

LOG NO:	MAY 26 1992	RD.
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FREEMONT GROUP

DIAMOND DRILLING REPORT

(A92-1)

Omineca Mining Division

British Columbia

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**22,322**

Anthony L'Orsa, F.G.A.C.

Smithers, B.C.

14 May 1992

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## SUMMARY

A diamond drill hole, 198.12 m in length, intersected an IP anomaly generated by graphitic sediments of what is thought to be the Nilkitkwa Formation. Anomalous amounts of gold, silver, and copper were recovered from graphitic shear zones in the sedimentary rocks.

## INTRODUCTION

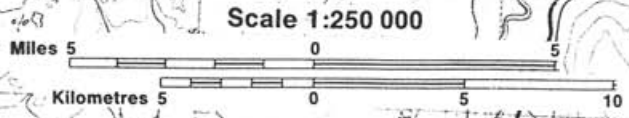
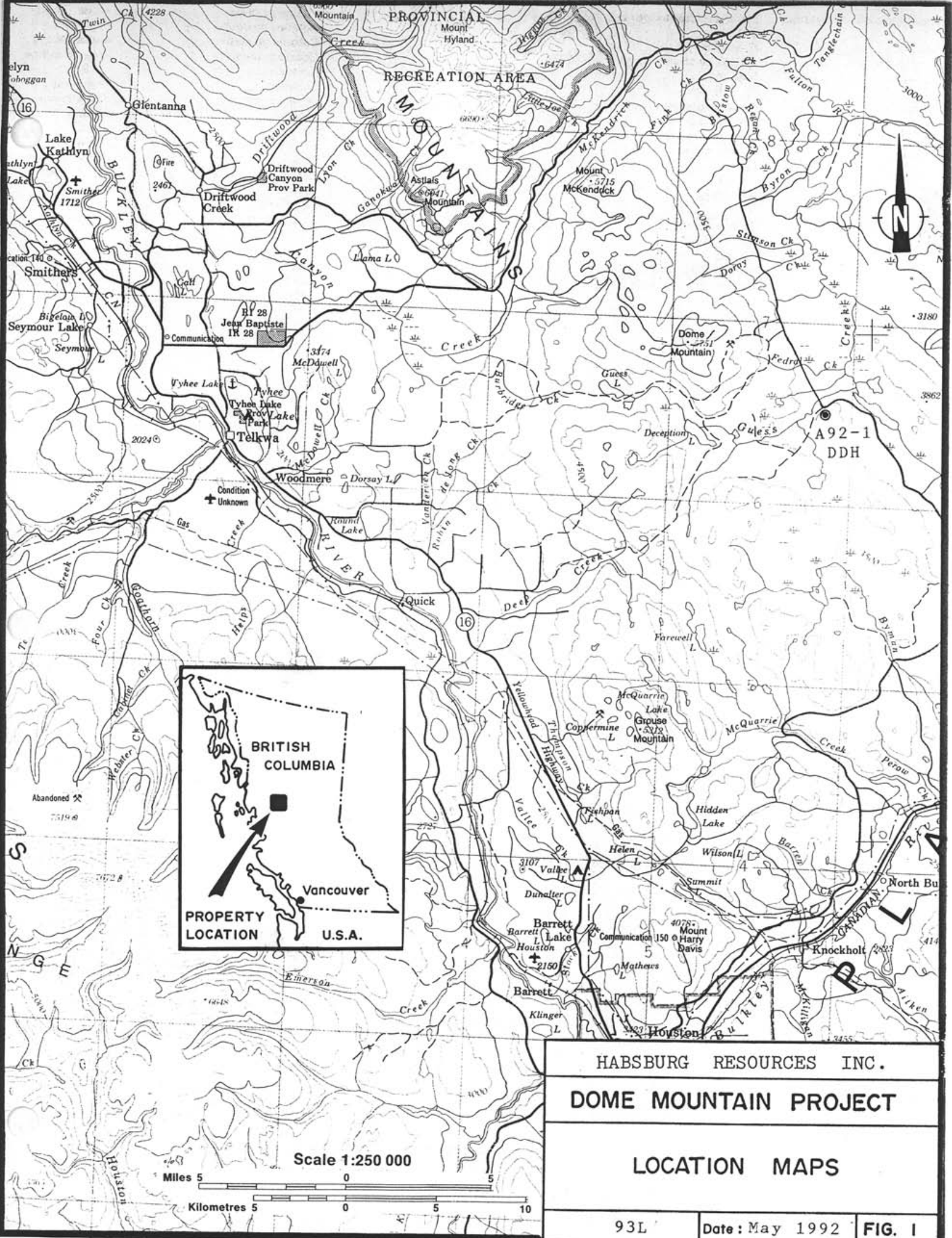
A diamond drill hole (A92-1), 198.12 m (650 ft) in length, was drilled on the April 2 mineral claim to test an IP anomaly (Scott, 1989) in an overburden covered area. The contractor was J.T. Thomas Diamond Drilling Ltd of Smithers, B.C. An Acker drill was used, and the core size is NQ. Water for drilling was obtained from Guess Creek. The core is stored in Smithers by Timmins Nickel Inc. Geochemical analyses were done by Min-En Laboratories of North Vancouver, B.C.

## LOCATION AND ACCESS

The drill hole is in a logged area approximately 39 km east-southeast of Smithers, at about 54° 42' 40" north latitude and 126° 32' 45" west longitude, map area 93L/10, at an elevation of about 1037 m. The Chapman Lake Forest Road provides excellent access all year, from either Smithers or Houston, to the Deception Lake Road that passes about 100 m northwest of the drill site. The locality is generally free of snow from mid May until late October.

## PHYSIOGRAPHY AND VEGETATION

The area is one of moderate relief, cut by the shallow valley of Guess Creek which is a major northeasterly-flowing stream. Stands of alpine fir and spruce are common here, although clearcut logging has been extensive.



HABSBURG RESOURCES INC.	
DOME MOUNTAIN PROJECT	
LOCATION MAPS	
93L	Date: May 1992 FIG. 1

### CLAIMS AND OWNERSHIP

The Freemont group comprises the following mineral claims:

<u>Claim</u>	<u>Units</u>	<u>Tenure No.</u>
April 1	12	238781
April 2	16	238782
April 3	2	238783
Chris	20	238776
Fort	8	238784
Mag 1	16	238775
Ophir	15	238785
Oro	10	238786

Habsburg Resources Inc. (formerly Teeshin Resources Ltd), 1075 North Service Road West, Unit 16, Oakville, Ontario, L6M 2G2, is the recorded holder of the claims, subject to several agreements.

### PREVIOUS WORK

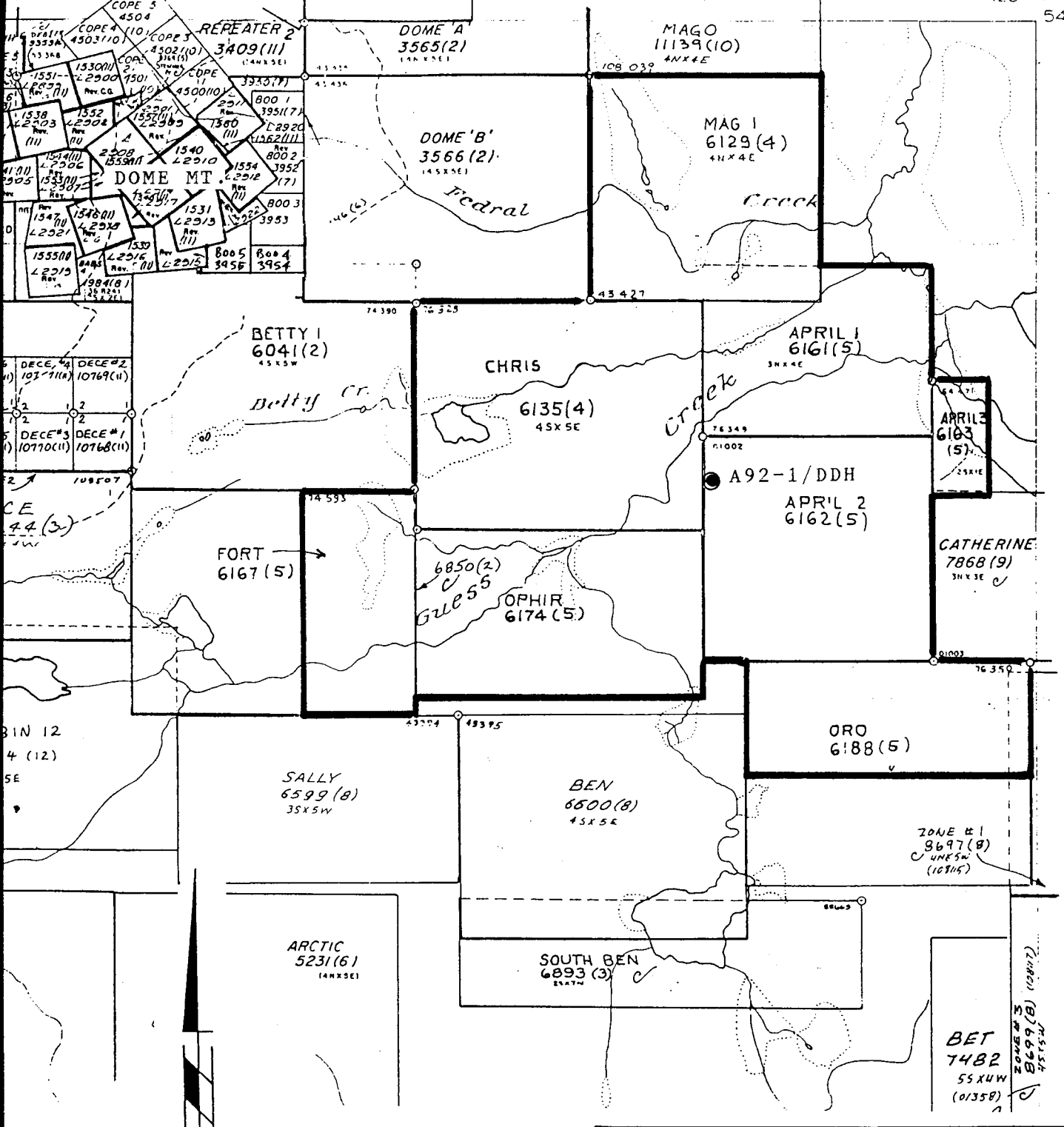
Mineral exploration work completed on the Freemont group includes limited prospecting, soil and silt sampling, line cutting, trenching, diamond drilling (L'Orsa, 1991; Price, 1987), and both aerial and ground geophysical surveys (Scott, 1989; Sheldrake, 1985).

### GEOLOGY

The claims lie on the Skeena Arch, near the southern edge of the Bowser Basin. The area has been described by Tipper and Richards (1976), and mapped by Tipper (1976) who shows Quaternary alluvium at the drill site. Rocks in the general area have been assigned to the Lower Jurassic formations of the Hazelton Group. These formations have been intruded locally by granitic to dioritic rocks, and by northwest-striking plagioclase porphyry dykes. Small occurrences of base and precious metals have been found in volcanic and intrusive rocks on the claims (Price, 1987).

### DISCUSSION

A unit of sheared, graphitic, sedimentary rocks was encountered in this drill hole under about 23 m of glacial till. A boulder of coarse-grained pinkish granite was intersected near the base of the till. Bedrock drilling revealed mainly dark grey to black siltstones with lesser amounts of volcanic sandstone and a very small amount of conglomerate. Small, fault-controlled quartz and calcite veins are locally common, and very small amounts of pyrite and chalcopryrite were found associated with those veins. Analyses of vein material revealed locally anomalous amounts of gold (up to 112ppb), silver (up to 2.4 ppm) and copper (up to 289 ppm).



1 : 50 000

Map 93L/10

LOCATION MAP		
FREEMONT GROUP		
Dome Mt. Area, B.C.		
14 May 1992	DRAWN BY:	FIG. 2

The rocks recovered from drill hole A92-1 appear to belong to the same sedimentary unit found below felsic volcanic rocks in drill hole C89-1 some 700 m to the northwest, across Guess Creek (L'Orsa, 1989). However, belemnoid-bearing volcanic sandstones that outcrop about 1200 m southwest of A92-1 contain clasts derived from hematitic volcanic rocks of a type not represented in the rocks found in the diamond drill holes (L'Orsa, 1985).

#### CONCLUSIONS

The IP anomaly was generated by graphite in sheared sedimentary rocks of the Nilkitkwa Formation.

A boulder, found near the base of the till, that appears to have been derived from the Topley intrusions suggests an early episode of glacial ice movement from a southerly or easterly direction.

The rocks discovered in this drill hole are of the same rock unit drilled in hole C89-1 north of Guess Creek, but they are probably older than belemnoid-bearing rocks that outcrop to the southwest of A92-1.

#### SELECTED REFERENCES

L'Orsa, A., 1991, Freemont Group, Omineca Mining Division, British Columbia, diamond drilling report: Report for Habsburg Resources Inc., 4 p. plus appendices.

\_\_\_\_\_ 1989, Chris group, Omineca Mining Division, British Columbia, diamond drilling report: Assessment Report 18910, 7 p. plus appendices.

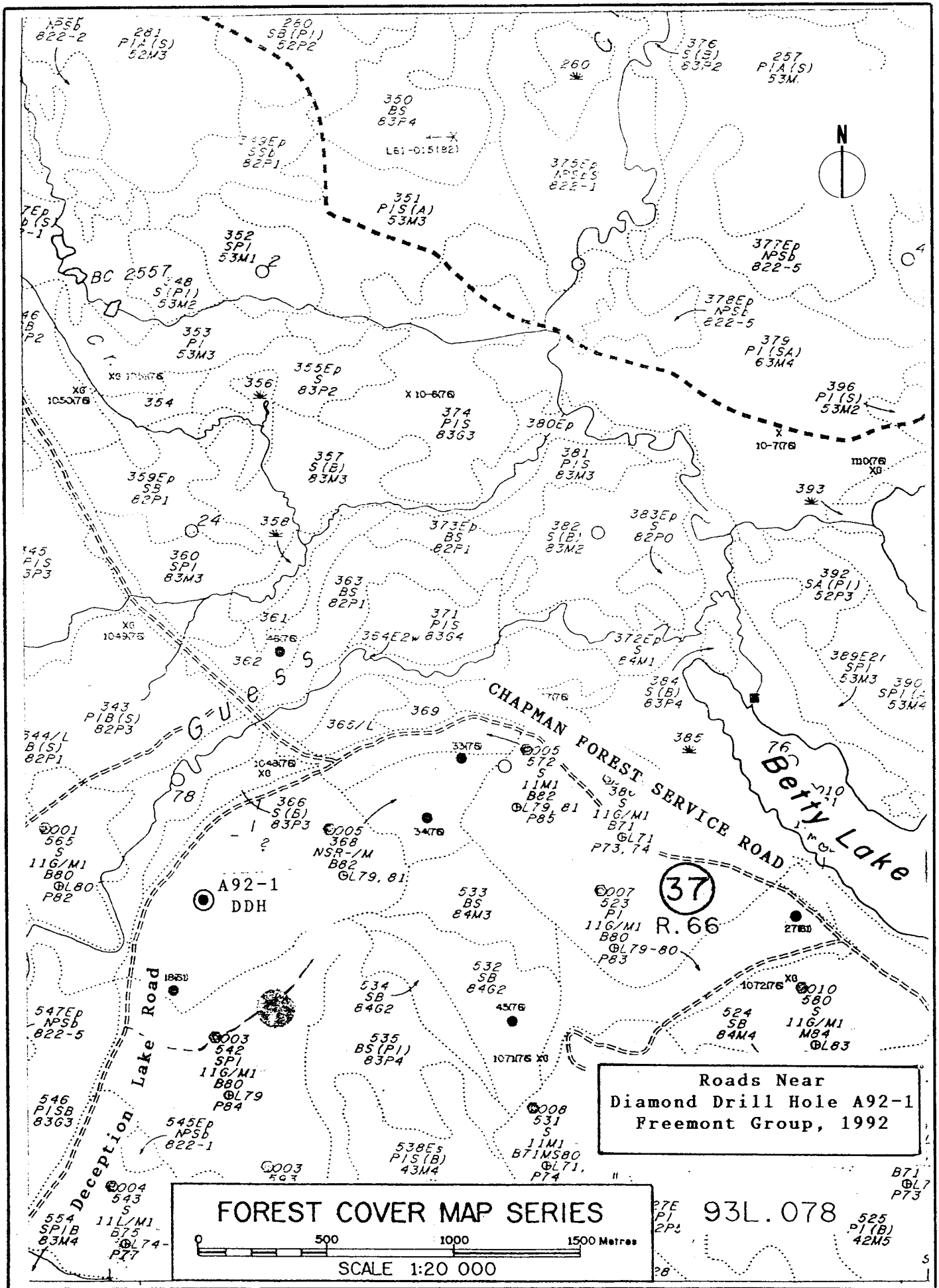
\_\_\_\_\_ 1985, Ophir mineral claim, prospecting report: Assessment Report 13638, 10 p. plus appendix.

Price, B., 1987, Dome Mountain gold property (April, Chris, Mag, Fort, Ophir, Sally, Ben, West Dome claims): Report for Freemont Gold Corp., 25 p.

Scott, A., 1989, Geophysical report, induced polarization/resistivity surveys, Dome Mountain property, Smithers area, Chris, April 1, April 2, April 3, and Mag 1 claims ...: Assessment Report 19923, 16 p.

Sheldrake, R.F., 1985, Report on a helicopter-borne multi-frequency electromagnetic and magnetometer survey in the Dome Mountain area, British Columbia: Assessment Report 13707, 41 p.

Tipper, H.W., 1976, Smithers map area, British Columbia: Geol. Survey of Canada, O.F. 351 (geological map).



Roads Near  
Diamond Drill Hole A92-1  
Freemont Group, 1992

FOREST COVER MAP SERIES  
SCALE 1:20 000

93L.078

525  
P1(B)  
42M5



Tipper, H.W., and Richards, T.A., 1976, Jurassic stratigraphy and history of north-central British Columbia: Geol. Survey of Canada, Bull. 270, 73 p.


STATEMENT OF COSTS

DIAMOND DRILLING:	198.12 m (all included)....	\$12,583.20
GEOLOGIST:	A. L'Orsa, supervision and report...	2,462.50
ANALYSES:	8 x 31 el. ICP and 8 Au, fire, AA....	145.52
VEHICLE:	Truck rental .....	118.34
		<hr/>
		\$15,309.56

STATEMENT OF QUALIFICATIONS

I, Anthony T. L'Orsa of Smithers, British Columbia, hereby certify that:

1. I am a geologist with business address at Adams Road, R.R. 2, Smithers, B.C., V0J 2N0.
2. I am a graduate of Tulane University, New Orleans, Louisiana, U.S.A., with the degrees of Bachelor of Science (1961) and Master of Science (1964) in geology.
3. I have practised my profession in mineral exploration since 1962 in western Canada, Australia and Mexico.
4. I am a fellow in good standing of the Geological Association of Canada, and a member of the Society for Geology Applied to Mineral Deposits.

  
\_\_\_\_\_  
Anthony L'Orsa

APPENDIX 1

Diamond Drill Logs

# DIAMOND DRILL RECORD

NAME OF PROPERTY APRIL 2 M.C., FREEMONT GP  
 HOLE NO. A92-1 LENGTH 198.12 M (650 ft)  
 LOCATION ± 780 M SW of Chapman Road - Deception Road junction.  
 LATITUDE \_\_\_\_\_ DEPARTURE \_\_\_\_\_  
 ELEVATION ± 1037 M AZIMUTH East DIP -15°  
 STARTED 17 Feb. 1992 FINISHED 20 Feb. 1992

METRES	DIP	AZIMUTH	METRES	DIP	AZIMUTH

HOLE NO. A92-1 SHEET NO. 1/6

REMARKS \_\_\_\_\_

LOGGED BY A. L'ORSA

METRES		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	METRES		%	%	OZ/TON	OZ/TON
					FROM	TO				
0	33.53	CASING, pulled. Drilled through a boulder of pink granite								
33.53	70.71	<p>SILTSTONE. Medium dark grey to ± black.</p> <p>Includes graphitic lenses. Locally ≤ 0.1% diaspy.</p> <p>Interbedded VOLCANIC SANDSTONE, fine to very coarse-grained; generally angular; dark grey to medium dark grey (GSA Rock-Color chart).</p> <p>Sandy <sup>units</sup> <del>beds</del> generally &lt; 85 cm thick, &amp; prob. comprise &lt; 10% of core. Core recovery fair. RQD low.</p> <p><u>Structure.</u></p> <ul style="list-style-type: none"> <li>• Bedding at 25°-50° to core axis.</li> <li>• Local rhythmic ± 2.5 m beds.</li> <li>• Shears are ubiquitous &amp; graphitic, &amp; generally along bedding planes. Zones of intense shears with local gouge &amp; abundant graphite occur at 42.2, 51.5, 52.6, 55.2 &amp; 57.6 m. The widths of the zones of intense shearing <sup>are</sup> <del>to</del> ≤ 0.5 m &amp; the dominant attitude is 45° to core axis.</li> <li>• Irregular <sup>or</sup> veins of white to clear quartz with or without white calcite are scattered throughout, &amp; concentrated in intense shear zones. Local, white calcite veins also occur. All gen. ≤ 2 cm</li> </ul>								

# DIAMOND DRILL RECORD

NAME OF PROPERTY FREEMONT GROUP

HOLE NO. A92-1

SHEET NO. 2/6

METRES		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	METRES		%	%	Au PPB	Ag PPM	
					FROM	TO					TOTAL
33.53	70.71	(continued) Very minor amounts (<0.1%) of pyrite & chalcopyrite (?) were noted in veins.  <u>Analyses</u>  # 62951. Intensely sheared rock with graphite on shear surfaces. Includes minor f.g. sandstone. White to clear quartz veinlets locally common, with very mi. calcite. <0.1% chalcopyrite (?) in thin graphitic shears in quartz. Gouge.  # 62952. Graphitic fault zone in siltstone. Quartz white to clear in at least two generations of veinlets: ① typically <0.5mm dia. offset by ② typically +1mm dia., Minor calcite, white. Chalcopyrite (?) in quartz & smeared on graphitic slickensides.	62951	20.1	51.66	52.16	0.5			17	0.1
70.7	71.7	<b>VOLCANIC SANDSTONE &amp; CONGLOMERATE</b> Medium grey. Bedding at 40° to c.d. SS comprises felsic volcanic clasts gen. 1.5-2mm dia. Conglomerate clasts are ≤ 18mm & gen. rounded, but range from angular to well rounded; moderately sorted. All clasts of volcanic origin & almost all are felsic. Most are med. grey a few are blackish red.	62952	20.1	59.10	59.60	0.5			112	0.7

# DIAMOND DRILL RECORD

NAME OF PROPERTY Treemant Group  
 HOLE NO. A92-1 SHEET NO. 3/6

METRES		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	METRES		%	%	OZ/TON	OZ/TON
					FROM	TO				
71.7	137.2	<p>SILTSTONE, and subsidiary interbedded volcanic sandstone &amp; minor tuff.</p> <ul style="list-style-type: none"> <li>• <u>Siltstone</u> is graphitic &amp; generally dark grey to black except for a 10 cm light olive grey section at 122.5 m. S'stone is sandy in places (e.g. 0.1mm grains, some of which appear to exhibit stretch lamination). Local phyllitic streak.</li> <li>• <u>Vol. sandstone</u> is generally medium to very fine-grained &amp; locally carries a few pebbles. Felsic vol. clasts abundant. Rock is dark grey. The section is locally <u>tuffaceous</u>, especially 114.5-115.2 m, where lapilli <math>\leq 12</math> mm were found - very angular to rounded; some have reaction rims. Clasts include light olive grey - not felsic - that appear rarely at 71 m in c5, &amp; a few med. grey felsic ones.</li> <li>• <u>Bedding</u>. Generally thin-bedded at 35°-45° to core axis. Locally beds <math>&lt; 1</math> cm are common.</li> <li>• <u>Shears</u>. Siltstone exhibits signs of shearing throughout, especially graphitic slickensides. Local gouge. The most intense shearing occurred in siltstone at contacts with sandstone units. Graphitic slickensides also found in sandstone. Shears gen. at 45°-90° to core axis.</li> <li>• <u>Veins</u>. Scattered, generally white, quartz veins with or without calcite throughout. Gen. <math>\leq 2.5</math> cm wide &amp; at 30°-90° to core axis. Locally drusy with SiO<sub>2</sub> xls. Locally faulted &amp; folded. Hi. white CaCO<sub>3</sub> veins.</li> </ul>								

# DIAMOND DRILL RECORD

NAME OF PROPERTY Freemant Group  
 HOLE NO. A92-1 SHEET NO. 4/6

METRES		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	METRES			%	%	Au PPB	Ag PPM
					FROM	TO	TOTAL				
71.7	137.2	[continued]									
		<p><u>Analyses</u></p> <p># 62953. Highly sheared graphitic siltstone. Quartz veins, white to clear, common. ? Minor calcite, chlorite. Sulphides (pyrite) rare; smeared on slickensides.</p>	62953	20.1	104.66	105.16	0.5			15	0.1
		<p># 62954. Highly sheared graphitic siltstone. Mostly gouge. Quartz veins common (+ 15% of rock?), gray to clear SiO<sub>2</sub> &gt; white (?). Calcite veins with little SiO<sub>2</sub> present. Minor chalcopyrite (?) on slickensides.</p>	62954	20.1	112.5	113.0	0.5			10	0.1
		<p># 62955. Highly sheared graphitic siltstone directly below sandstone beds. Gouge. Multiple slickensides directions. Local graphite bands in SiO<sub>2</sub>. Quartz veins common; white to clear, locally drusy with clear SiO<sub>2</sub> xls ≤ 1mm in length. Few calcite veins with little quartz. Aukerite? Minor pyrite in drusy SiO<sub>2</sub> veins &amp; sheared sides, &amp; as 20.1µm disseminations in CaCO<sub>3</sub> veins.</p>	62955	20.1	131.0	131.5	0.5			9	2.4

# DIAMOND DRILL RECORD

NAME OF PROPERTY Freemant Group  
 HOLE NO. A92-1 SHEET NO. 5/6

METRES		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	METRES		%	%	Au PPM	Ag PPM
					FROM	TO				
137.2	137.6	<p>VOLCANIC CONGLOMERATE. Med. light grey to light olive grey.</p> <p>clasts: Light brownish grey to light grey felsic volcanic rocks, very fine-grained; - local clear quartz 'eyes'. Thin, dark, reaction rims. Generally very angular to sub-angular. Few small subrounded pebbles. Includes few angular, dark grey siltstone fragments - e.g. 3mm.</p> <p>Matrix: Sand, looks like vol. ss elsewhere in section. Grains are angular to sub rounded. clasts are in part matrix supported. Top contact a graphitic fault. Lower ct gradational - clasts in sed.</p>								
137.6	165.8	<p>SILTSTONE. Dark grey to black. Graphitic. Locally appears massive. Cut by irregular, locally faulted, white quartz veins. Siltstone is locally sandy &amp;/or tuffaceous. Tuffaceous sections carry angular felsic vol. clasts, including a few lapilli. Very fine sand noted in several siltstone samples. Minor volcanic sandstone; dark grey, lithic frags. of vol. origin are angular to sub rounded &amp; <math>\leq 2</math>mm. Bedding 55° to core axis at 155m. Shears are present, but general evidence of shearing weaker than in upper siltstones.</p> <p>#62956. Sheared, graphitic siltstone. <math>\pm 30\%</math> white quartz. Minor calcite. No sulphides seen.</p>	62956	?	158.2	158.7			8	0.1



# DIAMOND DRILL RECORD

NAME OF PROPERTY Freemant Group  
 HOLE NO. A92-1 SHEET NO. 6/6

METRES		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	METRES		%	%	Au PPM	Ag PPM
					FROM	TO				
165.8	198.12	<p>INTERBEDDED SILTSTONE &amp; VOLCANIC SANDSTONE</p> <p>Although interbedded siltstones &amp; vol. ss occur above, this section is distinctive because of much regular, thin bedding. Colour is med. grey to black. Mostly thin-bedded, some as thin as 0.1 m. Beds at 45°-65° to core axis. Very fine to med. grained lithic sandstone; local siltstone clasts. Graded bedding suggests tops are up-hole. Generally but lightly sheared, except in zones listed below. Less graphite than higher sect. Quartz veins, gen. &lt; 1 cm dia., abundant in faults listed below - where they are contorted by faulting. Major zones of slickensides &amp; broken rock at 169.7-176.69, 171.3-178, &amp; 197.5-198.12 m (EOH).</p> <p># 62957 Graphitic shear zone - less graphite than other samples above. Quartz; white to clear ±26% of sample. Calcite veins locally abundant. Sulphides were not seen.</p>								
	EOH									
			62957	?	197.62	198.12			18	2.0

APPENDIX 2

Analyses

COMP: HABSBURG RESOURCES  
 PROJ: DOME/FREEMONT  
 ATTN: S.KELLEY/A.L'ORSA

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

FILE NO: 2S-0027-RJ1  
 DATE: 92/03/04  
 \* ROCK \* (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB
62951	.1	31040	1	7	87	1.2	4	9310	.1	23	289	50960	890	23	13350	1271	3	870	109	1230	47	4	44	1	15	59.3	140	6	1	6	124	17
62952	.7	29150	1	6	171	1.2	6	7880	.1	22	185	49510	820	20	12440	1243	1	950	113	670	42	5	31	1	12	53.3	110	6	1	6	113	112
62953	.1	31550	1	6	150	1.1	3	11170	.1	23	114	52910	800	23	14290	1891	4	850	111	840	42	5	28	1	13	58.8	171	5	1	8	155	15
62954	.1	33840	1	7	124	1.3	3	5870	.1	25	91	56520	830	24	14680	1424	1	1070	124	1020	35	5	24	1	12	61.9	134	6	1	6	125	10
62955	2.4	21580	7	6	109	1.3	2	13900	.1	17	94	38750	1080	16	11960	917	4	690	83	560	31	4	53	2	12	43.2	156	6	1	6	111	9
62956	.1	21920	1	6	236	.9	2	42170	.1	16	57	39190	860	18	12070	2114	2	500	73	630	33	3	100	1	15	40.7	90	4	1	6	126	8
62957	2.0	30720	1	8	151	1.1	3	7780	.1	23	101	53270	1050	24	9970	1315	1	1220	68	970	38	5	36	1	8	49.6	128	5	1	5	96	18