27	0.11	9.74	0.3	0.61	111.	59.	0.005	0.02	0.005
HEL68	22.	61.9	15.94	3.4	3.76	4.4	0.16	8.58	0.22	0.55	94.	66.	0.005	0.018	0.005
HEL69	10.	55.87	12.44	10.17	7.61	2.72	0.73	7.93	0.26	0.69	98.	67.	0.005	0.014	0.005
HEL70	30.	61.28	17.9	4.15	2.66	5.77	0.62	5.16	0.06	0.56	68.	26.	0.005	0.014	0.007
HEL71	30.	57.76	19.32	6.18	3.61	4.96	0.72	4.84	0.08	0.72	35.	28.	0.008	0.017	0.005
HEL72	21.	55.14	15.77	6.1	5.66	4.93	0.65	9.05	0.14	0.78	235.	23.	0.005	0.011	0.005
HEL73	10.	54.05	15.46	5.81	7.65	4.21	0.86	9.21	0.22	0.82	113.	63.	0.005	0.012	0.005
HEL74	10.	51.83	13.7	9.55	8.47	2.75	1.64	9.38	0.19	0.74	87.	65.	0.005	0.02	0.005
HEL75	10.	54.43	17.27	6.3	5.88	2.46	0.75	9.98	0.25	0.84	56.	82.	0.005	0.023	0.005

SAMPLE NO.	ROCK	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	BA	ZR
HEL76		53.68	17.8	4.01	5.67	3.3	3.87	8.87	0.2	0.76	110.	86.	0.005	0.049	0.007
HEL77	10.	54.96	15.4	7.64	5.02	1.91	3.72	8.83	0.16	0.82	119.	65.	0.006	0.031	0.007
HEL78	10.	51.5	16.6	6.94	5.21	2.15	5.46	9.48	0.18	0.82	54.	87.	0.006	0.043	0.007
HKL10	22.	56.97	17.23	7.46	4.9	1.03	1.22	8.43	0.29	0.85	92.	74.	0.007	0.027	0.005
HKL11	22.	89.56	4.01	0.33	1.02	1.1	0.12	2.42	0.08	0.13	27.	25.	0.005	0.006	0.005
HKL12	22.	53.94	17.08	5.83	5.34	3.87	1.08	9.95	0.25	0.79	116.	86.	0.005	0.024	0.005
HKL13	10.	54.11	10.44	12.06	11.15	1.6	0.38	7.7	0.15	0.6	67.	38.	0.008	0.	0.005
HKL14	10.	52.97	13.38	8.48	11.35	0.79	1.07	9.41	0.16	0.75	76.	57.	0.005	0.018	0.005
HKL15	10.	51.74	13.23	9.23	10.24	2.68	1.21	9.08	0.22	0.72	133.	55.	0.005	0.032	0.005
HKL16	10.	54.49	12.6	8.33	9.38	3.85	0.42	8.77	0.21	0.68	85.	43.	0.	0.006	0.005
HKL17	10.	49.02	12.57	10.15	12.39	1.75	1.08	10.24	0.26	0.73	98.	44.	0.006	0.015	0.005
HKL18	10.	53.91	13.41	8.66	7.93	3.93	0.72	8.63	0.21	0.66	104.	47.	0.005	0.011	0.005
HKL19	22.	55.77	16.73	4.62	6.97	2.31	1.3	9.52	0.21	0.94	120.	69.	0.009	0.03	0.005
HKL20	10.	51.88	13.48	9.6	10.01	2.56	1.35	8.44	0.22	0.73	69.	47.	0.005	0.028	0.005
HKL21	10.	54.02	16.36	7.22	5.54	3.07	1.22	9.69	0.18	0.86	74.	21.	0.005	0.018	0.005
HKL22	10.	50.71	13.14	11.72	8.61	3.74	0.93	8.32	0.23	0.81	155.	67.	0.005	0.011	0.005

SAMPLE NO.	ROCK	SIO2	AL2O3	CAO	MGO	NA2O	K2O	FE2O3	MNO2	TIO2	CU	ZN	PB	BA	ZR
HEL-079	10.	50.67	14.89	8.28	9.42	3.42	1.58	8.9	0.32	0.72	15.	61.	0.005	0.025	0.005
HEL-080	23.	49.36	18.81	0.91	4.01	3.35	3.92	16.5	0.12	1.32	14.	80.	0.005	0.027	0.005
HEL-081	22.	51.36	17.07	6.19	6.7	4.43	0.49	11.18	0.3	0.7	115.	66.	0.011	0.026	0.005
HEL-082	22.	52.69	15.96	7.	7.03	3.85	0.3	10.52	0.26	0.65	109.	62.	0.005	0.044	0.005
HEL-083	22.	55.27	16.37	5.63	5.54	4.91	0.4	9.24	0.24	0.65	87.	55.	0.007	0.13	0.005
HEL-084	21.	52.27	17.37	5.94	5.43	5.14	0.62	10.17	0.24	0.71	88.	63.	0.006	0.039	0.005
HEL-085	21.	54.36	16.27	4.9	6.65	1.37	2.43	11.41	0.25	0.74	120.	79.	0.005	0.079	0.005
HEL-086	21.	53.39	15.06	8.77	6.13	3.46	0.5	10.11	0.27	0.6	75.	54.	0.005	0.033	0.005
HEL-087	22.	57.12	17.18	2.79	3.69	6.09	0.42	10.1	0.38	0.62	62.	75.	0.005	0.068	0.005
HEL-088	21.	52.65	14.07	9.19	7.88	3.49	0.26	9.98	0.29	0.58	98.	49.	0.005	0.022	0.005
HEL-089	10.	44.61	12.09	12.22	7.57	2.52	1.58	8.24	0.25	0.68	117.	56.	0.005	0.029	0.005
HEL-090	21.	47.1	12.66	18.09	7.06	2.11	1.63	8.42	0.29	0.71	100.	51.	0.005	0.024	0.005
HEL-091	21.	56.18	17.75	2.66	5.79	2.3	3.17	9.43	0.24	0.71	120.	74.	0.005	0.085	0.005
HKL-023	21.	72.99	8.32	3.71	2.44	0.58	0.89	6.28	0.29	0.18	16.	82.	0.005	0.041	0.005
HKL-024	22.	45.1	16.89	9.39	3.16	0.25	5.82	10.8	0.45	0.64	78.	64.	0.005	0.101	0.005
HKL-025	10.	55.94	13.35	7.	8.95	3.51	0.39	8.12	0.24	0.54	86.	47.	0.005	0.007	0.005
HKL-026	10.	50.97	15.84	8.71	6.54	2.51	3.02	9.3	0.23	0.84	114.	61.	0.005	0.046	0.005
HKL-027	10.	49.81	10.61	10.74	15.41	1.45	0.63	8.81	0.25	0.56	77.	40.	0.009	0.017	0.005
HKL-028	10.	51.98	17.85	6.33	6.41	4.33	1.4	8.93	0.2	0.83	85.	71.	0.	0.036	0.005
HKL-029	30.	48.2	10.86	13.13	13.66	0.92	0.28	10.45	0.29	0.48	136.	50.	0.005	0.005	0.005
HKL-030	10.	50.72	16.22	10.47	6.54	3.16	0.71	9.12	0.21	0.78	95.	57.	0.005	0.009	0.005
HKL-031	10.	47.84	14.6	10.55	11.51	1.33	1.24	9.92	0.24	0.75	113.	59.	0.007	0.031	0.005
HKL-032	10.	53.06	15.76	3.18	10.4	2.38	2.2	10.1	0.25	0.81	94.	68.	0.008	0.022	0.005
HKL-033	10.	50.16	15.12	9.99	8.23	3.02	1.15	9.54	0.22	0.77	92.	56.	0.005	0.019	0.005
HKL-034	23.	49.22	9.61	12.13	13.97	0.22	0.18	12.08	0.29	0.61	114.	57.	0.012	0.005	0.005
HKL-035	10.	51.07	16.05	7.94	9.8	0.6	1.04	10.87	0.24	0.85	97.	70.	0.005	0.02	0.005
HKL-036	10.	48.5	14.99	12.34	7.08	3.02	2.17	9.02	0.24	0.75	81.	65.	0.005	0.019	0.005
HKL-037	10.	54.66	17.01	4.01	6.81	3.95	1.88	8.85	0.16	0.84	68.	63.	0.007	0.018	0.005
HKL-038	10.	47.9	7.06	10.2	23.	0.18	0.01	9.28	0.19	0.43	74.	33.	0.005	0.005	0.005
HKL-039	21.	49.85	15.6	7.62	9.31	2.57	2.43	9.68	0.25	0.83	102.	62.	0.005	0.055	0.005
HKL-040	22.	69.23	14.17	2.17	1.96	5.11	0.75	4.62	0.12	0.41	21.	26.	0.005	0.029	0.007
HKL-041	21.	51.33	15.07	8.58	8.51	2.39	1.51	9.99	0.27	0.58	116.	60.	0.005	0.21	0.005
HKL-042	22.	54.14	17.26	4.8	5.97	4.74	0.36	10.21	0.28	0.65	105.	71.	0.007	0.037	0.005
HKL-043	10.	49.63	15.34	9.63	10.43	1.6	0.45	10.19	0.18	0.82	87.	75.	0.005	0.011	0.005
HKL-044	10.	55.37	16.81	6.35	6.94	3.05	0.84	8.05	0.15	0.92	80.	67.	0.	0.012	0.005
HKL-045	21.	67.85	13.91	2.21	3.2	3.09	0.89	7.09	0.18	0.54	75.	69.	0.005	0.046	0.005
HEL001	30.	51.42	18.43	7.98	3.98	3.18	1.09	10.79	0.31	0.97	18.	80.	0.012	0.039	0.005
HEL002	30.	56.3	17.29	5.78	3.79	3.12	2.08	8.3	0.24	0.99	48.	64.	0.005	0.058	0.008
HEL003	30.	56.26	17.57	6.04	3.38	3.4	1.95	8.	0.2	0.92	31.	50.	0.005	0.055	0.006
HEL004	23.	61.66	16.38	0.81	4.31	4.93	0.17	9.4	0.23	0.78	46.	64.	0.005	0.012	0.005
HEL005	10.	50.3	16.88	5.99	8.21	2.71	3.3	9.54	0.25	0.96	128.	68.	0.009	0.068	0.009
HEL006	10.	51.16	18.32	2.91	7.57	3.14	3.32	10.47	0.27	1.06	140.	92.	0.014	0.06	0.011
HEL007	10.	52.58	17.64	2.9	7.15	3.27	3.43	10.21	0.19	0.89	40.	84.	0.005	0.041	0.008
HEL008	10.	52.39	16.79	4.97	7.39	2.21	3.46	9.86	0.27	0.82	112.	80.	0.	0.037	0.006
HEL009	10.	47.62	19.6	7.01	6.68	2.84	3.52	9.81	0.23	0.98	36.	100.	0.005	0.032	0.014
HEL010	10.	48.44	15.85	16.98	4.94	3.29	0.31	7.75	0.27	0.77	68.	72.	0.014	0.006	0.005
HEL011	22.	53.78	14.5	9.88	6.7	1.22	1.73	9.24	0.29	0.69	72.	104.	0.005	0.063	0.005
HEL012		53.48	12.89	8.78	10.15	1.81	1.53	8.66	0.2	0.64	46.	20.	0.006	0.022	0.005
HEL017	10.	54.45	14.75	9.63	5.41	3.31	2.76	7.19	0.25	0.64	52.	64.	0.008	0.035	0.005
HEL018	10.	52.05	17.45	3.58	8.5	4.04	1.22	10.5	0.23	0.85	96.	84.	0.006	0.025	0.005
HEL019	10.	50.5	14.33	12.69	8.15	0.91	1.7	8.88	0.22	0.7	96.	44.	0.009	0.027	0.005
HEL020	10.	49.51	18.	5.62	8.62	2.58	1.43	11.45	0.2	0.98	120.	80.	0.005	0.037	0.005
HEL021	10.	49.58	14.05	14.49	6.62	2.41	0.29	10.02	0.19	0.56	84.	37.	0.005	0.005	0.005
HEL022	10.	56.13	13.09	9.51	7.29	1.6	1.62	7.87	0.19	0.7	76.	60.	0.005	0.032	0.005
HEL023	10.	50.25	7.86	14.62	16.54	0.39	0.17	7.96	0.24	0.45	57.	36.	0.006	0.005	0.005
HEL024	10.	51.66	18.09	8.53	5.89	3.23	2.03	7.64	0.14	0.93	86.	52.	0.005	0.072	0.006
HEL025	10.	52.44	17.4	3.64	7.13	3.82	3.14	9.51	0.18	0.81	116.	80.	0.005	0.03	0.007
HEL026	10.	51.41	16.84	6.47	5.17	3.44	3.45	10.61	0.25	0.89	140.	80.	0.006	0.073	0.007
HEL027	10.	55.37	11.21	8.03	11.91	1.09	0.03	9.7	0.15	0.75	84.	56.	0.005	0.007	0.005
HEL028	10.	48.62	18.55	6.97	7.41	2.01	4.38	8.98	0.21	0.98	116.	89.	0.007	0.04	0.008

APPENDIX II

Drill Logs

HOLE NUMBER: H6

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: HEATHER
PROJECT NUMBER: 224
CLAIM NUMBER: CAROL-S
LOCATION: NTS:92 C/15

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 0+67S
EAST: 4+68W
ELEV: 548.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 157.60m
START DEPTH: 0.00m
FINAL DEPTH: 157.60m

COLLAR GRID AZIMUTH: 40° 0' 0"

COLLAR ASTRNOMIC AZIMUTH: ° ' "

DATE STARTED: September 22, 1987
DATE COMPLETED: September 24, 1987
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: BURWASH ENTERPRISES
CASING: 3.7m
CORE STORAGE: 6722 LAKES RD DUNCAN

PURPOSE: TO TEST THE MAIN ZONE MINERALIZATION

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
44.50	-	-50° 0'	ACID	OK		-	-	-	-	-	
114.90	-	-50° 0'	ACID	OK		-	-	-	-	-	
157.60	-	-48° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 3.70	OVERBURDEN					CASING
3.70 TO 28.90	FINE GRAINED ANDESITIC ASH	Greyish green Very fine grained Generally massive Veins 12.0m Veins 18.5m	 30 50	2-3% qtz-carb veins locally aligned	1% diss. py - locally have patches (<0.05m wide) with 5% py	20.8 - 27.8 - blocky core
28.90 TO 68.30	GREY PYRITIC TUFF/ASH	Grey Fine grained Generally massive - qtz/carb veins give rock a foliation locally Veins 30.7m Veins 37.0m 45.15 - 48.9 1-2% rounded qtz "eyes". Veins 46.3m 48.9 - 68.3 Veins 47.0m tr. rounded qtz eyes 1-2mm diameter Veins 54.0m lower contact fairly sharp but somewhat obscured by blocky core	 60 70 70 60 65	5% qtz-carb veins throughout with more highly veined zones as noted below - unit weakly chloritic ; chlorite and sericite associated with veins 38.0 - 39.5 - intense pervasive qtz-carb veining - carbonate is locally weathering out 44.75 - 68.3 qtz carb veining more intense 10-15% veins generally aligned with steep core axis angles	5% very fine grained pyrite disseminated throughout; locally have patches with 10% py 38.0 - 39.5 5% py primarily in wall rock, trace cp in veins 41.7 - 41.8 tr diss. cp in qtz-carb veinlets	are these qtz 'eyes' rounded crystals or vesicles?
68.30 TO 157.60	PURPLE & GREEN TUFF	Maroon to purplish green Fine grained Generally finely bedded/foliated - alternating beds which are green & maroon to purple 71.9 - 73.45 blocky core and fault gauge Fol'n & veins 78.2m 81.0m 84.3 - 87.9 possible diorite dike with 2-3% qtz-carb-	 60 70	Unit pervasively chloritic and hematile -rich (hematite gives unit purple-red colour). 68.3 - 87.9 15% carb +/- qtz vns generally aligned parallel to foliation/bedding	trace py. specks of cp, tr. py in veins at: 77.45 - 77.65	general lack of sulphide in both veins

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		hematite veins; patchy epidote alteration. trace fsp. crystals?				and wall rock within this purple and green tuff unit
		Lower contact 87.9	55	87.9 - 157.6 qtz-carb veining not as intense		
		fol'n 97.0m =	70	5% veins		
		103.4m =	70			
		114.5m =	65			
		trace fsp. crystals at 118.3				
		134.3m =	45			
		129.2 - 130.4				
		1-2% white fsp crystals				
		134.5m =	50			
		137.4m =	45			
		144.0m =	60			
		150.0m =	45			
		END OF HOLE				

Sample	From (m)	To (m)	Length (m)	ASSAYS Cu ppm	Zn ppm	Au ppb	Ag ppm	COMMENTS
BCD6751	28.90	30.50	1.60			5		
BCD6752	30.50	32.00	1.50			10		
BCD6753	32.00	33.50	1.50			5		
BCD6754	33.50	35.00	1.50			5		
BCD6755	35.00	36.50	1.50			5		
BCD6756	36.50	38.00	1.50			70		
BCD6757	38.00	39.50	1.50	550	185	5		
BCD6758	39.50	41.50	2.00			10		
BCD6759	41.50	43.00	1.50	1460	840	10		
BCD6760	43.00	44.50	1.50			5		
BCD6761	44.50	46.00	1.50			20		
BCD6762	46.00	47.50	1.50			5		
BCD6763	47.50	49.00	1.50			5		
BCD6764	49.00	50.50	1.50			10		
BCD6765	50.50	52.00	1.50			5		
BCD6766	52.00	53.50	1.50			20		
BCD6767	53.50	55.00	1.50			5		
BCD6768	55.00	56.50	1.50			5		
BCD6769	56.50	58.00	1.50			5		
BCD6770	58.00	59.50	1.50			40		
BCD6771	59.50	61.00	1.50			5		
BCD6772	61.00	62.50	1.50			40		
BCD6773	62.50	64.00	1.50			20		
BCD6774	64.00	65.50	1.50			5		
BCD6775	65.50	66.90	1.40			5		
BCD6776	66.90	68.30	1.40			5		
BCD6777	76.50	78.00	1.50			5		

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL203 %	CAO %	MGO %	NA20 %	K20 %	FE203 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	B PPM	SB PPM	SR %	ZR %	TOT %
BCD6872	78.00	81.10	3.10	41.7	14.7	10.22	2.35	2.33	2.41	10.76	0.29	0.96	0.014	54	82	20	1.0	5	13	9	1	0.02	0.003	85.76
BCD6873	121.00	124.10	3.10	45.72	17.67	7.3	5.31	2.75	2.47	8.42	0.28	0.71	0.022	4	68	19	1.3	5	20	11	3	0.02	0	90.65

HOLE NUMBER: H-7

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: HEATHER
PROJECT NUMBER: 224
CLAIM NUMBER: CAROL-S
LOCATION: NTS:92C/15

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 0+45S
EAST: 5+ 5W
ELEV: 539.00

COLLAR DIP: -59° 0' 0"
LENGTH OF THE HOLE: 96.00m
START DEPTH: 0.00m
FINAL DEPTH: 96.00m

COLLAR GRID AZIMUTH: 40° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 40° 0' 0"

DATE STARTED: September 24, 1987
DATE COMPLETED: September 25, 1987
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: BURWASH ENTERPRISES
CASING: 6.1M
CORE STORAGE: 6722 LAKES ROAD, DUNCAN

PURPOSE: TO TEST THE MAIN ZONE MINERALIZATION

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
35.10	-	-57° 0'	ACID	OK		-	-	-	-	-	
72.30	-	-55° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 6.10	OVERBURDEN					CASING
TO TO 12.20						
6.10 6.10 TO 25.10	GREENISH -GREY TUFF TO CRYSTAL TUFF	Greenish grey Fine grained Massive to weakly foliated tr. fsp crystals in patches. veins 16.0m veins 21.0m	 45 40	1-2% qtz-carb veins	none	6.1 - 25.1 - blocky core
25.10 TO 60.40	GREY PYRITIC TUFF	Grey Fine grained to very fine grained Massive. Trace qtz "eyes" - vesicles? - fine grained ash with the odd angular lithic fragment noted (ie., 50.8m) 30.0m (veins) 35.8m (veins) 37.5m (veins) 44.4m (veins) 46.5m (veins) fine grained light green intermediate dikes at: 48.3 - 48.45 49.2 - 49.35 49.2m (contact) 54.3m (veins) 59.5m (veins)	 70 65 50 70 65 60 40 60	25.1 - 28.4 pervasively moderately silicified 28.4 - 36.0 1-2% qtz veins all oriented at approx. the same angle to the core axis 36.0 - 40.4 pervasive intense qtz-ser- Chl(?) plus trace carb. Sericite is light brown and wispy - looks similar to leucoxene 40.4 - 43.45 3-5% wispy leucoxene or sericite(?) 43.45 - 51.1 pervasive intensely to moderately silicified with minor carbonate sericite 51.1 - 60.4 moderately silicified (~10-12% q.v's)	25.1 - 28.4 3-5% py as specks in host rock; trace cp in qtz veins 28.4 - 36.0 trace-1% py 36.0 - 40.4 3-5% very fine grained pyrite 40.4 - 43.45 trace-1% diss. py. 43.45-51.1 5-7% diss. py. locally have patches with 10%. Generally py in host rock and v.fgr 47.25 - 47.5 trace-1% diss. cp. 51.1 - 60.4 2-3% diss. py	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
60.40 TO 96.00	PURPLE AND GREEN TUFF	maroon to light green Fine grained Alternating beds of maroon and green tuff. Very fine graind beds; locally have pseudo-breccia look due to veining. Purple colour due to hematite 61.0m (veins)	45	60.4 - 72.3 pervasive carbonate alteration with 10-15% carb-qtz veins	Unit void of sulphides except as noted below	
		64.0m (veins)	30			
		63.1 - 63.3 fault gouge			63.3 - 66.0 2-3% very fine grained py hosted in veined green tuff unit	
		67.0m (veins & bedding)	40			
		71.0m (bedding)	70			
				72.3 - 96.0		
		77.0m (bedding)	60	5% carb veins; commonly have hematite associated with these veins		
					86.45 - 86.55 10% py associated with qtz vein.	
					88.35 - 88.65 1-2% py associated with qtz vein.	
		END OF HOLE				

Sample	From (m)	To (m)	Length (m)	ASSAYS Cu ppm	Zn ppm	Au ppb	Ag ppm	COMMENTS
BCD6778	25.10	26.75	1.65			5		
BCD6779	26.75	28.40	1.65			10		
BCD6780	28.40	29.90	1.50			5		
BCD6781	29.90	31.40	1.50			5		
BCD6782	31.40	33.00	1.60			5		
BCD6783	33.00	34.50	1.50			5		
BCD6784	34.50	36.00	1.50			5		
BCD6785	36.00	37.50	1.50	274	280	25		
BCD6786	37.50	39.00	1.50	490	264	10		
BCD6787	39.00	40.50	1.50	350	1400	100		
BCD6788	40.40	41.90	1.50			5		
BCD6789	41.90	43.45	1.55			5		
BCD6790	43.45	45.00	1.55			10		
BCD6791	45.00	46.50	1.50			5		
BCD6792	46.50	48.00	1.50	580	460	5	2.6	
BCD6793	48.00	49.50	1.50			40		
BCD6794	49.50	51.10	1.60			5		
BCD6795	51.10	52.60	1.50			10		
BCD6796	52.60	54.10	1.50			10		
BCD6797	54.10	55.60	1.50			15		
BCD6798	55.60	57.10	1.50			5		
BCD6799	57.10	58.80	1.70			5		
BCD6800	58.80	60.40	1.60			10		
BCD6801	63.30	64.70	1.40			10		
BCD6802	64.70	66.00	1.30			5		
BCD6803	86.45	86.55	0.10	125	13	825		
BCD6804	88.35	88.65	0.30			160		

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL203 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	B PPM	SB PPM	SR %	ZR %	TOT %
BCD6874	13.70	16.50	2.80	61.7	13.87	0.03	5.58	2.95	0.26	11.58	0.55	1.04	0.006	288	253	13	0.4	5	45	22	6	0.01	0.001	97.56
BCD6875	66.10	69.20	3.10	43.02	15.29	8.37	2.53	2.68	2.36	12.39	0.26	1.15	0.015	310	98	22	1.2	10	8	8	1	0.02	0.004	88.1

HOLE NUMBER: H-8

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: HEATHER
PROJECT NUMBER: 224
CLAIM NUMBER: CAROL S
LOCATION: NTS:92C/15

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 0+65S
EAST: 4+20W
ELEV: 555.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 96.60m
START DEPTH: 0.00m
FINAL DEPTH: 96.60m

COLLAR GRID AZIMUTH: 40° 0' 0"

COLLAR ASTRNOMIC AZIMUTH: ° ' "

DATE STARTED: September 25, 1987
DATE COMPLETED: September 26, 1987
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: BURWASH ENTERPRISES
CASING: 6.1M
CORE STORAGE: 6722 LAKES ROAD, DUNCAN

PURPOSE: TO TEST THE MAIN ZONE MINERALIZATION

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
60.10	-	-50° 0'	ACID			-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 6.20	OVERBURDEN					CASING
6.10 TO 56.90	GREY TUFF	Grey. Fine grained Massive		6.1 - 10.8 2-3% quartz carb veins	6.1 - 10.8 trace diss. py	6.1 - 9.4 blocky core
				10.8 - 22.3 pervasive moderately to intensely silicified approx. 15% qtz veins	10.8 - 13.75 1-2% py trace cp in qtz veins	
					13.75 - 15.35 10-15% very fine grained py - primarily in host rock	
		17.0m (veins)	45		15.35 - 22.3 3-5% very fine grained py.	
		21.5m (veins)	60		trace sph? in qtz vein at 20.1	
				22.3 - 30.35 2-3% qtz veins at irregular angles	22.3 - 30.35 trace 1% diss. py.	
				30.35 - 31.4 pervasively silicified	30.35 - 31.4 1-2% py, trace diss. cp.	
				31.4 - 39.55 1% qtz veins	31.4 - 39.55 1% py - associated with qtz veins	
				39.55 - 39.8 pervasively silicified	39.55 - 39.8 10% fine grained py	silicified zones occur as patches in this hole
		fault gouge and blocky core at: 36.6 - 36.8 39.55 - 39.8 40.9 - 47.5				
		47.0m (veins)	45	39.8 - 50.0 1-2% qtz veins	39.8 - 50.0 trace diss py	
				50.0 - 50.9 pervasively silicified		
		53.0 (veins)	45	50.9 - 56.9 3-5% qtz veins	50.9 - 56.9 trace diss py.	
56.90 TO 96.60	PURPLE AND GREEN TUFF	Purple/maroon and green Fine grained Interbedded maroon and green tuff. - locally have mm-sized fsp crystals - very fine ash layers in unit				

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
		57.0m (veins & bedding)	70	56.9 - 78.5 10-15% carb-qtz veins in green tuff	none	
		62.0m (veins/bedding)	70	have yellowy green sericite assoc.		
		72.5m (veins/bedding)	45	with qtz veins		
		69.2 - 69.9: fault gouge				
				78.5 - 96.6 2-3% qtz carb veins		
				80.6 - 84.6 pervasive epidote associated with green tuff layer		
		89.0m (bedding)	55			
		96.0m (bedding)	60			
		END OF HOLE				

Sample	From (m)	To (m)	Length (m)	ASSAYS Cu ppm	Zn ppm	Au ppb	Ag ppm		COMMENTS
BCD6805	10.80	12.30	1.50			5			
BCD6806	12.30	13.75	1.45			5			
BCD6807	13.75	15.35	1.60	138	155	5			
BCD6808	15.35	16.90	1.55			25			
BCD6809	16.90	18.40	1.50			10			
BCD6810	18.40	19.90	1.50			5			
BCD6811	19.90	21.10	1.20			30			
BCD6812	21.10	22.30	1.20			5			
BCD6813	30.35	31.90	1.55			5			
BCD6814	31.90	33.40	1.50			5			
BCD6815	33.40	34.90	1.50			10			
BCD6816	34.90	36.40	1.50			5			
BCD6817	36.40	37.90	1.50			10			
BCD6818	37.90	39.55	1.65			5			
BCD6819	39.55	39.80	0.25	225	780	5			
BCD6820	39.80	40.90	1.10			5			
BCD6821	50.00	50.90	0.90			35			

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	B PPM	SB PPM	SR %	ZR %	TOT %
BCD6876	26.20	29.30	3.10	61.96	13.27	0.53	7.87	1.45	0.35	10.71	0.35	0.9	0.004	70	272	18	0.4	10	1	26	5	0.01	0.005	97.41
BCD6877	44.80	47.50	2.70	63.6	13.87	0.17	6.04	1.8	0.93	9.91	0.38	0.86	0.006	155	317	22	0.6	5	13	23	5	0.01	0.005	97.58
BCD6878	56.80	60.00	3.20	47.44	16.58	4.62	8.21	4.11	0.39	11.86	0.19	0.93	0.011	93	98	7	0.8	5	2	24	5	0.02	0.001	94.36

HOLE NUMBER: H-9

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: HEATHER
PROJECT NUMBER: 224
CLAIM NUMBER: CAROL-S
LOCATION: NTS:92C/15

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 1+25S
EAST: 4+50W
ELEV: 524.00

COLLAR DIP: -60° 0' 0"
LENGTH OF THE HOLE: 127.10m
START DEPTH: 0.00m
FINAL DEPTH: 127.10m

COLLAR GRID AZIMUTH: 40° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 40° 0' 0"

DATE STARTED: September 26, 1987
DATE COMPLETED: September 28, 1987
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: BURWASH ENTERPRISES
CASING: 12.8M
CORE STORAGE: 6722 LAKES ROAD, DUNCAN

PURPOSE: TO TEST THE MAIN ZONE MINERALIZATION

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
84.40	-	-55° 0'	ACID	OK		-	-	-	-	-	
121.00	-	-53° 0'	ACID	OK		-	-	-	-	-	
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FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 12.80	OVERBURDEN					CASING
12.80 TO 36.10	GREY SILICIFIED ANDESITIC TUFF	Grey Fine grained Generally massive - weak foliation due to veining Areas of blocky core have less veins - possibly a different unit 23.0m (veins) Blocky core at: 14.3 - 19.9 27.4 - 29.1 31.8 - 32.5 24.3m (veins)	 20 50	Pervasively intensely silicified zones with minor carbonate at: 12.8 - 14.3 19.9 - 27.4 30.15 - 31.8 32.5 - 36.1	2-3% diss. py in intensely silicified zones. Trace cp at 26.7	12.8 - 14.3 - missing 0.5m 19.9 - 23.2 - missing 0.4m 24.2 - 26.2 - missing 1.0m 32.5 - 34.4 - missing 0.5m
36.10 TO 61.45	GREENISH GREY ANDESITIC TUFF	Greenish grey Fine grained Massive - locally foliated due to veining 44.5m (veins) 36.1 - 39.7 blocky core and fault gouge 55.5 - 56.2 fault gouge	 30	5% qtz carb veins throughout. - weakly chloritic	trace diss py	
61.45 TO 66.70	GREY PYRITIC TUFF	Grey Fine grained Massive - foliaton due to alignment of quartz veins 63.4m	 40	15% qtz veins throughout, trace chl and light brown, wispy sericite in veins	3-5% very fine grained py - gen. occurs in host rock adjacent to veins. Locally 5 cm sections are massive very fine grained py	
66.70 TO 81.40	ANDESITE CRYSTAL TUFF AND ASH	Orangy grey Fine-agr. Well-bedded/foliated. Have interbedded crystal rich layers and a finer-grained ash (which looks more felsic) 73.0m 76.0m	 60 50	1-2% qtz veins Orange coloued carbonate (ankerite) zones at: 68.6 - 69.1 76.4 - 76.7	trace diss py	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
81.40 TO 84.00	SILICIFIED FAULT ZONE	Light grey Mgr fragments set in fine grained silicified matrix. - silicified zone well foliated - fault gouge throughout zone 81.7 - 82.6 chloritic dike 83.0m (fol'n)	70	pervasively silicified	none	
84.00 TO 87.50	ANDESITIC ASH	Greenish grey Fine grained Weakly foliated; qtz veins generally aligned parallel to foliation 87.0m	70	10-15% quartz +/- carb veins	1-2% very fine grained py	
87.50 TO 90.65	SILICIFIED FAULT ZONE	Light grey Mgr Weakly foliated 89.8 - 90.4 chloritic fault gouge		pervasively silicified	none	
90.65 TO 94.80	PYRITIC GREY TUFF/ASH	Light grey Fine grained Massive, ashy look. - contact with underlying andesitic crystal tuff gradational 93.6m (veins)	55	10-15% qtz veins	5% very fine grained pyrite within zone	
94.80 TO 111.30	ANDESITIC CRYSTAL TUFF	Light green Fine agr. Well-foliated locally, otherwise massive zones with 5-7% fsp crystals aligned parallel to foliation 96.0m (fol'n) - locally have rounded qtz "eyes" (1-2 mm diam.) = possible vesicles? 101.0m (veins) 100.2 - 100.4 fine grained, light green intermediate dike; chilled, irregular contacts	55 30	94.8 - 111.3 10-15% qtz veins; in place impart a pseudo-breccia look to rock - generally aligned at shallow core angles	94.8 - 100.2 1-2% py in veinlets and as disseminations 100.2 - 111.3 trace py - generaly intimately assoc. with quartz veins	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
111.30 TO 127.10	PURPLE AND GREEN TUFF	Purple and dark green Fine grained Purple and green layers interfinger - fine ashy look - locally have contorted bedding - weakly foliated				
		118.0m (fol'n)	45			
		113.0 (veins)	30			
		126.0 (veins)	20			
		END OF HOLE		15-20% carbonate veins with minor qtz - purple colour due to fine grained hematite	none	

Sample	From (m)	To (m)	Length (m)	ASSAYS Cu ppm	Zn ppm	Au ppb	Ag ppm	COMMENTS
BCD6822	12.80	14.30	1.50			25		
BCD6823	19.90	21.70	1.80			40		
BCD6824	21.70	23.20	1.50			20		
BCD6825	23.20	24.20	1.00			15		
BCD6826	24.20	26.20	2.00			10		
BCD6827	26.20	27.40	1.20	3000	430	20		
BCD6828	30.15	31.80	1.65			5		
BCD6829	32.50	34.40	1.90			25		
BCD6830	34.40	36.10	1.70			10		
BCD6831	61.45	63.00	1.55	175	158	20	1.2	
BCD6832	63.00	64.50	1.50	240	250	15	1.4	
BCD6833	64.50	65.60	1.10	218	300	30	1.6	
BCD6834	65.60	66.70	1.10	330	190	15	1.0	
BCD6835	84.00	85.50	1.50			5		
BCD6836	85.50	86.50	1.00			25		
BCD6837	86.50	87.50	1.00			5		
BCD6838	90.65	92.20	1.55	278	280	25	1.3	
BCD6839	92.20	93.50	1.30	170	280	10	1.0	
BCD6840	93.50	94.80	1.30	98	260	30	1.0	
BCD6841	94.80	96.30	1.50			15		
BCD6842	96.30	97.60	1.30			75		
BCD6843	97.60	98.90	1.30			25		
BCD6844	98.90	100.20	1.30			90		

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	B PPM	SB PPM	SR %	ZR %	TOT %
BCD6879	40.20	42.10	1.90	56.94	14.33	2.95	6.31	2.61	0.51	11.79	0.34	1.03	0.005	227	79	13	0.7	5	47	23	7	0.01	0.001	96.81
BCD6880	50.90	53.90	3.00	55.75	13.8	3.59	6.71	2.17	0.44	12.47	0.24	1.01	0.004	1855	70	12	0.8	5	43	23	7	0.01	0.001	96.19
BCD6881	87.50	90.65	3.15	50.29	4.8	7.15	26.96	0.05	0.05	7.62	0.28	0.18	0.003	32	33	23	0.6	5	20	4	1	0.04	0.005	97.43
BCD6882	111.30	113.70	2.40	45.15	17.52	8.31	4.13	1.12	3.92	8.98	0.21	0.73	0.023	58	70	19	0.7	5	18	9	4	0.02	0.005	90.11

HOLE NUMBER: H-10

MINNOVA INC.
DRILL HOLE RECORD

IMPERIAL UNITS: METRIC UNITS: X

PROJECT NAME: HEATHER
PROJECT NUMBER: 224
CLAIM NUMBER: CAROL-S
LOCATION: NTS:92C/15

PLOTTING COORDS GRID:
NORTH:
EAST:
ELEV:

ALTERNATE COORDS GRID: FIELD
NORTH: 0+47S
EAST: 5+95W
ELEV: 516.00

COLLAR DIP: -50° 0' 0"
LENGTH OF THE HOLE: 111.30m
START DEPTH: 0.00m
FINAL DEPTH: 111.30m

COLLAR GRID AZIMUTH: 45° 0' 0"
COLLAR ASTRNOMIC AZIMUTH: 45° 0' 0"

DATE STARTED: September 29, 1987
DATE COMPLETED: September 30, 1987
DATE LOGGED: 0, 0

COLLAR SURVEY: NO
MULTISHOT SURVEY: NO
RQD LOG: NO

PULSE EM SURVEY: NO
PLUGGED: NO
HOLE SIZE: NQ

CONTRACTOR: BURWASH ENTERPRISES
CASING: 9.1M
CORE STORAGE: 6722 LAKES ROAD, DUNCAN

PURPOSE: TO TEST MAIN ZONE MINERALIZATION NORTH OF HOLE H-3.

DIRECTIONAL DATA:

Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments	Depth (m)	Astronomic Azimuth	Dip degrees	Type of Test	FLAG	Comments
93.60	-	-45° 0'	ACID	OK		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	
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-	-	-	-	-		-	-	-	-	-	
-	-	-	-	-		-	-	-	-	-	

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
0.00 TO 9.10	OVERBURDEN					CASING
9.10 TO 13.25	GREEN ANDESITE TUFF	Green Fine grained Weakly foliated - blocky core and fault gouge throughout		1% qtz-carb veins	trace py	
13.25 TO 52.30	GREY TUFF	Grey to greenish grey Fine grained Generally massive; foliaton due to parallel alignment of quartz veins 15.0m (veins)	60	13.25 - 15.5 3% qtz veins	13.25 - 15.5 3-5% very fine grained py	15.5 - 17.4 - missing 0.3m
		15.5 - 20.2 more green andesite tuff, blocky core and fault gouge		15.5 - 20.2 1-2% qtz carb veins	15.5 - 20.2 trace py	17.4 - 20.4 - missing 0.7m
				20.2 - 30.2 moderately silicified (5-7% qtz-veins)	20.2 - 47.5 3-5% very fine grained throughout	21.7 - 23.5 - missing 0.7m
		30.0m (veins)	55		- locally occurs as patches with	23.5 - 25.3 - missing 0.6m
		31.0m (veins)	65	30.2 - 52.3	10-12% py	
		40.6 - 40.7 fault gouge 38.8m (veins)	70	intensely silicified with minor carbonate in veins (15-20% veins)	46.4 - trace sph. in qtz vein	
		45.9 - 52.3 patches with 5% fsp crystals - unit has a greener colour			47.5 - 52.3 trace diss py.	
		48.2m (veins)	60			
52.30 TO 111.30	PURPLE AND GREEN TUFF	Maroon and green Fine grained to very fine grained Well foliated/bedded. Maroon layers are dominant in this hole.		52.3 - 69.5 pervasive carbonate veining (15%) gives unit a well-defined foliation.	none except as noted below	
		55.0m (vein/fol'n)	60	- purple/maroon colour due to very	59.7 - 60.1	
		61.0m (vein)	60	fine grained hematite. Hematite	3-5% py associated with qtz-	
		64.0m (fol'n)	65	also occurs as veinlets.	hematite, sericite vein	
				- also have trace-1% leucoxene in unit occurs as light brown wisps.	60.75 - 61.0	
		69.5 - 70.0 fault gouge			3-5% py associated with qtz-chl	
		71.5m (fol'n)	70	69.5 - 102.1	vein	
		77.0m (fol'n)	70	3-5% carb veins locally have thin (2-3mm) hematite veinlets in green		
		84.0m (bedding)	70	tuff/crystal tuff units which give		
		95.0m (veins/fol'n)	65	rock a pseudo-breccia look		
		106.5m (veins)	55			
				102.1 - 107.6		

FROM TO	ROCK TYPE	TEXTURE AND STRUCTURE	ANGLE TO CA	ALTERATION	MINERALISATION	REMARKS
				10-15% carb veins		
				107.6 - 111.3		
		111.0m (veins)	50	3-5% carb veins in green tuff unit		
		END OF HOLE				

Sample	From (m)	To (m)	Length (m)	SIO2 %	AL2O3 %	CAO %	MGO %	NA2O %	K2O %	FE2O3 %	MNO2 %	TIO2 %	BA %	CU PPM	ZN PPM	PB PPM	AG PPM	AU PPB	AS PPM	B PPM	SB PPM	SR %	ZR %	TOT %
BCD6883	53.90	56.10	2.20	43.68	15.69	8.08	2.12	3.31	2.2	12.17	0.25	1.22	0.015	156	86	16	1.0	20	8	4	2	0.02	0.004	88.75

Sample	From (m)	To (m)	Length (m)	ASSAYS Cu ppm	Zn ppm	Au ppb	Ag ppm		COMMENTS
BCD6845	13.25	15.50	2.25			10			
BCD6846	15.50	17.40	1.90			5			
BCD6847	17.40	18.40	1.00			5			
BCD6848	18.40	20.20	1.80			5			
BCD6849	20.20	21.70	1.50			5			
BCD6850	21.70	23.40	1.70			5			
BCD6851	23.40	25.30	1.90			10			
BCD6852	25.30	26.80	1.50			30			
BCD6853	26.80	28.00	1.20			25			
BCD6854	28.00	29.50	1.50			10			
BCD6855	29.50	31.00	1.50			15			
BCD6856	31.00	32.50	1.50			10			
BCD6857	32.50	34.00	1.50			15			
BCD6858	34.00	35.50	1.50			5			
BCD6859	35.50	37.00	1.50			5			
BCD6860	37.00	38.50	1.50			10			
BCD6861	38.50	40.00	1.50			5			
BCD6862	40.00	41.50	1.50			435			
BCD6863	41.50	43.00	1.50			15			
BCD6864	43.00	44.50	1.50			20			
BCD6865	44.50	45.90	1.40			5			
BCD6866	45.90	47.50	1.60	220	360	10	1.5		
BCD6867	47.50	49.00	1.50			5			
BCD6868	49.00	50.50	1.50			10			
BCD6869	50.50	52.30	1.80			5			
BCD6870	59.70	60.10	0.40			45			
BCD6871	60.75	61.00	0.25			85			

TANIA-S3
TANIA-S
CAROL-S

QUARTZ PYRITE ZONE

QUARTZ CARB ZONE

NORTH SHOWING

MAIN SHOWING

Seb Detail

←IP-chargeability

M TYPE FOLDS

BASELINE 0-00

6+00 N
5+00 N
4+00 N
3+00 N
2+00 N
1+00 N
1+00 S
2+00 S

L 19+00 W
L 18+00 W
L 17+00 W
L 16+00 W
L 15+00 W
L 14+00 W
L 13+00 W
L 12+00 W
L 11+00 W
L 10+00 W
L 9+00 W
L 8+00 W
L 7+00 W
L 6+00 W
L 5+00 W
L 4+00 W
L 3+00 W
L 2+00 W
L 1+00 W

HEATHER PROPERTY
MT BUTTLE
Nitinat
Cowichan Lake
Cayouse
MT VERNON
92C 1:250,000
Location Map

CORPORATION FALCONBRIDGE COPPER

HEATHER PROJECT

1986

GEOLOGY - drafted.

0 100 200m
SCALE: 1:2000

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE (FROM 1:50,000 GOVERNMENT CLAIM MAPS)

NOTE: For legend see map sheet 2

AUG. 1987 SL/dm
DRAWN BY: /dm
DATE: AUG. 1986
N.T.S. 92F/2,92C/18
FIG. NO.: 3a

LEGEND

LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS: SILURIAN-DEVONIAN

MYRA FORMATION

2c Andesitic tuffs (green and maroon phyllites)

2b Bedded ashes and cherts

2a Felsic lapilli tuff-ash flows

NITINAT FORMATION

1 Basaltic agglomerate with minor tuffs

SYMBOLS

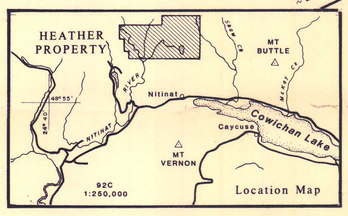
- fracture
- bedding
- foliation
- fold
- fault
- intrusive contact
- lithologic contact
- ⊙ H-5 drill hole location

Quartz veins with pyrite alteration

Quartz veins with carbonate alteration

Carbonate ± fuchsite

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE (FROM 1:50,000 GOVERNMENT CLAIM MAPS)



1986 IP survey area

× HK 024 40 geochemical rock sample (Au in ppb)

HOOPER CREEK

TANIA-S3

TANIA-S

~22m to LCP

HP87-31 to HP87-46

Sample #	Au (ppb)
HP87-31	5
32	10
33	10
34	5
35	5
36	45
37	10
38	5
39	5
40	5
41	10
42	5
43	5
44	5
45	5
46	5
HP87-47	5

L 30100 W · L 29100 W · L 28100 W · L 27100 W · L 26100 W · L 25100 W · L 24100 W · L 23100 W · L 22100 W · L 21100 W · L 20100 W · L 19100 W · L 18100 W

6100 N · 5100 N · 4100 N · 3100 N · 2100 N · 1100 N · BASELINE 00 · 1100 S · 2100 S · 3100 S · 4100 S

CORPORATION FALCONBRIDGE COPPER

HEATHER PROJECT

1986

- GEOLOGY -

drafted.

0 100 200m

SCALE: 1:2000

AUG. 1987 SL/dm		FIG. NO.: 3b
DRAWN BY: /dm		
DATE: AUG. 1986	N.T.S. 92F/2,92C/18	

1987 Detailed Mapping

McDougall Vein

1986 GRID AREA

LUCIA-S (20 units)

CAROL-S (20 units)

CAROL-S3 (20 units)

MARINO-S (20 units)

AUDACE (15 units)

HEATHER LAKE

WL 988

WL 1051

HEL-037 HEL-038 HEL-039 HEL-046 HKL-001 HKL-002 HKL-003 HE-018 HE-019

HEL-026 HEL-025 HEL-049 HEL-020 HKL-050 HEL-077 HEL-078 HEL-015 HEL-017 HEL-076 HEL-075 HKL-004 HKL-005 HKL-006 HKL-007 HKL-008 HKL-009 HEL-057 HEL-009 HEL-008 HEL-010 HEL-011 HEL-012 HKL-034 HKL-029 HKL-030 HKL-031 HKL-028 HKL-027 HKL-032 HKL-026 HKL-033 HEL-070 HEL-059 HEL-058 HE-034 HE-035 HEL-060 HEL-071 HKL-015 HE-033 HEL-062 HEL-063 HKL-005 HKL-016 HKL-017 HEL-073 HEL-042 HEL-074 HEL-085 HEL-086 HEL-081 HEL-082 HKL-018 HEL-069A HEL-064 HKL-022 HKL-023 HKL-024 HEL-083 HEL-079

HE-175 HE-174

LEGEND

LITHOLOGY

JURASSIC INTRUSIONS

- J — Diorite

VOLCANIC FORMATIONS: SILURIAN-DEVONIAN

MYRA FORMATION

- 2c — Andesitic tuffs (green and maroon phyllites)
- 2b — Bedded ashes and cherts
- 2a — Felsic lapilli tuff-ash flows

NITINAT FORMATION

- 1NTb — Basaltic agglomerate / flow breccia with minor tuffs

SYMBOLS

- fracture
- bedding
- foliation
- fold
- fault
- lithologic contact
- drill hole location (e.g. H-5)
- lithogeochemical sample location (e.g. x HEL-05)
- Quartz veins with pyrite alteration
- Quartz veins with carbonate alteration

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE (FROM 1:50,000 GOVERNMENT CLAIM MAPS)

Fourth Lake

HEATHER PROPERTY

SHEET 1

SHEET 2

SHEET 3

Cowichan Lake

0 2km

inches 0 1 2 3 4 5

centimetres

This reference scale has been added to the original image. It will change if the image is resized as the image, therefore it is not to be used as a reference for the original size.

MINNOVA Inc.

HEATHER PROJECT

RECONNAISSANCE MAPPING SHEET 2

0 100 200 300 400 500m

SCALE: 1: 5000

N.T.S. 92C/15,16

DRAWN BY: GE/sg

DATE: JAN.1988

MAP: 4b

TANIA-S4
(16 units)

TANIA-S3
(20 units)

TANIA-S2
(15 units)

TANIA-S
(20 units)

CAROL-S
(20 units)

1986 GRID AREA

MAIN ZONE

KARMUTSEN VOLCANICS

BONANZA VOLCANICS

NITINAT RIVER

HEL-001 HEL-002 HEL-003 HEL-004 HEL-017 HEL-018 HEL-019 HEL-020 HEL-021 HEL-022 HEL-023 HEL-024 HEL-025 HEL-053 HEL-054 HEL-055 HEL-056 HEL-057 HEL-058 HEL-059 HEL-060 HEL-061 HEL-062 HEL-063 HEL-064 HEL-065 HEL-066 HEL-067 HEL-068 HEL-069 HEL-087 HEL-088 HEL-089 HEL-090 HEL-091 HEL-094

HK-002 HK-003 HK-004 HK-010 HK-011 HK-012 HK-013 HK-014

HKL-039 HKL-040 HKL-041 HKL-042 HKL-043 HKL-044 HKL-045 HKL-046 HKL-047 HKL-048 HKL-049

HE-001 HE-002 HE-003 HE-004 HE-005 HE-006 HE-007 HE-008 HE-009 HE-010 HE-011 HE-012 HE-013 HE-014 HE-015 HE-016 HE-017 HE-018 HE-019 HE-020 HE-021 HE-022 HE-023 HE-024 HE-025 HE-026 HE-027 HE-028 HE-029 HE-030 HE-031 HE-032 HE-033 HE-034 HE-035 HE-036 HE-037 HE-038 HE-039 HE-040 HE-041 HE-042 HE-043 HE-044 HE-045 HE-046 HE-047 HE-048 HE-049 HE-050 HE-051 HE-052 HE-053 HE-054 HE-055 HE-056 HE-057 HE-058 HE-059 HE-060 HE-061 HE-062 HE-063 HE-064 HE-065 HE-066 HE-067 HE-068 HE-069 HE-070 HE-071 HE-072 HE-073 HE-074 HE-075 HE-076 HE-077 HE-078 HE-079 HE-080 HE-081 HE-082 HE-083 HE-084 HE-085 HE-086 HE-087 HE-088 HE-089 HE-090 HE-091 HE-092 HE-093 HE-094 HE-095 HE-096 HE-097 HE-098 HE-099 HE-100 HE-101 HE-102 HE-103 HE-104 HE-105 HE-106 HE-107 HE-108 HE-109 HE-110 HE-111 HE-112 HE-113 HE-114 HE-115 HE-116 HE-117 HE-118 HE-119 HE-120 HE-121 HE-122 HE-123 HE-124 HE-125 HE-126 HE-127 HE-128 HE-129 HE-130 HE-131 HE-132 HE-133 HE-134 HE-135 HE-136 HE-137 HE-138 HE-139 HE-140 HE-141 HE-142 HE-143 HE-144 HE-145 HE-146 HE-147 HE-148 HE-149 HE-150 HE-151 HE-152 HE-153 HE-154 HE-155 HE-156 HE-157 HE-158 HE-159 HE-160 HE-161 HE-162 HE-163 HE-164 HE-165 HE-166 HE-167 HE-168 HE-169 HE-170 HE-171 HE-172 HE-173 HE-174 HE-175 HE-176 HE-177 HE-178 HE-179 HE-180 HE-181 HE-182 HE-183 HE-184 HE-185 HE-186 HE-187 HE-188 HE-189 HE-190 HE-191 HE-192 HE-193 HE-194 HE-195 HE-196 HE-197 HE-198 HE-199 HE-200 HE-201 HE-202 HE-203 HE-204 HE-205 HE-206 HE-207 HE-208 HE-209 HE-210 HE-211 HE-212 HE-213 HE-214 HE-215 HE-216 HE-217 HE-218 HE-219 HE-220 HE-221 HE-222 HE-223 HE-224 HE-225 HE-226 HE-227 HE-228 HE-229 HE-230 HE-231 HE-232 HE-233 HE-234 HE-235 HE-236 HE-237 HE-238 HE-239 HE-240 HE-241 HE-242 HE-243 HE-244 HE-245 HE-246 HE-247 HE-248 HE-249 HE-250 HE-251 HE-252 HE-253 HE-254 HE-255 HE-256 HE-257 HE-258 HE-259 HE-260 HE-261 HE-262 HE-263 HE-264 HE-265 HE-266 HE-267 HE-268 HE-269 HE-270 HE-271 HE-272 HE-273 HE-274 HE-275 HE-276 HE-277 HE-278 HE-279 HE-280 HE-281 HE-282 HE-283 HE-284 HE-285 HE-286 HE-287 HE-288 HE-289 HE-290 HE-291 HE-292 HE-293 HE-294 HE-295 HE-296 HE-297 HE-298 HE-299 HE-300 HE-301 HE-302 HE-303 HE-304 HE-305 HE-306 HE-307 HE-308 HE-309 HE-310 HE-311 HE-312 HE-313 HE-314 HE-315 HE-316 HE-317 HE-318 HE-319 HE-320 HE-321 HE-322 HE-323 HE-324 HE-325 HE-326 HE-327 HE-328 HE-329 HE-330 HE-331 HE-332 HE-333 HE-334 HE-335 HE-336 HE-337 HE-338 HE-339 HE-340 HE-341 HE-342 HE-343 HE-344 HE-345 HE-346 HE-347 HE-348 HE-349 HE-350 HE-351 HE-352 HE-353 HE-354 HE-355 HE-356 HE-357 HE-358 HE-359 HE-360 HE-361 HE-362 HE-363 HE-364 HE-365 HE-366 HE-367 HE-368 HE-369 HE-370 HE-371 HE-372 HE-373 HE-374 HE-375 HE-376 HE-377 HE-378 HE-379 HE-380 HE-381 HE-382 HE-383 HE-384 HE-385 HE-386 HE-387 HE-388 HE-389 HE-390 HE-391 HE-392 HE-393 HE-394 HE-395 HE-396 HE-397 HE-398 HE-399 HE-400 HE-401 HE-402 HE-403 HE-404 HE-405 HE-406 HE-407 HE-408 HE-409 HE-410 HE-411 HE-412 HE-413 HE-414 HE-415 HE-416 HE-417 HE-418 HE-419 HE-420 HE-421 HE-422 HE-423 HE-424 HE-425 HE-426 HE-427 HE-428 HE-429 HE-430 HE-431 HE-432 HE-433 HE-434 HE-435 HE-436 HE-437 HE-438 HE-439 HE-440 HE-441 HE-442 HE-443 HE-444 HE-445 HE-446 HE-447 HE-448 HE-449 HE-450 HE-451 HE-452 HE-453 HE-454 HE-455 HE-456 HE-457 HE-458 HE-459 HE-460 HE-461 HE-462 HE-463 HE-464 HE-465 HE-466 HE-467 HE-468 HE-469 HE-470 HE-471 HE-472 HE-473 HE-474 HE-475 HE-476 HE-477 HE-478 HE-479 HE-480 HE-481 HE-482 HE-483 HE-484 HE-485 HE-486 HE-487 HE-488 HE-489 HE-490 HE-491 HE-492 HE-493 HE-494 HE-495 HE-496 HE-497 HE-498 HE-499 HE-500 HE-501 HE-502 HE-503 HE-504 HE-505 HE-506 HE-507 HE-508 HE-509 HE-510 HE-511 HE-512 HE-513 HE-514 HE-515 HE-516 HE-517 HE-518 HE-519 HE-520 HE-521 HE-522 HE-523 HE-524 HE-525 HE-526 HE-527 HE-528 HE-529 HE-530 HE-531 HE-532 HE-533 HE-534 HE-535 HE-536 HE-537 HE-538 HE-539 HE-540 HE-541 HE-542 HE-543 HE-544 HE-545 HE-546 HE-547 HE-548 HE-549 HE-550 HE-551 HE-552 HE-553 HE-554 HE-555 HE-556 HE-557 HE-558 HE-559 HE-560 HE-561 HE-562 HE-563 HE-564 HE-565 HE-566 HE-567 HE-568 HE-569 HE-570 HE-571 HE-572 HE-573 HE-574 HE-575 HE-576 HE-577 HE-578 HE-579 HE-580 HE-581 HE-582 HE-583 HE-584 HE-585 HE-586 HE-587 HE-588 HE-589 HE-590 HE-591 HE-592 HE-593 HE-594 HE-595 HE-596 HE-597 HE-598 HE-599 HE-600 HE-601 HE-602 HE-603 HE-604 HE-605 HE-606 HE-607 HE-608 HE-609 HE-610 HE-611 HE-612 HE-613 HE-614 HE-615 HE-616 HE-617 HE-618 HE-619 HE-620 HE-621 HE-622 HE-623 HE-624 HE-625 HE-626 HE-627 HE-628 HE-629 HE-630 HE-631 HE-632 HE-633 HE-634 HE-635 HE-636 HE-637 HE-638 HE-639 HE-640 HE-641 HE-642 HE-643 HE-644 HE-645 HE-646 HE-647 HE-648 HE-649 HE-650 HE-651 HE-652 HE-653 HE-654 HE-655 HE-656 HE-657 HE-658 HE-659 HE-660 HE-661 HE-662 HE-663 HE-664 HE-665 HE-666 HE-667 HE-668 HE-669 HE-670 HE-671 HE-672 HE-673 HE-674 HE-675 HE-676 HE-677 HE-678 HE-679 HE-680 HE-681 HE-682 HE-683 HE-684 HE-685 HE-686 HE-687 HE-688 HE-689 HE-690 HE-691 HE-692 HE-693 HE-694 HE-695 HE-696 HE-697 HE-698 HE-699 HE-700 HE-701 HE-702 HE-703 HE-704 HE-705 HE-706 HE-707 HE-708 HE-709 HE-710 HE-711 HE-712 HE-713 HE-714 HE-715 HE-716 HE-717 HE-718 HE-719 HE-720 HE-721 HE-722 HE-723 HE-724 HE-725 HE-726 HE-727 HE-728 HE-729 HE-730 HE-731 HE-732 HE-733 HE-734 HE-735 HE-736 HE-737 HE-738 HE-739 HE-740 HE-741 HE-742 HE-743 HE-744 HE-745 HE-746 HE-747 HE-748 HE-749 HE-750 HE-751 HE-752 HE-753 HE-754 HE-755 HE-756 HE-757 HE-758 HE-759 HE-760 HE-761 HE-762 HE-763 HE-764 HE-765 HE-766 HE-767 HE-768 HE-769 HE-770 HE-771 HE-772 HE-773 HE-774 HE-775 HE-776 HE-777 HE-778 HE-779 HE-780 HE-781 HE-782 HE-783 HE-784 HE-785 HE-786 HE-787 HE-788 HE-789 HE-790 HE-791 HE-792 HE-793 HE-794 HE-795 HE-796 HE-797 HE-798 HE-799 HE-800 HE-801 HE-802 HE-803 HE-804 HE-805 HE-806 HE-807 HE-808 HE-809 HE-810 HE-811 HE-812 HE-813 HE-814 HE-815 HE-816 HE-817 HE-818 HE-819 HE-820 HE-821 HE-822 HE-823 HE-824 HE-825 HE-826 HE-827 HE-828 HE-829 HE-830 HE-831 HE-832 HE-833 HE-834 HE-835 HE-836 HE-837 HE-838 HE-839 HE-840 HE-841 HE-842 HE-843 HE-844 HE-845 HE-846 HE-847 HE-848 HE-849 HE-850 HE-851 HE-852 HE-853 HE-854 HE-855 HE-856 HE-857 HE-858 HE-859 HE-860 HE-861 HE-862 HE-863 HE-864 HE-865 HE-866 HE-867 HE-868 HE-869 HE-870 HE-871 HE-872 HE-873 HE-874 HE-875 HE-876 HE-877 HE-878 HE-879 HE-880 HE-881 HE-882 HE-883 HE-884 HE-885 HE-886 HE-887 HE-888 HE-889 HE-890 HE-891 HE-892 HE-893 HE-894 HE-895 HE-896 HE-897 HE-898 HE-899 HE-900 HE-901 HE-902 HE-903 HE-904 HE-905 HE-906 HE-907 HE-908 HE-909 HE-910 HE-911 HE-912 HE-913 HE-914 HE-915 HE-916 HE-917 HE-918 HE-919 HE-920 HE-921 HE-922 HE-923 HE-924 HE-925 HE-926 HE-927 HE-928 HE-929 HE-930 HE-931 HE-932 HE-933 HE-934 HE-935 HE-936 HE-937 HE-938 HE-939 HE-940 HE-941 HE-942 HE-943 HE-944 HE-945 HE-946 HE-947 HE-948 HE-949 HE-950 HE-951 HE-952 HE-953 HE-954 HE-955 HE-956 HE-957 HE-958 HE-959 HE-960 HE-961 HE-962 HE-963 HE-964 HE-965 HE-966 HE-967 HE-968 HE-969 HE-970 HE-971 HE-972 HE-973 HE-974 HE-975 HE-976 HE-977 HE-978 HE-979 HE-980 HE-981 HE-982 HE-983 HE-984 HE-985 HE-986 HE-987 HE-988 HE-989 HE-990 HE-991 HE-992 HE-993 HE-994 HE-995 HE-996 HE-997 HE-998 HE-999 HE-1000

HE-023 50-60 % py in 20 cm shear zone

HE-024 50-70 % py, trace cp, 10 cm wide vein

HE-171 ov. 50% py

f-m dykes

dyke

sand

pit

LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS: SILURIAN-DEVONIAN
MYRA FORMATION

2c Andesitic tuffs (green and maroon phyllites)

2b Bedded ashes and cherts

2a Felsic lapilli tuff-ash flows

NITINAT FORMATION

Basaltic agglomerate / flow breccia with minor tuffs

SYMBOLS

fracture — fault
bedding — lithologic contact
foliation ○ H-5 drill hole location
fold x HEL-05 lithogeochemical sample location

Quartz veins with pyrite alteration

Quartz veins with carbonate alteration

NOTE: CLAIM BOUNDARIES ARE APPROXIMATE
(FROM 1:50,000 GOVERNMENT CLAIM MAPS)

HEATHER PROPERTY

SHEET 1 SHEET 2 SHEET 3

Fourth Lake Cowichan Lake

0 2km

Inches 0 1 2 centimetres 0 1 2 3 4 5

This reference scale bar was correct when the original image is set scale at the same ratio as this reproduction it can be used as a reference for the original size.

MINNOVA Inc.

HEATHER PROJECT

RECONNAISSANCE MAPPING
SHEET 3

0 100 200 300 400 500m

SCALE: 1: 5000

N.T.S. 92C/15,16		MAP:
DRAWN BY: GE/sg		4c
DATE: JAN.1988		

TANIA-S3

TANIA-S | CAROL-S

N

Nitinat flow breccia

Myra felsic to andesitic tuff/cherts

Nitinat flow breccia

Nitinat flow breccia

Myra felsic to andesitic tuff/cherts

Myra felsic to andesitic tuff/cherts

Diorite

Diorite

Diorite

Diorite

CLIFF

TALUS SLOPE

TALUS SLOPE

LOGGING SLASH

TALUS SLOPE

TALUS SLOPE

TALUS SLOPE

Heather Creek

H-1

H-2

H-3

H-4

H-5

H-6

H-7

H-8

H-9

H-10

6+00 N

5+00 N

4+00 N

3+00 N

2+00 N

1+00 N

BASELINE 0-00

1+00 S

2+00 S

3+00 S

4+00 S

L 19+00 W

L 18+00 W

L 17+00 W

L 16+00 W

L 15+00 W

L 14+00 W

L 13+00 W

L 12+00 W

L 11+00 W

L 10+00 W

L 9+00 W

L 8+00 W

L 7+00 W

L 6+00 W

L 5+00 W

L 4+00 W

L 3+00 W

L 2+00 W

L 1+00 W

L 0+00

LEGEND

SOIL GEOCHEMISTRY

x 19,15,74,45 As ppm, Au ppb, Cu ppm, Zn ppm

ANOMALIES

As ≥ 30 ppm

Au ≥ 20 ppb

Cu ≥ 200 ppm

Zn ≥ 200 ppm

SOIL SAMPLE NUMBERS PREFIXED BY HP

inches

centimetres

This reference scale bar has been added to the original figure. It is to scale at the same size as the image, therefore it may be used as a reference for the original size.

MINNOVA Inc.

HEATHER PROJECT

- 1987 -

SOIL SAMPLE LOCATIONS AND GEOCHEMISTRY

0 100 200m

SCALE: 1:2000

DRAWN BY: GW/dm	REVISED: NOV.1987	FIG. NO.: 5a
DATE: AUG. 1986	N.T.S. 92F/2,92C/18	

MW - 14327

Nitinat flow breccia

Myra felsic to andesitic tuffs/cherts

Myra felsic to andesitic tuffs/cherts

Diorite

Diorite

TANIA-S3

TANIA-S

6+00 N

5+00 N

4+00 N

3+00 N

2+00 N

1+00 N

BASELINE 00

1+00 S

2+00 S

3+00 S

4+00 S

L 30+00 W

L 29+00 W

L 28+00 W

L 27+00 W

L 26+00 W

L 25+00 W

L 24+00 W

L 23+00 W

L 22+00 W

L 21+00 W

L 20+00 W

L 19+00 W

L 18+00 W

LEGEND

SOIL GEOCHEMISTRY

x 19,15,74,45 As ppm,Au ppb,Cu ppm,Zn ppm

ANOMALIES

As ≥ 30 ppm

Au ≥ 20 ppb

Cu ≥ 200 ppm

Zn ≥ 200 ppm

SOIL SAMPLE NUMBERS PREFIXED BY HP

MINNOVA Inc.

HEATHER PROJECT

- 1987 -

SOIL SAMPLE LOCATIONS AND GEOCHEMISTRY

0 100 200m

SCALE: 1:2000

	REVISED: NOV.1987	FIG. NO.:
DRAWN BY: GW/dm	AUG. 1987 SL/dm	5b
DATE: AUG. 1986	N.T.S. 92F/2,92C/18	

This reference scale bar was accurate when the original image, is not scale at the same rate as the original drawing, it can be used as a reference for the original size.

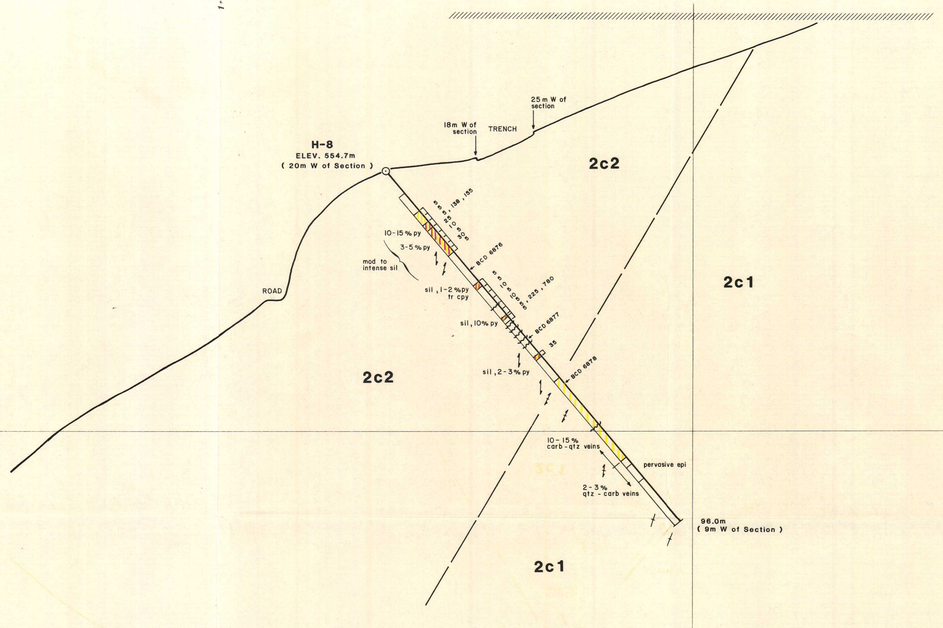
NW - 14327

2+00S | 1+00S | 0+00 | 1+00N | 2+00N

500m

400m

300m



LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS:SILURIAN-DEVONIAN
MYRA FORMATION

2a Felsic lapilli tuff-ash flows

2b Bedded ashes and cherts

2c1 Green and maroon andesite tuffs

2c2 Grey andesitic tuffs

NITINAT FORMATION

1 Basaltic agglomerate with minor tuffs

foliation

quartz veins

fault

IP chargeability

5 , 225 , 780
Au ppb,Cu ppm,Zn ppm

MINNOVA Inc.

HEATHER PROPERTY

SECTION 4+00 W

LOOKING WEST

0 10 20 30 40 50m

SCALE: 1:500

inches
centimetres

This reference scale bar has been added to the original image. It will therefore change as the image. Therefore it can be used as a reference for the original size.

DRAWN BY: GW/sg

DATE: SEPT.1987

N.T.S. 92C/16

FIG. NO.: 6a

XW-1-A327

2+00S | 1+00S | 0+00 | 1+00N | 2+00N

500m

400m

300m

H6
ELEV.548.0m
(18m W of Section)

H9
ELEV. 523.5m

ROAD

MAIN TRENCH

UPHILL TRENCH

10m W of section

106.1 g/T Au / 10m altered zone

25m E of section

25m W of section altered zone

2c2

2c2

2c1

2c2

2c2 2-3% py

2c2 5% py

2c2

2c2 15% qv 3-5% py

2c2 5% py 10-15% qv

2c2 10-15% qv

2c1

2c1

5% q-c veins

10-15% q-c veins

talcose

talcose

BCD 6879

BCD 6880

BCD 6881

BCD 6882

BCD 6878

BCD 6877

127.1m
(12m E of Section)

157.6m

LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS:SILURIAN-DEVONIAN
MYRA FORMATION

2a Felsic lapilli tuff-ash flows

2b Bedded ashes and cherts

2c1 Green and maroon andesite tuffs

2c2 Grey andesitic tuffs

NITINAT FORMATION

1 Basaltic agglomerate with minor tuffs

SYMBOLS

foliation

quartz veins

fault

IP chargeability

30 , 218 , 300 , 1.6
Au ppb,Cu ppm,Zn ppm,Ag ppm

MINNOVA Inc.

HEATHER PROPERTY

SECTION 4+50 W

LOOKING WEST

0 10 20 30 40 50m

SCALE: 1:500

inches / centimetres

This reference scale bar has been added by the original digitizer & will not be accurate if used as the image, therefore it can be used as a reference for the original size.

DRAWN BY: GW/sg

DATE: SEPT.1987

N.T.S. 92C/16

FIG. NO.: 6b

NW-14037

2+00S
1+00S
0+00
1+00N
2+00N

500m

400m

300m

H7
ELEV. 539.0m
(8m W of Section)

25m E of section

8m E of section

MAIN TRENCH

H1
ELEV. 558.0m

CHEVRON
84-01

CHEVRON
84-02

104.1 g/T Au / 1.0m

2c2

2c1

2b

sil
3-5% py

intense sil
3-5% py

intense sil
5-7% py

1.2 g/T / 1.52m

3.0 g/T / 1.52m

96.0m
(4m E of Section)

r47.83m

LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS:SILURIAN-DEVONIAN
MYRA FORMATION

2a Felsic lapilli tuff-ash flows

2b Bedded ashes and cherts

2c1 Green and maroon andesite tuffs

2c2 Grey andesitic tuffs

NITINAT FORMATION

1 Basaltic agglomerate with minor tuffs

SYMBOLS

foliation

quartz veins

fault

IP chargeability

5 , 580 , 460 , 2.6
Au ppb,Cu ppm,Zn ppm,Ag ppm

MINNOVA Inc.

HEATHER PROPERTY

SECTION 5+00 W

LOOKING WEST

0 10 20 30 40 50m

SCALE: 1:500

DRAWN BY: GW/sg

DATE: SEPT.1987

N.T.S. 92C/16

FIG. NO.: 6c

inches
centimetres

This reference scale bar has been added to the original drawing. The scale of the same was changed, therefore it can be used to determine the original size.

GW-14227

2+00S 1+00S 0+00 1+00N 2+00N

500m 500m

400m 400m

300m 300m

H10
ELEV. 515.6m

H3
ELEV. 517.5m

TRENCH @ Au values

2c2

2c2

2c1

2c1

2c2

2c1

5-7 % qv
3-5 % py

15-20% qv
5 - 5 % py

1% py

15 % carb veins

3-5 % carb veins

10-15 % carb veins
3-5 % carb veins

77.11m

111.3m

10 , 220 , 360 , 1.5
Au ppb,Cu ppm,Zn ppm,Ag ppm

LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS:SILURIAN-DEVONIAN
MYRA FORMATION

2a Felsic lapilli tuff-ash flows

2b Bedded ashes and cherts

2c1 Green and maroon andesite tuffs

2c2 Grey andesitic tuffs

NITINAT FORMATION

1 Basaltic agglomerate with minor tuffs

SYMBOLS

foliation

quartz veins

fault

IP chargeability

MINNOVA Inc.

HEATHER PROPERTY

SECTION 6+00 W

LOOKING WEST

0 10 20 30 40 50m

SCALE: 1:500

DRAWN BY: GW/sg

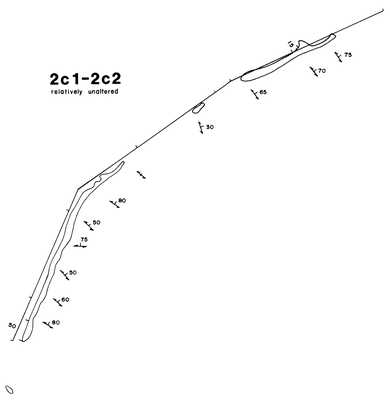
DATE: SEPT.1987

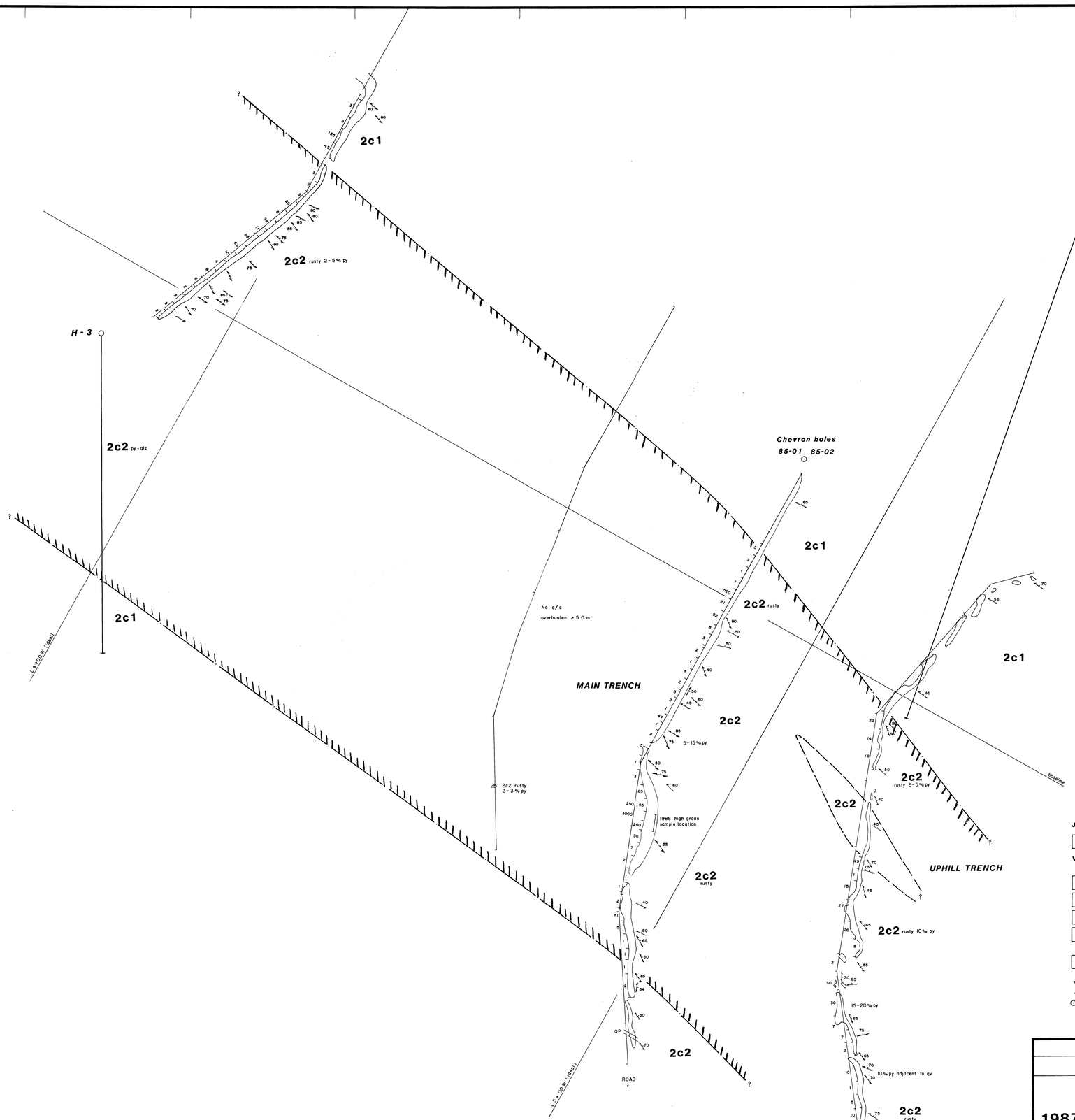
N.T.S. 92C/16

FIG. NO.: 6d

This reference scale bar was accurate for the original image. It will scale at the same ratio when reduced and can be used as a reference for the original size.

NR-14327





LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

- 3 — Diorite

VOLCANIC FORMATIONS: SILURIAN-DEVONIAN

MYRA FORMATION

- 2a — Felsic lapilli tuff-ash flows
- 2b — Bedded ashes and cherts
- 2c1 — Green and maroon andesite tuffs
- 2c2 — Grey andesitic tuffs

NITINAT FORMATION

- 1 — Basaltic agglomerate with minor tuffs

Au in ppb

DDH horizontatal projection

MINNOVA Inc.

HEATHER PROPERTY

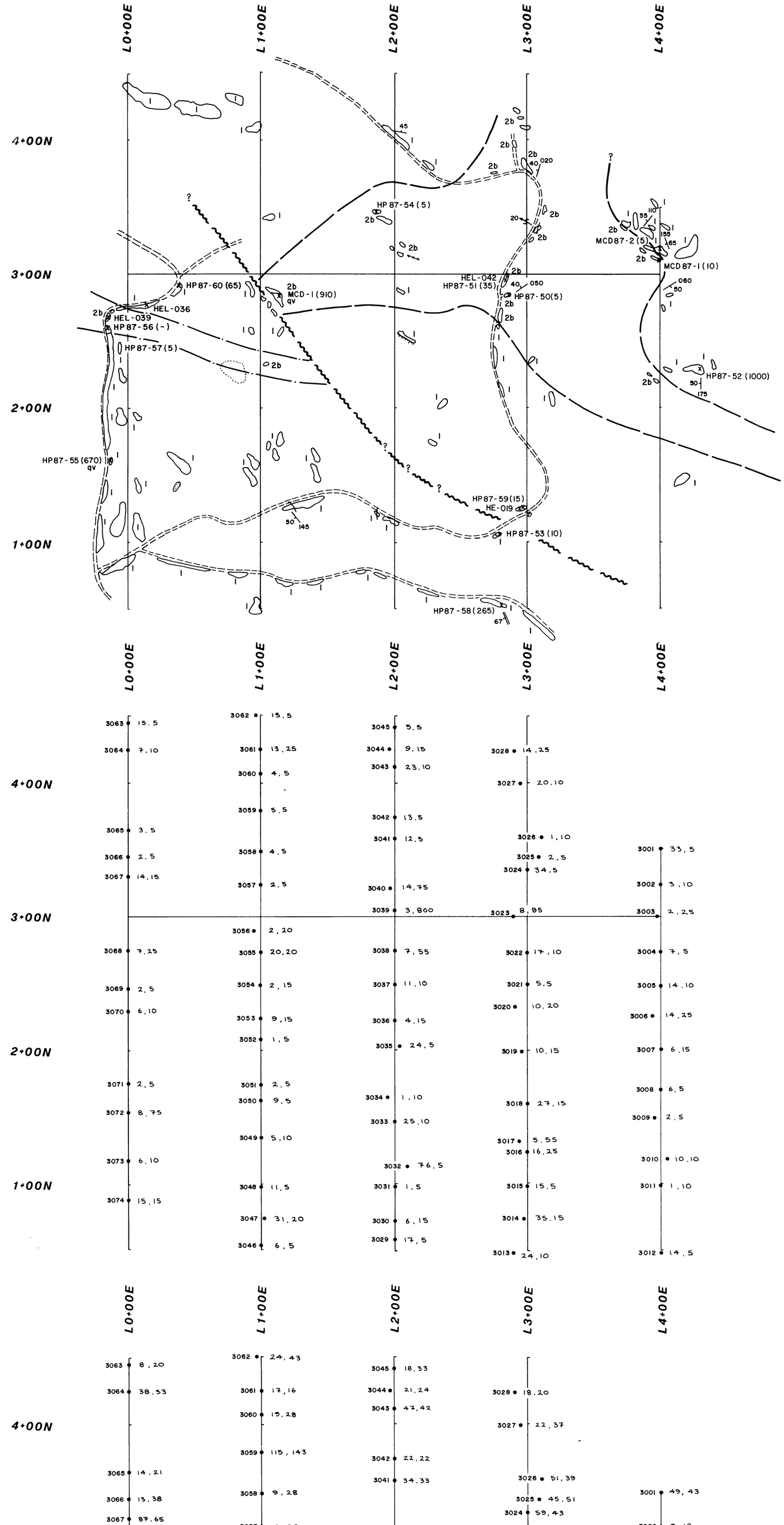
TRENCHING-MAIN ZONE

1987 SAMPLING & GEOLOGY

0 5 10 15 20 25m

SCALE: 1: 250

N.T.S. 92C/16		MAP: 8
DRAWN BY: GW/sg		
DATE: NOV. 1987		



LEGEND
LITHOLOGY

JURASSIC INTRUSIONS

3 Diorite

VOLCANIC FORMATIONS: SILURIAN-DEVONIAN

MYRA FORMATION

2c Andesitic tuffs(green and maroon phyllites)

2b Bedded ashes and cherts

2a Felsic lapilli tuff-ash flows

NITINAT FORMATION

1 Basaltic agglomerate / flow breccia with minor tuffs

SYMBOLS

fracture — fault

bedding — lithologic contact

foliation — x HEL-05 (10) lithogeochemical sample location (Au in ppb)

fold

GEOLOGY

SOIL GEOCHEMISTRY
As ppm, Au ppb

SOIL GEOCHEMISTRY
Cu, Zn ppm

inches 0 1 2

0 1 2 3 4 5 centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

MINNOVA Inc.

HEATHER PROJECT

McDOUGALL VEIN AREA
GEOLOGY & GEOCHEMISTRY

0 20 100 200m

SCALE: 1: 2000

N.T.S. 92C/15,16		MAP: 9
DRAWN BY: SL/sg		
DATE: JAN. 1988		