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# DRILLING REPORT

OUD DECORDER	on the
RECEIVED 1	91 EXPLORATION OF THE LUSTDUST GROUP
MAY 1 9 1992	OMINECA MINING DIVISION
M.R. #	BRITISH COLUMBIA
	LATITUDE 55° 34' LONGITUDE 125° 25'

### NTS 93N/11W

NUMBER OF CLAIMS 9

NUMBER OF UNITS 77

Owner and Operator

ALPHA GOLD CORP. 6018 Marguerite St. Vancouver, B.C. V6M 3L1

Consultant

DOLMAGE CAMPBELL LTD. 1970-1055 West Hastings St. Vancouver, B.C. V6E 2E9

April 16, 1992 Vancouver, B.C.

> GEOLOGICAL BRANCH ASSESSMENT REPORT

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### 1. EXECUTIVE SUMMARY

Exploration on the Lustdust property of Alpha Gold Corporation in 1991 consisted of site preparation, road improvements, minor cleaning of old trenches, the completion of ten NQ diamond drill holes and partial completion of another hole totalling 906.6 m.

This work has confirmed the existence of an oxidized mineralized zone, Zone 3 on the MV1 claim which contains significant values in gold, silver and zinc. Evidence of this zone, which appears to be a replacement zone located in the hinge of an anticlinal fold, can be traced to the south for approximately 350 m and possibly to the north of the gulley fault in the vicinity of diamond drill hole LD 81-3. These surface traces indicate a possible resource in the order of one million tonnes of oxidized ore at a tenor of 3 to 5 grams per tonne gold equivalent.

It is recommended that the next stage of exploration consist of a structural geology mapping program, 400 metres of trenching and 3500 metres of diamond drilling combined with a surface survey program and an aerial photography survey program. This work, to be completed in two stages is estimated to cost \$500,000.





### 2. INTRODUCTION

During the months of August, September and October 1991 Alpha Gold Corp. completed a diamond drilling program which consisted of eleven drill holes totalling 906.6 metres of drilling on the Lustdust Group of Alpha Gold Corp. Dolmage Campbell Ltd. provided a geological engineer who supervised the diamond drilling and completed all related technical work at the site. This report presents the results of the program.

# 2.1 PROPERTY STATUS

The Lustdust property of Alpha Gold (Figure 2) consists of three two-post claims and six four post claims totalling 77 units:

Name	Record No.	Date of Record	Expiry Date	Туре	Units	
MV-1	132409	20/09/74	20/09/2001	2-Post	1	
MV-2	132410	20/09/74	20/09/2001	2-Post	1	
WOW # 1	1514	20/10/78	20/10/2001	2-Post	1	
М	815	17/10/77	17/10/92	4-Post	20	
Air	1482	11/10/78	11/10/92	4-Post	4	
Р	2167	25/10/77	25/10/92	4-Post	10	
L	814	17/10/77	17/10/92	4-Post	12	
Ink	2169	25/10/79	23/10/92	4-Post	16	
Hogem TOT	10503 AL UNITS	21/05/89	21/05/89	4-Post	<u>12</u> 77	

### 2.2 LOCATION AND ACCESS

The Lustdust property is located in the Omineca Mining Division of north-central British Columbia (Figure 1), NTS 93N/11, at Latitude 55° 34' North and Longitude 125° 25' West, approximately 210 km northwest of Prince George, B.C. and 36 km east northeast of Takla Landing, immediately west of the old Takla Mercury Mine.

Access to the property is gained by travelling approximately 25 kilometres of paved road from Fort St. James towards Tachie Lake and thence 88 kilometres along the Leo Creek, 56 kilometres along the Driftwood, approximately 20 km along Fall-Tsayta and 3 kilometres along the Silver Creek forest service roads for a total of 191 kms.

Alternative access can be gained by float plane or train to Takla landing and 49 kilometres along the Fall-Tsayta and Silver Creek roads or by float plane to Tsayta Lake and 30 kilometres along the Fall-Tsayta and Silver Creek roads.

# 2.2 TOPOGRAPHY PHYSIOGRAPHY AND CLIMATE

Slopes on the property are gentle to moderately steep ranging from an elevation of 1000 m to 1600 m with vegetation ranging from mature spruce through thick cedar brush to alpine vegetation.

The summers are normally hot and dry while the winters are long and cold. the property is normally snow free from mid-May to mid-October and the annual precipitation ranges from 500 mm to 1000 mm.

# 2.4 <u>HISTORY</u>

The Lustdust area was first staked in 1944 when the No. 1 Zone was discovered. Since that time numerous operators have investigated the property and immediately surrounding area at different times for different metals. As a result of these investigations four mineralized zones have been identified in the area. However, the bulk of the work has been completed on Zones 1 and 4b (see footnote) due to the depth of the oxidized zone of Zone 3 and the limited extent of Zone 2.

A list of the work performed by the various operators is given below.

		Claim	-	
Date	Operator	Name	Zone	Work Performed
1944		WOW #1	Zone 1	No. 1 Zone discovered - staked.
1945	McKee Group, Leta Explorations Lto	WOW #1 1.	Zone 1	Trenching - 350 ' drifting.
1952-	Bralorne Mines	WOW #1,	Zone 1	17410 ' of trenching and 4688 '
1954	Ltd.	MV1, MV2, M	2, 3, 4b	drilling.
1960	Bralorne Mines Ltd. Noranda, Canex J.V.	Ħ	Zone 1, 2, 3, 4b	7 rock cuts, 34 test pits, 4950 ' of cat trenching, 650 ' of hand trenching.
1963	Bralorne Mines Ltd.	WOW #1	Zone 1	Sampling.
1964	Takla Silver Mines Ltd.	18	Zone 1	750 ' drifting.
1966	Takla Silver	11	Zone 1	750 ' underground drilling.
	Mines Ltd.	WOW #1, MV1, M	Zone 1, 3, 4b	2500 ' surface drilling
1968	Takla Silver Mines Ltd.	WOW #1	Zone 1	4387 ' surface drilling.
	Anchor Mines Ltd.	WOW #1	Zone 1 Zone 1	1881 ' underground drilling. 300 lb bulk sample metallurgical testing.
1978	Granby Mining Corp.	MV1, MV2, K, L, M	Zone 3,	Line cutting, soil geochemical survey, geological mapping,geophysics (Shootback E.M., Magnetometer).
1979	Granby Mining Corp.	K, L, M	Zone 1, 2, 3, 4b	Geophysics (Pulse EM).
		•	Zone 4b	Diamond drilling (see footnote).

1980 E	Exploration L,M		Zone 1 2, 3, 4b Zone 3 4b	<b>?</b> ) ;	Line cutting, airborne geophysics (magnetometer, VLF). G r o u n d g e o p h y s i c s (V L F, magnetometer, CEM, VLEM). Soil geochemistry, geological survey, drilling (2 wildcat holes).
1981	Noranda Explorat Company, Limited	ion L,M I	Zone 4	b	One diamond drill hole, 7 wildcat diamond drill holes drilled elsewhere on the property.
1986	Welcome North Mines Ltd.	WOW MV1, J	#1, M	Zone 1 3, 4b	1, Sampling.
1986	Pioneer Metals	"		Zone 1 2, 3, 4b	1, Geological survey. b

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In 1991 Alpha Gold Corp. purchased the MV1, MV2 and WOW #1 claims. Subsequent to the completion of the 1991 field program Alpha Gold Corp. also purchased the M, L, P, Ink and Air claims from Pioneer Metals.

#### 3. <u>GEOLOGY</u>

#### 3.1 REGIONAL GEOLOGY

The Lustdust property is situated in the Omineca Tectonic Belt of the Canadian Cordillera. The northern portion of the property straddles the Pinchi Fault, a major regional structure that trends northwesterly through the Omineca District. To the east of the Pinchi Fault bedrock consists primarily of intrusive granitic rocks of the Hogem Batholith of Jurassic age.

On the west side of the fault is a fault block of Permian rocks of the Cache Creek group consisting of chert, phyllite, argillite, greywacke, carbonate rocks and metavolcanics (chloritic schist). Structurally, this group has undergone two periods of penetrative deformation followed by kinking and faulting adjacent to the Pinchi Fault. As such these formations are tightly drag folded, sheared and cross-faulted, strike to the north-northwest, subparallel to the Pinchi Fault, and dip steeply to the west.

# 3.2 <u>SITE GEOLOGY</u>

On the Lustdust property outcrop is sparse. Bedrock is covered by glacial outwash and oxidized soil and rock detritus up to 5 metres in depth. The presence of considerable depths (up to 50 metres) of gossan on the surface of the ore zones indicates that denudation by glaciation has not been severe.

The bedrock geology consists primarily of a conformable sequence of interbedded limestone, chloritic schist and phyllite, chert and argillite and volcanic tuff. These units are tightly folded and intraformationally sheared, dipping steeply to the west and overturned to the east.

No major intrusive bodies crop out on the property; however dikes and irregular plugs consisting of aphanitic quartz feldspar porphyry and medium crystalline granitic intrusives of monzonitic to dioritic composition are common. The porphyry dikes occur in irregular branching swarms commonly occupying north-northwest trending faults and shear zones. In such cases the dikes are extensively and intensively sheared, fractured, hydrothermally altered and locally mineralized.

## 3.3 <u>LITHOLOGY</u>

Of the three most common lithologies at the site, limestone, chert-argillite and chloritic schist, the limestone and chert-argillite predominate.

The limestone is typical of the Cache Creek Group. It is mottled dark grey to black, soft, fine grained to coarsely crystalline marble that is generally massive within beds ranging from 25 metres to hundreds of metres thick. The chert is hard; grey, ribbon banded and intercalated with more massive, locally fissile to schistose quartzite and black argillite. The schistose zones are finely foliated, soft, dark green and locally pyritic to phyllitic.

The chlorite schist occurs in discontinuous belts and locally disconformable lenses, suggesting that it consists of metamorphosed lensey volcanic tuffs and/or flows.

An abbreviated stratigraphic column is given in Table 1.

Table I Abbreviated Stratigraphy										
	Period or Epoch	Group	Lithology							
Cenozoic	Tertiary (Associated with Lustdust mineralization?)		Syenite, granite, biotite-hornblende feldspar porphyry, felsite.							
	INTRUSIVE	CONTACT								
	Upper Cretaceous	Sustut Group	Conglomerate, shale greywacke							
	INTRUSIVE	CONTACT								
Mesozoic	Lower Jurassic (Outcrops on Lustdust Property)	Hazelton Group	Tuff, volcanic breccia granodiorite (Hogem Batholith)							
	INTRUSIVE	CONTACT								
	Upper Triassic and Jurassic	Takla Group	Chert, pebble conglomerate greywacke argillite							
	Upper Triassic and Jurassic	Sitlika Assemblage	Tuff, volcanic breccia, rhyolite, feldspar, porphyry, siltstone, black phyllite							
	Permo-Triassic		Serpentinite, harzburgite							
	INTRUSIVE	CONTACT								
Paleozoic	Upper Paleozoic (Host to Lustdust showings)	Cache Creek Group	Limestone, chert, phyllite, metavolcanic chlorite schist, greywacke, laminated siltstones.							

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### 3.4 MINERALIZATION

The known mineralization of interest at the Lustdust property appears to occur as replacement and fracture-filling in and along a series of steeply-dipping north-trending fracture zones which strike parallel, or at a very low angle, to the formational trends. However, the stratiform nature of the mineralization, particularly in Zones 3 and 4b may indicate a syngenetic origin of the mineralization associated with the chloritized volcanics. Within this environment there are two types of economically significant mineralization on the property; lead-zinc-antimony replacement veins with high values in silver, and iron-zinc massive elongate replacement bodies with low but consistent values in silver and significant values in gold. The high grade silver mineralization occurs in Zones 1 and 2 (Figure 3) and the replacement zinc-iron mineralization occurs in Zones 3 and 4b.

Of lesser interest is a skarn occurrence with low values in copper and molybdenum located just south of Canyon Creek.

In addition, mineralization, consisting almost entirely of bands and blebs of replacement arsenopyrite and graphite exists within argillaceous units and in the main economic zones.

It is therefore felt that at least two, if not three, events of mineralizations are represented at the site. These events likely followed the sequence given below:

1) Sedimentation of the Cache Creek rocks with possible syngenetic deposition of lead-zinc mineralization.

2) Preparatory fracturing and shearing of the Cache Creek Group rocks through tight, possibly anticlinal folding, especially in the hinge zones of the folds, associated with thrust movement along the Pinchi Fault and emplacement of the Upper Jurassic to Lower Cretaceous Omineca Intrusions including the development of minor skarn zones.

3) Injection of arsenopyrite-graphite rich fluids along associated intraformational breccias and shears which drastically reduced the permeability of intraformational shears but were inadequate to infill the brecciated limestones.

4) Injection and replacement of limestone and/or chlorite schist by silver-lead-zinc-antimony rich fluids along vein structures and gold-zinc-silver rich fluids in brecciated zones within the limestone, particularly along the "hinge" zones of folds.

5) Post-ore deposition faulting across the structures (Gulley Fault) resulted in the displacement of mineralized horizons and with subsequent erosion four main mineralized zones were exposed at surface.

6) Subsequent leaching by groundwater oxidized the upper portions of these zones to variable degree and depth.

From the existing drawings, it appears that <u>Zone 1</u> mineralization crops out at surface almost entirely within the boundaries of the WOW #1 claim. This zone, investigated by surface trenching, an underground adit and surface and underground diamond drilling, is a lead-zinc-antimony replacement vein with high values in silver. The vein is irregular in width and grade containing pyrite, sphalerite, galena, jamesonite, stibnite, arsenopyrite and freibergite. Previous surface sampling of this zone revealed a wide range of values across the zone, from 341 gm Ag/tonne to 4430 gm Ag/tonne with a general average of about 102 gm Ag/tonne. However this material is locally severely leached and oxidized. The only sample available from the underground workings contained 1450 gm Ag/tonne across a width of two feet. In addition to the high silver values the mineralized zone also contains up to 13.64 gm Au/tonne as well as 1% to 7% Zn, 1% to 5% Pb and 2% to 10% Sb.

Zone 2 mineralization also crops out in the WOW #1 claim westerly from Zone 1. Exposures of this zone in three bulldozer trenches spaced over 60 metres returned assays of 102.3 to 682 gm Ag per tonne, 3 to 12% Pb and 1 to 3% Zn across widths from 2 to 6 feet.

The main showing on Zone 3 is a lense-shaped area of gossan approximately 100 m in length and up to 20 m in width which has been explored by extensive trenching and limited diamond drilling. Mineralization in this zone consists primarily of arsenopyrite with some pyrite and minor sphalerite and galena in the massive sulphides and limonite and hemimorphite in the oxides which carry up to 22 gm of gold per tonne, about 110 gm of silver per tonne and up to 24.4% zinc.

Multi-element analyses indicate high values in arsenic, lead, and zinc with elevated values in copper, cadmium, iron antimony and barium. Exposures of gossanous material to the south and north of Zone 3 indicate that this zone of mineralization could have a strike length in the order of 500 to 750 m.

Zone 4b, located northwest of Zone 3, consists, on surface, of a wide zone of branching lenses of heavily oxidized sulphides. Early sampling of trenches over a strike length of approximately 230 metres returned an approximate average assay of 3 gm gold per tonne, 29 gm silver per tonne and 6.55% zinc. In this zone the major primary sulphide is pyrrhotite with subsidiary pyrite and arsenopyrite.

Diamond drilling completed on this zone indicates that the zone lenses out with depth and carries only spotty values in zinc with low values in gold, up to 0.9 gm per tonne, and silver, 14 gm per tonne; however, only one recent hole (LD 81-4) was drilled directly under the zone while two other holes were drilled under the extension of the zone to the north. Data from drill holes completed in 1965 and 1966 suggest widths varying from 1.6 metres to 6.0 metres with assays in the range of 0.3 to 5 gm gold per tonne, 19 to 24 gm of silver per tonne and 3.22% to 12.25% zinc. Although no indications of Zone 4 were found in the trenches to the north of this showing, previous workers have identified similar mineralization in outcrop at Canyon Creek, some 1500 m to the northwest.

### 4. <u>GEOCHEMISTRY</u>

In 1978 the Granby Mining Co. Ltd. completed a geochemical survey over the K, L and M mineral claims, collecting samples at 50 metre intervals on east-west grid lines spaced as approx. 200 metre intervals. In total 910 soil samples were collected and analyzed for silver ,lead, zinc and copper.

Although no samples were obtained from the MV1 and MV2 claims, the trends of the anomalous zones project through these claims. These same trends indicate:

1) Very spotty results in copper values in the area surveyed except in the southwest corner of the grid.

2) Zinc values correspond very well with the known area of mineralization and tend to indicate continuation of Zone 3 and possibly Zone 4b to the north-northwest up to Canyon Creek.

3) Anomalous silver values generally correspond with the zinc anomalies except they are more widespread, are not as strong in the area of Zone 4b and indicate the continuation of Zone 4 to the north of Canyon Creek.

4) Although the anomalous lead values exist in more restricted areas they generally conform to both the zinc and silver anomalies.

In 1981 Noranda extended the geochemical sampling coverage to the south end of the claim and to the west of the northern half of the property; collecting a total of 722 samples which were analyzed for copper, molybdenum, zinc, lead, silver, manganese and iron. This survey yielded only localized anomalous values.

### 5. GEOPHYSICS

Ground electromagnetic surveys were completed in 1978 and 1979 by the Granby Mining Co. Ltd. and in 1981 by Noranda over the same grid as the geochemistry survey.

Results from the electromagnetic survey delineate Zones 3 and 4b and the Pinchi Fault. Additional conductors have been identified that correspond to graphitic zones and/or areas with anomalous zinc and copper soil sample results. As such this geophysical tool has been useful to aid in locating drill sites, but must be assessed cautiously to avoid the drilling of graphite conductors.

### 6. 1991 EXPLORATION PROGRAM

The exploration work completed in 1991 was focused on the oxidized zone of mineralization known as Zone 3. The work consisted of diamond drilling and related activities such as access road improvements, site preparation and the cleaning out of the main trench of Zone 3. This report presents the data obtained from the completed drill holes.

### 6.1 **DIAMOND DRILLING**

Between August 23 1991 and September 18 1991 five diamond drill holes were completed in and around Zone 3 in the MV1 claim. Of the five holes completed four were drilled across the structure, at -45° to -65° to the east-northeast and one was drilled downdip along the footwall of the mineralized zone. From September 19, 1991 to October 10, 1991 five additional holes were completed and one hole to be completed in 1992 was drilled to a depth of 83.8 m for a total of 577.9 m. The location, orientation and depths of each of these holes is given in Table 2 and the holes are plotted in plan on Figure 3 and on sections in Figures 4, 5 and 6. The locations of the drill holes relative to the trenches and property boundaries were determined by topofil and compass surveys.

# 6.2 <u>CORE LOGGING AND SAMPLING</u>

All of the core obtained from the diamond drilling program was logged and sampled by the writer at the site. All core with the exception of Holes 91-9 and 11 is stored in a log cabin at the intersection of the property access road and the Silver Creek forest service road. The remainder of the core is stored in Vancouver.

The samples were shipped by truck to the North Vancouver laboratory of Bondar Clegg and Company Ltd.

## 6.3 ANALYTICAL PROCEDURES

All of the core samples were prepared for analysis by crushing, grinding and drying, when necessary, using standard laboratory techniques. The rejects and pulps from the splits are stored at the laboratory.

Analytical procedures used by Bondar Clegg are given in Appendix I.

# TABLE 2

# LUSTDUST PROPERTY RECORD OF COMPLETED DRILL HOLES

	Data at Hole Collar				<u>Dates</u> <u>I</u>			ig Lengt	<u>Remarks</u>			
Hole No.	Coord	Dip (deg.)	Az (deg.)	Elev. Refer.	Start	End	Туре	From (m)	To (m)	O.B. (m)	B.R. (m)	
DDH 91-1	10,000N 10,000E	-45°	064°	1474	30/08/91	03/09/91	OB BR	0.9 7.6	7.6 65.5	6.7	57.9	Ream casing to to 65.5 m
DDH 91-2	10,000N 10,000E	-65°	064°	1474	03/09/91	08/09/91	OB BR	0.7 6.1	6.1 83.2	5.4	77.1	Ream casing to 79.2 m
DDH 91-3	9,970N 9,996N	-45°	<b>0</b> 60°	1480	08/09/91	10/09/91	OB BR	- 0.9	- 61.0	-	- 59.9	Ream casing to 33.5 m
DDH 91-4	9,970N 9,996E	-65°	060°	1480	11/09/91	14/09/91	OB BR	- 0.7	- 63.1	-	- 62.4	Ream casing to 34.4 m
DDH 91-5	9,970N 9,995E	<b>-9</b> 0°	-	1480	14/09/91	18/09/91	OB BR	- 0.6	- 185.9	-	- 185.3	Ream casing to 71.6 m
DDH 91-6	10,008N 10,044E	-75°	244°	1460	18/09/91	24/09/91	OB BR	1.5 3.0	3.0 57.2	3.0	- 54.2	Ream casing to 45.7 m
DDH 91-7	10,032N 10,017E	-45°	068°	1463	25/09/91	28/09/91	OB BR	- 0.9	- 76.5	-	- 75.6	Ream casing to 68.6 m
DDH 91-8	10,032N 10,017E	-85°	068°	1463	29/09/91	01/10/91	OB BR	- 0.6	- 85.3	-	- 84.7	Casing to 1.5 m

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DDH 91-9	10,034E 10,025E	-45°	030°	1462	01/10/91	03/10/91	OB BR	0.8 2.6	2.6 96.9	1.8 -	- 94.3	Ream casing to 15.2 m
DDH 91-10	9,998N 10,055E	-70°	244°	1463	04/10/91	07/10/91	OB BR	- 0.6	- 55.9	-	- 55.3	Ream casing to 33.5 m
DDH 91-11	10,036N 10,017E	-45°	336°	1463	07/10/91	09/10/91	OB BR	0.8	- 83.8	-	- 83.0	Casing to 1.5 m

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#### 7. RESULTS

The results of the diamond drilling are presented in the form of diamond drill logs in Appendix II. Pertinent analytical results are summarized in Appendix III and the laboratory assay sheets are presented in Appendix IV.

Significant samples are recorded in Figures 4, 5 and 6. A brief summary of each hole is given below.

Diamond drill hole 91-1 was drilled from approximately 24 metres from the main trench exposure of the gossan in Zone 3 at an azimuth of 064° and a dip of -45°. The hole, drilled to test the downdip continuity of the oxidized zone, intersected approximately 20 m of limestone, a 1.5 m shear zone and 15 m of interlayered chlorite schist and limestone before encountering the oxide zone. The oxide zone, which extended from 36.4 m to 61.6 m, averaged <0.07 gm of gold per tonne, 7.3 gm of silver per tonne and 9.86% zinc over 25.2 m. The hole was continued only to 65.5 m in limestone before severe rod vibration forced the stoppage of drilling. Poor core recovery in the sandy oxides likely resulted in loss of gold values.

Diamond drill hole 91-2, drilled from the same location as DDH 91-1 was drilled at an azimuth of 064° and a dip of -65° to further test the downdip continuity of the oxidized mineralized zone and to test the geometry of the zone.

This hole intersected a sequence of limestone, shear zone and chlorite schist similar to DDH 91-1 before intersecting the oxide zone at 51.7 m. In this hole the oxide zone, which contained small intervals of massive sulphides, extended to 79.6 m for a total length of 27.9 m which averaged < 0.07 gm of gold per tonne, 5.6 gm of silver per tonne and 3.15% zinc over the first 9.9 m and 5.95 gm of gold per tonne, 31.8 gm of silver per tonne and 2.06% zinc over the last 18.0 metres. This hole was also stopped at 83.2 m because of severe rod vibration. Poor core recovery in the sandy oxides likely resulted in loss of gold values.

Diamond drill hole 91-3, approximately 30 metres (100 feet) along strike to the south, was drilled at an azimuth of 060° and a dip of -45° to test the extension of the oxide zone along strike. At this location the surface exposure of the oxide zone is only 5 metres wide and records of previous drilling and trenching were not available.

Hole 91-3 intersected a sequence of interlayered limestone and chlorite schist with a small interval of clayey oxides from 26.5 m to 27.0 m before intersecting the oxide zone at 39.9 m. The hole then intersected 8.9 metres of oxidized material, to 48.8 m, of which 8.0 metres averaged <0.07 gms gold per tonne, 11.7 gm silver per tonne and 3.34% zinc. The hole continued to 61.0 m in limestone prior to being stopped due to severe rod vibration. Again, poor core recovery in the sandy oxides likely resulted in the loss of gold values.

DDH 91-4 was drilled from the same site and in the same direction as DDH 91-3 at a dip of -65°. This hole continued 37.2 metres, predominantly through limestone before intersecting the oxide zone. In this hole the zone extended 21.5 m and averaged 3.25 gm of gold per tonne, 23.5 gm of silver per tonne and 2.26% zinc. The hole continued only another 4.4 metres to a depth of 63.1 m.

DDH 91-5 was drilled vertically from the same site as DDH 91-3 and DDH 91-4 to test the

downdip extension of the oxide zone at depth. It continued to a depth of 86.0 m through limestone and chlorite schist, with oxidized material from 67.5 m to 69.0 m grading 0.24 gm gold per tonne, 33.3 gm silver per tonne and 3.73% zinc prior to encountering any significant oxides. An oxidized zone was encountered from 86.0 m to 89.8 m and grading 0.45 gm of gold per tonne, 19.2 gm of silver per tonne and 9.01% zinc and the hole continued to 104.1 m in limestone before intersecting another oxide zone from 104.1 m to 109.1 m which averages <0.007 gm of gold per tonne, 5.14 gm of silver per tonne and 3.56 % zinc. From 109.0 m to 135.1 m the hole encountered cherty limestone and limey argillite with zones of up to 20% arsenopyrite. The hole then continued to a final depth of 185.9 m in limestone with a feldspar porphyry dyke from 155.0 m to 164.3 m.

DDH 91-6 was drilled down-dip in the oxide zone in approximately the middle of the main trench, along the dip direction to further test the down-dip continuity of the zone. This hole was collared in and continued to 57.2 m in oxides followed by massive sulphides from 57.2 m to 61.3 m and an additional 4.1 metres of oxides. From 65.4 m the hole continued through limestone to a final depth of 131.1 m with a feldspar porphyry dike from 97.4 m to 112.3 m. Assay results for this hole are given below:

			GRADES			
INT	ERVAL	TYPE	GOLD g/t	SILVER g/t	ZINC %	1
4.9 - 18.4		Oxides	4.11	37.0	1.30	
18.4 - 52.4		Oxides	0.48	8.9	4.64	
52.4 - 57.2		Oxides	1.78	19.2	1.76	
57.2 - 61.3		Sulphides	4.52	9.6	0.26	
61.3 - 65.4		Oxides	1.20	14.7	8.99	

DDH 91-7 was drilled from a site approximately 32 m north, along strike of DDH 91-1 and 17 m east on Section 10,030 mN at a dip of -45° on an azimuth of 068° to test the continuity of the zone on strike to the north. The hole intersected 22.7 m of limestone before encountering the oxide zone which extended to 59.4 m with a zone of oxidized chlorite schist from 48.8 m to 54.6 m. The average grade of this zone is 1.74 gm of gold per tonne, 2.13 gm of silver per tonne and 2.12% zinc with a 15.4 m interval grading 3.25 gm gold per tonne, 35.3 gm silver per tonne, and 1.91% zinc.

Immediately below the oxide zone a feldspar porphyry dike was encountered from 59.4 m to 64.0 m. From 64.0 m to the bottom of the hole at 76.5 m the hole encountered limestone with a 1.2 m interval of oxides from 64.8 m to 66.0 m grading <0.007 gm gold per tonne, 8.9 gm silver per tonne and 5.16% zinc.

DDH 91-8 was drilled from the same location and in the same direction as DDH 91-7 at a dip of -85°. This hole encountered a thick sequence of limestone with oxides from 38.4 m to 45.6 m grading 0.05 gm gold per tonne, 19.65 gm silver per tonne and 5.93 % zinc and from 55.0 m to 64.6 m grading 0.03 gm gold per tonne, 6.97 gm silver per tonne and 1.69% zinc. Other short intervals of oxides encountered in this hole of 0.3 m at 46.9 m depth grading 4.1 gm silver per tonne and 7.77% zinc and of 0.6 m at 48.8 depth grading 5.5 gm silver per tonne and 21.22% zinc.

DDH 91-9 was drilled from a site approximately 10 metres east of DDH 91-7 and 9 at an

azimuth of 030° and a dip of -45° to test the intersection of the ore zone and the gulley fault to the north. It was drilled through 37.5 metres of limestone where it encountered a sequence of interlayered chlorite schist and limey argillite which continued to 48.9 metres. From 48.9 metres to 55.8 metres the hole intersected limey argillite. Throughout the sequence from 37.5 metres to 55.8 metres bands and blebs of sulphides, predominantly arsenopyrite, with sulphide content as high as 30% to 40%, were intersected. From 55.8 metres to 60.0 metres a unit of black, very fine grained massive sulphides that consisted primarily of arsenopyrite was encountered. The hole then continued through a mixed sequence of chlorite schist and limey argillite with small dykes of feldspar porphyry before intersecting a fault from 71.0 metres to 72.2 metres containing a feldspar porphyry breccia with zones of kaolinite. From 72.2 metres to 77.1 metres the hole continued through a mixed unit of argillaceous limestone and quartz feldspar porphyry dykes. The hole then intersected a unit of limestone which extended to the end of the hole at 96.9 metres. Although sulphides ranged from 3% to 5% to a high of 40%, with one zone of massive sulphides from 55.8 metres to 60.0 metres, no significant assay values were obtained from any of the core samples in this hole.

DDH 91-10 was drilled just south of the main trench to test the location and orientation of the footwall and the downdip continuity of grade. An unexpected pinch in the oxide zone resulted in the upper portion of the hole being drilled in limestone. However from 22.2 metres to 55.9 metres this hole was drilled virtually along the footwall of the ore zone, intersecting oxides in the intervals listed below:

In	terval		<u>Grade</u>	
From	То	Gold	Silver	Zinc
(m)	(m)	(g/t)	(g/t)	(%)
22.2	26.1	<0.07	5.5	10.58
34.4	35.1	Not assayed. High core loss		
35.1	39.5	<0.07	11.3	17.28
43.7	45.1	<0.07	11.0	7.45
45.1	47.2	Not assayed. High core loss		

From 47.2 m to the end of the hole at 55.9 m, very low core recovery was obtained and drilling conditions were extremely difficult in highly broken limestone.

DDH 91-11 was drilled from the same site as holes DDH 91-7 and 8 at an azimuth of  $336^{\circ}$  and a dip of -45° to further test the gulley fault for mineralization and to test for the continuation of the ore zone to the north of the gulley fault. Due to equipment problems and bad weather conditions the hole was not completed to its planned depth and will be continued in the 1992 field season. In the portion of hole completed in October, 1991, the hole intersected 41.1 metres of limestone before encountering a bed of chlorite schist from 41.1 to 45.7 m. A zone of oxides was then intersected from 45.7 m to 48.3 m which graded <0.07 gm of gold per tonne, 3.4 gm of silver per tonne and 1.17% zinc. The hole then continued in limestone from 48.3 m to 83.8 m, its present depth.

It should be noted that core loss was very high in all holes, especially in dark brown sandy oxides, which may have resulted in the loss of gold values. Zones in which the entire core was lost have been assigned grades equivalent to the average grade of the immediately adjacent samples.

# 8. DISCUSSION

Based upon the results of the 1991 drilling and sampling program and the results of previous workers it is apparent that significant gold, silver and zinc mineralization exists on the Lustdust property. Of the four main zones of mineralization identified by previous workers Zones 3 and 4B appear to have the largest probability of containing economic ore reserves.

### 8.1 <u>ZONE 3</u>

The results of the 1991 drilling program indicate that the gold-silver mineralization identified in Zone 3 likely formed by replacement along fractured horizons in the limestone which appear to be more extensive in width in the hinge area or "nose" of a tight anticlinal fold. The gold-silver mineralizing fluids may have followed along a previously syngenetically deposited horizon of pyrite, pyrrhotite and sphalerite which remobilized during folding and possibly later during emplacement of the gold-silver values.

Drilling on section 9+970mN, 10+000mN and 10+030mN indicates that the hinge area of the anticline may be plunging slightly to the southeast with near vertical mineralized shoots or veins extending to surface (Figure 3). Thin oxidized zones, similar to the surface exposure on Section 9+970mn, with up to 2 gm of gold per tonne, can be traced from Zone 3 for approximately 350 metres to the southeast.

Geochemical and geological data indicate that the Zone 3 mineralization may extend to the northwest of the main gossanous showing, across the gulley fault. To date only one drill hole, LD 81-3, and five scattered trenches have tested this area. Again the surface exposures of oxides may indicate significant replacement of limestone at depth.

### 8.6 <u>ZONE 4B</u>

No new work was completed on Zone 4b in 1991. Work by previous operators indicates that this zone consists primarily of pyrrhotite mineralization with pyrite, sphalerite and values in gold and silver in a number of thin bands spanning a width of approximately 30 metres. If this mineralization is similar in style and geometry to Zone 3, it is likely that the surface exposures represent the hinge area of another fold. Although no exposures have been located in the trenches to the north of DDH 79-3, it is possible that the mineralized zone extends northwesterly, at a greater depth due to offset along crossfaults, to the surface exposures of mineralization at Canyon Creek. Insufficient drilling has been completed in and around Zone 4b to indicate the lateral extent of mineralization or the grades that may exist in this area.

### 8.3 <u>ZONE 1</u>

Zone 1 has been intensively explored with trenches, diamond drilling and underground exploration. It is felt that this vein material may represent a feeder structure through which the mineralizing fluids moved into the limestone. As such the silver:gold ratio is significantly higher and the zinc content is low. Although this zone has limited potential for the development of economic ore reserves by itself, it could provide additional high grade silver ore for mill feed.

### 8.4 <u>ZONE 2</u>

Other than surface trenching Zone 2 has received very little attention due to its limited strike length.

# 8.5 OTHER AREAS OF INTEREST

On strike with Zone 4b to the southeast at the southwesterly boundary of the MV1 claim is a topographic low, identified from aerial photographs, which corresponds favourably with high results from silver and zinc geochemistry and with a strong electromagnetic conductor. This area may represent a soft oxide or sulphide zone in the hinge area of a synclinal fold associated with the anticlinal hinge postulated for Zone 3.

Little work has been completed to the north of Canyon Creek on the Hogem Claim due largely to extensive areas of deeper overburden cover. Geological mapping completed by Noranda in 1980 indicates that the L mineral claim is largely underlain by granodioritic to monzonitic intrusives.

### 9. CONCLUSIONS AND RECOMMENDATIONS

It is therefore concluded that Zone 3 and its extension to the north and south could contain an economic open-pittable oxide mineral resource in the order of one million tonnes at a tenor of 3 to 5 grams per tonne gold equivalent. In addition, economic sulphide deposits amenable to large scale underground mining may exist at depth.

Given the present database it is recommended that the next exploration program be focused primarily on the development of the hypothesized oxide resource. A structural mapping program should be completed to identify additional structures which may contain oxide and/or sulphide mineralization near surface and at depth. Combined with 400 m of surface trenching and 3500 m of diamond drilling on Zone 3 and its extensions to the north and south the mapping program will provide valuable data to indicate the presence of deeper economic sulphide mineralization.

In addition, a surface surveying and aerial topographic mapping program should be completed to provide tighter control on drill hole and trench locations.

This work should be split into a two stage programme as detailed in the next section of this report.

# 10. <u>COSTS</u>

# <u>STAGE I</u>

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PROJECT PLANNING AND ORGANIZATION AND CO J. Rotzien 10 days @ \$400 =	DORDINATION	\$4,000.
GEOLOGICAL MAPPING AND SAMPLING 1 Field Geologist @ \$300/day x 16 days = 1 Assistant @ \$150/day x 20 days = Project Manager @ \$300/day x 4 days =	\$4,800 \$3,000 \$ <u>1,200</u>	\$9,000.
<ul> <li>TRENCHING <ol> <li>South Extension of Zone 3</li> <li>trenches of 15 m each @ 30 m intervals =</li> </ol> </li> <li>North Extension of Zone 3 <ol> <li>Gulley 100 m = 100 m</li> <li>North of gulley 10 trenches of 15 m each</li> </ol> </li> </ul>	= 150 m = 150 m = 400 m	
TD 125 E \$105/hr for 10 hr days at 50 m per day = 7 x 10 x \$1 + Mob. and Demob. at \$1,050 =	05	\$8,400.
TRENCH MAPPING AND SAMPLING 1 Field Geologist 4 days @ \$300 1 Assistant 4 days @ \$150	\$1,200 \$ <u>600</u>	\$1,800.
DIAMOND DRILLING Holes A, B, C, E, G 5 holes totalling 1000 m @ $60/m$ @ 25 m / shift x 2 = 29 days		\$60,000.
DRILL SITES & ACCESS ROADS TD 125E 5 days @ 10 hrs/day x \$145/hr		\$7,250.
ANALYSES Allow for 300 samples @ \$20.50 and 30 samples @ \$13	\$6,150 \$ <u>390</u>	\$6,540.
SITE SUPERVISION, LOGGING AND SURVEYING Field Geologist 13 days @ \$300 1 Assistant 13 days @ \$150	\$3,900 \$ <u>1,950</u>	\$5,850.
<ul> <li>TOPOGRAPHIC CONTROL</li> <li>a) 1:5000 scale topographic maps with contour intervals @ 5 m over area 5 km x 5 km, fly and contour</li> <li>b) Survey Control by triangulation &amp; ground control 2 man survey crew and helicopter</li> </ul>	\$8,000	

camp costs etc. allow for 3 km ground surveying, flagging of drill holes adits etc.	\$ <u>7,000</u>	\$15,000.
RENTAL 4 x 4 1 ½ month at \$1,200/mo = Gas for rental	\$1,800 \$ <u>600</u>	\$2,400.
TRAVEL Geologist, helper, Project Engineer 2 round trip each @ \$700		\$4,200.
RADIO TELEPHONE \$200/mo x 1½ mos		\$600.
ROOM AND BOARD Geologist + helper for 36 days + Project Enginee 76 man-days @ \$75	er =	\$5,700.
COMMUNICATION, FREIGHT, ETC.		\$1,000.
REPORT PREPARATION Geologist 10 days @ \$300 Project Manager 5 days @ \$400 Draughting, say	\$3,000 \$2,000 \$ <u>2,000</u>	\$7,000.
CONTINGENCY 8%		\$ <u>11,260</u> .
TOTAL STAGE I COSTS		\$150,000.
STAGE II		
PROJECT PLANNING & COORDINATION J. Rotzien 3 days @ \$400 =		\$1,200.
Site Supervision Field Geologist 44 days @ \$300 = Assistant 44 days @ \$150 = Project Manager 6 days @ \$300 =	\$13,200 \$ 6,600 \$ <u>1,800</u>	\$21,600.
DIAMOND DRILLING 3000 m (Holes D, F and H to R) @ \$60/m		\$180,000.
ACCESS ROAD IMPROVEMENTS TD 125 E 5 days A 10/hr/day x \$145 Gravel Truck 2 x 2.5 days @ 10/hr/day x \$90	\$7,250 \$4,500	

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Loader 2.5 days @ 10/hr/day x \$120 Mobilize and demobilize Equipment	\$3,000 \$ <u>3,000</u>	\$17,750.
DRILL SITES AND ACCESS ROADS TD 125 E 3 days @ 10hr/day x \$145		\$4,350.
ANALYTICAL COSTS 100 samples for Au, Ag, Zn @ \$20.50 10 samples for ICP	\$2,050 \$ <u>130</u>	\$2,180.
ROOM AND BOARD Field Personnel 94 days @ \$75/day		\$7,050.
4 x 4 RENTAL 1½ months @ \$1,300/mo Gas for rental	\$1,800 \$ <u>600</u>	\$2,400.
TRAVEL 2 round trips for geologist and helper 1 round trip for project manager = 5 round trips @ \$700		\$3,500.
COMMUNICATION, FREIGHT ETC.		\$500.
RADIO TELEPHONE 1 <sup>1</sup> / <sub>2</sub> months x \$200		\$300.
REPORT PREPARATION Field Geologist 5 days @ \$300 Project Manager 3 days @ \$400 Draughting say	\$1,500 \$1,200 \$ <u>1,500</u>	\$4,200.
Contingency (10%)		\$24,970.
TOTAL STAGE II COSTS		\$270,000.
TOTAL PROPOSED COSTS		\$420,000.

Respectfully submitted, Dolmage Campbell Ltd. 07  $\sim$ J. ROTZIEN Ø œ RITISH J. Rotzien, P.Eng. 6 11 M 6 GINE

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# 11. STATEMENT OF COSTS - 1991 DRILLING

The costs associated with the diamond drilling reported herein are detailed in Appendix V and summarized below:

Diamond drilling and casing	\$ 50,532.67
Road improvements	4,766.85
Analytical costs	4,077.13
Site supervision	9,416.00
Staff quarters	2,105.80
Board	900.00
Truck rental	1,198.49
Travel	1,540.00
Report Preparation	4,750.00

Total

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\$79,287.74

Respectfully submitted, Dolmage Campbell Ltd. J. ROTZIEN  $\sim$ INF J. Rotzien, P.Eng.

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#### 12. REFERENCES

- Armstrong, J.E., G.S.C. Map 844 A, 1945.
- Bronlund, E.B., Report on Lustdust Property, 1960.
- James, D.H., Memo to F.R. Joubin and F.A. McGonigle, 1962.
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Paterson, I.A., G.S.C. Paper 74-1, Part B, 1974.

James, D.H., Report on the Lustdust Property, 1978.

James, D.H., Wilkinson, W.J., Geology and Geochemistry of the K, L, and M Mineral Claim, 1979.

White, G.E., Geophysical Report on a Vector Pulse Electromagnetic Survey, 1979.

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Wilkinson, W.J., Diamond Drilling Report, L & M Mineral Claims, Lustdust Property, 1979.

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Prest, S.E., Lustdust Assessment Report on Line cutting, Geological, Geophysical, Geochemical and Diamond Drill Work, 1980.

Leahey, M.W., Assessment Report: Grid Control, Geophysics, Geochemistry, Geology and Diamond Drilling on the Lustdust Property, 1981.

St. Clair Dunn, David, Summary Report on Lustdust Property, P, L, INK, AIR, M, MV-1, MV-2 & WOW-1 Claims, 1989.

# 13. STATEMENT OF QUALIFICATIONS

I, J.L. Rotzien do hereby certify that:

- 1. I reside at 634 Berry St., Coquitlam, British Columbia.
- 2. I am a registered Professional Engineer with the Association of Professional Engineers of British Columbia.
- 3. I obtained a B.A. Sc. in Geological Engineering in 1972 and a M.A. Sc. in Mining Engineering in 1989 from the University of British Columbia.
- 4. I have been practising my profession on a full time basis as a geological engineer since 1972, except from 1983 to 1986 when I was enroled in the M.A.Sc. program at the University of B.C.
- 5. I supervised the diamond drilling reported herein and completed all logging and sampling of the core.
- 6. I have no direct or indirect interest in the property discussed in this report or in Alpha Gold Corp. nor do I expect to receive any in consideration of this report.



J.L. Rotzien, P.Eng.











Felsic dykes,quartz feldspar porphyry

Chlorite schist

Limestone



Ox

MS

2

a) Argillite b) Phyllite c) Chert

Oxides

Massive sulphides

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Felsic dykes, quartz feldspar porphyry

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ACTING

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Chlorite schist

Limestone



2

a) Argillite b) Phyllite c) Chert

Ox

MS

Oxides

Massive sulphides

\ '	1:500	Dec 13/91	93N/11W	7
ap toyou	SCALE	DATE	NTS	FIG. Nº
E DI-	SECTION LOOKS NORTHWEST			
A Care	GEOLOGICAL SECTION ALONG DDH 91-9			
	ALPHA GOLD CORP.			
	36	DOLMAGE C	AMPBELL EERS, VANCOUVER, C	LTD. Canada

Appendix I

# ANALYTICAL PROCEDURES

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October 11, 1991

# GOLD AND SILVER BY FIRE ASSAY WITH COLLECTOR

This procedure takes advantage of the ability of a collector for Au and Ag and the collector retards the loss of Ag during the cupellation stage of fire assay.

There are advantages to using this method to do Au/Ag assays:

1. Both the Au and Ag can be run by A.A. off the same solution at very low levels. (i.e. we can read very accurately the Au to 0.001 OPT and the Ag to 001 OPT).

2. The fire assay Gravimetric method is at best give or take 0.02 OPT and down in the low levels it is easy to have high losses of Ag during cupellation. this does not happen with the Collector in the bead!

- 3. The method is good for levels up to 1.00 OPT Ag and 0.300 OPT Au (over 1 OPT the Ag has a tendency to precipitate out of the solution).
- 4. The au result by this method is every bit as good as the fire assay A.A. finish currently used by most labs.
- 5. The limiting factor is that you can't go as high as you want to for Ag. We have to reassay by Gravimetric finshi any Ag's over 1.00 OPT>

### ZINC BY ATOMIC ABSORPTION

### REAGENTS

Hydrochloric Acid (HCl) - conc. Nitric Acid (HNO3) - conc.

### APPARATUS

Hot plate 300 ml beakers (tall form) Cover glasses Funnels 200 ml Volumetric flasks Wash bottle Atomic absorption unit

### PROCEDURE

- 1. Weigh 0.5 gm sample into 300 ml (tall form) glass beaker.
- 2. Add 10 mls each of HNO3 and HCl.
- 3. Digest on hot plate: take to dryness.
- 4. Remove from hot plate and allow to cool.
- 5. Add 50 mls of D.I. water and 25 mls HCl.
- 6. Cover and boil 5-10 mins.
- 7. Cool and transfer into 200 ml volumetric flasks.
- 8. Bulk to volume and mix thoroughly.
- 9. Finish by AA.

If dilutions are needed, take 10 mls and dilute to 100 mls with 10% acid except in the case of Sb, Pb, and Ag which take 25% HCl final volume.

If they are over 10% and drill samples, all elements must be rerun wet or at least by A.A. again in duplicate at 0.25 grams. Zn assays must be run again by titration. Only if they are rock samples and not drill samples can just A.A. results reported.

AA INSTRUMENT PARAMETERS Wavelength = 213.9 nm Slitwidth = 100 Lamp Current = 5 mA Fuel Flow = Air/Acetylene Flame Conditions = Lean

### LEAD BY ATOMIC ABSORPTION

#### REAGENTS

Hydrochloric Acid (HCl) - conc. Nitric Acid (HNO3) - conc. Potassium Chlorate (KClO3)

### APPARATUS

Hot plate 300 ml beakers (tall form) Cover glasses Funnels 200 ml Volumetric flasks Wash bottle Atomic Absorption Unit

### PROCEDURE

- 1. Weigh 0.5 gm sample into 300 ml (tall form) beaker.
- 2. Add 10 mls each HNO3, and HCl.
- 3. Digest on hot plate; take to dryness.
- 4. Remove from heat and allow to cool.
- 5. Add 50 mls of D.I. water, 25 mls HCl and approximately 0.1 gm KCl03. (pinch).
- 6. Cover and boil for 30 mins.
- 7. Cool and transfer into 200 ml volumetric flask.
- 8. Bulk to volume and mix thoroughly.
- 9. Finish by AA.

If dilutions are needed, take 10 mls and dilute to 100 mls with 10% acid except in the case of Sb, Pb, and Ag which take 25% HCl final volume.

Ag, Pb, and Sb must be run on the A.A. on the same day they are bulked up to avoid the elements precipitating out in their chloride form.

If they are over 10% and drill samples, all elements must be rerun wet or at least by A.A. again in duplicate at 0.25 grams. Only if they are rock samples and not drill samples can just A.A. results reported.

### AA INSTRUMENT PARAMETERS

Wavelength = 283.3 nm Slitwidth = 50 Lamp Current = 5 mA Fuel Flow = Air/Acetylene Flame Condition = rich

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#### ANTIMONY BY ATOMIC ABSORPTION

### REAGENTS

Hydrochloric Acid (HCl) - conc. Nitric Acid (HN03) - conc. Perchloric Acid (HCl04) - conc. Hydrofluoric Acid (HF) Potassium Chlorate (KCl03)

#### APPARATUS

Hot plate Tellon beakers Cover glasses Funnels 200 ml volumetric flasks Wash bottle Atomic Absorption Unit

### PROCEDURE

- 1. Weigh 0.5 gm sample into teflon beaker.
- 2. Add 10 mls each HN03, HCl then HCl04.
- 3. Add 3-5 mis HF.
- 4. Digest on hot plate, take to heavy perchloric fumes.
- 5. Remove form heat and allow to cool.
- 6. Add 50 mls of D.I. water, 25 mls HCl and approximately 0.1 gm KCl03.
- 7. Cover and boil for 30 mins.
- 8. Cool and transfer into 200 ml volumetric flask.
- 9. Bulk to volume and mix thoroughly.
- 10. Finish by AA.

Sb, Pb, and Ag must always be run the same day they are bulked up to volume to avoid the elements precipitating out of solution.

#### AA INSTRUMENT PARAMETERS

Wavelength = 217.5 nm Slitwidth = 100 Lamp Current = 10 mA Fuel Flow = Air/Acetylene Flame Condition = rich Appendix II

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## DIAMOND DRILL CORE LOGS

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### DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	i. 10000 10000 1474	N DE Leng m Azim	th 65.5 m uth 064°	Project Lustdust Property Location: 24 metres northwest Trench		Ho I	ole No. DI Date Se ogged by: J.	DH91-1 pt. 4/91 Rotzien
Core	size NC	) Dip -	45°	Purpose: Test downdip continuity and geometry of	oxidized zone.			
Dep	th	Rock Type		Description From (m)		Core Loss		
From (m)	То <u>(m)</u>					To _(m)	Lost (m)	
0	0.9		Datum to	ground				
0.9	7.6	Fill and Overburden	Casing	-				
7.6	19.8	Limestone	Mottled g	ey, moderately hard, massive to faintly bedded,	7.6	10.7	1.4	
			rubbly, reh	ealed limestone breccia with fresh to highly	10.7	13.7	0.2	
			oxidized jo	int surfaces ranging through rusty brown,	13.7	16.8	1.0	
			yellow, sar	dy and dark brown. Buff to brown blebs	16.8	19.8	1.5	
			of possible	sphaleritic limestone constitute $\pm 3\%$ of core.	19.8	22.9	0.3	
			Jointing is	predominantly oriented at 0°-10°, 45° and 30°.	22.9	25.9	1.0	
					25.9	32.0	1.1	
					32.0	35.0	1.5	
			7.6 m-12.4	m Faintly bedded limestone rubbly to blocky core	35.0	38.1	2.7	
			and sparse	staining on joint surfaces. Bedding at 45°.	38.1	41.1	1.1	
			-		41.1	44.2	2.6	
					44.2	47.2	2.0	
		·	12.4 - 19.8	Limestone is massive but vuggy and rubbly with	47.2	50.3	0	
			more inter	se staining and mineralization.	50.3	53.3	0	

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Dept	h	Rock Type	Description		Core	Loss	
From	То			From	To	Lost	
<u>(m)</u> (	<u>m)</u>		· · · · · · · · · · · · · · · · · · ·	<u>(m)</u>	<u>(m)</u>	(m)	
			Fracturing is more intense and joints are all stained and commonly vuggy. Calcite veinlets are common throughout increasing from	56.4 59.4	59.4 62.5	1.9 0	
			2 mil to 6 mil with depth.	02.5	05.5	0.2	
19.8	21.3	Shear Zone	Olive grey, very soft, sticky clay gouge with fragments of chlorite schist and limestone.				-
			19.9 - 20.0 Light rusty brown clay. 20.7 - Foliation at 75° to 90°.				
			21.0 - 21.3 Increasingly solid chlorite schist with limey bands.				
21.3	30.5	Chlorite Schist	Grey green, soft to moderately hard, intensely foliated, vuggy, rubbly to blocky, fine-grained chlorite schist with bands and blebs of limestone decreasing with depth. Oxidized mineralization common throughout but decreasing with depth. Rust staining is common in disseminations and along joints. Oxidized pyrite crystals up to 3 mm are sparse. Oxidation products range from dark rusty brown to light yellow brown. Foliation is drag folded in places but commonly consistent at: 21.3 - 75° 26.8 - 75° 29.9 - 80°				
			22.99 cm Rusty clay with fragments of chlorite schist.				
			<ul><li>23.3 - 6 cm Graphitic shear.</li><li>24.4 Distinctly crinkled drag folded chlorite schist.</li></ul>				

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Dep	th	Rock Type	Description			Core Loss				
From (m)	To (m)		• 	From (m)	To _(m)	Lost (m)				
30.5	32.0	Limestone	Grey, moderately hard, massive, blocky limestone with dull greyish							
32.0	35.2	Chlorite schist	Grey to grey green, moderately hard, foliated, highly broken, chlorite schis with oxides on foliation and joint surfaces and weakly disseminated throug Foliation at 75°.	t hout.						
35.2	36.4	Limestone	Grey moderately hard, massive, blocky to rubbly, vuggy limestone with joir commonly at 10° and 65° with light orange to dark rusty brown staining and solution features.	i <b>ts</b>						
36.4	61.6	Oxidized Zone	35.8 - 6 cm Brown moderately hard limestone with (sphalerite?) Light yellow to dark brown, very soft, clayey, oxidized zone with fragments bands of limestone. Very poor core recovery from 36.4 to 41.1.	and						
·			36.4 - 38.1 Dark brown to yellow clay with limestone fragments. 38.1 - 10 cm Limestone.							
			38.1 - 41.4 Yellowish brown clay.							
			41.4 - 41.9 Grey limestone.							
			41.9 - 44.2 Yellowish brown to rusty orange clay.							
			<ul> <li>44.2 - 45.7 Rusty orange to orange brown clay.</li> <li>45.7 - 50.4 Yellow brown clay with minor intervals of rusty orange clay and fragments of dark brown oxidized material.</li> </ul>	i						
			50.4 - 53.3 Rusty orange to dark brown, clayey to sandy oxides.							
			53.3 - 53.9 Yellow clay with black sandy material and rusty red to dark							
			53.9 - 54.6 Grey, faintly bedded limestone with bedding at 45° to 50°.							
			54.6 - 56.2 As in 53.3 to 53.9.							
			56.2 - 5 cm limestone.							

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Depth From To	Rock Type	Description		Core Loss From To Lost		
		<ul> <li>56.2 - 57.9 As in 53.3 to 53.9.</li> <li>57.9 - 59.4 Yellowish to orange oxidized clay with gravelly limestone fragments.</li> <li>59.4 - 61.0 Rusty orange to brown clay with dark brown sandy material.</li> <li>61.0 - 61.1 Limestone.</li> <li>61.1 - 61.6 As in 59.4 - 61.0.</li> </ul>	<u>(m)</u>	<u>(m)</u>	<u>(m)</u>	
61.6 65.5	Limestone	Grey, moderately hard, blocky, faintly bedded limestone with weak, rehealed brecciation. Slightly vuggy with rust stains on vugs and joints and blebs of brown, sphaleritic (?) limestone.				
65.5		<ul> <li>END OF HOLE.</li> <li>NOTE: Majority of core loss likely from oxidized sand and clay being washed and pushed out of hole due to fragments of limestone wedged in core catcher.</li> <li>2) All measurements in metres unless otherwise noted.</li> <li>3) All angles measured with respect to core axis.</li> </ul>				

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## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	. 10000 10000 1474 1	N E Lengt n Azim	th 83.2 m uth 064°	Project Lustdust Property Location: 24 metres northwest Trench		Ho L	Die No. DDH91-2 Date Sept. 4/91 ogged by: J. Rotzien
Core s	size NQ	Dip -	45°	Purpose: Test downdip continuity and geometry of oxidize	ed zone.		
Dept	th	Rock Type		Description		Core	Loss
From (m)	To (m)				From (m)	To (m)	Lost (m)
0 0.7	0.7 6.1	Fill and Overburden.	Datum to gro Casing.	und.			
6.1	23.0	Limestone	Grey, modera limestone with surfaces. Calo oriented at 40	tely hard, blocky to rubbly, medium to coarse-grained in traces of oxidized sulphides predominantly on joint cite healed joints up to 3 mm thick predominantly 9. Rust stained joints commonly at 0°-15°.	6.1 7.6 10.7 13.7 16.8 19.8 22.9	7.6 10.7 13.7 16.8 19.8 22.9 25.9	0 0 0 0.2 0.7 2.9
			6.1 - 12.2 Mas 12.2 - 12.6 Th 12.6 - 17.4 Ma	ssive, rubbly to blocky limestone. inly bedded, blocky limestone with bedding at 65°. assive to weakly bedded, blocky limestone with bedding	25.9 29.0 32.0 35.0 38.1	29.0 32.0 35.0 38.1	2.3 1.9 1.6 2.0 2.9
			17.4 - 19.6 Li	ght grey, massive, sound limestone with 1-2% buff to grey	41.1	44.2	1.2

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Depth		Rock Type	Description		Core 1	Loss
From	То		•	From	То	Lost
<u>(m)</u>	(m)			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
			brown blebs of sphaleritic limestone.	44.2	47.2	0.4
			-	47.2	50.3	0.9
			19.6 - 22.1 Massive, sound to blocky limestone.	50.3	51.5	0.3
			22.1 - 22.9 Light grey to brown, sound, faintly bedded limestone with a	51.5	52.1	0.1
			trace of sphalerite. Bedding @ 30° at 22.3 m.	52.1	52.7	0
				52.7	53.9	0
			22.9 - 23.0 Limestone with some greenish brown, soft chloritic material.	53.9	54.6	0
				54.6	55.8	0
				55.8	56.4	0
				56.4	57.0	0
				57.0	57.6	0
23.0	25.9	Shear Zone?	No Core Recovery	57.6	58.2	0
				58.2	58.8	0.3
25.9	38.1	Chlorite	Grey green to rusty grey, moderately soft to soft, rubbly to blocky,	58.8	59.4	0.3
		Schist	fine grained, foliated chlorite schist with abundant layers and blebs	59.4	60.0	0.6
			of limestone and drag folding at 31.4 m.	60.0	61.0	0.9
				61.0	61.3	0.2
				61.3	61.8	0
			25.9 - 29.9 Rust stained with 1-2% sphalerite.	61.8	62.5	0.3
			Foliation at 40°	62.5	63.1	0.3
			29.9 - 31.7 Dark grey, yuggy with foliation at 40°	63.1	63.7	0.2
			31.7 - 38.1 Grey green with rusty joints and foliation at 35°.	63.7	64.3	0.2
			, , , , , , , , , , , , , , , , , , ,	64.3	64.9	0.1
				64.9	65.5	0.1
38.1	41.1	Argillite	Grey, moderately soft to soft, rubbly, very fine grained, foliated	65.5	66.1	0.4
		8	argilite with rusty foliation partings. Only 0.15 m of core recovered.	66.1	66.8	0.1
				66.8	67.4	0.1

Hole No. DDH91-2

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Depth	l	Rock Type	Description		Core	Loss
From (m)	To (m)			From (m)	To (m)	Lost (m)
				67.4	68.0	0.2
41.1	51.7	Limestone	Grey, moderately hard, massive to faintly bedded, sound to blocky,	68.0	68.6	0.5
			medium to coarse grained limestone with abundant rusty joints and	68.6	69.2	0
			from 44.3 m to 49.7 m increasingly abundant and thicker zones of	69.2	69.8	0.6
			oxidized sulphides. Jointing @ 30°, 60° and 10°, all rust stained.	69.8	70.4	0.6
				70.4	71.0	0
				71.0	71.6	0.6
			Rock has been brecciated and rehealed generally causing displacement	71.6	72.2	0
			of bedding features and some small scale drag folding.	72.2	72.8	0
				72.8	73.8	0
				73.8	74.4	0.1
			43.3 Faint bedding at 25° - 30°	74.4	74.7	0
			44.5 - 6 cm Rusty clay recovered	74.7	75.9	0.5
			47.5 - 15 cm Buff clay recovered	75.9	76.5	0.2
			47.8 - 3 cm Rusty brown clay recovered	76.5	77.1	0.2
			48.1 - As above	77.1	77.7	0.6
			48.5 - 49.8 0.4 m rusty brown clay recovered	77.7	78.3	0.5
				78.3	78.9	0.2
51.7	63.0	Oxidized	Grey brown to rusty orange to dark reddish brown, clayey to sandy	78.9	79.6	0.4
		Zone	massive oxidized zone with occasional limestone fragments.	79.6	80.2	0.2
			-	80.2	80.8	0
				80.8	81.4	0
			51.7 - 52.1 Dark reddish brown oxides	81.4	83.2	0.1
			52.1 - 53.2 Light rusty brown clayey oxides with 8 cm limestone			
			at 52.9 m (not sampled).			
			53.2 - 53.6 Light rusty brown sandy oxides with sand-sized			
			limestone fragments.			

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Depth		Rock Type	Description		Core I	Loss
From (m)	To (m)	~	-	From (m)	To (m)	Lost (m)
		<u> </u>	·	67.4	68.0	0.2
			<ul> <li>53.6 - 54.2 Light rusty brown clayey oxides.</li> <li>54.2 - 54.7 Rusty brown clayey oxides.</li> <li>54.7 - 55.6 Light rusty brown clayey oxides.</li> <li>55.6 - 59.2 Orange, brown clayey oxides with blebs of bright orange and dark brown oxides.</li> <li>59.2 - 60.4 Dark reddish brown, moderately soft to loose sandy oxidized materials.</li> <li>60.4 - 61.6 Light rusty brown to orange brown, loose, sandy to clayey oxides.</li> <li>61.6 - 62.9 Dark reddish brown to reddish brown, moderately soft to very soft clayey oxides.</li> <li>62.9 - 63.0 Limestone.</li> <li>NOTE: from 52.7 to 58.2 core recovery &gt;100% due to core swelling 40-50% in length after retrieving from inner barrel.</li> </ul>			
63.0	66.4	Massive Sulphides	<ul> <li>Dark brown to dark reddish brown, very soft to moderately soft, fine to coarse grained, vuggy, massive sulphides with one interval of 6-8 cm of galena ? rich material and remnant lenses of extremely vuggy, very fine grained, multicoloured chlorite schist.</li> <li>63.0 - 63.7 Dark brown vuggy sulphides.</li> <li>63.7 - 63.8 Fresh, weakly magnetic vuggy sulphides.</li> <li>63.8 - 64.9 Dark brown vuggy sulphides with a bleb of fresh sulphides at 64.4 m and a remnant of chlorite schist (1.5 cm) at 64.7 m.</li> </ul>			

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Depth From (m)	To (m)	Rock Type	Description	From (m)	Core To (m)	Loss Lost (m)	
			<ul> <li>64.9 - 65.2 Dark brown to black sulphides with blebs</li> <li>of fresh sulphides and chlorite schist.</li> <li>65.2 - 66.4 Dark brown to black sulphides.</li> </ul>				
66.4	71.0	Oxidized Zone	Light orange brown, very soft, rubbly to pulverized, clayey oxides and dark reddish brown, loose, sandy oxides. 66.4 - 66.6 Light orange brown clayey oxides. 66.6 - 3 cm Limestone. 66.6 - 68.3 Dark reddish brown, loose, sandy oxides with a trace of moderately magnetic particles and minor intervals of orange brown clayey oxides. 68.3 - 69.2 Light to dark orange brown, soft, clayey oxides with blebs of dark reddish brown, loose, sandy oxides. 69.2 - 70.4 No core recovery - likely loose sandy oxides. 70.4 - 71.0 Mixed oxides as in 68.3 to 69.2 with 50:50 clayey:sandy.				
71.0	79.6	Mixed Oxides and Sulphides	<ul> <li>Orange brown to dark brown and black, very soft to moderately hard, rubbly to blocky mixture of sulphides and oxides.</li> <li>71.0 - 71.6 No core recovery.</li> <li>71.6 - 71.8 Dark to light rusty brown, moderately hard sulphides.</li> <li>71.8 - 72.3 Dark brown loose, sandy sulphides.</li> <li>72.3 - 72.8 Reddish brown partially oxidized sulphides.</li> <li>72.8 - 73.4 Rusty brown, soft, sandy oxides.</li> <li>73.4 - 79.6 Rusty brown to dark reddish brown, moderately hard sulphides. Vuggy from 76.5 to 79.6 m.</li> </ul>				
79.6	83.2	Limestone	Grey, moderately hard, blocky to sound, fine to medium grained limestone with 1-2% light brown to buff sphaleritic blebs. Joints are rusty and predominantly at 20° and 50°.				

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Depth From (m)	To (m)	Rock Type	Description	From (m)	Core To (m)	Loss Lost (m)	
83.2			79.8 Bedding at 30°. 79.8 - 80.2 Brownish grey sphaleritic limestone. END OF HOLE				
			NOTE: 1) All measurements in metres unless otherwise noted. 2) All angles measured with respect to core axis.				

## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	Coord. 9,970 mN 9,996 mE Elev. 1480 m		ngth 60.1 m muth 06°	m Project Lustdust Property Location: Approximately 50 m south of trench.			ole No. DDH91-3 Date Sept. 4/91 .ogged by: J. Rotzien	
Core size NQ Dip -45°			-45°	Purpose: Test downdip and on strike extension.				
Dep	th	Rock Type	Rock Type Description			Core Loss		
From (m)	To (m)				From (m)	То <u>(m)</u>	Lost (m)	
0	0.9		Datum to	ground.				
0.9	3.6	Limestone	Casing.				_	
3.6	7.8	Limestone	Grey, mod	erately hard, coarse grained, blocky to rubbly,	3.6	4.6	0	
			massive, re	chealed limestone breccia with occasional rust	4.6	5.8	0	
•			stained join	nts. At 4.4 m 2 2.5 cm band is brownish	5.8	6.7	0	
			grey and s	phaleritic. Jointing predominantly at 70° and 40°.	6.7	-7.6	0.6	
		_	_		7.6	8.5	0.8	
7.8	19.3	Chlorite	Grey green	n, moderately soft, fine grained, foliated, rubbly,	8.5	9.4	0.6	
		Schist	chlorite sc	hist with blocky, limey bands and occasional intervals	9.4	10.7	0.5	
			of rusty ch	lorite schist and/or mud. Jointing is predominantly	10.7	11.3	0	
			along folia	tion at 70° and at 70° across foliation.	11.3	12.2	0.2	
			Contacts w	vith limestone above and below are abrupt and broken.	12.2	13.7	0.3	
					13.7	15.2	0.6	
					15.2	15.8	0.1	
					15.8	16.8	0.5	
			11.4 - 9 cm	n rusty chlorite schist.	16.8	17.7	0.5	
			13.8 - 6 cm	n rusty chlorite schist.	17.7	18 <b>.9</b>	0.5	

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Hole No. DDH91-3

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Depth		Rock Type	Description		Core	Loss
From	То	•-	•	From	То	Lost
(m)	(m)			(m)	(m)	(m)
• •	• •		14.2 - 15 cm Rusty chlorite schist with some clay.	18.9	19.8	0.1
			15.5 - 15.8 Rusty chlorite schist with some clay.	19.8	20.7	0.2
			16.2 - 18.0 Loose, intensely broken, muddy chlorite schist with			
			bands of rusty schist and clay.	20.7	21.9	0.2
				21.9	22.9	0.2
			19.0 - Blebs of oxidized sulphides in schist.	22.9	24.4	0
			-	24.4	25.9	1.4
19.3	24.3	Limestone	Mottled grey, moderately hard, massive, rubbly to sound, coarse	<b>25.9</b>	26.5	0.5
			grained, rehealed limestone breccia becoming vuggy with depth;	26.5	26.8	0.3
			especially from 22.6 m to 24.3 m where vugs have rusty infilling.	26.8	27.4	0
			Irregular bands (stylolites?) of black carbonaceous material	27.4	29.0	0
			give limestone a mottled texture.	29.0	30.5	0.2
				30.5	32.0	0.1
		-	20.2 - 3 cm Grey, sandy, limey seam.	32.0	33.5	1.1
			20.6 - 20.7 Grey sandy, limey seam.	33.5	34.4	0.1
			21.5 2 cm Light rusty clay @ 70°. Lost core from 21.5 m to	34.4	35.1	0
			21.9 m may be oxides.	35.1	36.6	0.6
			22.5 - 9 cm Grey limey mud seam @ 70°.	36.6	38.1	0.6
24.3	26.5	Chlorite	Grey green, moderately soft, rubbly, fine grained chlorite schist	38.1	38.7	0.6
		Schist	with bands of limestone and numerous rust stained joints.	38.7	39 <b>.9</b>	0.5
				39.9	40.5	0.6
26.5	27.0	Oxidized	Light rusty brown, very soft, clay oxides with sand to gravel sized	40.5	40.8	0.3
		Zone	limestone fragments.	40.8	41.1	0.2
			5	41.1	41.4	0.1
27.0	36.6	Limestone	Grey, moderately hard, sound, coarse grained, massive, rehealed	41.4	42.1	0.2
				42.1	43.0	0.5

Hole No. DDH91-3

Depth		Rock Type	Description		Core 1	Loss
From	То	÷.	•	From	То	Lost
(m)	(m)			(m)	(m)	(m)
	• •		limestone breccia with intervals of chlorite schist and		• •	
			light rusty brown clayey oxides. Jointing predominantly at 45°			
			to 50°.	43.0	44.2	0.6
				44.2	44.8	0.4
			27.4 - 12 cm Grey sandy to clayey limey mud.	44.8	45.4	0
			28.3 - 9 cm Chlorite schist with 1 cm rusty clay.	45.4	46.0	0.6
			Contacts broken and abrupt at 70°.	46.0	46 <b>.6</b>	0.2
				<b>46.6</b>	47.2	0.2
				47.2	47.8	0.1
			29.0 - 20 cm Rusty chlorite schist.	47.8	48.8	0.5
			31.5 - 12 cm Brownish bands of sphaleritic limestone.	48.8	49.1	0
			32.1 Rusty clay mixed with gravel sized limestone fragments.	49.1	50.3	0.6
			3.5 m Core loss from 32.0 m to 33.5 m likely oxides.	50.3	<b>50.6</b>	0.1
			33.5 - Trace of rusty clay.	50.6	51.5	0.1
		•	34.0 - 34.1 2 cm Rusty clay at 70° and 1 cm at 20°.	51.5	51.8	0.1
			34.6 - Trace of rusty clay.	51.8	52.4	0.1
			35.7 - 2 cm Rusty clay.	52.4	53.3	0.1
			35.9 - Trace of rusty clay.	53.3	54.9	0.8
36.6	39.9	Chlorite	Grey green moderately soft, rubbly to blocky, foliated,	54.9	55.2	0.3
		Schist	fine grained chlorite schist with rusty and limey bands. From	55.2	55.8	0
			38.1 m to 39.9 m only 0.1 m of core recovered of very soft	55.8	56.4	0.3
			silty to sandy fragments of crushed (sheared?) chlorite schist with	56.4	57.0	0.2
			a trace of sphalerite. Foliation at 45°.	57.0	57.6	0.2
39.9	48.8	Oxidized	Light rusty brown to dark reddish brown, very soft to soft.clayey	57.6	58.2	0
		Zone	oxides.	58.2	58.8	0

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Depth		Rock Type	Description		Core I	Loss
From	То	51	ĩ	From	То	Lost
(m)	(m)			(m)	<u>(m)</u>	<u>(m)</u>
			39.9 - 44.0 Light yellowish brown to orange brown clayey oxides.	58.8	59.4	0.2
			44.0 - 44.3 Limestone.			
			44.3 - 47.8 Orange to reddish brown clayey to silty oxides.			
			47.8 - 48.8 Limestone pebbles in rusty clay matrix.			
48.8	61.0	Limestone	Grey, moderately hard, rubbly to blocky, massive, rehealed limestone			
			breccia with rusty joints predominantly oriented at 45° and 70°.			
			48.8 - 49.7 Limestone pebbles and cobbles in rusty silk matrix.			
			50.3 - 50.7 Limestone pebbles with light yellow silt coating.			
			50.7 - 61.0 Core is less oxidized.			
			51.0 - 6 cm Soft sheared limestone at 85°.			
			51.5 - 51.8 Rubbly limestone with light yellowish brown to orange			
			brown clay coating.			
			51.8 - 61.0 Rubbly to blocky limestone with lightly yellowish			
			brown to orange brown clay in joints.	59.4	60.0	0.4
61.0			END OF HOLE.	60.0	61.0	0.5
			NOTE: 1) All measurements in metres unless otherwise noted.			

2) All angles measured with respect to core axis.

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### DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord. 9,970 mN	Hole No. DDH91-4	
Elev. 1,480 m Length 65.5 m Azimuth 06°	Project Lustdust Property Location: Approximately 50 m SW of trench.	Date Sept. 4/91 Logged by: J. Rotzien
Core size NQ Dip -65°	Purpose: Test downdip extension of intersection in DDH91-3.	

Dep From (m)	th To (m)	Rock Type	Description	From (m)	Core To (m)	Loss Lost (m)
0 0.7	0.7 1.8	Fill	Datum to ground.			
1.8	7.9	Limestone	Mottled grey, moderately hard, blocky to sound, massive, coarse	1.8	3.0	0
			grained limestone with stylolites.	3.0	4.6	0
			From 6.7 m to 7.9 m limestone is more broken.	4.6	5.8	0
			Contact with chlorite schist below is sheared with 2 cm of clayey	5.8	6.7	0
			gouge at 70° to core axis. Numerous joints at 0°, 20°, 45° and 60°	6.7	7.6	0
			are all rust stained. One joint at 3.4 m contains 8 cm of rusty clay.	7.6	9.1	0.9
			· · · ·	9.1	10.4	0.4
				10.4	10.7	0
7.9	12.6	Chlorite	Grey green to rusty brown, moderately soft, rubbly to blocky,	10.7	11.6	0
		Schist	foliated, fine grained chlorite schist with blebs and bands	11.6	12.2	0
			of limestone and traces of pyrite. The contact with the limestone	12.2	12.8	0
			below is shattered and sheared. Jointing is predominantly parallel	12.8	13.7	0.1
			to foliation at 50° to 60°.	13.7	15 <b>.2</b>	0.7
				15.2	15.5	0.2
				15.5	16.8	0.4

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Hole No. DDH91-4

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Depth	l	Rock Type	Description		Core I	LOSS
From	То	•••	•	From	То	Lost
<u>(m)</u>	<u>(m)</u>	<u>.</u>		<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
12.6	16.9	Limestone	Grey, moderately hard, rubbly to sound, vuggy, massive, coarse	16.8	18.3	1.3
			grained, rehealed limestone breccia with numerous rusty joints	18.3	19.8	1.1
			as in 1.8 to 7.9. Trace to 1% sphalerite on some joint surfaces.	19.8	20.7	0.1
				20.7	21.6	0.1
				21.6	22.9	0.8
16.9	24.1	Mixed Unit	Grey to grey green to rust brown, moderately hard to soft, rubbly	22.9	24.1	0.5
			to blocky, vuggy, finely interlayered rehealed limestone and	24.1	24.7	0.3
			chlorite schist with minor intervals of rusty clay. Jointing	24.7	25.9	0.6
			predominantly parallel to foliation in chlorite schist at 75°.	25.9	27.1	0.6
				27.1	28.6	0.3
				28.6	29.0	0
				29.0	30.5	0.4
24.1	37.2	Limestone	Grey, moderately hard, rubbly to sound, massive to vuggy,	30.5	32.0	0.1
			coarse grained, rehealed limestone breccia with 1-3% sphalerite	32.0	33.5	0
			in short intervals around zones of rusty clay. Jointing	33.5	35.0	0
			predominantly at 60° to 70° and 30°.	35.0	36. <b>6</b>	0
				36.6	38.1	0.8
				38.1	39.6	0.8
				39.6	41.1	1.1
				41.1	42.1	0.5
			27.1 - Fractured limestone with a trace of rusty clay.	42.1	42.7	0.6
			28.6 - As at 27.1.	42.7	43.3	0.5
			28.8 - 1.5 cm Rusty clay.	43.3	43.9	0.6
			29.0 - 6 cm Rusty clay.	43.9	44.5	0.5
			29.1 - 3 cm Rusty clay.	44.5	45.1	0.4
			29.7 - 1.5 cm Rusty clay.	45.1	46.0	0.6

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Hole No. DDH91-4

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Depth		Rock Type	Description		Core	Loss
From	To	51	•	From (m)	To (m)	Lost (m)
<u>(m)</u>	<u>(m)</u>		295 - 15 cm Rusty clay	46.0	46.6	0
			29.9 - 1.5 cm Rusty clay	46.6	47.2	0.1
			311 - 15 cm Black to rusty vellow clay.	47.2	47.8	0.3
			31.7 - 1.5 cm Date to resty years only.	47.8	48.8	0.1
			limestone	48.8	49 1	0.5
			32.6 - 1.4 cm Rusty clay	49 1	49.4	0.4
			33.0 - 1.5 cm Rusty clay.	49.4	50.0	0
			33.2 - 3 cm Rusty clay.	50.0	50.3	õ
			33.6 - 3 cm Rusty clay.	50.3	51.5	0.6
			33.8 - 3 cm Rusty clay.	51.5	52.4	0.5
			34.1 - 34.9 Light rusty silt.	52.4	53.3	0.6
			35.2 - 9 cm Rusty clay.	53.3	53.9	0.3
			36.6. 6 cm Rusty clay	53.0	55.2	04
			50.0 - 0 cm Rusty citay.	55.7	56.4	0.5
272	58 7	Ovidized	Light yellowish brown to dark reddish brown very soft to moderately	56.4	573	0.8
51.4	50.7	Zone	soft rubbly clayer to sandy orides. From 43.9 m to bottom intensity	573	58.2	0.7
			of oxidation decreases with remnants of vugay sulphides and chlorite	58.2	594	0.5
			schist Contacts with limestone above and below are broken and abrupt	59.4	60.0	0.6
			37.2 - 39.2 Orange to reddish brown sulphides.	60.0	61.6	0.1
			39.2 - 40.1 Grev vuggy limestone.	61.6	62.5	0
			401 - 411 Reddish brown oxides with very low recovery.	62.5	63.1	0.1
			41.1 - 42.7 Yellowish brown clay	02.0	0011	0
			42.7 - 45.1 Reddish brown oxides with little clay recovered.			
			45.1 - 46.6 Yellowish to orange brown clay.			
			46.6 - 52.1 Reddish brown oxides with minor intervals of olive grev			
			clay and numerous pieces of harder core. At 49.4 m 3 cm of massive			

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Depth From (m)	To (m)	Rock Type	Description	From (m)	Core I To (m)	Loss Lost (m)
58.7	63.1	Limestone	<ul> <li>sulphides.</li> <li>52.1 - 53.9 Yellowish brown to reddish brown oxides and grey to greenish grey chlorite schist.</li> <li>53.9 - 58.2 Reddish brown silty to gravelly oxides.</li> <li>58.2 - 58.7 Mixed reddish to yellowish brown and grey green to black clay. Possible shear at contact.</li> <li>Grey, moderately hard, blocky to rubbly, coarse grained, massive limestone with intervals of yellowish brown clay. Jointing predominantly at 75° and 45°.</li> <li>59.3 - 3 cm Yellowish brown clay.</li> <li>59.4 - 60.0 No recovery.</li> <li>60.0 - 60.4 Yellowish brown clay.</li> </ul>			
63.1			END OF HOLE			
			NOTE: 1) All measurements in metres unless otherwise noted. 2) All angles measured with respect to core axis.			

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### DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	Coord. 9,970 mN 9,995 mE Length Elev. 1480 m Azimu Core size NQ Dip -9		ngth 185.9 m imuth -	Project Lustdust Property Location: 50 SW of Trench		Ho Logge	le No. DDH91-5 Date Sept.18/91 ed by: J. Rotzien
Core			p -90°	Purpose: Test structural geology to depth.	· · · · · · · · · · · · · · · · ·		
Dep From <u>(m)</u>	th To (m)	Rock Type		Description	From (m)	Core To (m)	Loss Lost (m)
0	0.6		Datum to	ground			
0.6	2.4	Fill	Casing				
2.4	19.8	Limestone	Mottled gr	ey, moderately hard, blocky to sound massive	2.4	4.6	0
			coarse grai	ned stylolitic limestone with rusty joints	4.6	6.1	0
·			predomina	ntly at 0°, 45° and 60° to 70°. Rusty clay	6.1	7.6	0
			infillings a	e common below 10.7 m where limestone is	/.6	8.5	0
			more brok	en and vuggy.	8.2	9.4	0
			10.7-12.2.1	ow recovery of light bull to brown clay	9.4 10.7	10.7	0.1
			12.6 - 1.5 C	m fusty clay	10.7	12.4	1.0
			13.2 - 11ac	e rusty clay	12.2	15.7	0
			13.8 - 17ac	e rusty clay	15.7	15.2	0
			15.9 - 11au 140 Troo	e rusty clay	15.2	17.1	0
			14.0 - 11a0	e rusty clay	10.3	12.0	0
			14.5 - 11au 14.0 Trac	e rusty clay	17.1	18.0	05
			14.9 - 11au 155 - 15a	m rusty clay	18.0	19.8	0.7
			15.5 - 18.0	All joints contain a trace of rusty clay	19.8	21.3	0
			189.108	Poor recovery in rusty clay with gravelly	21 3	22.9	0.4
			limestone f	ragments	22.9	24.1	0.1

Hole	No.	DDI	H91-5
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Depth		Rock Type	Description		Core I	Loss	
From	То	21	•	From	То	Lost	
<u>(m)</u>	<u>(m)</u>				<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
				24.1	25.0	0	
19.8	29.3	Limey	Grey green to grey, moderately soft to moderately hard,	25.0	25.9	0	
		Chlorite	blocky, foliated, fine grained chlorite schist with bands	25.9	27.4	0	
		Schist	blebs and beds of coarse grained, massive limestone and	27.4	28.3	0	
			intervals with 3-5% buff sphaleritic blebs and bands.	28.3	29.9	0.2	
			Foliation is variable from 20° to 60° and over short limey	29.9	30.5	0	
			intervals is highly contorted. 60% to 70% of joints are	30.5	31.4	0.2	
			parallel to foliation with other predominant joints at 45°	31.4	32.6	0.2	
			and 60°. All joints are commonly rusty.	32.6	33.2	0.2	
			20.4 - 20.7 Sphaleritic? blebs and bands evident	33.2	33.8	0.3	
			25.6 - 26.2 Rusty brown to black sphaleritic schist	33.8	35.1	0.3	
			28.2 - 28.6 As in 25.6 to 26.2	35.1	67.4	0	
29.3	67.5	Limestone	Grey, moderately hard, blocky to rubbly, massive, coarse	67.4	68.6	0.5	
			grained limestone with vuggy, rust stained joints at 0°, 30°,	68.6	85.6	0	
			60° and 80°. From 40.2 m to 67.5 m the core is generally sound	85.6	86. <b>9</b>	0.5	
			with minor rubbly intervals.	86.9	88.4	0.2	
			29.3 - 30.2 0°-10° joint with 0.5 cm rusty clay	88.4	89 <b>.</b> 9	0.3	
			30.6 - 0° joint with a trace of rusty clay	89 <b>.9</b>	90.5	0	
			32.3 - 30° joint with a trace of rusty clay	90.5	91.4	0	
			32.4 - 36.9 All joints have a trace of rusty clay	91.4	93.3	0	
			40.2 - 43.6 Faint handing (bedding?) at 20°	93.3	93.8	0	
			47.7 - 48.5 As above at 10° to 30°	93.8	94.2	0.1	
			53.3 - Trace sphalerite on joint at 20°	,,,,,	2	•••	
			58.0 - Limestone more brecciated and rehealed	94.2	102.7	0	
			but core still sound	~		*	
			$657 \cdot 01$ m limestone with rusty cubic cavities	102.7	104.2	0.2	
			05.7 - 0.1 m milliostone with rusty cubic cavities	10441	104.2	<b>U.</b>	

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Depth		Rock Type	Description		Core I	LOSS
From	То		L	From	То	Lost
(m)	(m)			(m)	<u>(m)</u>	<u>(m)</u>
			(oxidized pyrite crystals).	104.2	105.2	1.0
			66.4 - 15 cm rusty clay	105.2	106.7	1.0
				106.7	121.9	0
67.5	69.0	Oxidized	Light rusty brown to orange brown, very soft, silty to	121.9	124.7	0.4
		Zone	clayey oxides.	124.7	146.6	0
69.0	80.6	Limestone	Grey, moderately hard, blocky to sound, massive, coarse	146.6	148.1	0.1
			grained limestone with rusty joints predominantly at	148.1	149.4	0.8
			65°, 25° and 0°. Dark gray fragments of siliceous	149.4	185 <b>.9</b>	0
			limestone are evident. Brecciation (and rehealing)			
			increasing with depth resulting in a lighter grey colour			
			except in siliceous zones. From 85.3 m to 85.6 m limestone			
			is vuggy.			
86.0	89.8	Oxidized	Light yellowish brown grading to dark orange brown sandy to			
		Zone	clayey oxides.	•		
89.8	104.1	Limestone	Light to dark grey, moderately hard to hard, blocky, massive,			
			coarse to medium grained rehealed limestone breccia with intervals			
			of up to 0.3 m of siliceous limestone and short intervals of buff			
			to brown sphaleritic limestone. Rehealing of breccia with calcite			
			results in light grey colour while siliceous intervals are dark grey.			
			Joints are commonly oriented at 60° - 70°, 50° and 25° and usually			
			have a dark brown to black stain and are rarely rusty.			
			92.4 - 92.5 Buff to brown sphaletitic limestone			
			94.4 - 94.6 As above			
			94.9 - 95.4 As above			
			95.4 - 100.1 Buff to brown blebs average 1-3% throughout			
			100.1 - 102.0 Rubbly to blocky core with rust stained joint surfaces			

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Depth		Rock Type	Description		Core 1	Loss
From	То	51	•	From	То	Lost
<u>(m)</u>	<u>(m)</u>			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
-			traces of sphalerite.			
			102.0-104.1 As above but blocky			
104.1	109.0	Oxidized	Light yellowish brown to dark grey brown, very soft, clayey to sandy			
		Zone	oxides with intervals of rusty brown, partially oxidized, sphaleritic			
			limestone. Limestone core is generally highly shattered and likely			
			caused large core losses in oxides.			
			104.2 - 105.2 Light yellow brown clay			
			105.2 - 106.7 As above with limestone pebbles			
			106.7 - 107.1 Dark brown sandy oxides			
			107.1 - 107.3 Limestone			
			107.3 - 107.9 Dark brown to grey shattered limestone with sphaleritic			
			joints and some dark brown clayey oxides			
•			107.9 - 108.2 Dark brown sandy oxides			
			108.2 - 108.8 Rusty limestone with a trace of sphalerite			
			108.8 - 109.0 Dark brown sandy oxides			
109.0	116.0	Cherty	Grey to black, moderately hard to very hard rehealed bands of randomly			
		Limestone	oriented chert. Brecciation is rehealed with silica and calcite. Trace to 19	6		
			aresenopyrite and up to 3% sphalerite exist along joint surfaces and edges			
			of chert bands. Dark cherty bands also appear to contain a trace of very f	ine		
			galena (?) or arsenopyrite (?). Jointing commonly at 50° and 70°.			
116.0	126.2	Limey	Mottled black and grey, moderately soft, blocky, brecciated unit of fine			
		Argillite	grained limestone and argillite with bands of very fine grained massive			
			sulphides with visible arsenopyrite. High specific gravity may indicate			
			microscopic galena and/or tetrahedrite and rich brown stains on joints			
			indicate 1-3% sphalerite. Shearing is apparent throughout and where			
			intense these shears are graphitic and muddy. Limestone content increase	S		
			with depth as argillaceous bands decrease in thickness and frequency.			

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Depth		Rock Type	Description		Core	Loss
From	То	71	•	From	То	Lost
(m)	<u>(m)</u>			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
			<ul> <li>116.0 - 119.9 70% black argillaceous material with overall 15-20% visible sulphides</li> <li>119.9 - 121.3 Cherty limestone with up to 3% sphalerite and thin seams of argillaceous limestone containing 30-40% arsenopyrite</li> <li>121.3 - 123.4 Cherty limestone with 3-5% sphalerite</li> <li>123.4 - 125.2 Limey argillite with 15-20% arsenopyrite</li> <li>125.2 - 125.7 Cherty limestone with a trace of sulphides</li> <li>125.7 - 126.1 Limey argillite with 10-15% arsenopyrite</li> </ul>			
126.1		Cherty Limestone	Grey to black moderately hard to very hard, blocky coarse grained limestone with chert nodules, blocks and bands. From 134.4 m to 135.1 m banding is more regular and well defined at 25°. This zone contains 15-20% arsenopyrite whereas elshwhere in this unit there is only a trace of sulphides. Jointing predominantly at 70° with minor sets at 20° and 35°. 126.1 - 129.2 Cherty limestone with a trace of pyrite 129.2 - 129.6 Limey, sheared, graphitic argillite with upper contact at 70° and lower contact at 45° 129.6 - 132.9 Cherty limestone 132.9 - 133.0 Sheared graphitic limey argillite with 10-15% arsenopyrite 133.0 - 134.4 Cherty limestone 134.4 - 135.1 Argillaceous limestone with 10-15% arsenopyrite			
135.1	155.0	Limestone	Medium grey, moderately hard, sound, medium grained, massive limestone with bands of brownish grey to buff sphaleritic (?) limestone. Brown to buff bands increase with depth from 3-5% of core at top of unit to 30-40% at bottom. Joints commonly at 20°, 50° and 70° are usually stained with creamy to bright orange oxides. Contact below not precise due to large core loss and gradational nature.			

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Denth		Rock Type	Description		Core	Loss
From (m)	To (m)			From (m)	To (m)	Lost (m)
~ ~			145.4 - 0.5 cm light creamy orange oxide			
			146.3 - 0.3 m brown sphaleritic limestone			
			148.4 - 151.8 Light to dark grey, moderately hard limestone			
			152.1 - 9 cm Brown sphaleritic limestone			
			152.2 - 155.0 Decreasing amount of sphaleritic limestone with depth.			
155.0	164.3	Feldspar	Grey green, moderately hard, sound, fine grained feldspar porphyry with			
		Porphyry	medium grained feldspar phenocrysts and a trace of galena. Jointing			
		Dike	predominantly at 70°, 45° and 30°.			
			159.6 Slip with 3 mm of graphite and calcite with a trace of pyrite			
164.3	185 <b>.9</b>	Limestone	Grey, moderately hard, blocky to sound, medium to coarse grained,			
			massive limestone with buff blebs and bands of sphaleritic limestone			
			and an interval with 5-10% sulphides. Jointing commonly at 70°			
			and 20° with a less well developed set at 35°.			
			164.3 - 171.4 Weakly sphaleritic buff blebs and bands constitute			
			30-40% of core			
			171.4 - 172.9 Dark grey heavy limestone with 5-10% sulphides including			
			galena			
			172.9 - 173.2 60% buff sphaleritic limestone			
			173.2 - 182.5 Mottled grey, coarse grained limestone			
			183.3 - 185.9 As in 173.2 to 182.5			
185 <b>.9</b>			END OF HOLE			

### DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coor Elev.	d. 10008 10044 1460	3 mN 4 mE m	Length 131.1 m Azimuth 244°	Project Lustdust Property Location: Trench		He Logg	ole No. DDH91-6 Date Sept. 28/91 ed by: J. Rotzien
Core size NQ Dip -7.		Dip -75°	Purpose: Test downdip continuity of grade		·		
Dep	pth	Rock T	уре	Description	Core Loss		
From To (m) (m)			- ····································		From (m)	To (m)	Lost (m)
0	1.5	Fill					
1.5	3.0	Oxidized	d Casing	· · · · · · · · · · · · · · · · · · ·			
3.0	57.2	Oxidized	I Light orang	e to dark reddish brown, rubbly to sound	3.0	4.9	0.6
		Zone	very soft to	soft clay to loose sandy and gravelly	4.9	6.1	0
	•		oxides with	variations as listed below:	6.1	6.7	0
			3.0 - 11.3 E	Dark reddish brown, gravelly oxides	6.7	7.9	0
			11.3 - 18.3	Light orage brown to bright yellowish brown	7.9	9.1	0.5
				clayey oxides	9.1	10.4	1.0
			18.3 - 26.5	Dark reddish brown, sandy oxides	10.4	10.7	0.2
			26.5 - 31.7	Light yellowish brown clayey oxides	10.7	11. <b>0</b>	0.3
			31.7 - 33.5	Dark reddish brown, sandy oxides	11.0	11.3	0.2
			33.5 - 49.4	Light yellowish brown to orange brown	11.3	12.2	0.9
			clay	ey oxides with minor intervals of dark	12.2	12.5	0.7
			rede	lish brown to black sandy oxides	12.5	13.1	0.6
			49.4 - 52.4	Dark reddish brown silty to sandy oxides	13.1	13.7	0.6
			52.4 - 57.2	Dark reddish brown to black moderately hard	13.7	14.3	0.6
			coa	rse grained, blocky, partially oxidized material	14.3	14.9	0.5

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Hole	No.	<b>DDH91-6</b>

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Depth		Rock Type	Description		Core	Loss
From	То	51	•	From	То	Lost
(m)	(m)			(m)	(m)	(m)
			Note: Smooth fast penetration throughout indicates complete	14.9	16.2	1.1
			lack of limestone or chlorite schist	16.2	16.8	0
57.2	61.3	Massive	Blueish grey, very soft, loose clayey, very fine to	16.8	17.4	0
		Sulphides	coarse grained, virtually non-magnetic massive sulphides	17.4	18.0	0
		•	consisting primarily of arsenopyrite with significantly	18.0	18.9	0.3
			lesser amounts of galena, pyrite, sphalerite. Larger	18 <b>.9</b>	19.8	0.5
			intact pieces are virtually solid arsenopyrite. Small	19.8	21.3	1.5
			intervals of oxidized material exist at 57.9 and 60.0 m.	21.3	22.9	1.4
61.3	65.4	Oxidized	Dark reddish brown to yellowish brown, very soft to	22.9	24.4	1.4
		Zone	moderately soft clayey oxides. Colour changes gradually	24.4	25.9	1.4
			from dark reddish brown at 63.1 to yellowish brown at 65.4 m.	25.9	26.5	0.5
			62.5 - 63.1 Fragments of massive sulphide and 6 cm limestone	26.5	27.4	0.6
•			(Cave from above)	27.4	29.0	1.6
65.4	97.4	Limestone	Grey to blue-grey, moderately hard, blocky to sound, fine to	29.0	30.5	1.5
			coarse grained, massive limestone with buff, weakly sphaleritic	30.5	32.0	1.5
			intervals. Jointing commonly at 45°, 60° and 75°.	32.0	33.5	1.4
			65.4 - 72.2 Loose crystalline arsenopyrite coating core. This	33.5	35.1	0.1
			material likely washed out or caved from higher in hole.	35.1	36.6	0.9
			72.2 - 72.5 Limestone	36.6	38.1	0.8
			72.5 - 75.5 30-40% buff blebs and bands	38.1	39.6	1.1
			75.5 - 78.2 10-15% buff blebs and bands	39.6	41.1	0.8
			78.2 - 81.0 Coarse grained limestone	41.1	42.6	1.5
			81.0 - 82.5 As above with minor buff intervals	42.6	44.2	1.2
			82.5 - 85.3 10% buffy grey, fine grained limestone	44.2	44.8	0.2
			85.3 - 90.8 Blue-grey, fine to very fine grained limestone with	44.8	46.0	0.6
			a trace to 1% very fine grained sulphides and 20-25%	46.0	47.2	1.1

Hole No. DDH91-6

Depth		Rock Type	Description		Core I	Loss
From	То	51	•	From	То	Lost
(m)	(m)			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>
			buff intervals	47.2	48.8	0.3
			90.8 - 97.4 Medium to coarse grained limestone with a trace to 1%	48.8	50.3	0.5
			buff blebs and bands	50.3	51.8	0.6
97.4	112.3	Feldspar	Light grey to light to dark greenish gray, very soft to hard	51.8	53.3	0.1
		Porphyry	generally blocky to sound, very fine to medium grained feldspar	53.3	54.9	0
		Dike	porphyry with a trace of galena and pyrite as dissemination	54.9	56.4	1.0
			and joint coatings. Jointing predominantly at 70°, 10° and 20°.	56.4	<b>57.9</b>	1.2
			Contacts with limestone, above at 10° and below at 45°, are	57 <b>.9</b>	59.4	1.2
			both sharp and partially welded.	59.4	60.0	0.4
			97.6 - 98.3 Light grey kaolite (?Shear Zone?)			
112.3	131.1	Limestone	Grey, moderately hard, sound, massive, coarse grained siliceous	60.0	60.6	0
			limestone with calcite healed joints and minor weakly sphaleritic	60.6	61.3	0.3
			intervals. Jointing commonly at 55° and 40°.	61.3	61.9	0.6
			118.9 - 119.3 20% dark brown sphaleritic bands	61.9	62.5	0.2
			122.8 - 123.1 Trace of buff bands	62.5	63.1	0.4
131.1			END OF HOLE	63.1	64.0	0.7
				64.0	64.6	0.2
				64.6	66.1	0.6
				66.1	67.1	1.0
				67.1	68.0	0.1
				68.0	69.5	0.1
				69.5	70.7	0.7
				70.7	71.6	0.3
				71.6	71.9	0
				71.9	96.0	0
				96.0	97.5	0.1
				97.5	99.1	0.1
				99.1	131.1	0

### DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coor Elev.	Coord. 10,032 mN 10,017 mE Ler Elev. 1463 mE Azi		Lengt Azimi	h 76.5 m 1th 068°	m Project Lustdust Property Location: 50 m North of Trench		] I	Hole No. DDH91-7 Date Sept. 27/91 logged by: J. Rotzien
Core	size NC	2	Dip -4	45°	Purpose: Test strike extension to north			
Dep	oth	Rock Type Description		Core Loss				
From To (m) (m)						From (m)	To _(m)	Lost (m)
0	0.9			Datum to gr	round			
0.9	1.8	Limest	one	Casing				•
1.8	7.4	Limest	one	Light to dar	k grey, moderately hard, rubbly to sound,	1.8	3.0	0
				massive, fine	to coarse grained limestone with buff to	3.0	4.6	0.1
				brown sphal	eritic bands and blebs and 3-5% arsenopyrite	4.0	0.1	0
				to 4.6 m. Jo	binting is commonly oriented at 10°, 50° and 70°.	0.1	/.0	0.1
				2.1 - 3.2 Dat	rk brown blebs	/.0	9.1	0.1
				3.9 - 7.4 Da	Filed with mate also at 7.0 m	9.1	10.7	0
71	<b>77 7</b>	T imost	ona	Joint Medium to r	dark grey moderately hard, sound with rubbly	10.7	17.5	0
/.4	22.1	Lincsi	one	intervals ms	assive fine to coarse grained limestone with	11.0	12.5	0.1
				sparse buff t	to brown blebs and bands. Jointing predominantly	13.4	15.4	0.2
				oriented at '	70° with less intense sets at 0° and 30°. 30°	15.4	16.8	0.2
				ioints comm	only have rusty clay coatings.	16.8	18.3	0
				17.8 - 18.0 T	Dark brown sphaleritic veinlets	18.3	19.5	0.4
				19.6 - 3 cm	vellowish brown clay on 70° joint	19.5	20.7	0.3
				19.7 - 1.5 cm	a vellowish brown clay on 40° joint	20.7	22.2	0.6
				19.9 - Trace	yellowish brown clay on 30° joint	22.2	23.5	0.8

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Hole No. DDH91-7

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Depth		Rock Type	Description		Core Loss		
From	То		•	From	То	Lost	
(m)	(m)			(m)	(m)	(m)	
-			20.6 - 0.5 cm yellowish brown clay on 40° joint	23.5	24.4	0.6	
			21.0 - 0.5 cm yellowish brown clay on 70° joint	24.4	25.9	1.3	
			21.1 - 3 cm yellowish brown clay on 70° joint	25.9	27.1	0.8	
			22.1 - 0.5 cm yellowish brown clay on 10° joint	27.1	28.3	0.3	
			22.4 - 22.7 Rusty brown clay on abundant joints	28.3	29.6	0.9	
22.7	48.8	Oxidized	Light yellow to dark brown, very soft to moderately	29.6	30.5	0.5	
		Zone	soft, rubbly, clayey to gravelly oxidized material	30.5	31.1	0.4	
			with some zones of limestone as detailed below.	31.1	32.3	1.2	
			Very high core loss due to softness and high degree	32.3	33.5	0.9	
			of fracturing in harder intervals. All core loss	33.5	34.7	1.1	
			attributed to oxides.	34.7	35.4	0.5	
			22.7 - 23.8 Oxides: No recovery	35.4	36.5	0.6	
			23.8 - 24.4 Limestone	36.5	38.1	1.1	
			24.4 - 25.7 Brown oxides: No recovery	38.1	39.6	1.5	
			25.7 - 25.9 Limestone	39.6	41.1	1.5	
			25.9 - 27.0 0.2' light brown oxides recovered	41.1	41.8	0.2	
			27.0 - 27.1 Limestone	41.8	42.7	0.4	
			27.1 - 27.6 Light, yellow to reddish brown clay	42.7	43.3	0.5	
			27.6 - 27.9 Sphaleritic limestone	43.3	43.9	0.5	
			27.9 - 31.1 Orange brown silty oxides	43.9	44.5	0.5	
•			31.1 - 32.3 Silt? No recovery	44.5	45.7	0.8	
			32.3 - 48.8 Dark brown to black sandy to gravelly oxides	45.7	46.3	0.5	
			with orange brown clay from 43.3 m to 43.9 m	46.3	46.9	0	
48.8	54.6	Oxidized	Rusty orange to reddish brown to greenish grey, very soft	46.9	47.5	0.3	
		Chlorite	to moderately soft, foliated, highly oxidized	47.56	48.2	0.2	
		Schist	chlorite schist with small (1-2 cm) intervals of rusty	48.2	48.8	0.6	
		•	orange clay and dark brown sphalerite.	48.8	49.4	0.4	

Hole No. DDH91-7

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Depth		Rock Type	Description		Core Loss		
From	То	¥1	•	From	То	Lost	
<u>(m)</u>	<u>(m)</u>	<u></u>		<u>(m)</u>	<u>(m)</u>	<u>(m)</u>	
54.6	59.4	Oxidized	Yellowish brown to black, very soft to moderately	49.4	50.0	0.6	
		Zone	hard, rubbly, clayey to sandy oxidized material with	50.0	50.6	0.5	
			more sound dark brown partially oxidized sulphides	50.6	51.8	0.2	
			from 54.9 m to 55.8 m.	51.8	52.4	0.3	
59.4	64.0	Feldspar	Olive green to yellowish green to pale cream, very	52.4	53.0	0.5	
		Porphyry	fine to medium grained partially oxidized felsite/	53.0	53.6	0.3	
		Dike	feldspar prophyry dike with light yellow very soft clay	53.6	54.9	0.7	
			from 60.0 m - 60.9 m.	54.9	55.5	0.3	
64.0	76.5	Limestone	Grey, moderately hard, blocky to rubbly, vuggy, massive	55.5	56.7	0.8	
			limestone breccia rehealed with limestone and containing	56.7	<b>57.9</b>	0.4	
			5-10% buff to brown sphaleritic blebs throughout. Jointing	57 <b>.9</b>	58.5	0.3	
			is predominantly oriented at 70° and 55°.	58.5	59.4	0.8	
			•	59.4	60.0	0	
76.5			END OF HOLE	60.0	61.6	0	
				61.6	62.5	0.3	
				62.5	64.0	0.9	
				64.0	65.5	0.2	
				65.5	66.8	0.2	
				66.8	67.0	0.2	
				67.0	68.6	0.2	
				68.6	76.5	0	

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## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	. 10032 10017 1463	emN mE Lei m Az	ngth 85.3 m imuth 068°	Project Lustdust Property Location: 50 metres northwest Trench		Ho L	Date Oct. 1/91 Date Oct. 1/91 Logged by: J. Rotzien	
Core s	ize NC	) Dij	o -85°	Purpose: Test downdip extension of oxides in DDH 91-7.				
Dept	h	Rock Type	;	Description		Core Loss		
From (m) (	То ( <u>m)</u>			• • • • • • • • • • • • • • • • • • •		To _(m)	Lost (m)	
0	0.6		Datum to g	ground				
0.6	1.5	Limestone	Casing			• •	•	
1.5	15.7	Limestone	Mottled gre	ey, moderately hard, rubbly to blocky, vuggy,	1.5	3.0	0	
			medium to	coarse grained reneated limestone breccia	3.0	4.0	0	
			With 5-10%	dark brown to reduish brown bands and blebs.	4.0 ∠ 1	0.1 6 4	0.4	
157	20 4	Timostono	Joining pro	moderately hard, sound with multily intervals	0.1 6 /	0.4	0	
13.7	30.4	Linestone	Light grey,	moderately hard, sound with rubbly intervals,	0.4	2.5	0	
			massive, co	dark brown blebs Bolow 25.6 m core is more	27	0.2	03	
			intensely fr	actured with numerous minor joint costings of	0.2	10.0	0.5	
			rusty clay h	elow 27.4 m Joint frequency is high with no	10.0	14.3	0.4	
			annarent ni	referred orientation	14.3	15.2	02	
38.4	45.6	Oxidized	Yellowish b	prown to dark reddish brown with grey brown intervals	15.2	18.3	0	
50.1	10.0	Zone	very soft cla	avey oxides with limestone intervals.	18.3	18.9	0.1	
		20110	38.4 - 39.6	Grey brown to grey clay with limestone fragments	18.9	21.3	0	
			39.6 - 41.5	Reddish brown clayev oxides	21.3	22.6	0.2	
			41.5 - 42.7	Dark brown to black to vellow matrix with reddish	22.6	28.0	0	
			brov	wn fragments	28.0	28.7	0.4	

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Hole No. DDH91-8

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Depth		Rock Type	Description		Core ]	Loss
From	То	51	Ł	From	То	Lost
<u>(m)</u>	(m)			<u>(m)</u>	<u>(m)</u>	(m)
			42.7 - 44.0 Grey limestone with rusty clay oxides along	28.7	29.3	0.4
			joints at 10° and 60°	29.3	30.5	0
			44.0 - 45.6 As in 41.5 - 42.7	30.5	31.7	0.2
45.6	55.0	Limestone	Grey, moderately hard, blocky, massive, medium to coarse	31.7	32.9	0.3
			grained limestone with a trace of sphalerite and numerous	32. <b>9</b>	33.5	0
			intervals of oxidized clay. Jointing is predominantly	33.5	34.4	0.1
			oriented at 60°-70°, 45° and 10°	34.4	35.7	0.3
			45.6 - 46.9 Grey limestone with rusty sand oxides along	35.7	36.6	0.7
			one 10° joint	36.6	37.5	0.7
			46.9 - 47.2 Brown to yellow brown silty oxides	37.5	38.4	0.7
			47.2 - 48.8 Limestone with orange brown sandy oxides	38.4	39.6	0.4
			on a 60° joint	39.6	40.2	0.1
			48.8 - 49.4 Grey, yellowish brown and reddish brown	40.2	41.4	0.1
			clayey oxides	41.4	42.6	0
			49.4 - 50.2 Grey limestone	42.6	43.6	0.3
			50.2 - 50.3 Grey brown to black clayey oxides	43.6	44.2	0
			50.3 - 55.0 Grey limestone with reddish brown oxides on	44.2	44.8	0.2
			numerous joints	44.8	45.7	0.1
55.0	64.6	Oxidized	Yellowish brown grading through orange brown to dark	45.7	46.9	0.1
		Zone	reddish brown (twice), very soft to moderately hard,	46.9	47.8	0
			clayey oxides with intervals of dark reddish brown to	47.8	48.7	0.3
			black, partially oxidized material	48.7	49.1	0.2
			55.0 - 56.1 Yellowish brown clayey oxides	49.1	50.3	0.4
			56.1 - 56.4 Banded pale yellow to greenish grey to	50.3	50. <b>9</b>	0.1
			orange brown oxides in a shear(?) zone. Banding	50.9	51.8	0
			oriented at 45°	51.8	52.1	0
Hole No. DDH91-8

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Depth		Rock Type		Core Loss		
From	То	21	ĩ	From	То	Lost
(m)	(m)			(m)	(m)	(m)
				•••		
			56.4 - 57.9 Yellowish brown to reddish brown, soft, clayey	52.1	52.7	0.1
			oxides with 12 cm moderately hard, vuggy, dark reddish	52.7	53.3	0
			brown partially oxidized sulphides	53.3	53.6	0
			57.9 - 59.1 NO CORE RECOVERY - Loose Sandy Material	53.6	54.2	0.4
			59.1 - 61.1 Dark reddish brown to black, moderately hard	54.2	54.9	0.2
			sulphides (arsenopyrite?) with minor oxidized	54.9	56.1	0.4
			intervals	56.1	57.3	0.4
			61.1 - 63.1 Yellowish brown grading to reddish brown, soft	57.3	57.9	0.4
			clayey oxides	57 <b>.9</b>	58.5	0.6
			63.1 - 64.6 Yellowish brown to grey brown clayey oxides	58.5	59.1	0.6
64.6	85.3	Limestone	Medium to light grey, moderately hard, rubbly to sound,	59.1	59.7	0.3
			massive, fine to coarse grained rehealed limestone	59.7	60.4	0.2
			breccia. From 64.6 m to 75.3 m the core is virtually	60.4	61.0	0.3
			all rubbly due largely to a number of joints sub-	61.0	62.2	0.5
			parallel to the core axis with other joints at 30°,	62.2	63.1	0.3
			45°, 60° and 70°. All joints are rust stained and	63.1	64.0	0.8
			contain traces of rusty silt. From 75.3 m to 85.3 m	64.0	64. <b>6</b>	0.4
			the core is generally sound with much less intense	64.6	65.5	0
			jointing and only minor rust staining. At 85.3 m a 10°	65.5	66.4	0.3
			joint contains 0.3 cm of rusty silt.	66.4	67.7	0.3
				67.7	68.6	0.1
				68.6	69.8	0.6
				69.8	78.0	0
				78.0	78 <b>.6</b>	0.1
				78.6	85.3	0
85.3			END OF HOLE			

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## ALPHA GOLD CORP

## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coor Elev.	Coord. 10034mN 10025mE L Elev. 1462 m A		Lengt Azimı	Length 96.9 mProject Lustdust PropertyAzimuth 030°Location: ≈ 40 m due N of DDH 91-6			Ho I	Date Oct. 3/91 Date Oct. 3/91 Degged by: J. Rotzien
Core size NC		NQ Dip		Purpose: Test intersection of gulley fault and ore zone.		and ore zone.		
Dep	oth	Rock	Туре		Description		Core	Loss
From To (m) (m)							To _(m)	Lost (m)
0	0.8			Datum to	round			
0.8 2.4	2.4 2.6	Fill Fill		Casing				
2.6	37.5	Limes	tone	Light to m	dium grey, moderately hard, blocky to	2.6	21.3	0
			•	sound with	rubbly intervals, faintly bedded, fine	. 21.3	22.6	0.5
				to coarse g	ained limestone with a trace to 1%	22.6	24.1	0
				of bull to g	ey brown, sphaleritic beds increasing in	24.1	24.4	0
				frequency	nd thickness from 16.4 m to 27.6 m. From	24.4	25.3	0.5
				27.6 m to 3	2.8 m the limestone is all buff coloured.	25.3	26.2	0.7
				Bedding or	entation increases from 45° at top of unit	26.2	26.8	0.2
				to 60° at b	ttom. Contact with unit below is broken	26.8	27.4	0
				and gradat	onal. Jointing predominantly oriented at	27.4	29.0	0.5
				70°, 45° an	15°.	29.0	30.5	0
				21.9 - 22.4	Rusty brown clay oxide	30.5	32.0	0
				24.4 - 26.2	.2 m core loss likely represented by 12 cm	32.0	33.2	0.3
				of	ght rusty to dark brown clay for total oxide	33.2	33.8	0
				len	th of 1.3 m	33.8	35.3	0.1
				34.9 - 35.4	Dark butt to orange brown silty oxides	35.3	36.5	0.4

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Hole No. DDH91-9

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Depth		Rock Type	Description		Core	Loss
From	То	71	•	From	То	Lost
<u>(m)</u>	(m)			(m)	<u>(m)</u>	<u>(m)</u>
				<b>D</b> ( <b>F</b>	or 5	••
37.5	48.9	Interlayered	Greenish grey, soft, blocky, fine grained chlorite	36.5	37.5	0.2
		Chlorite	schist interlayered with light grey to black, moderately	37.5	38.4	0.1
		Schist	soft, blocky, very fine grained limey argillite with blebs	38.4	39.6	0
		and Limey	and bands of massive sulphides (arsenopyrite). Banding	39.6	40.5	0
		Argillite	and/or foliation are oriented at 40° to 65°. Jointing is	40.5	41.8	0
			predominantly along the foliation and/or bedding with	41.8	43.3	0
			two other dominant sets at 10° and 45°	43.3	44.8	0.4
			37.5 - 37.8 Limestone and chlorite schist with sphalerite	44.8	45.7	0
			and a trace of sulphides	45.7	47.2	0
			37.8 - 39.3 Chlorite schist with fragments of limestone	47.2	48.8	0.6
			and 10 cm green chloritic clay gouge at 38.4 m	48.8	50.3	0
			39.3 - 39.9 Limey argillite breccia with 10-15% chlorite	50.3	51.2	0
			schist	51.2	52.7	0.2
			39.9 - 41.3 As in 37.8 - 39.3 with bands of limey	- 52.7	54.2	0
			argilite and 3 cm chloritic clay at 40.5 m	54.2	55.8	0.2
			41.3 - 43.9 Limey argillite breccia with chloritic	55.8	56.4	0
			intervals. 0-5% sphalerite and externely fine	56.4	57.9	0.1
			grained sulphides	57.9	59.1	0.5
			439 - 489 Thinly interlayered chlorite schist and	59.1	68.9	0
		•	limev argillite with up to 5% sphalerite and a trace	68.9	70.1	0.1
			of arsenonwrite	70.1	71.6	0
18 0	55.8	limev	Black to mottled grey moderately soft blocky to rubbly	70.1	73.2	Õ
70.7	55.0	Argillita	bedded fine grained to very fine grained limey argillite	72.0	74 1	02
		Argume	with intervals of chloritic schirt and of rehealed limer	73.2	06.0	0.2
			with intervals of childred script and of reneated hilley	/4.1	70.7	v
			arguine breccha. Sulphide content ranging from a high of			
			30-40% to a low of 10% consists primarily of arsenopyrite.			

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Hole No. DDH91-9

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Depth From (m)	To _(m)	Rock Type	Description			Loss Lost (m)	
			Sulphides are extremely fine and may constitute a large portion of the argillite. Some blebs and bands are so fine that they can be identified only by scratch. 48.9 - 0.9 cm rusty brown to greenish brown chloritic clay 52.7 - 3 cm greenish grey clay 54.5 - 55.8 Rusty, very soft, friable chlorite schist				
55.8	60.0	Massive Sulphides	Black, moderately hard, very fine grained massive sulphides consisting primarily of arsenopyrite				
60.0	62.2	Chlorite Schist and Limey Argillite	Grey green to dark grey, soft to moderately hard finely interlayered chlorite schist and limey argillite with 6 cm blue grey to green grey clay at 61.0 m				
62.2	71.0	Chloritized Limey Argillite Breccia and Felsite Dike	Greenish grey to grey, moderately hard to moderately soft, sound, rehealed chlorite breccia incorporating fine to very coarse fragments of argillite and limestone with sulphides ranging from 10-15% to 35-40%. Foliation orientation decreass from 70° at top of unit to 35° at bottom. Jointing is predominantly parallel to foliation and at 0° 62.2 - 67.5 Greenish grey, chloritized feldspar porphyry with limey and argillitic layers and 10-15% sulphides 67.5 - 69.0 As above with up to 30-40% sulphides 69.0 - 70.4 Feldspar porphyry 70.4 - 71.0 Argillic/carbonaceous (?) limestone with minor bands of feldspar porphyry				
71.0	72.2	Fault	Light grey to grey green, very soft, blocky, very fine grained (kaolinitized) matrix with grey green angular fragments of feldspar porphyry and up to 5-10% sulphides				

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Hole No. DDH91-9

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Depth From (m)	To (m)	Rock Type	Description	From (m)	Core I To (m)	Loss Lost (m)	
72.2	77.1	Intermixed Quartz Feldspar Porphyry and Argillaceous Limestone	<ul> <li>Grey green to grey to rusty orange, moderately hard, blocky coarse grained quartz feldspar porphyry and light grey to black, moderately soft to moderately hard, blocky argillaceous/ carbonaceous limestone. Joints are predominantly oriented at 20° and at 40° to 50° parallel to the foliation.</li> <li>72.2 - 73.2 Argillaceous limestone with quartz feldspar porphyry and 15-20% sulphides</li> <li>73.2 - 76.5 Finely intermixed quartz feldspar porphyry and argillaceous limestone with up to 40% sulphides in the limestone</li> <li>76.5 - 77.1 Quartz feldspar porphyry with 3-5% sulphides</li> </ul>				
77.1 96.9	96.9	Limestone	Blue grey, moderately hard, sound to blocky, massive, coarse grained limestone with minor buff bands and blebs that may be weakly sphaleritic. Jointing is predominantly oriented at 20°-30° and 45°-50°. Faint banding from 253' - 259' indicates bedding (?) at 50° END OF HOLE				

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# ALPHA GOLD CORP

## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord. 9,998 fi 10000E Elev. 1463 m Core size NQ		mN )E Len m Azin	gth 55.9 m nuth 244°	Project Lustdust Property Location: 10 metres south of Trench		Hol I	le No. DI Date Se .ogged by: J	0H91-1( ept. 4/9) [. Rotzier
		) Dip	Dip -70° Purpose: Test for location and dip of footwall.					
Dep	th	Rock Type		Description		Core	Loss	
From (m)	To (m)				From (m)	To (m)	Lost (m)	
0	0.6		Datum to	ground.				
0.6 3.6	3.6 22.2	Limestone	Casing. Grev. mod	erately hard, blocky to sound, yuggy, coarse grained	3.6	16.8	0	
			rehealed li	mestone breccia with calcite veinlets up to 0.6 cm	16.8	18.3	0.3	
			thick and	custy joints at 15°, 45° and 70°.	18.3	19.8	0.2	
·					19.8	21.3	0.7	
			11.1 - Join	t at 0° with 0.6 cm brown sandy silt.	21.3	22.9	0.9	
			15.7 - Join	t at 60° with 2.5 cm brown sandy silt.	22.9	23.8	0.5	
			18.2 - Join	t at 60° with 2.5 cm brown sandy silt.	23.8	24.1	0	
22.2	26.1	Oxidized	Rusty orar	nge to dark brown, soft to very soft, clayey oxides with	24.1	25.0	0.5	
		Zone	banding at	20° to 30°.	25.0	25.9	0.2	
					25.9	26.8	0.4	
					26.8	27.4	0.1	
26.1	34.4	Limestone	Grey, mod	erately hard, rubbly to sound, vuggy, coarse grained,	27.4	29.0	1.4	
			rehealed li	mestone breccia with traces of sphalerite and rusty	29.0	29.6	0.5	
			joints.		29.6	29.9	0	
			29.1 - 30.3	Large core loss in light rusty brown clayey oxides.	<b>29.9</b>	30.5	0.5	
			30.5 - 30.6	Light rusty brown clayey oxides.	30.5	31.4	0.1	

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Hole No. DDH91-10

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Depth		Rock Type	Rock Type Description				
From	То		1	From	То	Lost	
(m)	(m)			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>	
34.4	39.5	Oxidized	Black to reddish brown to light rusty brown, soft to very soft,	31.4	32.0	0	
		Zone	silty to clayey oxides with limestone intervals as listed below.	32.0	33.2	0.8	
				33.2	34.1	0.8	
			34.4 - 35.0 Large core loss in light yellowish brown clayey oxides.	34.1	35.1	0.6	
			35.0 - 36.3 Dark reddish brown to black clayey oxides.	35.1	36.3	0.2	
			36.3 - 36.7 Light yellowish brown to rusty brown silty oxides.	36.3	36.9	0	
			36.7 - 37.8 Limestone.	36.9	37.8	0.5	
			37.8 - 39.0 Light yellowish brown clayey oxides.	37.8	38.4	0	
			39.0 - 39.3 Limestone	38.4	38.7	0.2	
			39.3 - 39.5 Light yellowish brown silty oxides.	38.7	39.3	0.3	
				39.3	39.6	0	
				39.6	39.9	0.3	
				39.9	40.2	0.3	
39.5	43.7	Limestone	Grey, moderately hard, rubbly to blocky, vuggy, coarse grained,	40.2	40.8	0	
			rehealed limestone breccia with buff blebs and bands and rusty	40.8	41.4	0	
			joints. Large core losses likely due to presence of oxides.	41.4	42.1	0	
				42.1	42.7	0.4	
				42.7	43.3	0.4	
			43.1 - 43.3 Rusty brown clayey oxides.	43.3	43.9	0	
				43.9	44.2	0.2	
43.7	47.2	Oxidized	Rusty brown to reddish brown, very soft, clayey oxides with	44.2	44.8	0.3	
		Zone	intervals of limestone.	44.8	45.1	0	
				45.1	45.7	0.6	
			45.1 - 46.0 No Recovery - likely oxides.	45.7	46.0	0.3	
			46.2 - 46.6 Limestone.	46.0	46.3	0.2	
			46.8 - 47.1 Limestone.	46.3	46.6	0.2	
				46.6	47.2	0.3	

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Depth From To (m) (m)		Rock Type	Description	From (m)_	Core I To (m)	Loss Lost (m)
47.2	55.9	Limestone	Grey, moderately hard, rubbly to sound, coarse grained	47.2	48.8	0.2
			rehealed limestone breccia with rusty joints and minor	48.8	50.3	0
			seams of rusty clay. Jointing predominantly oriented	50.3	51.2	0.1
			at 15°, 60° and 80°. Most of core loss due to broken	51.2	52.7	0
			limestone and rod vibration.	52.7	53.3	0.3
			52.9 - 53.2 Soft rusty clay.	53.3	54.6	0.1
			54.8 - 6 cm Soft rusty clay.	54.6	54.9	0.1
			55.6 - 55.9 Soft rusty clay.	54.9	55.5	0.4
				55.5	55.9	0.2
55.9			END OF HOLE.			
	. *		NOTE: 1) At 55.9 m bit worn out and excessive rod vibration and casing at 27.4 m. Hole stopped. 2) All measurements in metres unless otherwise noted			

3) All angles measured with respect to core axis.

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# ALPHA GOLD CORP

## DRILL RECORD - DOLMAGE CAMPBELL LTD.

Coord Elev.	Coord. 10036mN         Length 83.8           10017mE         Length 83.8           Elev. 1463 m         Azimuth 330           Core size NQ         Dip -45°		h 83.8 m 1th 330°	Project Lustdust Property Location: 50 m north of Trench	]	Hole No. DDI Date Oc Logged by: J. Rot;				
Core			NQ Dip -45°		45° Purpose: Test gulley fault.					
Dep	oth	Rock	Туре		Description		Core	Loss		
From (m)	To <u>(m)</u>			<b></b>		From (m)	To (m)	Lost (m)		
0	0.8			Datum to g	ground					
0.8	1.2	Limes	tone	Casing		1.0	2.0			
1.2	41.1	Limes	tone	Grey, mod	erately hard, sound to blocky, time to coarse	1.2	3.0	0		
				grained sty	s intervals and zones of huff to brown	5.0	5.2	0		
				sphaleritic	limestone. The brecciation has been rehealed with	61	12.2	0.1		
				calcitic and	argillaceous material. Banding in intervals	12.2	13.4	0.2		
				with sphale	ritic limestone at 30°. Jointing is predominantly	13.4	14.9	0		
				oriented at	25° and 75°	14.9	15.8	0.8		
				5.2 - 6 cm	rusty clay	15.8	16.8	0.7		
				5.8 - 3 cm :	rusty clay	16.8	17.4	0.4		
				8.5 - 8.8 1-3	3% buff to rusty blebs	17.4	18.3	0.5		
				10.7 - 14.9	1-3% buff to rusty blebs	18.3	18 <b>.9</b>	0.3		
				14.9 - 19.5	Dark grey to black to rusty, rubbly argillaceous	18 <b>.9</b>	19.5	0.2		
				lime	estone with foliation at 0° at 18.3 m.	19.5	20.4	0.2		
				Pos	sible fault gouge	20.4	21.9	0.8		
				19.5 - 20.4	Carbonaceous limestone	21.9	23.5	0.1		
				20.4 - 22.1	Limestone with thin bands of chlorite schist	23.5	25.0	U		

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Hole No. DDH91-11

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Depth		Rock Type	Description		Core Loss		
From	То		•	From	То	Lost	
<u>(m)</u>	(m)			<u>(m)</u>	<u>(m)</u>	<u>(m)</u>	
			22.1 - 23.8 Black to grey siliceous limestone with 6 cm light orange	25.0	26.5	0	
			rusty clay	26.5	27.1	0	
			23.8 - 27.2 Limestone	27.1	27.7	0	
			27.2 - 28.0 Vuggy, rubbly to blocky limestone with 0.3 m of	27.7	28.6	0.4	
			buff limestone	28.6	30.2	0	
			28.0 - 30.3 Black, blocky, siliceous limestone with numerous	30.2	31.4	0	
			calcite veinlets	31.4	32.3	0.4	
			30.3 - 38.4 Blocky to rubbly limestone with minor argillaceous	32.3	33.5	1.1	
			and siliceous intervals	33.5	34.1	0.6	
			38.4 - 41.1 Black, blocky siliceous limestone with numerous	34.1	35.1	0.8	
			calcite veinlets	35.1	36.0	0.2	
41.1	45.7	Chlorite	Grevish green, soft, rubbly to blocky, vuggy, foliated	36.0	36.6	0	
		Schist	fine grained rusty chlorite schist with foliation at 30°	36.6	37.1	0.2	
			42.7 2.5 cm light yellowish grey clay - Fault (?)	37.1	38.1	0.4	
45.7	48.3	Oxidized	Light yellowish brown to dark reddish brown, very soft	38.1	39.0	0.2	
		Zone	to soft clayey to silty oxides with fine gravel sized	39.0	40.5	0	
			fragments of limestone	40.5	41.1	0.3	
48.3	66.8	Limestone	Grey, moderately hard, rubbly with blocky intervals,	41.1	42.1	0.8	
			massive, fine to medium grained, vuggy, limestone	42.1	42.7	0.6	
			with minor intervals of 1-3% blebs of sphaleritic	42.7	43.6	0.8	
			limestone. Joints predominantly oriented at 0°-15°	43.6	44.2	0.4	
			and 75° are all rusty	44.2	44.8	0.2	
66.8	83.8	No Core	CORE LEFT AT DRILL SITE -	44.8	45.7	0.7	
			NOT LOGGED OR SAMPLED -	45.7	46.6	0.7	
			DRILLERS SAY LIMESTONE	46.6	47.2	0.1	
				47.2	47.8	0.3	

Hole No. DDH91-11

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Denth		Rock Type	Description		Core I	Loss
From 1	Το			From	То	Lost
(m) (	(m)			(m)	(m)	(m)
<u></u>						······································
				47.8	48.8	0.4
				48.8	<b>49.4</b>	0.1
				49.4	50.6	0.8
				50.6	52.1	0
				52.1	52.7	0.4
				52.7	54.2	0
				54.2	54.9	0.3
				54.9	55.4	0.1
				55.4	56.1	0.2
				56.1	57.9	0
				57 <b>.9</b>	58.5	0.3
				58.5	59.4	0.3
				59.4	61.6	0
				61.6	62.8	0.2
				62.8	64.0	0
				64.0	65.2	0.4
				65.2	66.8	0
		<b>x</b>				

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Appendix III

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# SUMMARY OF DIAMOND DRILL CORE SAMPLES

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#### LUSTDUST PROFERTY

### SUMMARY OF DIAMOND DRILL CORE SAMPLES

	222		=========	*********				22222222		332222222		*********	=
	ISA	MPLE	DRILL	FROM	TO	LENGTH	1		ASSAY RE	SULTS		ICP	1
		NO.	HOLE	(m)	(m)	(m)	DESCRIPTION :	Au	Ag	Zn	Sb	CONPLETED	:
	ł					-		(g/t)	(g/t)	(1)	(%)	(y or n)	1
	==	*******		**********			*************************				2222222	,	1
	ł	133651	DDH91-1	19.8	21.3	1.5	Shear Zone 1	0.14	1.03	N/A	N/A	n	:
	ł	133652	DDH91-1	21.3	22.9	1.5	l Chlorite Schist 🕴	<0.07	1.03	N/A	N/A	n	:
	!	133653	DDH71-1	22.9	24.4	1.5	Chlorite Schist 1	<0.07	1.03	N/A	N/A	n	1
	1	133654	DDH91-1	24.4	25.9	1.5	Chlorite Schist	<0.07	<0.7	N/A	N/A	n	:
	1	133655	DDH91-1	25.9	29.0	3.0	Chlorite Schist 1	<0.07	(0.7	N/A	N/A	n	1
	1	133656	DDH91-1	29.0	30.5	1.5	Chlorite Schist	<0.07	(0.7	N/A	N/A	n	;
	1	133657	DDH91-1	30.5	32.0	1.5	Limestone :	<0.07	<0.7	N/A	N/A	n	1
	1	133658	DDH91-1	32.0	35.2	3.2	Limestone 1	<0.07	<0.7	N/A	N/A	n	:
	;	133659	DDH91-I	35.2	36.4	1.2	Limestone 1	<u> </u>	(0.7	N/A	N/A	n	;
	ì	133660	DDH91-1	36.4	38.2	1.8	Oxide zone(10cm Ls N/S)	<0.07	5.14	N/A	N/A	n	1
	i	133661	DDH41-1	38.2	41.9	3.7	Yellow brown oxide	<0.07	4.46	2.55	N/A	л	1
	i	135662	UDHY1-1	41.9	44.2	2.3	Yell. brn. to prnge oxide!	<0.07	4.80	15.31	N/A	n	1
	:	133563	DDHA1-1	44.2	45./	1.5	Urnge to ornge brn oxide !	<0.07	3.43	8.01	N/A	n	1
	i	133664	DDH91-1	45.7	47.2	1.5	Yellow brown axide 1	<0.07	5.83	14.40	N/A	n	l
	:	133665	DDH91-1	47.2	48.8	1.5	Yellow brown oxide	(0.07	4.46	11.54	N/A	n	<u> </u>
	i	133666	DDH71-1	48.8	50.4	1.6	Yellow brown oxide	<0.07	8.23	21.17	N/A	Л	!
	i	133667	DDH91-1	50.4	51.8	1.4	Ornge to dk. brn oxide	<0.07	5.49	10.08	N/A	n	ł
	;	133668	DDH71-1	51.8	53.3	1.5	iOrnge to dk, brn oxide i	<0.07	19.54	6.14	N/A	n	:
	i	133664	DOH41-1	53.3	54.6	1.2	Yell. oxide w/ black sand:	<0.07	11.31	10.76	N/A	ι, Π	1
	1	133670	DDH91-1	54.6	56.2	1.7	Yell. oxide w/ black sand!	<0.07	8.57	18.92	N/A	D:	I .
	;	1336/1	DDH91-1	56.2	57.9	1.7	As above (5 cm Ls N/S) :	<0.07	6.17	9.46	<u> </u>	n	
	i	1336/2	00871-1	57.9	57.4	1.5	Yell, to ornge oxide w/Ls!	<0.07	5.49	8.26	N/A	n	1
	i	1336/3	DDHAI-I	24.4	61.1	1./ )	Urnge to dk brn oxide	(0.07	16.11	6.38	N/A	n	;
	i t	1330/4	DDM01 1	61.1	61.6 /7 7	0.5	Urnge to dk brn bxide	(0.07	6.17	22.76	N/A	n	1
	4 4	1330/3	DDUD1 7	61.6 51.7	63./ 54.7	2.1 i	vuggy lidestone ;	(0.07	0.69	0.04	N/A	រា	1
	4 1	1330/0	00071-2 60007.0	31./ 54.7	04.3 55 /	2.0	RUSTY DEN OX. (BCM LS N/S);	(0.0/	4.46	4.21	N/A	n	1
	1	1330//	DDU01-2	55 /	57.6	1.4 i	HUSTY DEOWN DX1de	(0.0/	4.46	3.16	<u>N/A</u>	<u>n</u>	!
	, 1	133070	00071-2 NNU01-2	JJ.0 57 5	50 t	1.0	Ornge orden bilde ;	(0.07	7.20	5.66	N/A	Ŋ	:
	1	133077	DDH71-2 DDH71-2	50 1	10 1	1.7	Drige prown oxide ;	(0.07	5.1/ 0.04	5.40	N/B	n	
	1	133680 133681	00001-2	10 I	60.4 (1 L	1.2	voll to oroon bee svidel	11.0	9.94 5.0/	2.33	N/8	ค	1
	!	133661		L1 L	47.0	1.2	Tell. Co ornge orn. oxide; Tornan ta du sad bre quida!	1 70	2.00	1 00	N/A	n	i
	1	177697	DDH91-7	۵۲.۵ ۲۸ ۸	44 0	1.0	We have avide 17cm mulab 11	1.30	11,00	1.80	N/A	A	i :
<u> </u>	÷	133684	DDH91-2	63.0 64 R	04.1 	1.6	bk brown to black owide	2.37	10.07	0.4/	<u>N/A</u>	<u>n</u>	i
		133485	DDH91-7	64.7 66 A	5 9J	1.0	Dk rod brown condy owide !	0.14 7.77	27.40	0.00	N/H M/A	n ·	i r
1	i	133686	DOH91-2	68.3	71.6	3.4	The to prove brown oxide !	2.33 1 Q7	14.07	2.03 T DD	N/A	n	4 1
}	;	133687	DDH91-2	71.6	73.5	1.8	lark brown avide	0.02 7 77	110.78	1 07	_ R/H	····· -	i .
1	í	133688	DDH91-7	73.5	76.5	3.0	Dk to group brown oxide !	77 18	57 94	1.03	л/н N/A	"	4 9
ļ	ì	133689	DDH91-2	76.5	79.6	3.0	Dk brown to black oxide !	1.79	17 49	1.TJ 7 Kg	N/A	11 D	•
<u> </u>	1	133690	DDH91-2	79.6	B0.2	0.6	Limestone !	(0.07	1.03	0.10	N/A	<u> </u>	<u>.</u>
1	I	133695	DDH91-3	39.9	43.0	3.0	Yell. to ornoe brn oxide !	(0.07	7.20	2.45	N/A	" n	•
ļ	1	133696	DDH91-3	43.0	44.3	1.4	Orange brown oxide	(0.07	12.69	3.5B	N/A	,, ກ	
	1	133697	DDH91-3	44.8	46.3	1.5	Ornge brn ox. (Sca Ls N/S)	<0.07	14.06	4.16	N/A	. <del>.</del>	1
	1	133698	DDH91-3	46.3	47.9	1.5	Ornge to red brown oxide 1	<0.07	22.29	5.00	N/A	y y	ł
	;	133699	DDH91-4	7.9	12.6	4.7	Chlorite schist	<0.07	1.03	0.09	N/A	n.	:

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#### LUSIDUST PROPERTY

## SUMMARY OF DIAMOND DRILL CORE SAMPLES

	ISAMPLE	DRILL	FRON	TO	LENGTH			ASSAY RES	ULTS	~		
		HQL <b>E</b>	<u>          (")                          </u>	(_)	<u>(m)</u>	DESCRIPTION	<u> </u>	<u> </u>	<u></u>	<u></u>	COMPLETED	<u> </u>
	1					i i	(g/t)	(g/t)	(1)	(2)	(y or n)	i 1
	133700	NDK91-4	17.6	======== 16.9	4.3	limestone	(0.07	1.03	0.20	N/A	n	• 
	1 133501	00491-4	16.9	24.1	1.2	IChl.schist & limestone	(0.07	6.51	0.03	N/A	n	
	1 133502	00891-4	34.3	34.7	0.5	Rusty silty pride	(0.07	1.37	0.1B	NZA	n	1
	-1-183508-				1.8	lornes to red brown oxide		25.71	3.21	N/A	Y	1
	1 133504	DDH91-4	41.1	42.7	1.5	lYellow brown oxide	0.17	12.00	13.31	N/A	ก	
	133505	DDH91-4	42.7	45.1	2.4	lRed brown oxide	2.50	26.74	3.24	N/A	n	;
	133506	DDH91-4	45.1	46.6	1.5	Yell. to ornge brn oxide !	2.16	17.83	1.99	N/A	. n	1
	133507	DDH91-4	46.6	49.1	2.4	Red brown oxide	8.91	25.71	1.01	0.07	y	1
	133508	DOH91-4	49.1	50.0	0.9	lYeliredbrn ox. w/yeli grn1	6.03	16.46	0.24	0.07	Y	;
	-1-133509			52.1	2.1	Dk red brown oxide	14B7	43.89	0.40	0.07	<u> </u>	1
	133510	DDH91-4	52.1	53.9	1.8	lYell-redbrn ox w/ sulph	7.89	43.B9	0.37	N/A	n	ł
	133511	DDH91-4	53.9	56.4	2.4	lRed brown oxide	3.12	25.03	1.02	0.06	У	;
	1 133512	DDH91-4	56.4	58.7	2.3	IRed-yell brn to blk oxide	1. 0.69	18.17	2.41 .	0.11	. <b>y</b>	1.
	1 133513	DDH91-5	10.7	12.2	1.5	(Buff to brown oxide	0.34	4.46	1.19	N/A	n	ţ
	1 133514	DDH91-5	67.5	69.0	1.5	Rusty oxide	0.24	33.26	3.73	N/A	n	1
	+ 133515	<u>-DDH91-5</u> -		89.8		<u> Yellow to dk. brown oxide</u>	0.45		9.01	_N/A	<u> </u>	1
	133516	DDH91-5	104.2	106.7	2.4	1Lt. brn oxide less 10% Ls	{0.07	4.80	3.88	N/A	n	1
	133517	DDH91-5	106.7	109.0	2.3	1Dk. brn oxide w/ sph. Ls.	1 <0.07	5.49	3,45	0.07	У	1
	1 133518	DDH91-5	109.0	110.6	1.7	Cherty linestone	1<0.07	<b>(0.7</b>	0.06	N/A	. N .	Ι_
	133519	DDH91-5	110.6	112.5	1.9	Cherty limestone	<b>{0.07</b>	<0.7	0.02	N/A	n	1
	133520	DDH91-5	112.5	114.3	1.8	ICherty linestone	1 <0.07	<0.7	0.02	N/A	n	1
		<u>-00H91-5</u>			1.7	-:Cherty lisestone			0.02	N/A_	n	<u>t</u> .,
	133522	DDH91-5	116.0	118.0	2.0	Argillaceous limestone	1 <0.07	(0.7	0.01	<0.01	Y	1
	133523	DDH91-5	119.0	119.9	2.0	Argillaceous limestone	1 <0.07	<0.7	0.02	(0.01	У	1
	133524	DDH91-5	119.9	121.3	- 1.4	ICherty linestone w/ arg.	. (0.07	<0.7	0.03	N/A	n n	!
	1 133525	DDH91-5	121.3	123.4	2.1	Cherty linestone	1 (0.07	(0.7	(0.01	N/A	ĥ	1
	1 133526	DDH91-5	123.4	125.2	1.8	Liney argillite	1 (0.07	0.69	0.01	N/A	n	; ,
					¥+¥	-;Liasy argkcherty_is		U_69	0.02	<u>N/A</u>	<u>n</u>	 
	1 13352B	DDHAT-2	129.2	127.0	0.9	illmey snro. grapn. arg.	1 (0.07	/0.7	0.02	N/H N/A	0 0	•
	1 133327	00071-0	124.4	133.0	0.7	Acgillacour linetopp	1 10,07	(0.7	0.03	N/A	11 V	
	1 100000	00071-J	134.4	133.1	21	Sobalaritir lisastone	1 (0.07	(0.7	(0.01		· - J	7 I
	1 100001	- 1001-5	133+1	137.2	2.1	Subalaritir lianstone	1 (0.07	(0.7	(0.01	N/A	" D	i
	<u> </u>		137.12	141#_		<u>-!Schalaritir limestone</u>	1 (0.07		(0-01_	N/A		i
	1 17757	00H71-5	141 4	147 6	2.1	Subaleritir limestone	1 (0.07	(0.7	0.02	N/A	n	!
	1 100001	D000115	143.6	146.0	2.4	Sobaleritic limestone	(0.07	1.71	0.01	N/A	v	i
	1 133333	00///1 3 00///1-5	146.0	149 4		I Sobaleritic limestone	1 (0.07	(0.7	0.01	N/A	י ת	i
	1 133537	DDH91-5	152.1	154.9	2.6	l ISphaleritir linestone	1 <0.07	(0.7	(0.01	N/A		1
	1 133538	DDH91-5	164.3	166.6	2.3	Sobaleritic limestone	1 (0.07	(0.7	(0.01	N/A	n	Ì
ļ	133579	DDH91-5				Sphaleritic_linestone	<u> </u>	(0.7	0.01	N/A	n	1
	1 133540	) DDH91-5	168.9	171.5	2.	6 ISphaleritic limestone	1 (0.07	(0.7	0.02	N/A	Ŷ	1
1	1 133541	DDH91-5	171.5	173.2	1.6	I ISphaleritic linestone	1 <0.07	<0.7	0.04	N/A	R	1
	1 133542	2 DDH91-5	i 182.5	183.3	0.	9 ISphaleritic liméstone	: <0.07	<0.7	<0.01	N/A	л	ł
l	1,33543	DDH91-6	4.9	8.1	3.3	2 10k, brown oxides	1 7.30	61.71	0.78	0.0	9 n	ł
	13354	4 DDH91-6	6.1	11.3	3.	2 IDk. brown oxides	1 4.94	42.86	1.18	0.1	0 n	1

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## LUSTDUST PROPERTY

## SUMMARY OF DIAMOND DRILL CORE SAMPLES

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ISAMPLE	DRILL	FROM	TO	LENGTH		_	ASSAY RE	SULTS		ICP I
<u>I. NO.</u>	HOLE	( <u>n</u> )	<u>(a)</u>	( <u>n</u> )	DESCRIPTION	Au	Ag	Žn	Sb	COMPLETED
-						(g/t)	(g/t)	(%)	(%)	(y or n)
133545	DDH91-6	14.3	18.4	4.1	Orange brown oxides 1	1.65	17.83	1.71	0.14	y 1
133546	DDH91-6	18.4	26.5	8.1	IDk. brown to black oxides!	0.69	14.06	2.53	0.15	n t
133547	DDH91-6	30.5	33.5	3.0	Yellow to dk. red oxides !	1.51	6.86	2.53	0.44	n ¦
1	DDH91-6	33.5	36.6	3.0	IMixed oxides	0.24	10.29	2.11	0.17	n
1 133549	DDH91-6	36.6	39.6	3.0	INixed oxides 1	0.10	8.91	2.84	0.04	ni
133550	DDH <b>91-</b> 6	39.6	42.7	3.0	Mixed oxides	<0.07	9.60	23.06	0.03	Y S
133551	DDH91-6	42.7	46.0	3.4	Hixed oxides	<0.07	5.49	4.02	0.07	n l
133552	DDH91-6	45.0	49.4	3.4	Mixed oxides	0.17	8.23	5.86	0.29	n
133553	DDH91-6	49.4	52.4	3.0	IDk red brown oxides	0.69	25.71	2.91	0.83	y I
133554	DDH91-6	52.4	54.9	2.4	<u>Massive</u> sphalerite	1.17	18.51	2.01	0.47	у у
133554B	DDH91-6	54.9	57.2	2.3	Massive sphalerite w/ ox.1	2.43	19.89	1.49	0.52	n l
1 133555	DDH91-6	57.2	59.7	2.6	Massive sphalerite w/ ox.	3.74	11.66	0.32	0.14	у
133569	DUH91-6	59.7	61.3	1.5	Inassive sulphides	5.83	6.51	0.15	0.11	n i
133556	DDH91-6	61.3	63.1	1.8	10xides less 8cm ls.	2.50	25.71	1.68	0.10	У
1 133570	DDH91-6	65.1	65.4	2.3	luxides	0.17	6.51	14.86	0.08	n
<u>13355/</u>	<u>UUH91-6_</u>	<u> </u>	<u>6//_</u>	2.3	Linestone w/ diss. Aspy	(0.07	(0.7	0.10	(0.01	n
1 133228	DDH41-6	6/./	67.5	1.8	Limestone W/ diss. Aspy	0.10	2.40	0.15	<0.01	n
1 133554	DBHA1-P	57.5	72.2	2.7	iLinestone W/ diss. Aspy		(0.7	0.02	(0.01	n .
1 133560	DDH71-6	12.2	/4.Z	2.0	isphaleritic limestone	(0.07	(0.7	0.06	<0.01	n
1 133351	DDHA1-P	74.2	/3.6	1.4	Sphaleritic limestone	i (0.07	(0.7	0.03	(0.01	n
i 100062	DDH71-6	/3.6	78.2	2.6	ispnaleritic limestone		(0.7	0.03	<0.01	រា
<u>i 100000</u> 1 1775 <i>1</i> 4	DD171-0		02.5	2.9	ilinestone W/ sparse spn.	i <u>(0.07</u>	(0.7	0.02	(0.01	<u> </u>
i 100004	DD101 2	81.1 01.5	82.3	1.5	illmestone W/ sparse spn. i	i (U.V/	(0.7	0.03	<0.01	n
i 100000 I 177511	0~171עע חפטריי	62.J	83.S	2.8	ilimestone w/ sparse spn.	i (0,07	(0.7	0.02	(0.01	n
1 133300	00171-0 0001_4	03.3	00 0	1.0	linestone w/ sparse spn. a	1 (V.V/ 1 /0.67	, (0.7	0.01	(0.01	n
1 100007	NUT01-0	99 A	07.V 00 D	1.0	Alimestone w/ sparse spin	I (0.07	(0,7	V.VZ	10.01	
1 133300	100007 0	1 0	70.0	1.0	Sobalacitic ligoctopo	1 (V.V) 1 /0 07	(0.7		N/A	
133572	 DDH91-7	3.0	4.6	1.5	Schaleritic limestone	(0.07	(0.7	(0.01	N/A	<u> </u>
133573	DDH91-7	4.6	6.1	1.5	Schaleritic limestone	(0.07	(0.7	(0_01	N/A	יי ח
133574	DDH91-7	6.1	7.4	1.3	Sphaleritic limestone	{0.07	(0.7	0.01	N/A	יי ת
133576	DDH91-7	25.9	27.6	1.6	iYell, or. ox. less .5m 1st	0 14	16.46	1.00	N/A	n
133577	DDH91-7	27.9	31.1	3.2	lOrange oxides	0.14	7.54	7.34	N/A	'n
13357B		32.3	39.6	7.3	IDk. brown to black oxides	1.82	29.83	2.88	N/A	<u>n</u>
133579	DDH9I-7	41.1	45.7	4.6	lDk. red brown oxides	6.24	47.66	1.52	N/A	n
133580	DDH91-7	45.7	48.8	3.0	1Dk. brown to black oxides	2.16	29.49	2.25	N/A	n
133575	DDH91-7	48.0	54.6	5.8	lOxidized chloritic schist	K0.07	2.06	2.34	N/A	n
l 133581	DDH91-7	54.6	59.4	4.9	ILt. yellow to black ox.	1.17	13.71	2.34	N/A	ß
1 133582	DDH91-7	64.8	66.0	1.2	Srey br. to red br. ox.	(0.07	8.91	5.16	N/A	Đ
133583	<u>DDH91-7</u>		68.6	2.6	ISphaleritic yuggy ls.	<u> </u>	1.71	0.41	N/A	<u> </u>
; 133584	DDH9I-7	68.6	70.1	1.5	Sphaleritic vuggy 1s.	: <0.07	<0.7	0.03	N/A	<u>л</u>
l 133585	DDH91-7	70.1	71.6	1.5	Sphaleritic vuggy Is.	(0.07	<0.7	0.03	N/A	n
133586	DDH91-7	71.6	73.2	1.5	lSphaleritic vuggy ls.	(0.07	<0.7	0.03	N/A	n
1 133587	DDH91-7	73.2	74.7	1.5	Sphaleritic vuggy ls.	<b>\$0.07</b>	<0.7	<0.01	N/A	n
133588	DDH91-7	74.7	76.5	1.B	Sphaleritic vuggy ls.	1 (0.07	<0.7	<0.01	N/A	n

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### LUSTDUST PROPERTY

## SUMMARY OF DIAMOND DRILL CORE SAMPLES

ISAMPLE	DRILL	FRON	TO	LENGTH	1 1		ASSAY R	ESULTS	_	ICP I
NO.	HOLE	(m)	( <u>s</u> )	(m)	I DESCRIPTION :	Au	Ag	Zn	Sb	COMPLETED
 1		<u></u>			<u>+</u>	-{g/t}	{g/t}			<u>(y or n)</u>
=====================================	1222222222 NUQ1_D	=============== t	======== Λ Λ	222222222 7 A	"Enhalaritic yuray le !	222222222 70 07	22222223 /A 7	/^ ^1	N/A	
1 133367	מ־ולחעט ח-ופטחת	1.J	4.0	2.1 2.1	Sobalaritic vugyy is.	20.07	(0.7			
133370	171-0 1101-9	4.6	99	2.7 7 A	Schaloritic vuov le	20.07	(0.7	(0.01	N/A	n !
1 133371	NN491-9	0.T Q Q	1t T	2.4	Sobalaritir vuonv le	(0.07	(0.7	(0.01	N/A	
	-88891-8-				ISphaleritic waay is					<u></u>
133594	DDH91-B	13.7	15.7	2.0	Sobaleritic vuogy ls.	(0.07	(0.7	0.03	N/A	n ‡
133595	DDH91-8	27.4	30.5	3.0	Linestone W/ ox. seams	<0.07	(0.7	0.08	N/A	n l
133596	DDH91-8	30.5	33.5	3.0	Linestone w/ ox. seams	<0.07	(0.7	- 0.20	N/A -	n - 1
133597	DDH91-B	33,5	36.6	3.0	Limestone w/ ox. seams	<0.07	<0.7	0.09	N/A	n l
133598	DDH91-8	36.6	38.4	1.8	Limestone w/ ox. seams	<0.07	<0.7	0.26	N/A	n l
 <del>- 1 133599</del>	<del>- 0</del> 0 <del>1191-8-</del>				lGrey brown oxides l				- N/A	<del>n . !</del>
133600	DDH91-8	39.6	41.5	1.8	Well. to red brn. oxides 1	0.21	44.57	2.93	N/A	n l
133601					INDT USED	NOT US	ED	NOT USED		1
133602	DDH91-8	41.5	42.7	1.2	1Dk. brown to black oxides!	(0.07	34.63	5.11	N/A	n l
1 133603	DDH91-8	42.7	44.0	1.4	Limestone w/ clay ox. 1	<0.07	2.06	0.93	N/A	n l
133604	DDH91-8	44.0	45.6	1.5	IDk. brown to black oxides!	<0.07	6.17	16.76	N/A	n
 133605-	-D0H91-8-	46.9-	47.2	0.3	-Brown-to-yellow silty-ox.1	<del>- 40.07</del>			N/A-	<u>n i</u>
133606	DDH91-8	47.2	48.8	1.5	iLimestone i	<0.07	<0.7	0.09	N/A	n i
133607	DDH91-8	48.8	49.4	0.6	Grey-yell.brnredbrn. ox:	(0.07	5.49	21.22	N/A	n l
133608	DDH91-B	49.4	52.1	2.7	Sphaleritic limestone	(0.07	(0.7	0,90-	N/A -	·· n··l
133609	DDH91-8	52.1	55.0	2.9	Limestone	<0.07	(0.7	0.05	N/A	n i
133610	DDH91-8	55.0	56.4	1.4	Yellow brown clay oxides 1	(0.07	2.06	0.88	N/A	n i
 1 133611	-08H91-0-			1.5	-Yellow brown cley exides 4	<u>1.44</u> -				
1 133612	DDH91-8	59.1	61.1	2.0	:Dk. red brn. to black ox.;	U.41	/.54	3,70	N/A	n i
133613	DDHAI-R	61.1	64.6	3.5	ifell. to red orn, oxides i	(0.07	6.1/	2.54	N/A	n i
133614	DDHA1-R	64.8	5/./	3.0	itell-grorn ox less 6cm 15;	0.27	- 0.67	0.75	- N/A	n · - i−-
1 133610	DDHA1-A	10.0	14.2	3.0	isphaleritic limestone i	(0.07	(0.7	0.04	N/A N/A	
 i ISSBID			42.0 		Isphalericic limestone -	<u> </u>			п/н <u></u>	. II i
133617	DDH91-9	22.6	28.7	3.0	ISnhaleritic limestone	(0.07	(0.7	0.04	N/A	n 1
1 133619	DDH91-9	28.7	31.7	3.0	(Sohaleritic limestone {	<0.07	<0.7	<0.01	N/A	n t
133620	DDH91-9	31.7	34.7	3.0	Sphaleritic limestone 1	<0.07	<0.7	0.01	N/A	n 1
133621	DDH91-9	34.7	37.5	2.7	Sphaleritic limestone	(0.07	(0.7	0.03	N/A	n l
1 133622	DDH91-9	37.5	39.3	1.8	Sphaleritic chlor. schist:	<0.07	(0.7	0.18	N/A	n i
 + 133623			41.3	2.0	-ILimey argbx w/clay&sulph.i	<del>~ (0.07</del>	(0.7-	0.04		
133624	DDH91-9	41.3	43.9	2.6	As above w/25-301 sulph. 1	<0.07	(0.7	(0.01	N/A	n i
133625	DDH91-9	43.9	46.6	2.8	1Chl.sch.&lim.arg.w/sulph.1	<0.07	<0.7	<0.01	N/A	n i
133626	DDH91-9	46.6	- 48.9	2.3	<pre>{Chl.sch.&amp;lim.arg.w/sulph.!</pre>	<0.07	(0.7-	<0.01	·· N/A	• n • 1
1 133627	DDH91-9	48.9	51.2	2.3	Lim. arg. w/30-40% sulph.:	<0.07	<0.7	(0.01	N/A	n i
133628	DDH91-9	51.2	53.5	2.3	:Lim. arg. w/30-40% sulph.:	<0.07	(0.7	<0.01	N/A	n i
 +133629	—DDH <del>91-9</del>	53.5	55:8		-lLim:-arg: w/30-40% sulph.1	<del>~{0:07</del>	— <del>~(0.7</del>	0.03-	<u>N/A</u> -	<del></del>
133630	DDH91-9	55.B	58.1	2.3	Massive sulphides	<0.07	<0.7	<0.01	N/A	n :
133631	DDH91-9	58.1	60.0	2.0	Massive sulphides	<0.07	<0.7	<0.01	N/A	• D
133632	DDH91-9	60.0	62.2	2.1	Chl.sch.&arg.w/tr.sulph.	<0.07	<0.7	<0.01	N/A	n i
: 133633	DDH91-9	62.2	64.9	2.7	'lLim, arg. w/10-15% sulph.1	(0.07	<0.7	<0.01	N/A	n i

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#### LUSTDUST PROPERTY

SUMMARY OF DIAMOND DRILL CORE SAMPLES

ISA	MPLE	DRILL	FROM	10	LENGTH	1		ASSAY RE	SULTS	<u>.</u>	ICP
ł	NO.	HOLE	(m)	(m)	(a)	I DESCRIPTION !	Au	Ag	Zn	Sb	COMPLETE
					<u>.</u>	l	_(g/t)	_(g/t)	_(1)	(7)	<u>(y or n)</u>
}== !	======= 133634	======================================			2.6	lin, arc. w/10-157 sulph.:	********** {0:07		(0.01	====== N/A	122222222 N
:	133635	DDH91-9	67.5	69.0	1.5	lin. arn. w/30-402 sulph.	<0.07	(0.7	(0.01 .	N/A .	в.
i	133636	DDH91-9	69.0	71.0	2.0	10.F.P.& 0.6m arn.1s.	<0.07	(0.7	(0.01	N/A	5
1	133637	DDH91-9	71.0	72.2	1.2	10.F.P.bx w/ tr. sulph. 1	<0.07	<0.7	(0.01	N/A	л
<u>+</u>	133638	DDH91-9	72.2	74.4	2.1_	10.F.P.Larg.1s.w/407_sulph!		1.03	0.04	N/A	n
1	133639	DDH71-9	74.4	76.5	2.1	10.F.P.&arg.1s.w/40% sulph:	<0.07	(0.7	0.02	N/A	ß
ł	133640	DDH91-9	76.5	77.1	0.6	IQ.F.P. w/ 3-5% sulphides i	<0.07	<0.7	(0.01	N/A	n
1	133641	DDH91-9	77.1	78.9	1.8	Limestone w/tr11 sulph.:	<0.07	(0.7	. <0.01 -	N/A	n
ł	133642	DDH91-9	78,9	82.0	3.0	Limestone w/ 1-3% sulph.	<0.07	<0.7	(0.01	N/A	n
1	133643	DDH91-9	B2.0	85.0	3.0	:Limestone w/ 5-10% sulph.:	<0.07	<0.7	<0.01	N/A	n
!	133691	DDH91-10	22.3	26_1	<u>3. R</u>	<u>:Yell_tn.dk_brown_oxide_1</u>		5.49	10.58	N/A	<u> </u>
1	133692	DDH91-10	35.1	36.3	1.2	1Dark red brown oxide	0.07	23.31	24.40	N/A	n
ł	133693	DDH91-10	36.3	39.5	3.2	Yellow brown oxide 1	<0.07	6.86	14.62	, NZA	Y
1	133694	DDH91-10	43.7	45.1	1.4	lRed brown oxide 👘 👘	<b>&lt;0.07</b>	10,97	7.45	N/A	n
!	13364B	DDH91-11	45.7	48.3	2.6	10xides 1	<0.07	3.43	1.17	N/A	n

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# Appendix IV

## ANALYTICAL RESULTS

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# Certificate of Analysis

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES DATE PRINTED: <u>22-NOV-91</u>

REPORT: V91-111756.4 ( COMPLETE )					F	ROJECT: NONE GJVEN	PAGE	1
SANPLE NUMBER	ELEMENT UNITS	Au OPT	Âg Opt	Zn PCT				
02 133631		<0.002	<0.02	<0.01			· · · · · ·	
D2 133632		<0.1002	<0.02	<0.01				
D2 133633		<0.002	<0.02	<0.01				
D2 133634		<0.002	<0.02	<0.01	•			
D2 133635	<u> </u>	<0.002	<11.02	<0.01				
D2 133636		<0.1102	<0.02	<0.01		<u> </u>		
D2 133637		<0.002	<11.N2	<0.01				
D2 133638		<11,11112	0.03	0.04				
D2 133639		<0_002	<11.02	0.02				
D2 13364()		<0.402	<0.02	<0.01				
D2 133641		<0,002	<11.02	<0.01				
D2 133642		<0.1012	<11.02	<0.01				
D2 133643		<0.002	<11.02	<0.01				
D2 133648		<11.1102	0.10	1.17				

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Certificate of Analysis

A DIVISION OF INCHCAPE INSPECTION & LESTING SERVICES

REPORT: V91-	-H1756.4 ( CO	UPEFTE )			[ <sup></sup>	PROJECT: NONE GIVEN	PAGE	2
STANDARD NAME	ELEMENT UNJTS	Au OPT	Ag Opt	Zn PCT				
FA SYNTHETIC	C S10	Ø.046	11.23	-				-
Number of Ar	nalyses	1	1	-				
Nean Value	•	0.0460	11.230					
Standard Dev	viation	-	-	-				
Accepted Va	lue	0.050	8.25	**				
CANNET CERTI	JETED SID	·		>10.00				
Number of A	nalyses	-	-	1				
Nean Value		-	-	10.000				
Standard Dev	viation	•	-	-				
Accepted Val	не	-	-	1 _				

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Certificate of Analysis

A DIVISION OF INCHCAPE INSPECTION & LESTING SERVICES

8	EPORT: V91-1/17	56.4 ( CO	MPLETE )				PROJECT: NONE GIVEN	PAGE	3
S	IAMPLE	ELENENT	Au	Ag	Zn	··			
N	INURER		0140	001	PC 1	· · · · ·		· · · · · · · · · · · · · · · · · · ·	· · ·
1	33635		<0.002	<11.02	<0.01				
D	uplicate				<0.01				
1	33636		<0.002	<11.02	<0.01				
00	uplicate		<11.11112	<0.02					
1	.33640		<11,1112	<11.112	<0.01	· · · · · · · · · · · · · · · · · · ·			
D	uplicate				<0.01				
P	rep Duplicate								
D	uplicate				1.18				

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REPORT: V91	-01564.1 ( COM	PLETE )					P1	ROJECT:	NONE GIVEN		PAGE 1A	
SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPN	1 Pb PPM	Zn PPM	No PPN	Ni PPN	Co PPN	Cd PPN	Bi PPN	As PPN	Sb PPN
D2 133553		23.5	1664	1355	>20000	80	22	5	1257.9	182	>2000	>2000
D2 133554		11.7	870	3687	15948	46	15	6	507.5	419	>2000	>2000
D2 133555		11.4	711	3726	2549	17	22	3	58.9	118	>2000	995
D2 133556		19.2	452	>10000	13192	40	19	4	426.0	227	>2000	761

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<b>F</b> ***				A DIVISIO	N OF INCHC	APE INSPEC	HON & TEST	ING SERVE	LS TE DOTNEE	D. 18-NOV	-01		
	REPORT: V91-0	01564.1 ( CC	MPLETE )					P	OJECT: NO	NE GIVEN	71	PAGE 18	
par of a	SAMPLE NUMBER	ELEMENT Units	Fe PCT	Mn PPN	' Te PPN	8а РРМ	Cr PPN	¥ PPN	Sn PPN	W PPM	Li PPM	Ga PPM	La PPN
· · · · ·	D2 133553 D2 133554		>10.00 >10.00	370 350	42 <25	493 357	77 61	<2 <2	61 42	<20 <20	<2 3	37 12	<5 <5
ι.	D2 133555 D2 133556		>10.00 >10.00	81 52	<25 41	107 319	139 78	18 <2	45 64	36 <20	<2 <2	41 37	<5 <5
					••••••••••						·	: :	
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								<u> </u>			<u> </u>		
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<u>,</u>													-
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<u> </u>	·····			<u>.</u>									



SAMPLE NUMBER	ELEMENT UNITS	Ta PPN	Ti PCT	E A1 PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Nb PPN	Sr PPN	Y PPN	Zr PP
D2 133553	· · · · · · · · · · · · · · · · · · ·	<5	0.01	0.98	0.04	0.61	1.07	0.52	5	30	10	29
D2 133554		<5	0.04	1.32	0.09	0.96	0.99	0.64	<5	42	<u>9</u>	37
D2 133555		<5	0.19	1.16	0.15	0.14	0.18	1.13	7	11	6	38
D2 133556		28	<0.01	0.67	0.02	0.17	0.67	0.33	5	23	<5	18
- · · · · · · · · · · · · · · · · · · ·												



## Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

	PEPOPT. VOI-	01564 1 ( 00		]					AIL PKINI Poisct. N	LU: 18-NUV	-91			
									KUJELI: M	UNC BIVER		PAUE ZA		
<b>.</b>	STANDARD NAME	ELEMENT UNITS	Ag PPN	Cu PPN	Pb PPN	Zn PPN	No PPN	Ni PPM	Co PPN	Cd PPM	Bi PPN	Ås PPN:	Sb PPN	
	GED TRACE ST	0-2 1989	5.9	787	253	411	558	577	48	<2.0	<5 1	526	94	
	Mean Value Standard Dev	iation	5.87	787.5	252.6	411.4	557.9	577.1	47.5	1.00	2.5	526.0	93.6	
	Accepted Val	ue	5.0	820	250	500	600	600	40	2.0	4	320	50	
	ANALYTICAL B	LANK	<0.5	3	7	3	- 3	1		<2.0	<5	11	<5	
	Number of An	alyses	1	1	1	1	1	1	1	1	1	1	1	
	Mean Value		0.25	3.5	7.0	2.7	3.0	1.1	0.5	1.00	2.5	11.0	2.5	
	Standard Dev	iation	-	-	-	-	-	-	-	-	-	-	-	
	Accepted Val	ue	-	-	-	-	-	-	-	-	-	-	-	
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Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

<u>-</u>	REPORT: V91-0	1564.1 ( (0)		]					<u>112 PRIMI</u> 201801-08	ONE CIVEN	-91	DACE 28	
					•								
<b>1979</b> 1975	STANDARD NAME	ELEMENT	Fe PCT	Nn PPN	Te PPN	Ba PPN	Cr PPN	V PPN	Sn PPM	W PPM	Li PPM	Ga PP <b>N</b>	La PPN
	GEO TRACE STD Number of Ana Mean Value	-2 1989 lyses	4.97 1 4.972	948 1 948,1	30 1 29.8	617 1 617.0	549 1 548.9	82 1 81.6	48 1 47.8	<20 1 10.0	22 1 22.1	<10 1 5.0	12 1 12 2
	Standard Devi Accepted Valu	ation e	6.63	1022	-	573	598	83	-	-	21	7	10
	ANALYTICAL 8L Number of Ana Nean Value Standard Devi Accepted Valu	ANK lyses ation e	0.04 1 0.042 -	<5 1 2.5 -	<25 1 12.5 -	<5 1 2.5 -	- 8 1 7.9 -	5 1 5.1 -	<20 1 10.0 -	<20 1 10.0 -	<2 1 1.0 -	<10 1 5.0 -	<5 1 2.5 -

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## Geochemical Lab Report

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 REPORT: V91-	01564.1 ( COM	PLETE )		۰.			P	PROJECT: NONE GIVEN			PAGE 2C		
STANDARD NANE	ELEMENT UNITS	Ta PPN	T î PCT	A1 PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Nb Ppm	Sr PPN	Y PPN	Zr PPN	
 GEO TRACE ST	D-2 1989	22	0.14	6.35	5.15	4.70	1.44	1.25	18	168	8	33	
Number of An	alyses	1	1	1	1	1	1	1	1	1	1	1	
Mean Value		22.0	0.138	6.349	5.155	4.702	1.436	1.248	18.1	168.1	7.6	32.8	
Standard Dev	iation	-	-	-	-	-	-	-	-	-	-	-	
 Accepted Val	ue	37	0.15	6.30	6.20	5.67	1.02	0.90	12	171	13	45	
 ANALYTICAL B	LANK	<5	<0.01	0.02	<0.01	<0.01	0.04	0.01	<5	<1	<5	<5	
Number of An	alyses -	1	1	1	1	1	1	1	1	1	1	1	
Mean Value		2.5	0.005	0.018	0.005	0.005	0.045	0.012	2.5	0.5	2.5	2.5	
Standard Dev	iation	-	-	•	-	-	•	-	-	-	-	-	
Accepted Val	ue	-	-	-	-	-	-	-	-	-	-	-	

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	REPORT: ¥91-	01564.1 ( COM	PLETE )					PR	OJECT: N	ONE GIVEN	<b>JI</b>	PAGE 3A	
	SAMPLE NUMBER	ELEMENT UNITS	Ag PPN	Cu PPN	Pb PPN	Zn PPN	No PPN	N 1 PPM	Co PPN	Cd PPN	Bi PPM	As PPN	Sb PPN
	133556 Duplicate		19.2 17.3	452 455	>10000 >10000	13192 13479	40 33	19 12	4	426.0 497.0	227 193	>2000 >2000	761 746
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	REPORT: V91-	01564 <b>.</b> 1 ( CC	OMPLETE )					PR	OJECT: NO	NE GIVEN		PAGE 38	
	SAMPLE NUMBER	ELEMENT UNITS	Fe PCT	Mn PPN	Te PPN	Ba PPM	Cr PPN	V PPM	Sn PPN	N PPN	Li PPN	Ga PPN	La PPN
	133556 Duplicate		>10.00 >10.00	52 49	41 <25	319 299	78 90	<2 <2	64 38	<20 - <20	<2 <2	37 <10	<5 <5
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## Geochemical Lab Report

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<b>P</b> 14.	A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES DATE PRINTED: 18-NOV-91														
	REPORT: V91-0	01564.1 ( COM	PLETE )					P	PROJECT: NONE GIVEN			PAGE 3C			
<b>P</b> **	SANPLE NUNBER	ELEMENT UNITS	Ta PPN	T i PCT	Al PCI	Mg PCT	Ca PCT	Na PCT	K PCT	Nb PPN	Sr PPN	Y PPN	Zr PPN		
	133556 Duplicate		28 <5	<0.01 <0.01	0.67 0.54	0.02 0.02	0.17 0.15	0.67 0.48	0.33 0.26	5 <5	23 20	<5 <5	18 13		
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Bondar-Clegg & Company Ltd. 190 Pemberton Ave. North Vancouver, B.C. V 7P 2RS 4000-985 (X81 Telex 04-352667)

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#### A DIVISION OF INCHCAPP INSPECTION & IT STING SERVICES.

EPORT: ¥91-0	)1594 <b>.</b> 4 ( COMP	PLETE )					PROJECT: NONE GIVEN PAGE 1					
SAMPLE NUMBER	ELEMENT UNITS	Au Opt	Ag Opt	Zn PCT	Zn PCT	SAMPLE NUMBER	ELEMENT UNITS	Au Opt	Ag OPT	Zn PCT	Zn PCT	
R2 A		0.083	0.73	1.74		D2 133607		<0.002	0.16	>10.00	21.22	
R2 B		0.025	5.19	0.52		D2 133608		<0.002	<0.02	0.90		
R2 C		0.168	0.91	0.14		D2 133609		<0.002	<0.02	0.05		
R2 Ð		0.022	0.65	0.94		D2 133610		<0.002	0.06	0.88		
R2 133644		0.004	0.04	<0.01		D2 133611	_, , ,	0.042	0.53	1.82		
02 133571	<b>-</b>	<0.002	<0.02	<0.01	<u> </u>	D2 133612		0.012	0.22	1.70		
02 133572	<	<0.002	<0.02	<0.01		D2 133613		<0.002	0.18	2.54		
02 133573	<	(0.002	<0.02	<0.01		D2 133614		0.008	0.02	0.76		
02 133574	<	<b>0.002</b>	<0.02	0.01	1	D2 133615		<0.002	<0.02	0.04		
02 133575	<b>&lt;</b>	<0.002	0.06	1.00		D2 133616		<0.002	<0.02	0.12		
2 133576	·	0.004	0.48	7.34		D2 133617		<0.002	<0.02	0.10	- <u>.</u>	
02 133577		0.004	0.22	2.88		D2 133618		<0.002	<0.02	0.04		
2 133578		0.053	0.87	1.52		D2 133619		<0.002	<0.02	<0.01		
2 133579		0.182	1.39	2.25		D2 133620		<0.002	<0.02	0.01		
)2 133580		0.063	0.86	2.34	!	D2 133621	••••	<0.002	<0.02	0.03		
02 133581		0.034	0.40	2.34		D2 133622	, · <b>-</b> · ·	<0.002	<0.02	0.18		
02 133582	<	0.002	0.26	5.16		D2 133623		<0.002	<0.02	0.04		
2 133583	<	<0.002	0.05	0.41		D2 133624		<0.002	<0.02	<0.01		
2 133584	(	<0.002	<0.02	0.03		D2 133625		<0.002	<0.02	<0.01		
02 133585	<pre></pre>	0.002	<0.02	0.03		D2 133626		<0.002	<0.02	<0.01		
2 133586	<b>(</b>	0.002	<0.02	0.03		D2 133627		<0.002	<0.02	<0.01		
2 133587	•	(0.002	<0.02	<0.01		D2 133628		<0.002	<0.02	<0.01		
2 133588	<	<0.002	<0.02	<0.01		D2 133629		<0.002	<0.02	0.03		
2 133589	<	<0.002	<0.02	<0.01		D2 133630		<0.002	<0.02	<0.01		
2 133590	<	<0.002	<0.02	<0.01								
2 133591	<	<0.002	<0.02	<0.01								
02 133592	<	<0.002	<0.02	<0.01								
02 133593	<	<0.002	0.02	<0.01								
02 133594	<	<0.002	<0.02	0.03								
02 133595	<	<0.002	<0.02	0.08								
2 133596		<0.002	<0.02	0.20								
2 133597	<	<0.002	<0.02	0.09								
2 133598	<	<0.002	<0.02	0.26								
2 133599	•	<0.002	0.18	4.04								
2 133600		0.006	1.30	2.93	•							
02 133602	· · · · · · · · · · · · · · · · · · ·	<0.002	1.01	5.11			<u></u>				······	
02 133603	<	<0.002	0.06	0.93								
02 133604	•	<0.002	0.18	>10.00	16.76							
2 133605	<	<0.002	0.12	7.77								
02 133606	•	<0.002	<0.02	0.09								
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## Certificate of Analysis

A DIVISION OF INCHCAPE INSPECTION & IT STING SERVICES.

REPORT: V91-	·01594.4 ( CC	MPLETE )					DATE   PROJE	PRENTED:. Ct: None	29-0CT <u>-91</u> Given	PAG	iE 2
STANDARD NAME	ELEMENT UNITS	Au OPT	Ag Opt	Zn PCT	Zn PCI	STANDARD NAME	ELEMENT	Au Opt	Ag Opt	Zn PCT	Zn PCT
FA SYNTHETIC	: STD	0.046	0.25								
Number of An	nalyses	1	1	-	-						
Mean Value	-	0.0460	0.250	-	-						
Standard Dev	viation	-	-	-	-						
Accepted Val	lue	0.050	0.25	•	-						
CANMET CERTI	IFIED STD			>10.00					····· · -		
CANNET CERTI	IFIED STD	-	-	>10.00	•						
Number of An	nalyses	-	<del>_</del> '	2	-						
Mean Value	•	-	-	10.000	1 -						
Standard Dev	viation	-	-	0.0000	· -		<u></u>				
Accepted Val	ue		~		19.02						
		(0.002	<u>/0 02</u>								
Number of Ar	vunna Volvene	<u>`</u> U.UUZ 1	1	-	-						
Numuci ui ni Maan Valua	11253	0.0010	0 010	-	-						
Standard Day	viation	- 	0.010	-	-						
Accented Vol		-	-	-	•						
nccepteu Val	lue	-	-	-	-						



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A DIVISION OF INCHCAPE INSPECTION & 11 STING SERVICES.

REPORT: V91-01	594.4 ( CO	MPLETE )		]				PROJ	.PRINTED: ECT: NONE		1PAGE	3	
SAMPLE NUMBER	ELEMENT UNITS	Au OPT	Ag Opt	Zn PCT	Zn PCT	SAMPLE NUMBER		ELEMENT	Au OPT	Ag Opt	Zn PCI	Zn PCT	
133644 Duplicate		0.004	0.04	<0.01 <0.01		133628 Duplicate			<0.002	<0.02	<0.01 <0.01		<u></u>
133571 Duplicate		<0.002 0.004	<0.02 0.02	<0.01		133629 Duplicate			<0.002 <0.002	<0.02 <0.02	0.03		<del>, .</del>
133575 Duplicate		<0.002	0.06	1.00						··· , , ,			
133580 Duplicate		0.063	0.86	2.34 2.36	!						•		
133583 Duplicate		<0.002 <0.002	0.05 0.04	0.41			·						
133585 Duplicate		<0.002	<0.02	0.03 0.02		· · · · · · · · · · · · · · · · · · ·							
133590 Duplicate		<0.002	<0.02	<0.01 <0.01	, <u>.</u>								······
133594 Duplicate		<0.002 <0.002	<0.02 <0.02	0.03	,,,,,,,,,	- <u></u>				<u></u>			
133595 Prep Duplicate	· · · · · · · · · · · · · · · · · · ·	<0.002 <0.002	<0.02 <0.02	0.08 0.07 0.07									
133604 Duplicate		<0.002	0.18	>10.00 >10.00	16.76								
133606 Prep Duplicate Duplicate		<0.002 <0.002 <0.002	<0.02 <0.02 <0.02	0.09 0.03									
133608 Duplicate		<0.002	<0.02	0.90 0.90								<u></u>	
133613 Duplicate		<0.002	0.18	2.54 2.54	, , ,								
133617 Duplicate		<0.002 <0.002	<0.02 <0.02	0.10									
133618 Duplicate		<0.002	<0.02	0.04 0.04			· · · · · ·						7
133623 Duplicate		<0.002	<0.02	0.04						7	· · · · · ·		

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## Certificate of Analysis

A DIVISION OF INCHEAPEINSTEE HON & ITSTINGSERATES DATE PRINTED: 22-DET-91

	REPORT: V91-015	564.4 ( CO)	IPLETE )					PROJECT: NONE GIVEN	PAGE 2			
<b>F</b> 11	SAMPLE	ELEMENT	Au	Ag	Zn	Zn	Sb	····				
	NUMBER	UNITS	OPT	OPT	PCT	PCT	PCT					
	D2 133541		<0.002	<0.02	0.04			, <u>,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	D2 133542		<0.002	<0.02	<0.01							
	D2 133543		0.213	1.80	0.78		0.09					
	D2 133544		0.144	1.25	1.18		0.10					
	D2 133545		0.048	0.52	1.71		0.14		:			
	D2 122546		0 020	0 /1	2 52		0 15					
	D2 133540		0.020	0.20	2.33		0.13					
	D2 133347		0.044	0.20	2.00		0 17					
	D2 133540		0.007	0.00	2.11		0.17					
	02 133550		<0.002	0.28	4.01	23.06	0.03					
								······································				
	DZ 133551			0.16	4.02		0.07					
	UZ 13355Z		0.005	U.24	5.85		0.29					
	DZ 133553		0.020	0.75	2.91		0.83					
	UZ 133554		0.034	0.54	2.01		0.49					
	UZ 1335548		0.071	0,58	1.49	······.	0.52					
-	D2 133555		0.109	0.34	0.32		0.14					
	D2 133556		0.073	0.75	1.68		0.10					
	D2 133557		<0.002	<0.02	0.10		<0.01					
	D2 133558		0.003	0.07	0.15		<0.01					
	D2 133559		<0.002	<0.02	0.02		<0.01					
	N2 122560		<u></u>	<u></u>	0.06	••• ·····	<u> </u>					
	DZ 133500		V0.002	20.02	0.00		20.01					
	NZ 133301		<pre>&lt;0.002</pre>	20.02	0.03		20.01					
	VZ 10000Z		NU.UUZ	_0.02 ∠0.02	0.03		20.01					
	NZ 133303			×0.02 20.02	0.02		20.01					
· _ · <del>·</del> _ ·			NU.UUZ	NU+UZ	0.03	·	<b>NU: UI</b>		·			
	D2 133565		<0.002	<0.02	0.02		<0.01					
	D2 133566		<0.002	<0.02	0.01		<0.01		,			
	D2 133567		<0.002	<0.02	0.02		<0.01					
	02 133568		<0:002	<0.02	<0.01		<0.01					
	D2 133569		0.170	0.19	0.15		0.11					
	D2 133570		0.005	0.19	14.86		0.08					
	D2 133691		<0.002	0.16	10.58							
	D2 133692		0.002	0.68		24.40						
	D2 133693		<0.002	0.20	14.62							
	D2 133694		<0.002	0.32	7.45							
	02 133695		<0.002	0.21	2.65							
	D2 133696		0.003	0.37	3.58							
	02 133697		<0.002	0.41	4.16							
	D2 133698		0.005	0.65	5.00							
	D2 133699		<0.002	0.03	0.09							
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Certificate of Analysis

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A DIVISION OF INCHCAPE INSPECTION & ITSTING SERVICES DATE PRINTED: 22-001-91 REPORT: V91-01564.4 ( COMPLETE ) PROJECT: NONE GIVEN PAGE 3 Ag SAMPLE ELEMENT Au Zn Zn Sb NUHBER UNITS OPT OPT PCT PCT PCT D2 133700 <0.002 0.03 0.20
mdar-Clegg & Company Ltd. B0 Pemberton Ave. North Vancouver, B.C. 7P 2R5 34) 985-0681 Telex 04-352667





A DIVISION OF INCREAPEINSPECTION & TESTES ON REFERS

REPORT: V91-01564.4 ( COMPLETE ) **PROJECT: NONE GIVEN** PAGE 4 ELEMENT Ag Sb STANDARD Au Zn Zn NAME UNITS OPT 0P T PCT PCT PCT FA SYNTHETIC STD 0.050 Number of Analyses 1 Mean Value 0.0500 Standard Deviation Accepted Value 0.050 0.25 CANHET CERTIFIED STD 19.15 0:03 -Number of Analyses 1 1 0.026 Mean Value 19.148 Standard Deviation Accepted Value 19.02 19.02 ANALYTICAL BLANK <0.002 <0.02 Number of Analyses 1 1 Mean Value 0.0010 0.010 Standard Deviation Accepted Value . FA SYNTHETIC STD 0.095 Number of Analyses 1 0.0950 Mean Value Standard Deviation Accepted Value 0.100 0.50 WESTMIN FEED 4.12 \_ Number of Analyses 1 Mean Value 4.120 Standard Deviation 0.89 Accepted Value 4.10 1990 AU STANDARD-1 0.148 0.06 Number of Analyses 1 1 Hean Value 0.1478 0.060 Standard Deviation Accepted Value 0.184 \_ Number of Analyses Mean Value Standard Deviation Accepted Value

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V91-0	1564.4 ( COMPLETE )		i			PROJECT: NONE GIVEN	PAGE 5
SAMPLE NUMBER	ELEMENT AU UNITS OPT	Ag Opt	Zn PCT	Zn PCT	Sb PCT		
133505 Duplicate	0.073	0.78	3.24 3.32	<u></u>			
133506 Duplicate	0.063 0.062	0.52 0.59	1.99				
133511 Duplicate	0.091	0.73	1.02 0.98		0.06 0.06		
133517 Duplicate	<0.002	0.16	3.45 3.54		0.07 0.07		
133518 Duplicate	<0.002 <0.002	<0.02 <0.02	0.06				
133520 Duplicate	<0.002	<0.02	0.02				
133525 Duplicate	<0.002	<0.02	<0.01 <0.01				
133529 Duplicate	<0.002 <0.002	<0.02 <0.02	0.03				
133530 Duplicate	<0.002	<0.02	0.01				
133538 Duplicate	<0.002	<0.02	<0.01 <0.01				
133541 Duplicate	<0.002 0.003	<0.02 0.03	0.04				4
133543 Duplicate	0.213	1.80	0.78 0.76		0.09 0.10		
133548 Duplicate	0.007	0.30	2.11 2.08		0.17 0.19		
133550 Duplicate	<0.002	0.28		23.06 23.00	0.03		
133552 Duplicate	0.005 0.004	0.24 0.22	5.86		0.29		
133553 Duplicate	0.020	0.75	2.91 2.88		0.83 0.83		
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A DIVISION OF INCHCAPPEINSPECTION & TENTING SERVICES

·• · • • •	REPORT: V91-0	1564.4 ( CO	MPLETE )					PROJECT: NONE GIVEN	PAGE 6	
	SAMPLE NUMBER	ELEMENT UNITS	Au Opt	Ag OPT	Zn PCT	Zn PCT	Sb PCT			
	133557 Duplicate		<0.002	<0.02	0.10 0.10		<0.01 <0.01		i.	<u> </u>
	133562 Duplicate		<0.002	<0.02	0.03 0.02		<0.01 <0.01		د	
	133563 Duplicate		<0.002 <0.002	<0.02 <0.02	0.02		<0.01			
<u> </u>	133570 Duplicate		0.005	0.19	14.86 14.88		0.08			
	133692 Duplicate		0.002	0.68		24.40 24.55				
	133694 Duplicate		<0.002 <0.002	0.32 0.33	7.45					
	133695 Duplicate		<0.002	0.21	2.65					
	133700 Duplicate		<0.002	0.03	0.20 0.22					

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<b>**</b> **			А	DIVISION OF IN	ACHCAPL INSPLC	HON & TESTING S	NATE DDINTED.	22-001-01		1
	REPORT: V91-	01564.6 ( COM	PLETE )				PROJECT: NONE	GIVEN	PAGE	1
	SAMPLE NUMBER	ELEMENT UNITS	Pb PC1							
	D2 133503		1.37	<u></u>			· · · · · · · · · · · · · · · · · · ·			
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	REPORT: V91-	01564.6 ( COM	IPLETE )			PROJEC	T: NONE GIVEN	PAGE	2
	SAMPLE NUMBER	ELEMENT UNITS	РЬ РСТ						
	133503 Duplicate		1.37 1.38						
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A DIVISION OF INCLEAPT INSPECTION & JESTING SERVICES NATE DRENTED: 21-0CT-91

	REPORT: V91-0	REPORT: V91-01564.5 ( COMPLETE )		PROJECT: NONE GIVEN	PAGE 1		
	SAMPLE NUMBER	ELEMENT UNITS	РЬ РСТ				
	D2 1335548 D2 133555 D2 133556		0.62 0.45 1.40				
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A DIVISION OF INCHCAPT INSPECTION & TESTERG SERVICES DATE PRINTED: 21-0CT-91

 REPORT: V91-	REPORT: V91-01564.5 ( CO STANDARD ELEMENT NAME UNITS		-01564.5 ( COMPLETE )			PROJECT: NONE GIVEN	PAGE 2
 STANDARD NAME	ELEMENT UNITS	РЬ РСТ					
 Number of An Mean Value	nalyses						
Standard Dev Accepted Va	viation lue	-					
 		·	1				

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A DEVISION OF INCLUDING TONIC HISTORY STRUCTS DATE PRINTED: 21-0CT-91

 REPORT: V91-	01564.5 ( COM	PLETE )		PROJECT: NONE GIVEN	PAGE 3	
 SAMPLE NUMBER	ELEMENT UNITS	РЬ РСТ				
 1335548 Duplicate		0.62 0.60				
133555 Duplicate		0.45 0.45	1			

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# Geochemical Lab Report

REPORT: V91-U	)1564.0 ( COM	PLETE )		· · ·	١		P	ROJECT: NO	NE GIVEN		PAGE 1A	
SAMPLE NUMBER	ELEMENT UNITS	( Ag PPM	(Cu PPH	(Pb) (PDM	Zn	. (Mo PPM	(Ni) PPH	Co/ PPM	Cd PPM	Bi PPM	As PPM	Sb PPM
D2 133503		23.2	1087	>10000	>20000	50	88	20	88.2	<5	>2000	1391
D2 133507		23.2	412	-4876	8452	19	<1	6	82.2	<5	>2000	756
D2 133508		16.2	467	6696	2000	15	13	2	<2.0	<5	>2000	650
D2 133509		45.6	697	8147	3354	12	<1	5	56.4	<5	>2000	597
D2 133511		26.7	1384	5794	8234	34	16	3	818.6	<5	>2000	560
D2 133512		15.6	823	4186	18823	44	41	19	781.5	<5	>2000	907
D2 133517		5.0	58	941	>20000	40	26	8	70.0	<5	>2000	515
D2 133522		<0.5	23	18	111	3	53	15	<2.0	<5	169	7
D2 133523		1.1	30	15	123	7	76	18	<2.0	<5	126	30
02 133525		0.9	3	6	35	1	6	5	<2.0	<5	59	6
D2 133530		<0.5	15	2	81	5	25	16	<2.0	<5	39	
D2 133535		0.6	4	19	84	<1	<1	6	<2.0	<5	69	7
D2 133540		1.2	6	20	115	2	<1	<1	4.7	<5	310	10
D2 133545		18.7	718	1413	13898	37	18	8	130.4	<5	>2000	1141
D2 133550		8.5	195	335	>20000	175	86	35	287.8	<\$	>2000	316
D2 133693		6.6	224	373	>20000	128	77	15	104.2	<5	>2000	319
D2 133698		21.0	309	289	>20000	64	36	9	806.1	<5	>2000	364

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# Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES DATE\_PRINTED: 16-001-91

	REPORT: V91-	01564.0 ( COM	IPLETE )						OJECT: NO	NE GIVEN		PAGE 18		
Part of the second s	SAMPLE NUMBER	ELEMENT UNITS	Fe PCT	Mn PPM	Te PPN	8a PPN	Cr PPN	V PPM	Sn PPM	N PPM	Li PPN	Ga PPM	La PPN	
	D2 133503		>10.00	4117	<25	303	158	143	28	<20	10	<10	5	
	D2 133507		>10.00	145	- <25	762	57	<2	41	<20	3	<10	<5	
	D2 133508		>10.00	138	<25	857	56	<2	70	<20	<2	<10	<5	
	D2 133509		>10.00	204	<25	571	48	<2	51	<20	<2	<10	<5	
	D2 133511		>10.00	166	<25	1108	79	<2	79	<20	<2	<10	<5	
	N2 133512		<u>&gt;10_00</u>	4508	< 25	1047	107	75	50	(20	12	(10	12	
	h2 133512		3 08	2020	25	519	87	97	21	20	6	210	15	
	D2 133317		2 02	A51	<25 <25	168	76	07	(20	<20 <20	26	210	24	
	D2 133522		2.52	505	(25	100	111	115	20	<20 200	20 A1	<10 <10	J7 //1	
	D2 133525		0.11	127	<25	49	14	39	<20	<20	<2	<10	8	
	D2 133530		2.47	508	<25	118	42	89	<20	<20	9	<10	58	
	02 133535		0.07	437	<25	53	11	35	<20	<20	<2	<10	9	
	02 133540		0.13	173	<25	53	6	33	<20	<20	<2	<10	7	
	D2 133545		>10.00	330	<25	837	84	9	71	<20	2	<10	<5	
	D2 133550		>10.00	9617	<25	1181	89	227	91	<20	14	<10	37	
	D2 133693		7.01	4507	<25	1355	94	155	76	<20	18	<10	24	
	D2 133698		>10.00	679	<25	838	85	108	79	<20	8	<10	14	

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Geochemical Lab Report

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

	REPORT: V91-01564.0 ( COMPLET						, <u>U</u>	HIL PRINIL	<u>0: 10-001</u>	-91				
	REPORT: V91-	01564.0 ( COM	PLETE )					P	ROJECT: NO	INE GIVEN		PAGE 1C		
	SAMPLE NUMBER	ELEMENT UNITS	Ta PPN	T i PCT	A1 PCT	Mg PCT	Ca PCT	Na PCT	K PCT	Nb Pp <b>n</b>	Sr PPM	Y PPN	Zr PPN	
,	D2 133503		. <5	0.71	1.38	0.23	1.23	0.18	0.65	37	18	9	7	
	D2 133507		<5	0.04	0.33	0.06	3.36	0.07	0.19	8	322	<5	<5	
	D2 133508		<5	0.04	0.32	0.08	2.95	0.08	0.22	20	371	<5	<5	
	D2 133509		<5	0.03	0.26	0.05	2.39	0.08	0.15	<5	223	<5	<5	
	D2 133511		<5	0.03	0.54	0.06	1.58	0.12	0.19	21	130	10	6	
•	D2 133512		<5	0.14	1.73	0.45	1.09	0.19	0.42	20	44	18	27	
	D2 133517		<5	0.06	0.97 .	0.37	>10.00	0.06	0.30	21	253	12	12	
	D2 133522		<5	0.53	2.65	4.06	>10.00	0.16	0.63	30	204	13	73	
	D2 133523		<5	0.71	3.20	2.74	>10.00	0.22	0.70	61	256	13	100	
	D2 133525		<5	0.01	0.06	2.63	>10.00	0.04	0.03	24	318	<5	<5	
	D2 133530		<5	0.28	2.61	1.49	>10.00	0.28	0.61	24	248	18	142	
	D2 133535		<5	<0.01	0.04	2.49	>10.00	0.04	0.02	14	174	6	<5	
	D2 133540		<5	<0.01	0.03	2.33	>10.00	0.04	0.01	25	176	<5	<5	
	D2 133545		<5	0.06	0.93	0.13	1.52	0.31	0.38	21	46	10	22	
	D2 133550		<5	0.10	2.61	0.60	1.66	0.14	0.63	8	31	39	41	
	D2 133693		<5	0.06	3.07	0.87	5.93	0.14	0.67	10	55	27	42	
	D2 133698		<5	0.10	1.32	0.45	1.45	0.13	0.42	19	31	25	23	

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# Geochemical Lab Report

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: VS	91-01564.0 ( COM	PLETE )					P	ROJECT: N	ED: 16-ULI ONE GIVEN	-91	PAGE 2A		
STANDARD NAME	ELEMENT UNITS	Ag PPM	Cu PPM	Pb PPM	Zn PPN	Mo PPN	Ni PPN	Co PPM	Cd PPM	Bi PPN	As PPN	Sb PPM	
GEO TRACE Number of Mean Value Standard C Accepted V	STD-2 1989 Analyses Deviation Value	.6.3 1 6.28 - 5.0	767 1 766.7 - 820	226 1 226.1 250	568 1 568.2 - 500	598 1 597.6 - 600	608 1 607.9 - 600	47 1 46.9 - 40	<2.0 1 1.00 - 2.0	<5 1 2.5 - 4	421 1 421.5 320	57 1 56.6 - 50	
ANALYTICAL Number of Mean Value Standard D Accepted V	BLANK Analyses Peviation Value	<0.5 1 0.25 -	<2 1 1.0 -	<2 1 1.0 -	<2 1 1.0 -	- <1 1 0.5 -	<1 1 0.5 -	<1 1 0.5 -	<2.0 1 1.00 - -	<5 1 2.5 -	<5 1 2.5 -	<5 1 2.5 - -	

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	REPORT: V91-	01564.0 ( CO	MPLETE )	]				P	ROJECT: N	ONE GIVEN	-91	PAGE 28		
<b>-</b> · · · ·	STANDARD NAME	ELEMENT UNITS	Fe PCT	Mn PPM	, Te PPN	8a PPM	Cr PPN	V PPN	Sn PPN	W PPN	Li PPN	Ga PPN	La PPN	
	GEO TRACE ST Number of An Mean Value	D-2 1989 alyses	5.48 1 5.483	902 1 901.7	<25 1 12.5	566 1 566.5	471 1 471.3	81 I 81.3	20 1 20.0	<20 1 10.0	19 1 18.5	<10 1 5.0	11 1 10.6	
	Standard Dev Accepted Val	iation ue	6.63	- 1022	-	- 573	- 598	- 83	-	-	21	- 7	- 10	
	ANALYTICAL 8 Number of An	LANK alyses	0.05	<5 1	<25 1	<5	<2 1	<2 1	<20 1	<20 1	<2 1	<10 1	<5 1	
	mean Value Standard Dev Accepted Val	iation ue	U.U46 - -	2.5	12.5	2.5 - -	1.0 - -	1.0 - -	10.0 - -	10.0 - -	1.0 - -	5.0 - -	2.5	

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 REPORT: V91-	01564.0 ( COM	PLETE )					Ç F	DATE PRINTED: 16-OCT-91 PROJECT: NONE GIVEN				PAGE 2C	
 STANDARD NAME	ELEMENT UNITS	Ta PPM	Ti PCT	A1 Pct	Hg PCT	Ca PCT	Na PCT	K PCT	Nb PPM	Sr PPM	Y PPM	Zr PPN	
GEO TRACE ST Number of An Mean Value Standard Dev Accepted Val	D-2 1989 alyses iation ue	· <5 1 2.5 - 37	0.15 1 0.149 - 0.15	.6.57 1 6.572 6.30	5.71 1 5.706 6.20	5.51 1 5.513 - 5.67	1.19 1 1.191 - 1.02	1.12 1 1.124 0.90	14 1 14.5 - 12	168 1 168.1 - 171	10 1 9.8 - 13	41 1 40.7 - 45	
ANALYTICAL 8 Number of An Mean Value Standard Dev Accepted Val	LANK alyses iation ue	<5 1 2.5 -	<0.01 1 0.005 -	<0.01 1 0.005 -	<0.01 1 0.005 -	<0.01 1 0.005 -	<0.01 1 0.005 -	0.02 1 0.021	<5 1 2.5 -	<1 1 0.5 -	<5 1 2.5 -	<5 1 2.5 -	

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# Geochemical Lab Report

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	REPORT: V91-01	564.0 ( COM	PLETE )		·			PR	OJECT: N	ONE GIVEN		PAGE 3A	
,	SAMPLE NUMBER	ELEMENT UNITS	Ag PPM	Cu PPM	РЬ РРМ	Zn PPM	Mo PPN	Ni PPM	Co PPN	C d PPN	Bi PPM	As PPN	Sb PPN
	133511 Prep Duplicate Duplicate		26.7 22.0 26.1	1384 1146 1384	.5794 5375 5786	8234 7040 8222	34 29 34	16 18 13	3 6 <1	818.6 698.3 829.7	<u>رج</u> رج رج	>2000 >2000 >2000	560 499 551
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Geochemical Lab Report

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	REPORT: V91-01	564.0 ( CC	OMPLETE )					PR	OJECT: NO	NE GIVEN	-91	PAGE 3B	
¥.	SAMPLE NUMBER	ELEMENT UNITS	Fe PCT	Mn PPM	Te PPM	Ba PPM	Cr PPM	V PPM	Sn PPN	W PPM	Li PPM	Ga PP <b>N</b>	La PPM
	133511 Prep Duplicate Duplicate		>10.00 >10.00 >10.00	166 73 186	<25 <25 <25	1108 951 1112	79 66 79	<2 <2 <2	79 77 78	<20 <20 <20	<2 <2 <2	<10 <10 <10	<5 <5 <5
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 ^North Vancouver, B.C.
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# Geochemical Lab Report

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A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

 REPORT: V91-	01564.0 ( COM	PLETE )					P	AIE <u>Printe</u> Roject: No	<u>d: 16-oct</u> Ine given	-91	PAGE 3C		
 SANPLE NUMBER	ELEMENT UNITS	Ta PPM	Ti PCT	r Al PCT	Mg PCT	Ca PCT	Na PCT	K PCT	N5 Ppn	Sr PPN	Y PPM	Zr PPN	
 133511 Prep Duplica Duplicate	ite	<5 <5 <5	0.03 0.03 0.03	0.54 0.54 0.65	0.06 0.07 0.07	1.58 1.60 1.61	0.12 0.21 0.32	0.19 0.22 0.27	21 24 19	130 140 130	10 9 9	6 16 14	

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 DC					1			DATE PRI	NTED:3:0CI-9	1	
	UKT: 091-11	1470.4 ( LU	nei e i e i j					PROJECT	NUNE GIVEN	PAGE	1
SF	4.E	ELEMENT	Âu	Âg	Zn	Zn					
NU	JER	UNJTS	OPT	OPT	PCT	PCT					
D2	.33651			0.03							
D2	33652		<0_002	0.03		•					
D2	133653		<0.002	0.03							
Ð2	133654		<0.102	<0.02							
D2	133655		<11.002	<0.02					• · · ·		
D2	133656	<u></u>	<0.1012	<0.02			· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · ·	
D2	33657		<0.002	<0.02							
D2	133658		<0.102	<0.02							
D?	133659		<0.002	<0.02							
D2	33660		<11.11(12	0.15				<u>,</u>			
D2	133661	·····	<0.002	<i>II</i> .13	2.55	· · · · · · · · · · · · · · · · · · ·			· - · · · · · · · · · · · · · · · · · ·		
D2	33662		<11.11112	0.14	>10.110	15.31					
D2	:33663		<0.002	0.10	8.01						
D2	133664		<(1,1)(12	8.17	>10.00	14.40					
02	133665		<0.002	0.13	>10.00	11.54					
D2	133666		<11.11112	(1.24	>10.00	21.17					
D2	133667		<0.002	U.16	>10.00	10.08					
D2	33668		<11.1102	0.57	6.14						
D2	133669		<0.002	11.33	>10.00	10.76					
D2	133670		<11_11(12	0.25	>18.00	18.92					
Dí	133671		<0.002	·U.18	9.46						
D2	133672	•	<11.1112	11.16	8.26	•					
D	133673		0.005	11.47	6.38						
D2	133674		<ii.u02< td=""><td>0.18</td><td>&gt;10.00</td><td>22.76</td><td></td><td></td><td></td><td></td><td></td></ii.u02<>	0.18	>10.00	22.76					
D2	133675		<0.002	0.02	11.04						
D2	33676		<11.1112	11.13	4.21	·					
02	133677		<0.002	0.13	3.16	1					
D2	133678		<0.002	0.21	3.66						
D:	133679		<0.002	<b>II.18</b>	3.40					:	
Dż	133680		11.0004	(1.29	2.33						
D	133681		<0.002	11.06	0.55	• ••• · · ·	· · · · · · ·		· _ · · · · · · · · · · · · · · · · · ·		
Dź	133682		11,1138	(1.34	1.80						
D2	133683		0,163	11.44	0.47						
D2	133684		11.179	(1.80	0.35						
D:	133685		D.1168	0.37	2.35						
02	133686		11.1124	0.30	3.88				······	·····	· •
D	133687		11,1197	3.23	1.83					:	
D2	133688		11.647	1.69	1.45						-
D2	133689		0,052	8.51	2.69						
Di	1336911		<ii,1002< td=""><td>0.03</td><td>0.10</td><td></td><td></td><td></td><td><math>\cap</math></td><td>~</td><td></td></ii,1002<>	0.03	0.10				$\cap$	~	
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A DIVISION OF INCHCAPE INSPECTION & ITSTING SERVICES

				A DIVESIVES	OF INCREMENT	35/10.10.56/1151)	DATE PRINTED: 3-0CT-91		
REF JRT: V91-U	1496.4 ( CO	MPLETE )					PROJECT: NONE GIVEN	PAGE 2	
SÍ IDARD Nr :	ELEMENT UNITS	Au OPT	Ag OPT	Zn PCT	Zn PCT				
F/ SYNTHETIC	SID	11.048	11.25	-					
Nu per of Ana	lyses	1	1	-	-				
Mean Value		11.114811	0,250	-	-				
Standard Devi	ation	•	•	-					
A epted Valu	e 	0.050	0.25	-		·····			
Number of Ana	lyses	•		-	; _				
Ne s Value		-	-	-	-				
St_idard Devi	ntion	-	-	-	-			÷	
Accepted Valu	9	•	-	-	-				
		<b></b>			!				
1990 AU STAND	ARD- 1	11.142	0.06	-					
Number of Ana	lyses	1	1	-	-				
∦∈ n Value		0.1420	0.060	-	-				
Standard Devi	ation	-	-	-	-				
Accepted Valu	<del>)</del>	li 184		-	-				
Chudet CERTIF	IED SID			>10.00			······································	·····	
Number of Ana	lyses	-	-	1	-				
Ne n Value		•	-	10.000	-				
St Indard Devi	ation	-	-	-	-				
Accepted Valu	A	-	-	-	19.02				

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A DIVISION OF INCHCAPE INSPECTION & TESTING SURVICES.

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RL. JRT: V91-1114	96.4 ( CO	INPLETE )	,			l l	PROJECT: NONE GIVEN	PAGE 3				
S <sup>E</sup> PLE	ELEBENT	Au	Âg	Zn	 Zn		•••• •• ••• ••••••••••••••••••••••••••					
NI BER	UNITS	0PT	091	РСТ	PCT							
1,3,656		<11,1102	<ii.112< td=""><td></td><td></td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td></ii.112<>				· · · · · · · · · · · · · · · · · · ·					
De licate		<11.1102	<0.02									
133662	:	<0.302	<b>0.14</b>	>10.00	15.31							
D licate					15.34							
133665		<11,1012	0.13	>10.00	11.54	•						
Di licate				>10.00	i			:				
133667		<0.002	8.16	>10.00	10.08	•		÷ •				
Di licate					10.15			· · · · · · · · · · · · · · · · · · ·				
133668		<0.002	B.57	6.14				<u> </u>				
Dumlicate		<0.007	D.54									
100670		<0.002	0.25	>10.00	18.92							
Duplicate				>10.00		<u></u>	······					
1674		<0.002	11.18	>10.00	22.76		·					
Prep Duplicate		0.052	0.46	>10.00	22.85 21.90							
1 675		<11,11112	0.02	11,94								
Duplicate				0.04	<u> </u>							
1 679		<0.002	8,18	3.40								
Duplicate		<11.1102	0.16									
1 680		0.804	11.29	2.33								
Duplicate				2.26								
1 685		11,1168	0.37	2.35		<u> </u>		· ·				
0 licate				2.28								
1^^689		0,052	Ø.51	2.69								
D licate				2.63								
123690		<0,002	0.03	0.10		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					
P p Duplicate		<11.11112	<0.02	0.21				<i>.</i>				
Vahillare		10.002	11-113									

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Appendix V

### DETAILED STATEMENT OF COSTS

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### NQ DIAMOND DRILLING - Triangle Drilling

DDH 91-5 Drilling 1	84.4 m,	casing t	to 71.6 i	n		\$14,008.00				
DDH 91-6 Drilling 1	28.0 m,	casing (	to 44.2 i	n		\$9,624.00				
DDH 91-7 Drilling 7	DDH 91-7 Drilling 75.0 m, casing to 68.6 m									
DDH 91-8 Drilling 8	DDH 91-8 Drilling 85.3 m, casing to 1.5 m									
DDH 91-9 Drilling 9	DDH 91-9 Drilling 93.9 m. casing to 15.2 m									
DDH 91-11 Drilling	68.6 m,	casing (	to 1.5 m	L		\$4,209.00				
		, 0		Subt	otal	\$46,639.20				
				G.S.	Г.	\$3,264.74				
Additional Core boxe	es (Woo	odpecke	r Indust	ries)		\$628.73				
TOTAL DRI	LLING	COST	S	,		*	\$50,532.67			
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<b>ROAD IMPROVEMENTS</b>										
Hiram Enterprises Ltd.										
TD 25E Sept. 25 to 27, 1991	L									
27 hrs @ \$145. + GST						\$4,189.05				
Hat Lake Logging						·				
Hauling tractor to property	+ GST					<u>\$577.80</u>				
TOTAL ROAD IMPROVE	MENT	S					\$4,766.85			
ANALYTICAL COSTS										
Bondar Clegg										
Analyses for	Au	Ag	Zn	Sb	Pb	ICP				
DDH 91-5	30	30	30	3	-	7				
DDH 91-6	29	29	29	29	3	6				
DDH 91-7	18	18	18	-	-	-				
DDH 91-8	25	25	25	-	-	-				
DDH 91-9	29	29	29	-	-	-				
DDH 91-11	_1	_1	<u>_1</u>	-	_	_				
Total	132	132	132	32	3	13				

Costs: Au + Ag = \$10.80, ZN = \$7.65, Pb = \$7.65, Sb = \$2.98

Crush and pulverize 132 samples @ $4.00 =$	\$528.00
Dry 104 samples @ \$1.00 =	\$104.00
Au + Ag + Zn 132 samples @ \$18.45	\$2,435.00
Sb 32 samples @ \$2.98	\$95.36
Pb 3 samples @ \$7.65	\$22.95
ICP 13 samples @ \$15.00	\$195.00
Shipping charges	<u>\$186.69</u>
Subtotal	\$3,567.40

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GST TOTAL BONDAR CLEGG	\$ <u>249.72</u> <u>\$3,817.12</u>	
CHEMEX		
12 check assays for gold, silver 12 @ \$20.25 GST TOTAL CUEMEX	\$243.00 <u>\$17.01</u> \$260.01	
	\$200.01	\$4 077 12
<ul> <li>TOTAL ANALYTICAL</li> <li><u>SITE SUPERVISION, CORE LOGGING, SAMPLING ETC</u></li> <li>Dolmage Campbell Ltd., J.L. Rotzien Sept. 19, 1991 through</li> <li>October 10, 1991, 22 days @ \$400</li> <li>GST</li> <li>TOTAL SITE SUPERVISION</li> <li><u>STAFF QUARTERS TRAILER RENTAL</u></li> <li>Atco, Aug. 23, 1991 to October 10, 1991</li> <li>49 days rental plus hauling @ \$3,968.63</li> <li>(incl. GST) Prorated to Sept. 19, 1991 to</li> <li>Oct. 10, 1991 = 26/49 x \$3,968.63</li> </ul>	\$8,800.00 <u>\$616.00</u>	\$4,077.13 \$9,416.00 \$2,105.80
BOARD		
Site Engineer, J.L. Rotzien 22 days @ \$25 Owner's Representative, G. Whatley 14 days @ \$25 Total Board	\$550.00 \$ <u>350.00</u>	\$900.00
$\frac{\text{TRUCK RENTAL}}{\text{Jeep, Sept. 2, 1991 to Oct. 10, 1991}} = 39 \text{ days rental plus handling etc. at $1,451.85} \\ \text{Prorated to Sept. 19, 1991 to Oct. 10, 1991} \\ 22/39 \text{ x $1,451.85} \\ \text{King Cab for Demobilizing} \\ \text{Total Truck Rentals} \end{cases}$	\$918.99 \$ <u>379.50</u>	\$1,198.49
TRAVEL		
J.L. Rotzien 1 round trip Vancouver to Prince George and return G. Whatley 2 round trips Vancouver to Prince George 2 x \$513.60 Total Travel Costs	\$513.60 \$ <u>1,027.20</u>	\$1,540.80

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REPORT PREPARATION J. Rotzien 8 days @ \$400 Draughting 52 hours @ \$25 Printing, copying, etc.

#### \$3,200.00 \$1,300.00 \$250.00 \$<u>4,750.00</u>

#### TOTAL ESTIMATED FIELD COSTS

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\$<u>79,287.74</u>



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