REPORT ON THE

GEOCHEMICAL, GEOPHYSICAL SURVEYS

ON THE

MONA 1, 2 CLAIMS [40 UNITS]

KAMLOOPS M. D.

Latitude 51°16'15"N Longitude 120°14'30"N

92P8E

11/86

for

LIONHEART RESOURCE CORPORATION Kamloops, B. C.

FILMED

Ьу

A.F. ROBERTS, P. ENG.

GEOLOGICAL BRANCH ASSESSMENT REPORT

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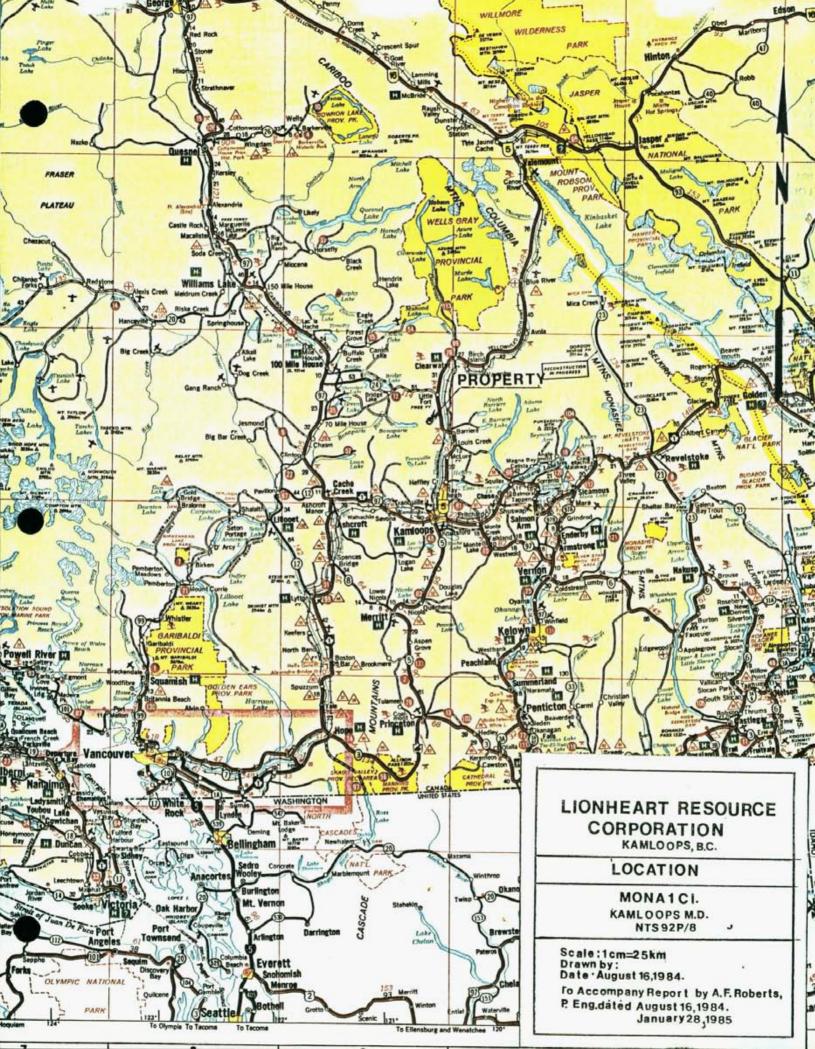
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REFERENCES

Ref. No.

1]	Report on the Mona 1 Claim [20 units], NTS 92P/8, Kamloops M.D. for Lionheart Resource Corporation, A.F. Roberts, P.Eng., August 16, 1984
2]	Addendum to Report dated August 16, 1984 on the Mona 1 Claim [20 units] Kamloops M.D., NTS 92P/8 for Lionheart Resource Corporation, A.F. Roberts, P.Eng., November 26, 1984
7]	GSC, Geology of Bonaparte Lake Area, Memoir 363, R.B. Campbell, H.W. Tipper, 1971
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SUMMARY

The Company has opened up the vein on their Mona I claim, Kamloops M.D., for an additional 150 feet. Trenching on strike has extended for another 150 feet. Widths are about 6 feet.

Unfortunately, heavy snows have prevented access to the property for sampling, and geology. Two grab samples one from each trench, gave encouraging values.

The geochemical surveys for gold showed a highly anomalous area on the north boundary of the survey, approximately 300 metres east-west, and 200 metres southerly.

Another narrow, but strong anomaly in the northeast corner of the survey.

The balance of the anomalous values appear to be erratics.

Silver anomalies are not particularly strong, though quite extensive in the southwest quarter of the survey, and partially overlap the gold anomalies on the north boundary.

Neither silver or gold show any anomalies around, or over, the known vein. No <u>good</u> explanation is available for this exception. It is possible that the area is highly leached, or samples were not close enough to the vein to register.

A magnetometer survey did not show any marked contrasts when contoured. Probably interprets the underlying rock to be virtually of the same magnetic intensity.

The VLF-EM survey showed two strong linear north-south anomalies, and several small ones.

One cuts across the gold anomaly and is open both ends.

No known mineralization exists to account for them. It is suggested that they are representative of structure, probably faults that may be related to mineralization.

The claim is considered a good bet for finding an economic gold-silver orebody.

It is recommended that the previously recommended program be carried out, although with a diversion of a small amount of money to investigate the major gold-silver anomaly, where it is coincident with the VLF-EM anomaly.

This program is estimated for a $\underline{\text{total}}$ cost of \$76,000.00.

A further stage, when justified, will cost in excess of \$200,000, mostly for diamond drilling.

Respectfully submitted,

A.F. Roberts, P. Eng., January 28, 1985 REPORT ON THE GEOCHEMICAL, GEOPHYSICAL SURVEYS ON THE

MONA 1, 2 CLAIMS [40 UNITS]
KAMLOOPS M. D.

Latitude 51°16'15"N

Longitude 120⁰14'30"N

for LIONHEART RESOURCE CORPORATION Kamloops, B.C.

by A.F. ROBERTS, P.ENG. January 28, 1985

INTRODUCTION

This report is authorized by the Directors of the Company.

Its purpose is to analyze the results of work recommended by the writer in reports dated August 16, and November 26, 1984. $^{1]2]$

The following work has been completed and evaluated:

Trenching:

150 feet [50 metres] of vein was stripped and two trenches cut it to expose it for another 150 feet. Heavy snow prevented sampling other than one grab sample from each trench.

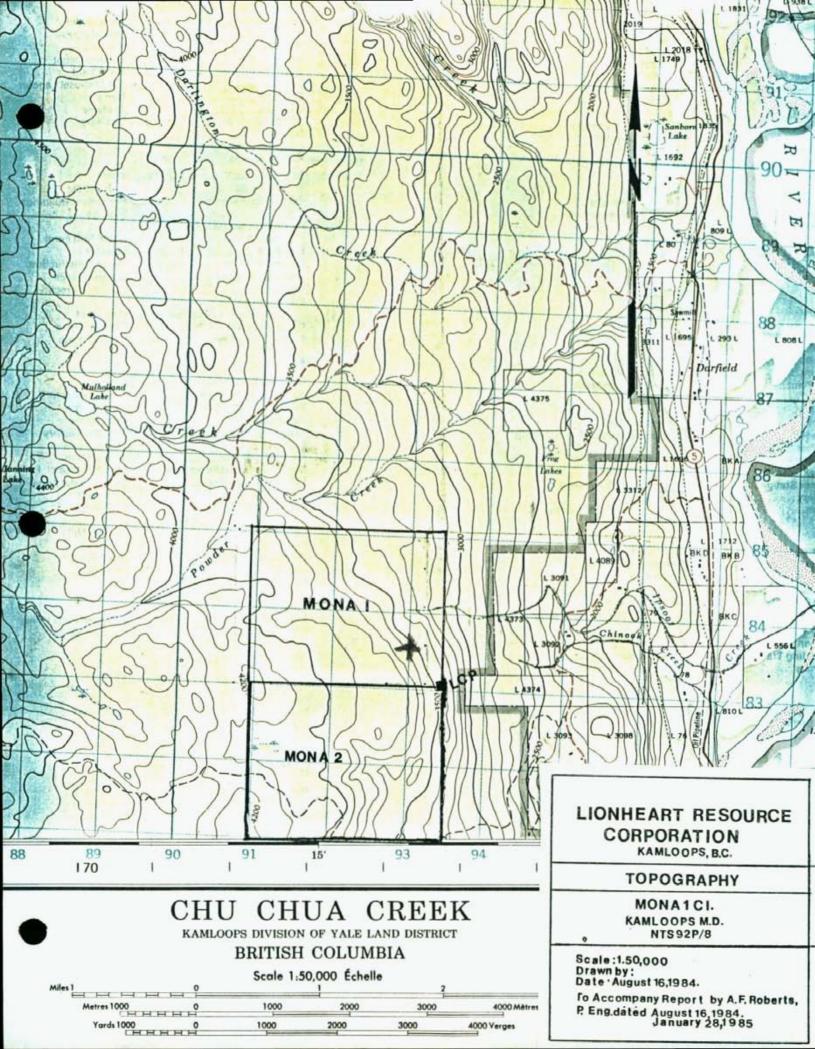
Geochemical Survey:

498 samples were taken, on lines with 100 metre spacing, and 25 metre stations. Assays were for Gold, and Silver only.

The program was completed on or about December 19, 1984.

^{1]} Report on the Mona I Claim [20 units] NTS 92 P/8, Kamloops M.D. for Lionheart Resource Corporation, A.F. Roberts, P.Eng., August 16, 1984

^{2]} Addendum to Report dated August 16, 1984 on the Mona I Claim [20 units] Kamloops M.D., NTS 92P/8 for Lionheart Resource Corporation, A.F. Roberts, P.Eng., November 26, 1984



Geophysical Survey:

A VLF-EM survey and a magnetic survey were completed over the same stations as the geochemical survey.

The above work was done by, or supervised by L. Loranger, Contract Mining Services, of Kamloops, B.C.

Due to weather conditions it will be impossible to do any work until April or May, 1985.

LOCATION, ACCESS, TOPOGRAPHY 3] 4]

The property is reached via Highway 5 north from Kamloops for about 80 km, to the Boulder Mt. turnoff for 3 km, thence on a northwesterly trending logging road for about 2 km, a point that is about 200 metres from the vein showing.

In general, the southeasterly parts of the claims are in steep country with a cover of commercial spruce and pine. Parts of the west and northwesterly areas are flatter and have been logged over. Elevations are from 3,400 feet to 4,200 feet [1,067 m. to 1,280 m.].

Overburden is fairly heavy in places, but reasonable for trenching over part of the vein near the showing. The writer has seen only two rock outcrops other than the showing.

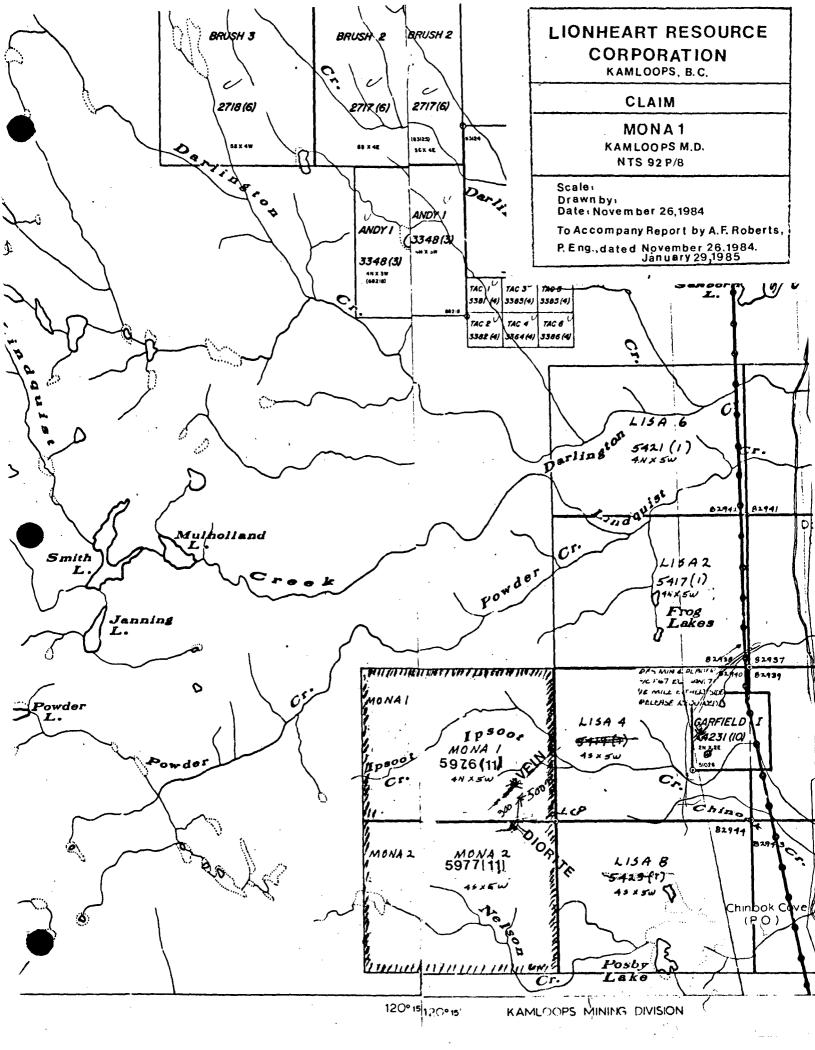
No water was seen on the claim.

CLAIM GROUP 5]

The claims are described as follows:

<u>Name</u>	<u>Units</u>	Record No.	Expiry Date
Mona 1	20	5976	November 21, 1985
Mona 2	20	5977	November 21, 1985

- 3] Location Map: B.C. Road Map, 1 cm = 26 km [Frontispiece]
- 4] Topographic Map: NTS 92P/8, 1:50,000 [Follows Page 1]
- 5] Claim Map: B.D. Dept. of Mines & Pet. Res. [Follows Page 2]



The common Legal Corner Post was examined and found to fulfill the requirements of the Mining Act.

The exact location, and the area covered can only be determined by a legal survey.

GENERAL GEOLOGY 6] 7] 8]

The GSC mappings show the claim area to be underlain by rocks of the Morrowan to Guadalupin Formation [Pennsylvan-ian-Permian] consisting of "volcanic arenite, greenstone, argillite, phyllite, minor quartz schist, limestone, basaltic and andesitic flows, amphibolite, conglomerate and breccia. Includes small bodies of Jurassic hornblende andesite."

A large intrusive of Jurassic granitic rocks lies to the north of the claim, with small bodies of intrusives to the southeast and southwest.

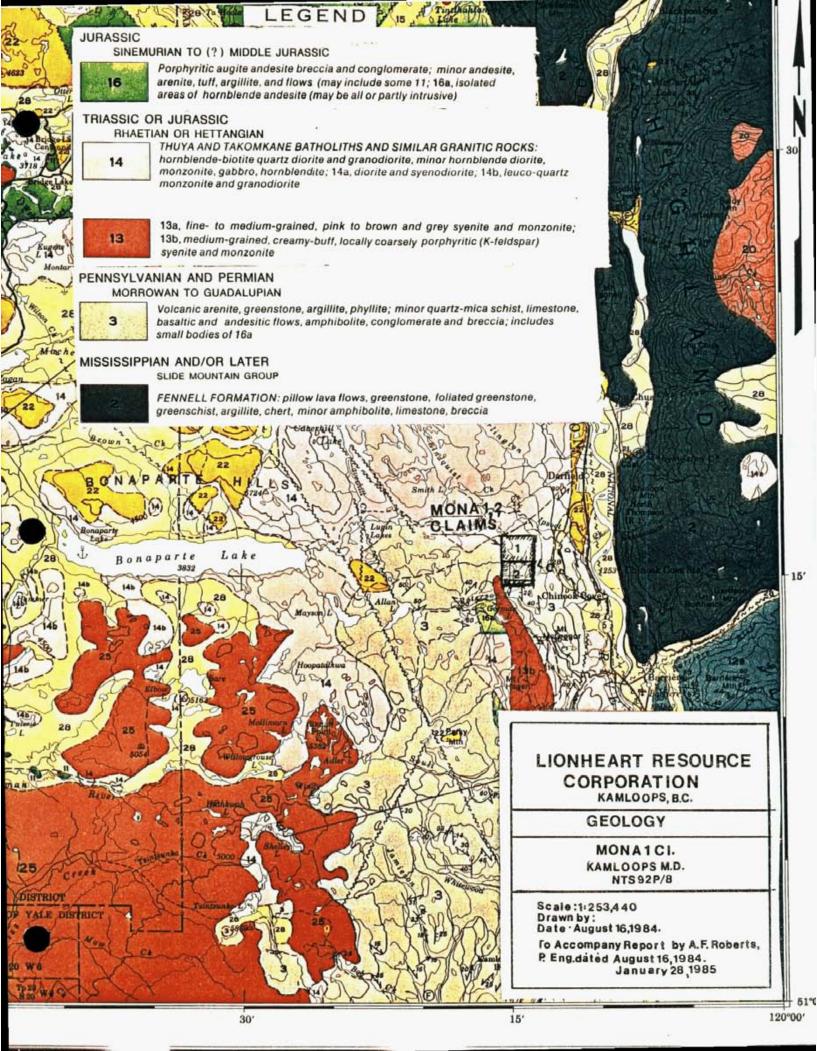
The map does not show any faulting close to the property. All but one indicated fault strike northwesterly. The exception, if projected an unreasonably long distance, could cut the claims from southwest to northeast.

On the ground, the major rock seen is a green andesite, which, at the showing has a major fracture striking N 33° W, Dip 60° W. No other fractures were measured. This rock is non-magnetic, no mineralization, some limonite stain.

^{6]} Geology Map: GSC MAP 1278A, Bonaparte
Lake, 1:250,000 [Follows page 3]

^{7]} GSC Geology of Bonaparte Lake Area, Memoir 363, R.B. Campbell, H.W. Tipper, 1971

^{8]} GSC Summary Report 1921, Part A, pages 72-106, W.L. Uglow



There is an outcrop of diorite about 500 metres south of the showing, that contains very fine pyrite, but assayed only 0.001 ozs/ton in gold.

At the showing there are some pieces of rock, dense, fine grained, faint suggestion of flow banding, a few spherical particles.

In the showing area the old dumps contained a considerable amount of quartz, clear to white, surrounding breccia fragments, 3 to 5 cm in size. Some good widths of quartz, up to 25 cm wide carried breccia fragments.

The quartz is often banded with an occasional veinlet of watery quartz cross-cutting the main mass within the vein area; the rock has the appearance of a highly oxidized diorite, sheared and broken by quartz.

Visible mineralization consisted of pyrite, rare pyrrhotite, very minor chloritic alteration. Pyrite is mostly very fine, under 1 mm, with some to perhaps 3 mm.

The vein as partially exposed strikes N 55°E, dip vertical to westerly. The quartz is slightly banded across the 2 metre width, as partially exposed. There is a pyrite content, along the hanging wall, a few inclusions of rock that may be a granite but too badly oxidized to define.

The footwall contact with the volcanics is sheared and lightly folded.

The assays taken to date indicate, roughly, 10 parts silver to one part gold.

RESULTS OF FIELD WORK 9] 10]

Trenching:

As of November 19, 1984. Roads had been cut into the old adit area, and above the adits.

Work to open the adits had cleared out No. 1 adit Observation shows large, loose blocks of andesite. No entry was made and it should be abandoned for pafety reasons.

At No. 2, no portal was found. Probably only surface material was moved, and no face reached.

No. 3. A great deal of overburden was cleared out but safe access was not obtained, as the hillside continued to cave, and has been abandoned.

Consequently, there is no evidence other than the muck outside, that the adits ever found the vein. have come from a caved section of vein to the north.

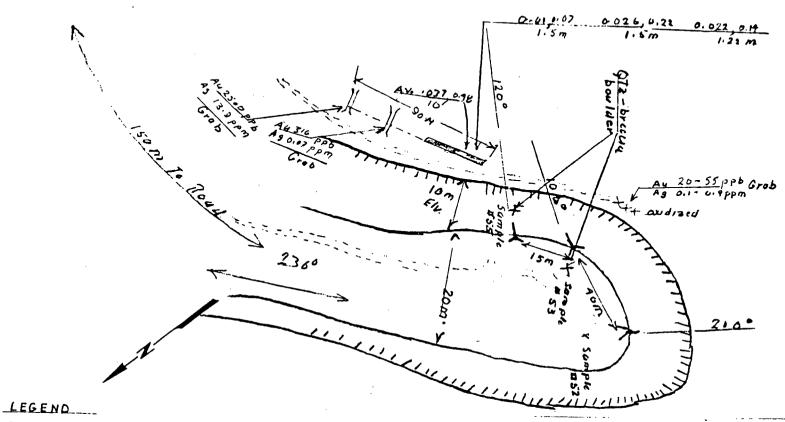
The vein was exposed in the road at November 19 visit and has been exposed for 150 feet additional, and in two trenches for a further 150 feet, when weather forced abandonment of the work [92.6 metres]. Apparent width is around $2\frac{1}{2}$ metres, with vertical dip.

It was not sampled before access became impossible. A grab sample out of each trench by rock geochemistry showed:

[Follows page 5]

^{9]} Sketch Map of Showing Area

¹⁰ Appendix A - Assay Certificates [End of Report]



Au, Ag Assays

Samples - Grab

452 coll 3

13 .019 .16

55 .651 .45

LIONHEART RESOURCE CORPORATION

KAMLOOPS, B.C.

ASSAY PLAN

MONA 1 KAMLOOPS M.D. NTS 92 P/8

Scale: None Drawn by: Date: November 26,1984

To Accompany Report by A.F. Roberts, P. Eng., dated November 26,1984. January 28,1985

<u>No</u> .	<u>Au [ppb]</u>	Au [oz/ton]	Aq [pm]	Ag [oz/ton]
8851	310 -	0.009	2.3	0.07
8852	2500	0.073	13.9	0.405

These assays can be considered very encouraging.

GEOCHEMISTRY 11] 12]

Gold:

498 samples were taken in "B" horizon soils. A threshold value of 50 ppb was used, comprising 14.5% of the samples.

Anomalous value of 100 ppb and up, was used, or 4% of samples. 5 ppb area contained 27.3% of samples. 10 ppb area contained 20.6% of samples. Natural abundance in volcanics is given as average of 3 ppb.

There is a strong anomaly along the north boundary open to the north, about 300 metres long by up to 200 metres deep within threshold limits. This anomaly lies on both sides of the base line.

Another strong but narrow anomaly lies in the northeast corner, open to the north and east.

All other anomalous values appear to be scattered erratics.

The writer has no explanation for the obvious fact that no anomalous values, or even threshold values are found in the showing area. One exception: a value of 125 ppb lies 75 metres east of, and slightly south of the second or most northerly trench.

^{12]} Geochemistry Map - Silver, 1 cm = 25 m. [Back pocket]

Silver:

A threshold value of 0.7 ppm was chosen, comprising of 83 samples at or above that value, or 17.4 ppm.

Anomalous was placed at 1.00 ppm, with 19 values or 4%. Natural abundance in volcanics - 0.1 ppm.

No silver anomalies are particularly large or strong. In part, they overlap the high gold anomalies along the north boundary, but tend to be up to 100 metres more southerly.

There are several fairly extensive, plus threshold, anomalies in the southwest quarter of the map.

As drawn, these anomalies have a south to south-easterly trend.

As with gold, no anomalous conditions are found associated with the known vein exposures.

GEOPHYSICS 13 14 15]

Magnetometer Survey:

The instrument used was:

Geometrics Magnetometer Model G-836 Serial No. 7092

All readings reduced by 57,000 gammas for mapping purposes, and corrected for diurnal variation.

There does not appear to be any trend to the magnetic contours of the area, possibly southerly in the north and south, with a long, narrow east-west area in the south half.

13]	Geophysics Map –	Magnetometer Survey 1 cm = 25 metres	[Back Pocket]
14]	Geophysics Map –	VLF_EM 1 cm = 25 metres	[Back Pocket]
15]	Geophysics VLF-E with Reductions	M – In-Phase Values – Appendix B	[End of Report]

Any relationship with soil sampling is not obvious. All anomalous metallic areas appear to lie in the areas of 850 - 950 gammas, with overlaps on both sides.

Once more there is no correlation with the known showing.

VLF-EM Survey:

The machine used was a Geonics Ronka EM-16, Serial No. 78.

The station used was Seattle at a frequency of 24.8 KHz.

The in-phase values were reduced by Fraser's method to give positive numbers.

Ten was the number chosen for the low limit in contouring.

Two major conductors occur, one on either side of the north-south base line. Both average about 75 - 100 metres wide.

The eastern one is open to the north.

The western one is open both north and south.

There are several smaller ones, of which a rather weak one overlaps the trenches in the showing area.

They all start from the north end with a south to southeasterly trend, then shift to a westerly trend, then back to easterly.

There is no apparent correlation between these conductors and the geochemical anomalies although they apparently overlap in places.

CONCLUSIONS

1] There is a known gold-bearing structure that is quite strong. But not correlated with either geochemistry or geophysics. This structure strikes at 55° East.

VLF-EM, silver anomalies have a southerly strike but gold and magnetics are essentially formless, although it is possible to force a southerly strike on them.

- 2] Gold-silver anomalies, although not coincident, are fairly strong on the northern boundary, especially gold, but not coincident with the EM anomalies. Silver low level anomalies are substantial in the southwest area of the map.
- 3] Magnetics are formless and probably reflect the mass of the green andesites. Time and physical work may show a correlation with geological mapping of new exposures.
- 4] VLF-EM. The two strong conductors are not explained. They have no apparent strong relationship with known mineralization nor with the geochemical anomalies.

However, it is possible that the geochemical anomalies are displaced, and further work will show a relation-ship.

Further, no mineralization has been seen on the property to indicate conductors of this strength.

It is possible they indicate faulting rather than mineralization, and the faulting could be related indirectly to the indicated gold-silver anomalies. It is concluded that the Company should direct a small part of its funds to follow upon the gold-silver anomalies on the northern boundary and to open up the VLF-EM anomalies.

RECOMMENDATIONS

The November 26, 1984 report recommended Geochemical and VLF-EM surveys over the balance of the Mona 1 claim.

This work should be done, but not so extensively. Divert part of the money to trenching the gold anomaly on the northern boundary of the surveyed area.

Try a trench across both the major VLF-EM anomalies at their strongest points.

Continue trenching on the known showing, if conditions permit.

ESTIMATED COSTS

Phase I was completed, as per this report.

Phase II of Previous Program.

As recommended in the November report, \$45,000 was assigned to geochemical and geophysical surveys.

The following changes in the work program, but not financing:

15/50/

Further geochemical and geophysical sexpanding from last work, with sample note specifically any outcrops and to samples	ers to	\$ 35,000.00
Further trenching and clean up on the vein	known .	2,500.00
Trenching on new geochem anomaly, nor ary and trenching across VLF-EM anoma sections of their common overlap on the section of	alies at	
ern three lines		7,500.00
•		\$ 45,000.00
The balance of the program to remain	the same:	
Diamond drilling, 200 metres @ \$90/m		18,000.00
Assaying, 15 @ \$15.25		662.50
Engineering, supervision, etc.		5,000.00
Ş	Sub-total	68,662.50
10% cor	ntingencies	6,866.25
٦	「otal	\$ 75,528.75

Say \$76,000.00

Phase III

This phase will depend on the results of Phase II. It will probably consist of more diamond drilling, possibly further trenching and can be expected to cost in excess of \$200,000.00.

Respectfully submitted,

A.F. Roberts, P. Eng., January 28, 1985

A. F. ROBERTS, P.ENG. CONSULTING MINING ENGINEER

CERTIFICATE

I, A.F. Roberts of 812 Fairbrook Crescent, Richmond, B.C., do hereby certify that:

- [1] I am a graduate of the University of British Columbia [B.Ap.Sc.] in Mining Engineering, 1951.
- [2] I am registered as a Professional Engineer of the Province of British Columbia, and am a member of the Canadian Institute of Mining and Metallurgy.
- [3] I have practiced my profession since 1951 with Quatsino Copper Gold Mines Ltd., Giant Mascot Mines Ltd., Cochenour Willans Gold Mines Ltd., Mogul Mines Ltd., Kerr Addison Gold Mines Ltd., Atlantic Coast Copper Corporation Ltd., Wasamac Mines Ltd., Brenda Mines Ltd., and T.C. Explorations Ltd. Since January of 1970 I have been an independent Consultant.

Previous to, and during University, I worked as a miner underground, and on several exploration-development projects.

- [4] The accompanying report is based entirely on a personal analysis of the reports and other data referred to in the text, and examinations of the property on July 7, November 19, 1984, and the Geochemical, Geophysical Survey data presented in the text.
- [5] I have no interest, direct or indirect, in the Lionheart Resource Corporation property, or adjacent properties, nor have I any interest, direct or indirect, in any companies controlled by Lionheart Resource Corporation. I have not, nor do I expect to receive any interest in the shares of the Company, in its securities, or in those of any company with which it may become associated.
- [6] I consent to the use of this report, in or in connection with, a prospectus, or a statement of material facts relating to the raising of funds for this project.

DATED at Vancouver, British Columbia, this 28th day of January 28, 1985.

. ROBERT

CONSULTING MINING ENGINEER

A.F. Roberts, P. Eng.

STATEMENT OF COSTS

L. Loranger, Contract Mining Services Field Supervision, Geochemical, Geophysical Surveys	\$	9,620.00
J. Myron Trucking, Backhoe Trenching		2,740.00
Bloomfield - Bulldoze roads, trenching		5,600.00
Assaying		5,028.35
McElhanney, Topo Map from Air Photos 1:5,000		2,550.00
Engineer's Transportation in field		234.00
Engineer's Reports [2]	*	3,081.00
Total	\$	28,853.35

The above is a true statement of costs, compiled from the Company's invoices.

The field work was noted and approved by the en-

A. F. ROBERTS
BRITISH
COLUMBIA

Respectfully submitted,

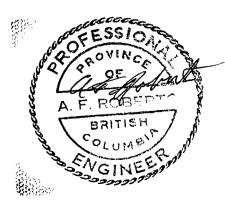
A.F. Roberts, P. Eng., January 28, 1985

NOTE:

gineer.

Work done and paid for before the re-staking of the claims is <u>not</u> included.

AFI) A.F.R.



A. F. ROBERTS, P.ENG.

APPENDIX A

ASSAY CERTIFICATES



ENVIRONMENTAL TESTING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ASSAYING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700 Telex: 048-8393

December 6, 1984

CERTIFICATE OF ANALYSIS

CLIENT: Lionheart Resources Corporation

419 Robson Drive KAMLOOPS, B. C.

V2E 1W2

ATTENTION: Ken Ellerbeck

SAMPLE IDENTIFICATION: 2 rock samples received November 27, 1984

CERTIFICATE OF ANALYSIS NUMBER: ET375

 Description
 Au (ppb)
 Ag (ppm)

 8851
 310. 0.61 0 ₹ / √√√
 2.3 0.07 0 ₹ / √√√

 8852
 2,500. 0.673 €
 13.9 0 € / √√√

TJF/FJP/mil

ECO-TECH LABORATORIES LTD. Thomas J. Fletcher, B.Sc.

Chief Assayer



ENVIRONMENTAL TESTING GEOCHEMISTRY ANALYTICAL CHEMISTRY ASSAYING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700

Telex: 048-8393

November 29, 1984

CERTIFICATE OF ANALYSIS

CLIENT: Lionheart Resource Corporation

419 Robson

KAMLOOPS, B. C.

V2E 1W2

ATTENTION: Mr. Ken Ellerbeck

SAMPLE IDENTIFICATION: 222 soil samples received November 23, 1984 for

geochemical analysis

CERTIFICATE OF ANALYSIS NUMBER: ET373

<u>Description</u>	Au (ppb)	Ag (ppm)
M10	<5	0.6
11	10	0.5
12 13	<5 5	0.3
14	10	0.3
15	5	0.7
M16	<5	0.2
17	5	0.4
18	5	0.3
19	5	0.3
20	<5	0.6
M21 22 23 24 25	5 25 25 250 15 5	0.6 0.4 0.6 0.2 0.5
M26	10	0.4
27	30	0.4
28	15	0.4
29	5	0.5
30	15	0.1

Description	Au (ppb)	Ag (ppm)
M31 32 33 34 35	5 15 10 15	0.4 0.2 0.4 0.4 0.2
M36	15	0.5
37	5	0.6
38	10	0.5
39	10	0.4
40	<5	0.3
M41	5	0.6
42	5	0.4
43	10	0.4
44	5	0.1
45	10	0.2
M46	5	0.5
47	60	0.3
48	<5	0.5
49	15	0.3
50	10	0.5
M51 52 53 54 55	5 5 10 5 <5	0.6 0.6 0.5 0.5
M56	10	0.9
57	25	1.0
58	10	0.3
59	10	0.5
60	5	0.7
M61	5	0.4
62	10	0.6
63	10	0.3
64	5	0.6
65	5	0.1
M66	20	0.5
67	25	0.6
68	25	0.3
69	10	0.4
70	(50)	0.3

Description	Au (ppb)	Ag	(ppm)
M71 72 73 74 75	5 20 10 10		0.2 0.2 0.5 0.6 0.4
M76	20		0.5
77	5		0.6
78	15		0.6
79	5		0.7
80	35		0.4
M81	60)		0.6
82	25		0.7
83	75		0.4
84	35		0.4
85	20		0.3
M86	5	• 4	0.3
87	20		0.6
88	10		0.6
89	15		0.5
90	15		1.1
M91	25		0.6
92	45		0.5
93	25		0.1
94	35		0.3
95	25		0.6
M96	30		0.5
97	10		0.6
98	20		0.2
99	40		0.2
100	45		0.3
M101 102 103 104 105	25 45 120 350 205		0.3 0.6 0.3 0.3
M106	185		0.3
107	210		0.4
108	815		0.3
109	100		0.6
110	105		0.5

Description	Au (ppb)	Ag (ppm)
M111	880	0.5
112	65	0.6
113	60	0.4
114	05	0.3
115	50	0.5
M116	55	0.3
117	55	0.5
118	45	0.6
119	50	0.5
120	20	0.3
M121	30	0.4
122	65	0.2
123	85	0.7
124	55	0.5
125	80	0.4
M126	95	11.0
127	60	0.4
128	165	0.6
129	45	0.9
130	45	0.5
M131	55	1.1
132	60	0.6
133	85	11.2
134	90	0.7
135	45	0.6
M136	40	0.7
137	80	0.8
138	155	0.5
139	95	0.7
140	270	0.4
M141	55	0.5
142	35	0.9
143	45	11.5
144	40	11.1
145	90	0.7
M146	55	0.5
147	60	0.7
148	15	0.7
149	65	0.4
150	50	0.8

M151 50 0.4 152 80 0.5 153 25 1.0 154 25 0.6 155 25 0.7 M156 15 0.6 157 60 0.8 158 45 0.8 159 40 0.8 160 50 0.7 M161 50 0.6 162 35 0.8 163 40 0.0 164 40 0.9 165 35 0.5 M166 20 0.5 167 35 0.4 168 70 0.2 169 40 0.7 170 50 0.4 M171 45 0.2 172 30 0.4 173 165 0.5 174 40 0.4 175 20 0.4	Description	Au (ppb)	Ag (ppm)
157 60 0.8 158 45 0.8 159 40 0.8 160 50 0.7 M161 50 0.6 162 35 0.8 163 40 11.0 164 40 0.9 165 35 0.5 M166 20 0.5 167 35 0.4 168 70 0.2 169 40 0.7 170 50 0.4 M171 45 0.2 172 30 0.4 173 165 0.5 174 40 0.4 175 20 0.4 M176 15 0.5 177 25 0.5 178 25 0.5 179 5 0.7 180 30 0.6 M181 80 0.6 182 15 0.8 183 5 0.6	152	8 80	0.5
	153	2 2 5	1.0
	154	4 2 5	0.6
162 35 0.8 163 40 11.0 164 40 0.9 165 35 0.5 M166 20 0.5 167 35 0.4 168 70 0.2 169 40 0.7 170 50 0.4 M171 45 0.2 172 30 0.4 173 165 0.5 174 40 0.4 175 20 0.4 M176 15 0.5 178 25 0.5 179 5 0.7 180 30 0.6 M181 80 0.6 182 15 0.8 183 5 0.6 184 5 0.4 185 5 0.5 M186 5 0.9 188 10 0.6 189 15 0.7	157	∌ 0	0.8
	158	45	0.8
	159	40	0.8
167 35 0.4 168 70 0.2 169 40 0.7 170 50 0.4 M171 45 0.2 172 30 0.4 173 165 0.5 174 40 0.4 175 20 0.4 M176 15 0.5 177 25 0.5 178 25 0.2 179 5 0.7 180 30 0.6 M181 80 0.6 182 15 0.8 183 5 0.6 184 5 0.4 185 5 0.5 M186 5 0.8 187 <5	162	35	0.8
	163	40	11.0
	164	40	0.9
172 30 0.4 173 165 0.5 174 40 0.4 175 20 0.4 M176 15 0.5 177 25 0.5 178 25 0.2 179 5 0.7 180 30 0.6 M181 80 0.6 182 15 0.8 183 5 0.6 184 5 0.4 185 5 0.5 M186 5 0.8 187 <5	167	35	0.4
	168	3 0	0.2
	169	40	0.7
177 25 0.5 178 25 0.2 179 5 0.7 180 30 0.6 M181 80 0.6 182 15 0.8 183 5 0.6 184 5 0.4 185 5 0.5 M186 5 0.8 187 <5	172	30	0.4
	173	165)	0.5
	174	40	0.4
182 15 0.8 183 5 0.6 184 5 0.4 185 5 0.5 M186 5 0.8 187 <5	177	25	0.5
	178	25	0.2
	179	. 5	0.7
187 <5	182 183 184	15	0.8 0.6 0.4
	187	<5	0.9
	188	10	0.6
	189	15	0.7

Description	Au (ppb)	Ag (ppm)
M201	10	0.5
202	(125	0.5
203	5	0.4
204	5	0.5
205	5	0.4
M206	25	0.6
207	10	0.3
208	15	1.0
209	15	0.2
210	20	0.1
M211	15	0.1
212	20	0.4
213	20	0.4
214	10	0.4
215	<5	0.4
M216	20	0.5
217	5	0.5
218	1 55	0.5
219	10	0.3
220	10	0.3
M221 222 223 224 225	15 10 5 5 15	0.3 0.5 0.3 0.3
M226	5	0.4
227	5	0.2
228	10	0.2
229	*	0.8
230	5	0.1
M231	*	0.6
232	*	0.6
233	*	0.3
234	<5	0.9
235	<5	0.5

Description	Au (ppb)	Ag (ppm)
M236	5	0.3
237	5	0.4
238	20	0.3
239	5	0.3
240	5	0.3
241	< 5	0.3

NOTES: < = less than

ECO-TECH LABORATORIES LTD. Thomas J. Fletcher, B.Sc.

Chief Assayer

TJF/mi1

^{*} Insufficient sample to perform analysis



ENVIRONMENTAL TESTING GEOCHEMISTRY ANALYTICAL CHEMISTRY ASSAYING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700 Telex: 048-8393

December 6, 1984

CERTIFICATE OF ANALYSIS

CLIENT: Lionheart Resource Corporation

419 Robson KAMLOOPS, B. C.

V2E 1W2

ATTENTION: Mr. Ken Ellerbeck

SAMPLE IDENTIFICATION: 135 soil samples received November 27, 1984 for

geochemical analysis

CERTIFICATE OF ANALYSIS NUMBER: ET373A

Descripti	<u>on</u>	Au (ppb)	Ag (ppm)
M191		s. 15	0.6
192		15	0.4
193		15	0.6
194		20	0.3
195		. 20	0.4
		•	
M196		20	0.3
197	•	15	0.5
198	•	15	0.5
199		. 5	0.5
200		10	0.7
M242		10	0.5
243		10	0.6
244	and the second s	<5	0.3
245		5	0.4
M246		10	0.4
247			
247		10	0.4
249	The second of th	10	1.0
		10	
250		10	0.4

Description	Au (ppb)	Ag (ppm)
M251 252 253 254 255	10 10 15 15	0.3 0.5 0.2 0.5 0.6
M256	25	0.4
257	40	0.9
258	65	11.8
259	15	0.8
260	10	0.5
M261	10	0.5
262	10	0.6
263	10	0.5
264	20	0.6
265	15	0.4
M266	10	0.4
267	15	0.5
268	25	0.6
269	15	0.5
270	15	0.4
M271	10	0.5
272	5	0.4
273	10	0.3
274	20	0.3
275	15	0.4
M276	15	0.6
277	10	0.3
278	10	0.2
279	10	0.3
280	5	0.7
M281	10	0.4
282	5	0.3
283	<5	0.3
284	10	0.3
285	15	0.2
M286	20	0.4
287	30	0.4
288	15	0.4
289	10	0.3
.290	<5	0.5

Description	Au (ppb)	Ag (ppm)
M291	25	0.5
292	10	0.5
293	20	0.4
294	25	0.5
295	15	0.6
M296	30	0.6
297	15	0.6
298	20	0.8
299	25	0.4
300	15	0.7
M301 302 303 304 305	15 15 20 15 20	0.4 0.6 0.5 0.5
M306	15	0.5
307	10	0.5
308-	10	0.4
309	10	0.4
310	10	0.3
M311	<5	0.5
312	5	0.3
313	10	0.4
314	5	0.3
315	15	0.4
M316	20	0.5
317	45	0.7
318	15	0.6
319	15	0.4
320	25	0.5
M321	20	0.4
322	15	0.4
323	25	0.4
324	10	0.6
325	25	0.4
M326	25	0.7
327	10	0.6
328	15	0.4
329	5	0.4
330	10	0.3

Description	Au (ppb)	Ag (ppm)
M331	10	0.4
332	10	0.3
333	5	0.5
334	5	0.4
335	15	0.3
M336 337 338 339 340	15 10 10 20 15	0.3 0.4 0.5 0.5
M341	15	0.8
342	25	0.4
343	20	0.3
344	5	0.4
345	10	0.4
M346	20	0.3
347	15	0.5
348	10	0.3
349	10	0.6
350	20	0.4
M351	5	0.2
352	10	0.4
353	15	0.3
354	10	0.2
355	20	0.2
M356	20	0.2
357	10	0.4
358	10	0.2
359	10	0.3
360	5	0.2
M361	5	0.2
362	20	0.5
363	<5	0.1
364	15	0.2
365	<5	0.5
M366	5	0.6
367	10	0.5
NOTE: < = less	than	

T.IF/F.JP/mil

ECO-TECH LABORATORIES LTD. Thomas J. Fletcher, B.Sc. Chief Assayer

EGU-TEUT LABORATORIES LTD.



ENVIRONMENTAL TESTING GEOCHEMISTRY ANALYTICAL CHEMISTRY ASSAYING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700

Telex: 048-8393

December 18, 1984

CERTIFICATE OF ANALYSIS

Lionheart Resource Corporation

419 Robson KAMLOOPS, B. C.

V2E 1W2

ATTENTION: Mr. Ken Ellerbeck

SAMPLE IDENTIFICATION:

141 soil samples received December 6, 1984 for

geochemical analysis

CERTIFICATE OF ANALYSIS NUMBER: ET373B

Description	Au (ppb)	Ag (ppm)
M368	115	0.9
369	5	0.7
370	5	0.6
M371	5	1.7
372	5	0.6
373	5	0.8
374	5	0.7
375	5	0.5
M376	5	0.3
377	5	0.5
378	5	0.6
379	5	1.3
380	15	0.9
M381	5	0.9
382	5	0.9
383	10	0.6
384	5	0.9
385	15	0.5
M386	5	0.9
387	5	1.0
388	15	0.3
389	5	0.4
390	5	0.6

		·
Description	Au (ppb)	Ag (ppm)
M391	5	0.4
392	5	0.5
393	5 5 5 15	0.7
394	15	0.5
395	5	0.8
M396	5 5	0.6
397		0.8
398	20	0.6
399	10	0.8
400	10	0.7
M401	5	0.4
402	10	0.6
403	10	0.7'
404	10	0.5
405	10	0.7
M406	5	0.5
407 .	10	0.3
408	10	0.2
409	10	0.5
410	10	0.4
M411	5 5 5 5	0.3
412	5	. 0.4
413	5	0,5
414	5	0.5
415	5	0.3
M416	10	0.2
417	5 5 5	0.3
418	5	0.1
419		0.3
420	15	0.1
M421	50	0.2
422	20	0.3
423	10	0.3
424	10	0.3
425	5	0.2
M426	5	0.2
427	10	0.5
428	10	0.6
429	15	0.3
430	10	0.3

Description	<u>Au (ppb)</u>	Ag (ppm)
M431 432 433 434 435	15 10 30 20 15	0.5 0.6 0.5 0.5
M436 437 438 439 440	5 <5 <5 15 5	0.2 0.6 0.4 0.3 0.3
M441 442 443 444 445	10 30 25 5 5	0.4 0.5 0.5 0.5 0.1
M446 447 448 449 450	5 15 5 10 20	0.5 0.3 0.8 0.6 0.3
M451 452 453 454 455	15 10 10 5	0.3 0.7 0.3 0.2
M456 457 458 459 460	* 5 10 15	0.3 0.3 0.7 0.5 0.6
M461 462 463 464 465	5 10 20 15 15	0.8 0.2 0.3 0.9 0.5
M466 467 468 469 470	75 10 15 20 <5	0.6 0.3 0.6 0.3

Description	Au (ppb)	Ag (ppm)
M471	10	0.3
472	765	0.4
473	120	0.4
474	130	0.2
475	10	0.2
M476	20	0.4
477	10	0.3
478	10	0.6
479	30	0.4
480	5	0.6
M481	75	0.5
482	10	0.6
483	10	0.5
484	15	0.3
485	10	0.6
M486 487 488 489 490	10 60 5 20 70	0.6 0.8 0.6 0.4
M491	25	0.4
492	10	1.0
493	10	1.3
494	20	0.6
495	10 .	0.5
M496	20	0.4
497	5	0.5
498	5	0.5
M501	10	0.4
502	5	0.4
503	5	0.5
504	5	0.2
505	10	0.9
M506	5	0.4
507	5	0.3
508	5	0.5
509	5	0.2
510	10	0.5
NOTES. / -	less than	

NOTES:

ECO-TECH LABORATORIES LTD.
Thomas J. Fletcher, B.Sc.
Chief Assayer
LABORATORIES LTD.

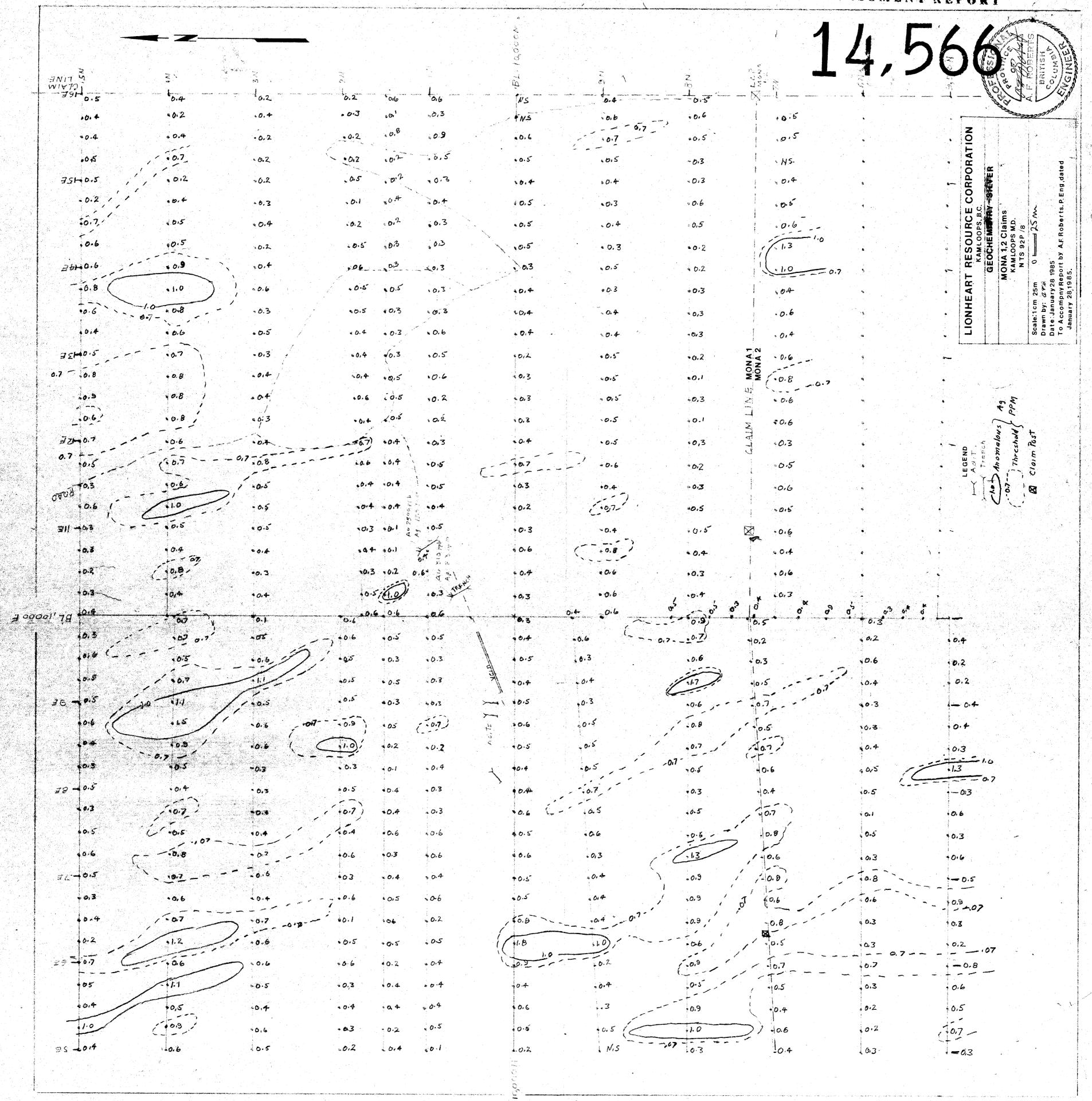
< = less than
* Insufficient sample</pre>

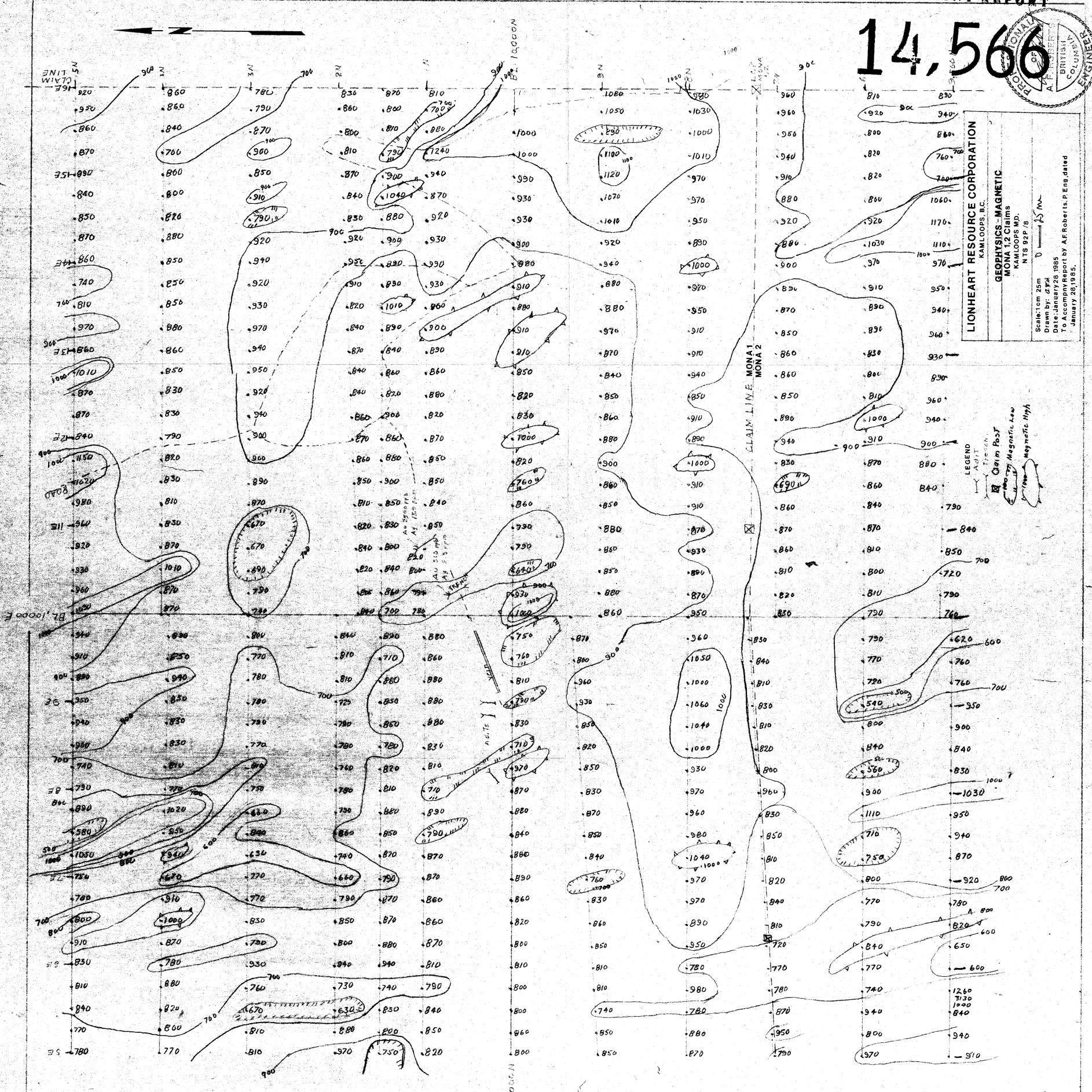
APPENDIX B

COPY OF IN PHASE VALUE WITH FRASER REDUCTIONS VLF - EM SURVEY

-18	T - 45	-30	-16	-/4		-20	-17	- 141	-25	-/-	3 F	
-20	-15	40 -26 2	7 - 24 -	15 -14	-13	- 23	-20	20	- 30	-30	, -	
-20	-20 -23	-25	3 -28 -	331 -27	- 17	- 24	22	- 23	-32	2	2 10	
-17	17 -21	4 -23	6 -30 0	-32 -35	- 30	-40	-25	-20	13 - 38			
-8	7 -18	12 -21	28 12	30 8 -35	-27	-35	19 -19	- 15	- 42	-38	- I	
-4	-/5	11 -22	12 -10 13	27 23 - 32	32 - 35	-28	7 -23 -	- 18	22	41 -30	27	
- 77 - 20	10	10 -13	15 -18 -	14 , -15	22 -28	-28	-26	-22	-15	- 22	9	
-9	20 -7 -	// -12	3 -15	15 3 -15	-20	- 27	-17	-12		-23	- 22	
-5	10	5 -10	1 -11 -	13 3 -16	7 -15 2	- 15	12 -19	0 -22		14 -25	16	
1	3 -4		-16	-12 -10	-5	8 + 8	38 -12	-22	4 -15	9 -12	18 < 2	
	-8	72	-18	3 -9-	0	+7+		- 13	16 -15	-15	4	
3		12	5 -12 9	-12 7 -12	2 -5 -	- 2	-/-	-10	6 -15	13	4 0 0	
-10	- 15	-8	12 · · · · · · · · · · · · · · · · · · ·	-8 ² -7	6 -10 -	-15	-10	-10	-18	-/0	9 🗕 🖻	
- 20	-/3	12	-8	3 -11	-18	-18	-10	-/2	-15	9 - 8	7 5 6	
- 19	14 7	11 - 7		8 - 17	-15 9	- 24	5 0	-15	2 -1	8 -12		
-10	12 -4	3		-7 5 -11	14 - 12		9 -10 0	- //	9 -10	-20		
-12	9	-9		-510-	y -9 10	-12	-W		-/5	-20	5	
BL 10.6000 = 22	- · · · · · · · · · · · · · · · · · · ·	-11	-10	-10 -7	-\	2 715	-10 4	-12		8 -20	/3	R1 10.000E
J		-26	-23 = -	22 -25	18 18		-18	-/3		012	10	
- 33	-36	-27	25	25-1-30-	1	114		-14	-13	- 13		
-50	7 - 45	39	37	25 - 725	2 //0 =	······································	-8 2 -12			-20		
- 29	51 39 -53	10 -20		3328	100	-10 3	-13	-12	-13	2 + 23		
-17	3 -35	47 -56	48 -50 16	42 78	127	-13	-13	-16	-15		14	
-23	0 -22	22 -10	BI	45 28 -40 40 35	11 1 18 4	-10 10		-18	امر	0 -14		المراجع المراج
-14	19 -16	23 -13	28 -4 71 - 4 14	20 74 74 - 32	53	-8 12		-20		-31		or and a first control of the second control
-10 -6	11 -8	15	8 - 0	9 14 -14	48	-5		-30			10	
-7	3 -4	9	13 -10 - 1	- 12	8 / 32 6	-5-1	20	-40 35	-30	- 35	20	Morta
- 6	2 -10	8	3 -26 -	188	- 20 37	-3 2	-14 JO	-10 49			10	92 10/8
-5	4 -13	18 -11	0 -20 23	10 -15	-10 -14	1-4/3		-6	-10	3 -25	V0	1=M-16
-2	+1	26 -10	10 -16 22	28 -20	-	12				-10	35	
2+6	" +H	-2	18 -7 11 -	10 7 -21	16	+4. 13	-17 0	-1 35	-10	2	4	Lefte Right
344	+2	2 +1	12	-13	14 3 -17	+5	76 18	3		12 512	4 Map	
1 Mary 1000, Taling Vellan 1 5 +2	+5	+6	-7 -/	0 -10	V=1/	3	. 0		121	· · · · · · · · · · · · · · · · · · ·		

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SIM S 0 MA 2> 7> 02 **30** 一量

A.F. ROBER

BRIJISH

SOLUMBIS

MONA 1,2 Claims KAMLOOPS M.D. NTS 92P /8

Scale:1cm 25m Drawn by: ara Date: January 28 1985 To Accompny Report by A.F. Roberts, P.Eng. dated January 28,1985.

Ano malous

Nosample

☑ Claim PosT