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**CONFIDENTIAL**

**Interim report on field work at the Lustdust Cu-Au-Zn-Pb-Ag\_Mo  
Manto-Skarn-Porphyry property, north-central B.C.**

by Gerry Ray & Ian Webster,  
August 11<sup>th</sup>, 2001

**Summary of work at Lustdust**

(a) 14 active field days were spent at the Lustdust property (5<sup>th</sup>-19<sup>th</sup> of August 2001).

(b) 1:5000 scale mapping was completed over part of the mineralized property; this was done in co-operation with work by consultants Keith Glover and Peter Megaw.

(c) the number of samples collected were as follows:

49 mineralized samples for assay from core and surface showings,  
19 plutonic samples of the porphyry for whole rock analyses,  
37 mineralized samples for fluid inclusion studies (by katheryn Dunne),  
66 samples for thin section and/or polished section studies,  
4 limestone samples for conodont extraction, and  
2 porphyry samples (1 of the diorite, 1 of the monzonite) for U-Pb zircon dating.

(d) all the above samples have been submitted to the various labs. To date, 30 assay results have been obtained from Chemex (see attached xcel files). The rest are expected within 10 days. Katheryne Dunne will start her fluid inclusion work on the 13<sup>th</sup> of August.

(e) due to the untimely death of Keith Glover, we are now attempting to go through his field notes, maps and files to compile a 1:5000 scale map using his and our joint work.

**Introduction.**

Between the 5<sup>th</sup> and 19<sup>th</sup> of July 2001, we completed 14 field days working at Alphagold's Lustdust property. This property lies close to the junction of Dream and Silver creeks, approximately 210 km NW of Prince George, 162 km NNW of Fort St James and 36 km east of Takla Landing. It is located immediately west (< 3 km) of the Pinchi Fault and the old Bralorne-Takla Mercury Mine (B.C. MINFILE No. 093N009). Part of the property includes the Ag-Au-Zn-Pb-Cu-As-bearing veins and carbonate-replacements of the former Takla Silver Mine (093N008).

In 2000 and 2001, Alphagold completed an aggressive drilling program. This has revealed a classic metal-zoned system, with a Mo-Cu porphyry and proximal Cu-Au skarns to the north that pass southwards into more distal Zn-Pb-Au-Ag manto ore-bodies and carbonate-replacements.

Previous mining and drilling has been concentrated on the more distal Zn-Ag-rich veins and mantos. However, the economic potential of the more proximal Cu-Au skarns and Mo-Cu porphyry is now apparent and recent drilling has been centered on these more northerly styles of mineralization. Drilling by LDS Ltd. is still in progress (as of 11<sup>th</sup> August).

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Our fieldwork included 1:5000 scale geological mapping as well as examining and sampling surface exposures and drill core. For part of the time our work was done jointly with geological consultants employed by Alphagold, particularly Jim McGlasson, Peter Megaw and Keith Glover.

## **GEOLOGICAL SUMMARY**

### **Metasedimentary rocks**

The geology of this NTS 93N/11-13 area has recently been compiled by Paul Schiarizza (Open File 2000-33). The Lustdust area is underlain by a north trending package of slaty argillites, tuffs, cherts, greenstones and limestones belonging to the Cache Creek Group. The NNW-striking Pinchi Fault lies <3km E of the property and this major structure marks the eastern tectonic margin of the group. The large Hogen *Hogen* Batholith of the Quesnell Terrane lies immediately east of the Pinchi Fault. This batholith is associated with Cu-Au porphyry mineralization.

The Cache Creek metasediments at Lustdust have undergone a complex history of brittle-ductile deformation that was probably related to both the accretion of the group onto the north American continent and later recurrent dextral transcurrent movements along the Pinchi structure. This resulted in a moderate to strong S1 slaty cleavage that has overprinted the argillaceous rocks. Bedding structures are relatively uncommon due to intense structural transposition. The cleavage and bedding strikes N and generally dips steeply W. Small scale isoclinal, north plunging F1 folds have been identified, as well as younger F2 strain slip and king folding.

The F1 and F2 deformation predates the emplacement of two small plutons and the associated porphyry, skarn and manto mineralization. However, some important pre- and post-mineralizing faults have been identified, the former have partly controlled the alteration and mineralization. The hydrothermal fluids were probably channeled along N- and E-W trending fault conduits and the resulting orebodies were controlled by the presence of limestones and also possibly by fold structures. In the vicinity of the sphalerite-rich 4B zone manto-type mineralization, the following W to E sequence has been identified:

1. Strongly cleaved and deformed cherty argillite (in structural hangingwall).
2. Limestone.
3. Calcareous mafic tuff with abundant small limestone clasts.
4. Well cleaved carbonaceous argillite.
5. Limestone.
6. Well cleaved carbonaceous argillite (in the structural footwall).

The 4B manto mineralization is mostly hosted in the two N-trending units of massive limestone (Nos 2 and 5 above). It is uncertain whether these are two distinct beds or represent fold repetitions of a single unit. The limestone reach an outcrop width of approximately 500 m, but in many places along the belt they are narrower. The calcareous tuff (No. 3 above) comprises a distinctive fine grained green mafic ash tuff matrix with numerous matrix-supported and stretched clasts of limestone that are generally < 8 cm in diameter. This unit may represent an olistostrome or syn-sedimentary gravity slide.

There is a strong possibility that the large two limestone units may also represent a number of very large mega-blocks that were transported down a paleoslope.

### **Intrusive rocks**

Mapping this summer has revealed the presence of two 700m by 700m stocks that have intruded a N-S striking package of Cache Creek Group limestones, ribbon cherts, greenstones and phyllitic meta-argillites. The two stocks are separated by a E-W trending zone of fractured and altered country rocks underlie Canyon Creek; this creek is believed to mark an economically important fault zone. The stocks probably represent partially eroded cupolas that pass down into a single composite, multiphase pluton. They are marked by feldspar and hornblende porphyritic textures and range from diorite to monzonite to quartz monzonite in composition.

A sequence of early mafic diorite followed in turn by felsic monzonite and late mafic diorite has been identified. All phases are overprinted by porphyry-style mineralization which includes Mo-Cu-bearing quartz-sericite-pyrite veining and zones of secondary albitic and potassic alteration. The latter includes early pink Kspar as well as pervasive fine sericite and secondary biotite. The southern, more dioritic stock include some rare sections with quartz-tourmaline veining.

The northern and southern margins of both stocks pass out into a series of felsic dikes and sills that have intruded the N-striking country rocks. In the southern part of the area and distal to the southern stock, some dikes and fault zones are spatially associated with N-S trending zones of sulphide-rich mantos and carbonate replacements. Generally, thermal alteration is rarely developed against the minor intrusions. However, where the stocks have intruded the argillites, a 100-300 m zone of brown-purple hornfels is present, and many of the limestones are bleached and recrystallized to marble.

Whole rock analyses on four samples of minor intrusions collected by us in 2000 showed the presence of both calc-alkaline diorites and alkalic monzonites. It is not known if this alkalic character is primary or due to late hydrothermal Na and K overprinting. Certain features of the Lustdust mineralization (e.g. abundant Au in the mantos) are compatible with alkalic rocks. However, the low Au and high Mo style of mineralization in the stocks suggests a more calc-alkaline porphyry.

The age of the stocks is unknown. Hopefully, our U-Pb zircon dates will prove whether or not the stocks were emplaced after the Cache Creek rocks had been thrust over the Quesnellia terrane rocks east of the Pinchi Fault. In such a case, the stocks may have originated as melts in the Quesnellia terrane, which in this area is occupied by the large Hogem Batholith. The latter varies from alkalic to calc-alkalic and is associated with Cu-Au porphyry mineralization.

### **Mineralization**

At least four different mineralized zones are recognized on the claims. These follow a narrow, NNW trending belt that extends for at least 3 km along strike. From S to N, these are named the No. 1, the No. 3, the No. 4B and the "Canyon Creek" Zones. These four zones lie slightly en-echelon to one another. From S to N the mineralization is strongly zoned; this metal zoning reflects increasing proximity to the porphyry stocks that

outcrop north and south of Canyon Creek. Mineralization is separable into the following three types:

1. Massive, sphalerite-rich mantos, veins and carbonate replacement bodies. These contain variable amounts of pyrite  $\pm$  pyrrhotite  $\pm$  magnetite  $\pm$  galena  $\pm$  sulphosalt minerals. These are marked by anomalous amounts of Zn, Au, Ag, As and Sb, with sporadic enrichment in Pb, Cu, As, Bi, Hg and Mn. Various styles of this mineralization are seen at the Nos. 1, 3 and 4B Zones, which are hosted mainly by limestone and marble. Contacts between the massive sulphides and the hostrocks are generally very sharp. Replacement features include "scaloped" contacts and in some cases the sulphides contain small (< 0.3 m) remnant bodies of incompletely replaced limestone.
2. Garnet-dominant Cu-Au skarns that overprint both carbonates and the intrusives. This type of mineralization is seen at the "Canyon" Zone and is characterized by chalcopyrite-pyrite-magnetite with lesser amounts of bornite, pyrrhotite, sphalerite, stibnite and rare, late sulphosalt minerals. The exoskarn silicates mainly include large quantities of a paragenetically early, coarse crystalline green-yellow garnet, and lesser amounts of a later brown-red colored garnet. Pyroxene is present but is relatively uncommon. Trace amounts of vesuvianite and wollastonite occur. Retrograde alteration is marked by dark chlorite, amphibole and minor epidote (epidote appears to be more common in the altered intrusions). Richer mineralization tends to be associated with the brown garnet rather than the pale green garnet, and in many holes the chalcopyrite-pyrite is spatially related to patches of dark chloritic retrograde alteration. However, these are no firm rules since there are many sections where substantial amounts of interstitial chalcopyrite-pyrite mineralization are hosted by pristine, crystalline garnet skarn of both the green and brown varieties.
3. Mo-Cu porphyry mineralization developed in the two stocks. This comprises thin (generally < 2 cm) molybdenite-quartz-pyrite veins that may carry some chalcopyrite, as well as sericite; the latter mineral may occur in the vein as well as forming a pale halo. Other vein-types identified include early Kspar-quartz veins, hair-like quartz-pyrite veinlets, and rare examples of greissen-type quartz-tourmaline veins. Rarely, some thin (< 20 cm), hydrothermal breccias are present. These have milled intrusive clasts and may represent "pebble" breccias.

### **Conclusions**

The Lustdust property represent an elongate, metal zoned Zn-Pb-Cu-Au-Ag-Mo manto-skarn-porphyry system that extends over a 3 km strike length. Drilling has intersected some exciting mineralized skarn and porphyry, and the property clearly has good economic potential. One important aspect is that the Lustdust mineralization is hosted by Cache Creek Terrane rocks. This terrane has not traditionally been regarded as a good candidate for porphyry-skarn exploration. Recent drilling at Lustdust could change that perspective.

Gerry Ray & Ian Webster. 11<sup>th</sup> August 2001

Lustdust01.doc

A0121315 - CERTIFIED

CLIENT : "B.C. MINISTRY OF ENERGY AND MINES"

# of SAMPLES : 34

DATE RECEIVED : 26-JUL-2001

PROJECT : " "

CERTIFICATE COMMENTS : "AT5TN: GERRY RAY

CC: IAN WEBSTER"

SAMPLE DESCRIPTION	20 Hg ppb	21 F ppm	9886 Au ppb ICP-MS	9884 Pt ppb ICP-MS	9885 Pd ppb ICP-MS	3597 Au g/t	9327 Ag ppm	9301 Al %
GR01 - 9	90	320	350	<1	14	-----	15.75	0.72
<b>GR01-19</b>	<b>190</b>	<b>120</b>	<b>580</b>	<b>2</b>	<b>3</b>	-----	<b>20.3</b>	<b>0.05</b>
GR01-20	90	190	1920	2	6	-----	70.8	0.28
GR01-21	<10	100	1840	2	<1	-----	54.7	0.09
GR01-22	10	170	730	<1	4	-----	17.2	0.42
GR01-23	10	120	16	1	<1	-----	0.42	0.59
GR01-24	10	140	8	<1	<1	-----	0.24	0.7
GR01-28	<10	100	28	1	1	-----	0.58	0.55
GR01-29	30	550	440	2	3	-----	1.42	3.15
GR01-30	10	300	19	1	<1	-----	0.36	1.33
GR01-31	<10	100	2	<1	<1	-----	0.22	0.64
GR01-32	70	220	590	1	16	-----	30.7	1.33
<b>GR01-39</b>	<b>310</b>	<b>30</b>	<b>280</b>	<b>2</b>	<b>&lt;1</b>	-----	<b>8.62</b>	<b>0.04</b>
<b>GR01-40</b>	<b>330</b>	<b>60</b>	<b>340</b>	<b>2</b>	<b>1</b>	-----	<b>13.2</b>	<b>0.06</b>
<b>GR01-41</b>	<b>390</b>	<b>2500</b>	<b>110</b>	<b>3</b>	<b>1</b>	-----	<b>20</b>	<b>0.49</b>
<b>GR01-42</b>	<b>170</b>	<b>380</b>	<b>770</b>	<b>2</b>	<b>&lt;1</b>	-----	<b>64.7</b>	<b>0.08</b>
GR01-43	70	90	16	1	<1	-----	8.8	0.05
GR01-44	<10	320	400	2	<1	-----	5.14	0.17
GR01-46	10	670	84	2	<1	-----	3.24	0.45
GR01-47	30	300	680	2	<1	-----	5	0.26
GR01-48	10	210	550	3	1	-----	3.04	1.51
GR01-49	100	340	2100	2	<1	-----	21.8	0.15
<b>GR01-50</b>	<b>10</b>	<b>660</b>	<b>6</b>	<b>&lt;1</b>	<b>&lt;1</b>	-----	<b>0.4</b>	<b>6.25</b>
<b>GR01-51</b>	<b>&lt;10</b>	<b>910</b>	<b>2</b>	<b>&lt;1</b>	<b>&lt;1</b>	-----	<b>0.36</b>	<b>6.74</b>
<b>GR01-53</b>	<b>&lt;10</b>	<b>780</b>	<b>9</b>	<b>&lt;1</b>	<b>&lt;1</b>	-----	<b>0.6</b>	<b>6.42</b>
<b>GR01-58</b>	<b>&lt;10</b>	<b>740</b>	<b>4</b>	<b>1</b>	<b>&lt;1</b>	-----	<b>0.42</b>	<b>5.62</b>
GR01-65	10	300	2800	2	1	-----	34	0.37
GR01-67	<10	520	960	2	2	-----	15.45	0.24
GR01-88	60	40	>1000	<1	52	26.05	444	0.01
GR01-89	40	210	8500	<1	16	-----	199	0.35
GR01-90	10	300	1600	1	2	-----	61.6	0.42
GR01-92	20	200	1210	<1	15	-----	28	0.94
GR01-93	50	230	5100	1	90	-----	87.2	1.06
GR01-94	20	200	3100	<1	8	-----	35.3	0.69

9346	9302	9303	9304	9306	9305	9307	9310	9309
As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr
ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
1735	4.5	0.2	1.86	16	0.7	59.5	5.5	153
56	9	0.65	12.9	3	>500	3.89	575	43
124	15	0.1	11.9	9.3	>500	38.3	337	108
428	25.5	0.8	1165	1.7	15.5	1.2	178.2	58
1510	4.5	0.2	19	17.5	6.06	80.2	4.6	109
1485	10.5	0.2	10.65	15	3.84	72.4	8.7	139
1565	15.5	0.2	17.05	17.5	0.64	79	3	83
1470	27.5	0.15	61.1	16	0.42	60.7	6.6	100
72.8	46	0.95	11.3	2.3	1.76	60.5	8.9	130
371	38	0.9	4.46	17.5	0.84	21.3	4.6	138
604	34.5	0.1	0.94	18.5	0.8	44	3.3	61
427	5.5	0.3	4.85	18	5.44	32.2	2.6	157
1855	2	<0.05	10.8	2	>500	2.67	2.3	79
1635	2.5	0.1	9.31	0.73	>500	3.48	3.5	93
3530	66	<0.05	48.5	0.42	>500	25.8	8	59
383	61.5	<0.05	3.89	0.1	257	0.83	17.1	60
235	12.5	0.05	0.72	>25.0	46.4	1.18	3.6	12
792	24	0.25	18.9	1.5	4.08	1.12	15.4	48
1710	21.5	0.05	14.05	0.82	4.8	7.74	36.1	183
>10000	16.5	<0.05	27.6	0.38	2.98	2.37	21.3	103
>10000	21	0.2	9.24	0.14	1.66	25.3	55.2	105
627	8	<0.05	165	1.7	>500	6.03	9.6	74
66.2	1573	1.9	0.67	1.35	6.98	91.5	3.5	112
64.6	2100	1.95	0.24	1.65	2.1	83.2	3.4	57
9.6	86.5	1.95	1.06	1.7	10.45	78.9	6.9	177
5	622.6	1.7	0.3	1.7	2.66	72.6	6.2	97
257	6.5	2.3	17.75	5.8	1.32	10.85	428	79
324	5.5	0.8	74.6	0.96	1.76	12.15	17.1	73
27.6	4.5	0.05	44.6	1.05	>500	1.52	906	12
158.5	5.5	1	71	12.5	63.9	21.3	361	144
123	3	0.75	5.86	13.5	9.14	33.2	26.6	119
179	2.5	0.35	0.93	15	8.1	52.4	8.4	90
154.5	3.5	0.2	3.92	12	7.48	39.7	28.6	115
149	6.5	0.3	1.83	14.5	3.3	48.9	21.3	94

9308	9311	301	9315	9312	9313	9347	9348	9325
Cs	Cu	Cu	Fe	Ga	Ge	Hf	In	K
ppm	ppm	%	%	ppm	ppm	ppm	ppm	%
0.1	7910	-	15.5	15.65	0.05	1.4	5.96	<0.01
0.1	6510	-	7.52	2.4	0.45	0.2	27.1	<0.01
0.15	>10000	4.03	13.15	14.55	0.5	0.7	33	<0.01
0.15	>10000	1.56	>25.0	1.1	0.85	0.1	3.19	<0.01
0.25	9490	-	16.4	17.25	0.3	1.2	8.32	<0.01
0.4	99.6	-	18	13.75	0.15	1.5	2.83	0.03
0.25	71.4	-	15.95	19	0.2	1.3	2.95	0.02
0.2	82.2	-	17.85	18.9	0.25	1.3	3.1	0.09
3.3	803	-	14.25	23.65	0.35	1.4	1.045	3.62
0.85	78	-	14.3	13.5	0.3	2.3	4.93	0.16
0.4	213.8	-	16.5	14.55	0.15	0.9	3.22	0.21
0.45	>10000	1.22	14.9	16.55	0.4	1.1	7.13	<0.01
0.05	1025	-	>25.0	7.9	0.7	<0.1	12.65	<0.01
0.05	1680	-	>25.0	6.85	0.65	0.1	8.39	<0.01
3.15	864	-	>25.0	5.9	0.9	0.3	3.95	0.51
0.55	245	-	22.1	1.8	0.5	<0.1	3.95	0.05
0.25	168.8	-	3.99	0.8	<0.05	<0.1	0.355	<0.01
0.8	891	-	>25.0	1.45	0.65	<0.1	0.07	0.07
0.1	556	-	>25.0	2.85	0.5	0.2	0.09	0.03
0.2	828	-	>25.0	1.25	0.75	0.1	0.07	0.04
0.7	405	-	24.5	7.95	0.65	0.9	0.075	0.4
0.3	1290	-	12.45	17.15	0.45	0.1	38	0.03
1.8	80	-	1.2	15.15	0.2	0.9	0.09	2.7
1.75	46.8	-	1.08	19.4	0.2	0.9	0.025	3.03
1.9	165.9	-	1.99	18.55	0.2	0.7	0.125	2.57
1.7	117.1	-	1.38	15.8	0.15	0.6	0.03	2.13
1	8790	-	15.45	2.65	0.25	1.1	6.53	0.03
0.25	4750	-	>25.0	8.45	1.65	0.1	3.98	<0.01
0.2	>10000	15.9	>25.0	0.6	0.9	<0.1	26.1	<0.01
0.2	>10000	7.1	20.2	6.25	0.55	0.7	15.7	<0.01
0.55	>10000	2.14	12.3	9.8	1.05	0.9	10.6	<0.01
0.8	>10000	1.38	12.75	20.2	0.9	1.2	10	<0.01
1.05	>10000	4.66	14.15	14.35	0.5	1.3	22	<0.01
0.75	>10000	1.66	13.15	18.15	1	1.6	11.4	<0.01



9316	9318	9319	9320	9321	9328	9323	9322	9324
La	Li	Mg	Mn	Mo	Na	Nb	Ni	P
ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm
29	0.8	0.09	1785	2.85	<0.01	0.3	75.9	160
2	1	1.17	3750	0.75	<0.01	0.4	93.6	590
9	0.8	0.64	1820	2.05	<0.01	0.5	509	1110
0.5	0.6	0.29	725	1.2	<0.01	0.5	2.8	380
35	0.8	0.17	1700	19.9	<0.01	0.3	100.5	390
33	1.2	0.08	1580	3.3	<0.01	0.3	17.2	70
35.5	1.6	0.11	1870	2.6	<0.01	0.1	14.6	120
28	0.8	0.06	1710	4.15	<0.01	0.1	18.6	10
48	4.2	0.6	315	587	0.17	4.2	32.8	1530
10.5	3	0.63	2770	84	<0.01	2.7	22.4	1200
16.5	1.2	0.05	1625	13.95	<0.01	0.1	14.4	<10
13	1.2	0.08	2280	29.85	<0.01	3	123.5	340
3	0.8	0.01	840	2.1	<0.01	0.3	<0.2	20
3	0.6	0.03	845	1.35	<0.01	0.2	<0.2	40
28	27.8	0.88	910	42.35	<0.01	1.4	22.8	1110
6.5	3.6	0.12	525	1	<0.01	0.1	4.6	30
3	0.2	0.19	840	0.45	<0.01	<0.1	19.6	260
1	5.4	0.38	200	0.75	<0.01	0.1	7	<10
6	4.6	0.28	375	1.65	<0.01	0.5	17.2	4060
2	2.2	0.1	385	1.4	<0.01	0.3	14.8	1420
12.5	10.2	0.69	575	5.3	<0.01	2.8	33.8	330
5	3	0.21	1905	1.1	<0.01	0.4	8	230
56	4.2	0.48	90	201	2.17	10	4.8	1030
50.5	3.8	0.71	120	362	2.32	11.7	4	970
46	3.8	0.62	135	866	2.24	12.5	6.2	990
43.5	4.6	0.6	135	899	2.07	10.4	5.4	900
4.5	3.4	2.67	785	7.5	<0.01	1.3	34	2270
9.5	1.8	0.29	545	3.8	<0.01	0.7	31.4	2990
1	0.6	0.14	935	9.5	<0.01	0.1	2460	1610
6	2	2.25	1660	5.45	<0.01	0.7	700	1560
8.5	1.6	1.59	1435	4.05	<0.01	0.8	210	1470
15.5	3	0.91	1630	4.55	<0.01	1	156	750
11	1.6	0.56	1435	4.15	<0.01	2.4	570	940
12.5	1.6	0.77	1470	3.05	<0.01	1.7	150	730

9317	312	9326	9349	9351	9341	9350	9352	9329
Pb	Pb	Rb	Re	S	Sb	Se	Sn	Sr
ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm
4	-	0.6	0.008	2.45	9.05	6	5.6	6
7.5	-	0.5	<0.002	>10.00	4.1	121	2	4.4
8	-	0.4	<0.002	>10.00	7.95	79	11	8.4
43.5	-	0.2	<0.002	>10.00	31.05	95	2.4	9.8
5	-	0.7	0.012	2.15	6.45	7	6.2	4.8
22	-	2.3	0.008	7.38	28.45	7	3.4	6.8
6	-	1.9	0.008	1.07	5.35	<1	3.4	9.8
7.5	-	4.7	0.008	5.88	7.85	8	3.4	6.8
14	-	133	0.058	>10.00	10.1	22	18.2	60.3
11	-	6.3	0.032	1.77	11.65	1	14	22.2
8	-	6.5	0.016	0.75	12.9	<1	5.6	6.6
7.5	-	1.2	0.03	1.77	17.35	2	8.4	10.4
40.5	-	0.4	0.002	>10.00	23.25	62	1	5.8
34.5	-	0.5	<0.002	>10.00	22.1	57	1	2.2
>10000	2.78	64.6	0.036	>10.00	>1000.0	29	1.6	4.8
>10000	14.55	9.2	<0.002	>10.00	>1000.0	78	6	1.6
5010	-	0.5	0.002	4.77	>1000.0	2	0.2	166
325	-	12.4	0.002	>10.00	247.7	36	0.4	10.2
2360	-	2.4	0.002	>10.00	>1000.0	13	0.2	12
335	-	2.4	0.006	>10.00	434	5	<0.2	5
205	-	22.5	0.002	>10.00	453.9	2	1.2	8.4
231	-	4.8	<0.002	>10.00	152.2	94	1.6	9.2
15	-	77.8	0.114	0.71	6.95	<1	0.6	634
13.5	-	89.9	0.2	0.35	4.9	<1	0.8	749
51.5	-	79.2	0.506	1.12	45.85	1	0.8	763
10.5	-	71.3	0.324	0.74	3.4	1	0.8	647
7	-	5.9	0.004	>10.00	18.15	54	4.4	33.8
29	-	0.9	0.01	>10.00	15.5	39	12	12.2
11.5	-	0.4	<0.002	>10.00	14	190	1	8.4
18.5	-	0.5	<0.002	>10.00	20.9	49	7.4	11.4
7.5	-	1.1	0.002	2.55	13.05	5	15	9
8	-	2.8	0.008	1.44	7.25	4	22.6	19
88.5	-	1.9	0.004	5.34	26	21	18.4	13
12.5	-	2.2	<0.002	1.77	8.3	7	18.2	12.6

9330	9331	9333	9334	9332	9336	9337	9335	9338
Ta	Te	Th	Ti	Tl	U	V	W	Y
ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
<0.05	1.5	0.6	<0.01	<0.02	19.7	31	425	12.4
<0.05	1.15	0.2	<0.01	0.12	2.8	<1	61.2	0.9
0.05	4.4	2	<0.01	0.8	18.3	5	209	7.1
0.05	129	0.4	<0.01	0.02	3.4	23	23.3	1.3
<0.05	3	0.4	<0.01	0.06	19	23	349	5.4
<0.05	6.35	0.6	<0.01	0.06	22.4	21	438	7.2
<0.05	0.95	0.2	<0.01	0.04	22.2	23	404	6.9
<0.05	38.2	0.2	<0.01	0.06	18.7	12	415	2.6
0.35	10.75	1.4	0.1	1.7	7.2	175	27.4	24.8
0.15	3.3	2.6	0.07	0.12	14.8	72	409	22.7
<0.05	0.3	0.6	<0.01	0.08	13	11	291	3.3
0.1	0.9	1	0.05	0.06	12.5	110	206	17.8
<0.05	4.25	<0.2	<0.01	0.04	2.5	<1	24.7	1.1
0.05	4.75	<0.2	<0.01	0.04	2.4	1	36.6	0.7
0.15	6.45	1.6	0.03	1.22	14.5	69	15.3	6.6
<0.05	6	<0.2	<0.01	0.3	2.3	4	10.2	0.3
<0.05	0.8	<0.2	<0.01	0.06	2.2	2	1.6	9.6
<0.05	12.3	<0.2	<0.01	0.22	4	15	2.3	3.5
<0.05	2.1	0.6	0.01	0.1	0.5	15	4.1	13
0.05	0.55	<0.2	<0.01	0.08	0.1	10	12.8	7.7
0.3	1.4	3.4	0.05	0.52	1.2	39	74.9	10.5
<0.05	66.4	0.2	<0.01	0.12	4.2	14	21.1	2.7
0.7	0.2	20.2	0.14	0.86	4.1	42	8.8	10.9
0.75	0.05	19.4	0.18	0.9	4.7	43	2.5	10.4
0.7	0.5	19.4	0.18	0.78	4.5	48	2.4	10.3
0.65	0.25	18.6	0.15	0.9	3.9	47	2.9	10.6
0.2	7.15	3.4	0.05	0.16	2.2	19	13.7	3.4
0.05	63.2	0.4	<0.01	0.12	10.7	19	18.5	13.3
<0.05	13.35	<0.2	<0.01	0.4	0.5	<1	5.7	0.6
0.05	6.55	2.6	0.01	0.42	10.5	23	112	7.7
<0.05	2.9	3	0.01	0.22	15.8	25	190.5	10.9
<0.05	0.15	2.6	0.01	0.26	15.3	25	276	11.3
0.2	0.9	3.2	0.05	2.02	12.2	27	193	10.4
<0.05	0.4	2.8	0.03	0.34	16.8	29	269	11.9

9339	316	9353
Zn	Zn	Zr
ppm	%	ppm
52	-	3
>10000	43.7	2
>10000	21.4	3.5
1655	-	3
642	-	6
356	-	2.5
26	-	1.5
<2	-	0.5
10	-	43.5
14	-	35
22	-	0.5
416	-	21
>10000	17.65	1.5
>10000	16.4	2
>10000	12.25	13.5
>10000	4.2	<0.5
4500	-	1.5
354	-	1.5
410	-	10
220	-	3.5
136	-	22
>10000	41.5	3
708	-	23.5
134	-	23.5
838	-	18
38	-	15
154	-	32
164	-	8.5
>10000	14.15	2.5
8930	-	19
920	-	14
760	-	11.5
740	-	27.5
286	-	24

Sheet1

Samples collected at Lustdust, 2001								
Sample No.	Station #	UTM	UTM	Notes	Assay	Sample type		
						WR	TS/PD	
<b>Trav # 1</b>	<b>05-Jul-01</b>							
GR01-1	1			LD01-32@253.8 Sk-intrusion contact	-	-	1	
GR01-2	1			LD01-30 @ 109 Moly vein	-	-	-	
GR01-3	8	346307	6162871	8m wide quartz vein	-	-	-	
<b>Trav# 3</b>	<b>07-Jul-01</b>							
GR01-4	2	347746	6160627	Massive grey limestone near hole 20-1	-	-	-	
GR01-5	10	347853	6160749	Pyrite, grey Cu minerals, As, scorodite	1	-	1	
GR01-6	12	347746	6160556	Pale brown-rose colored ?Fe carbonate or arsenic	1	-	-	
<b>Trav # 4</b>				<b>Hole LD01-32</b>				
GR01-7				328 ft contact between CFP monzonite and massive garnet	-	-	1	
GR01-8				322 ft Massive gt sk with magnetite after hematite	1	-	1	
GR01-9				317 ft Massive brown-green gt sk with chalcopyrite	-	-	1	
GR01-10				305 ft Massive gt sk	-	-	1	
GR01-11				277 ft Green garnets banded in hornfels	-	-	1	
GR01-12				252 ft Massive gt sk with pyrite and chalcopyrite	-	-	1	
GR01-13				220 ft Garnet pyrite sulphide skarn with possible chalco	-	-	1	
GR01-14				192 ft Garnet sulphide skarn with moly	-	-	1	
GR01-15				172 ft Contact between hornfels & epidote ?cpx-chlorite skarn front	-	-	1	
GR01-16				340 ft Dike, chlorite-epidote altered CFP monzonite	-	1	1	
GR01-17				349 ft Same dike, Qtz-pyrite-sericite altered CFP monzonite	-	1	1	
GR01-18				342 ft, Garnet-sphalerite-chalco sk with bladed magnetite after ?hematite	-	-	1	
				<b>Hole LD99-17 (transition between 4B &amp; Canyon skarns</b>				
GR01-19				266 ft Black sphalerite and chalcopyrite	1	-	1	
GR01-20				275 ft green cs Xstalline garnet sk w sphalerite & chalcopyrite	1	-	1	
GR01-21				192 ft 1.25m wide massive py-po-chalco zone in marble	1	-	-	
				<b>Hole LD20-12</b>				
GR01-22				211 ft massive brownish green garnet with pyrite & chalcopyrite	1	-	1	
				<b>Hole LD20-17 (north of Canyon Creek)</b>				
GR01-23				ft Cs brownish green crystalline garnet skarn with pyrite & chalco	1	-	1	
GR01-24				572 ft massive brown garnet skarn with pyrite & chalcopyrite	1	-	1	
				<b>Hole LD01-34</b>				
GR01-25				287 ft Moly scrapped from vein cutting BH monzonite	-	-	-	
				<b>No 1 Takia Silver Zone</b>				
GR01-26		347855	6160516	Pyrite, grey Cu minerals, arsenopyrite, scorodite	1	-	1	
GR01-27		347860	6160518	Pyrite, grey Cu minerals, arsenopyrite, scorodite w white quartz	1	-	-	
<b>Trav # 5</b>				<b>Hole LD01-32</b>				
GR01-28				407 ft massive dark garnet sk w pyrite & chalco	1	-	-	
GR01-29				197 ft massive garnet sk with pyrite	1	-	-	
GR01-30				229 ft Brown garnet with retrograde alteration & pyrite veinlets	1	-	1	

Sheet1

					<b>Hole LD97-11</b>			
GR01-31					289 ft brown garnet skarn with sulphides	1	-	1
GR01-32					494 ft Greenish garnet skarn with sulphides	1	-	1
					<b>Hole LD20-07</b>			
GR01-33					297 ft massive chalcopyrite-py-po-magnetite	-	-	1
					<b>Trav # 7</b>			
GR01-34		3	347037	6161091	Cs grey megacrystic K-spar Hbe monzonite (5% mafics)	-	-	1
GR01-35		21	346476	6160321	Pale silicious fine grained layered ?felsic volcanic or tuff	-	-	1
GR01-36		26	346241	6160212	3m wide dike of white, silicious QF intrusion with glassy quartz eyes	-	-	1
					<b>Trav # 8</b>			
GR01-37		6	346602	6161475	Purple bte hornfels chert in contact w bte (hbe) diorite w 13% mafic & 2% pyrite	-	-	1
GR01-38		16	348069	6160847	Bluegrey massive limestone	-	-	-
					<b>Hole LD93-8</b>			
GR01-39					20.4m massive black sphalerite with pyrite	1	-	1
GR01-40					21.5m massive black sphalerite-pyrite with white qtz veining	1	-	1
GR01-41					27.2m massive pyrrhotite with possible fibrous grey copper minerals	1	-	1
GR01-42					31m massive sphalerite with 20% cs euhedral pyrite	1	-	1
					<b>Hole LD93-11 (?No 3 Zone)</b>			
GR01-43					32.9m oxidized mineralization in marble	1	-	-
GR01-44					46m, get 1m wide zone of massive pyrrhotite in bleached marble	1	-	1
					<b>Hole LD93-7</b>			
GR01-45					9.5m pale altered monzonite with 2% diss pyrite, altered hbe and 2ary bte	-	1	1
					<b>Hole LD93-4</b>			
GR01-46					88m massive py-po with lesser sphalerite	1	-	1
GR01-47					90m massive py-po-?chalco with white quartz blebs	1	-	1
GR01-48					91.5m massive po-py-?chalco & white quartz blebs	1	-	1
					<b>Hole LD92-15</b>			
GR01-49					32m massive black sphalerite with pyrite	1	-	1
					<b>Hole LD01-34</b>			
GR01-50					559 ft cs grained monzonite with diss & veinlets of py-moly-chalco	1	-	1
GR01-51					540 ft monzonite with diss moly-py & qtz-moly-py vein	1	-	-
GR01-52					724 ft monzonite	-	1	1
GR01-53					456 ft monzonite with moly-qtz-py veins	1	-	-
GR01-54					387 ft monzonite cut by 1.5cm qtz-Kspar-pyrite vein cut by younger py vein	-	-	-
GR01-55					348 ft monzonite with some kspar alteration	-	1	1
GR01-56					292 ft monzonite cut by thin qtz-pyr-moly vein	-	-	-
GR01-57					243 ft monzonite cut by thin qtz-py-moly vein	-	-	-
GR01-58					221 ft monzonite cut by qtz-py-moly veinlets	1	-	-
GR01-59					200 ft monzonite with minor pyrite	-	1	1
GR01-60					292 ft monzonite with thin qtz-pyr-moly vein & glassy euhedral qtz Xstals	-	-	-
					<b>Hole LD01-33</b>			
GR01-61A & B					561 ft green Xstalline gt cut by silica & pyrite	-	-	1

## Schroeter, Tom EM:EX

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**From:** Schroeter, Tom EM:EX  
**Sent:** Thursday, August 16, 2001 9:02 AM  
**To:** Ray, Gerry EM:EX; Massey, Nick EM:EX  
**Cc:** Lane, Bob EM:EX  
**Subject:** RE: Interim report & assay data: Lustdust porpyry-skarn

Gerry and Ian - thanks! Bob Lane and I had a good visit to Lustdust on Aug. 6th. With the "high-profile" drilling to the north on the Lorraine, this area should attract some good attention (if not later this year - next season!). Hope you have a good time in Wells. Looking forward to chatting with you in Victoria later this Fall. P.S. Devasting about Keith. Tom.

-----Original Message-----

**From:** Ray, Gerry EM:EX  
**Sent:** Monday, August 13, 2001 8:27 AM  
**To:** Massey, Nick EM:EX  
**Cc:** Schroeter, Tom EM:EX; Lane, Bob EM:EX  
**Subject:** Interim report & assay data: Lustdust porpyry-skarn

13th Aug 2001  
Wells, BC

Hi Nick,

Here is an interim report outlining our work at Lustdust and also two files listing the samples and the assay results we have received to date.

Things are going well at Wells although exploration is very quiet in the belt.

Gerry << File: 1st batch 01.xls >> << File: SAMP2001.XLS >> << File: Interim01.DOC >>