

susceptibility surveys were run using the Scintrex IGS-2 system. A fifty foot observation interval was used and for the magnetic survey a base station was set up with readings at two minute intervals, field stations were then diurnally corrected with these base station readings. Other survey parameters were described in the introduction.

Figure 27 shows stacked profiles for the VLF-EM survey and figure 28 stacked profiles for the magnetic susceptibility survey. On line 4+00N as compared with line 0+00 there is a stronger VLF-EM crossover with an increased negative amplitude magnetic low. On line 8+00N this feature is weaker and shifts to the west. It is not observed on line 12+00N.

LOG OF DRILL HOLE SL-4

by B. Frey

- 0-20' OVERBURDEN; no samples.
- 20'-61.7' OVERBURDEN BOULDERS OF MEDIUM-COARSE-GRAINED TROCTOLITE, MINOR ANORTHOSITE AND GABBROIC TROCTOLITE, WITH LOCAL MIXED GRAVEL-COBBLERES.
- Mode is 65-95%, 5-20 mm plagioclase laths; 5-40%, 2-5 mm olivine; 0-10% clinopyroxene; 2-7% oxides; 0-5% biotite; and a trace chalcopyrite. Ferromagnesian minerals are interstitial to plagioclase. This represents all the major boulders in this interval with the following intervals probably representing discreet, separate boulders: 20'-21.5', 22.5'-57.8', and 61'-61.7'. Boulders are separated by gravel and cobbles of basalt and coarse-grained mafic rocks and also by limonitic-weathered surfaces (especially olivines). Interval 22.5'-57.8' contains fracture surfaces with limonite, so this may be several boulders. Boulders probably were not transported far. More anorthositic, lighter colored intervals (namely 38.4'-40.5' and 47.3'-49.5') tend to be fractured and lighter colored albitized(?) with texture ranging from breccia to pseudobreccia. These intervals also contain troctolite-gabbroic knots to 3 cm (with interstitial olivine) which do not have the fracturing and albitization. Fracturing and albitization probably occurred when anorthosite was in a crystal mush stage with solidified inclusions(?) of gabbroic knots. Above 38.4' rock is largely troctolitic, while below 40.5' rock is more gabbroic and troctolitic. Interval 41'-42.3' contains uralitized-serpentinized ferromagnesian minerals and is probably fracture controlled.
- 61.7'-81.0' OVERBURDEN BOULDER OF MEDIUM GREY, FINE-GRAINED, ALTERED BASALT.
- Unit is very broken throughout with limonite along fractures in upper foot. Unit contains scattered 1-2 mm amygdals (calcite filled with red veins) and irregular vesicles to 1 cm (but usually spherical 1-2 mm) which are more prevalent toward the base. Unit is slightly calcareous in places and appears to have originally contained 50-60% plagioclase with

the remaining percent ferromagnesians (now chlorite, serpentine, and amphiboles). Rock is not as hard as fresh basalt. Breakage of core caused a number of 2-3' core runs. Broken core may be due to primary volcanic fragments, glacial brecciation, or tectonic brecciation (or a combination), although it has the least appearance of tectonic brecciation. Minor chlorite(?)—serpentine occurs along some fragment surfaces, but no slickensides are evident. Boulder probably was not transported far.

- 81.0'-81.3' OVERBURDEN COBBLE OF MEDIUM TO COARSE-GRAINED TROCTOLITE. Similar to uppermost unit. Probably was not transported far.
- 81.3 LEDGE(?)
- 81.3'-103.8' MEDIUM GREY GRADING INTO RED, FINE-GRAINED, ALTERED BASALT. Similar to boulder at 61.7'-81.0'. Contains scattered 1-4 mm calcite amygdales with red (hematite? heulandite? chabazite?) rims. Color change is noticeable over about 6', with most abrupt change occurring at 87'. Reddish color is due to hematite, with oxidation possibly but not necessarily related to oxidation along fractures or faulting associated with basal contact. Basalt in general is soft with alteration to sheet silicates and amphibole(?). Basalt is largely broken-fragmental(?) throughout, for the same reasons as the basalt boulder, although towards the base the core is probably more sheared and tectonically broken. Chlorite-serpentine is formed along some fragment contacts in the upper part with hematitic concentrations or gouge similarly found in the red basalt, with weakly developed slickensides toward the base. Locally very poor recovery (especially 97'-103.8') and shorter than normal core runs.
- 103.8'-136.9' BRECCIATED RED AND GREY ALTERED BASALT WITH SCATTERED INTRUSIVE(?) AND/OR TECTONIC SLIVERS OF COARSE-GRAINED REDDISH AND GREEN ALTERED ANORTHOSITE-TROCTOLITE(?) AND GABBRO(?). Most coarser intrusive fragments occur within 103.8'-111.4'. Basalt within 103.8'-131.3' is largely red and hematitic. Basalt from 131.3'-136.9' is largely grey. Material between fragments ranges from hematite to sheet silicates and gouge locally (such as 111.4'-111.7') as in other broken basalt. There is more voids and open space than other basalt intervals, perhaps indicating rather dry brecciation. Some fragmentation of basalt may have been primary, not tectonic. Broken rock produced local short runs and poor recovery (especially 116'-121'). Basal contact is tectonic.
- 136.9'-385.5' VERY COARSE-GRAINED TO MEDIUM-GRAINED ANORTHOSITIC GABBRO AND ANORTHOSITE WITH SCATTERED SHEARS AND ASSOCIATED ALTERATION.

Unaltered mode:

- 60-95% (75% avg) plagioclase, largely as laths to 2 cm (higher % away from augite oikocrysts).
- 3-25% (15% avg) augite, oikocrysts to 3 cm.
- 1-7% (4% avg) oxides, magnetite and ilmenite, largely interstitial.
- 0-5% (4% avg) biotite, interstitial, sometimes mantles oxides.
- 0-25% (3% avg) olivine, found with oxides, pyroxene.
- trace- $\frac{1}{2}$ %(?) chalcopyrite, disseminated.

The plagioclase forms the framework of the rock with everything else usually interstitial. Laths show locally developed preferred orientation (60° to core axis at 198.5'); usually are an opalescent, medium dark grey; and are translucent at best. Laths are locally bent. Interstitial plagioclase may be more clear, transparent. Plagioclase in general becomes finer-grained, more anhedral, more transparent with depth. Interstitial augite occurs as oikocrysts, at least some of which are elongate. Olivine and/or oxides are sometimes intergranular or occur as chadacrysts in plagioclase and may increase slightly downward along with chalcopyrite. Distribution is otherwise somewhat spotty. Rock is slightly-somewhat magnetic with some decrease with severe alteration. Grain size in general decreases downhole. Shears are typically mylonitic and less than 2 cm wide, with light colored sheet silicates, zeolites, chlorite, calcite, K-feldspar, quartz, and local voids. Sometimes they are composed of thinner coalescing shear laminae.

Alteration of the surrounding rocks is of several types. Immediately adjacent to and within several cm of many mylonitic shears, the plagioclase is pink from partial alteration to K-feldspar. Within a few tens of cms, the augite is altered to a dark green-black chlorite-serpentine and/or urallite, with local iron oxides. Olivine may have minor serpentinization along fractures, but in general appears to be less affected by alteration than the pyroxene. Locally, on a cm scale where shears cross elongate augite oikocrysts, the alteration runs deeper into the country rock here than in adjoining augite-free anorthositic rock. Within several feet of the upper contact, ferromagnesian have also been hematitically altered. Hairline fractures with chlorite, calcite, slickensides, and very minor alteration are scattered, especially where larger shears are missing. The plagioclase shows another type of alteration which may have a less direct association with the shears. Locally, the plagioclase is cracked with white to pale green alteration between and variably through the crystals, producing a pseudobreccia and breccia type fabric. Resulting grain size here may be finer than normal. Texture is somewhat more granular locally. This alteration type may be carbonitization or albitization. It does have a tendency to be more pronounced in more anorthositic areas (areas with

interstitial plagioclase) away from adjacent rock with interstitial ferromagnesian silicates and oxides. This may reflect late stage fluids after the augite oikocrysts (but pre-interstitial plagioclase) had formed; or that the anorthosite was a more brittle deforming rock compared with less anorthositic areas.

Oxides show local alteration to hematite or leucoxene.

The more major mylonitic shears with associated alteration foci are centered at 137.0', 137.8', 145.2', 153.0', 153.6', 163.6', 171.8', 176.5', 177.5', 181.0', 181.4', 199.7', 202.5', 204.0', 232.5', 234.0', 236.1', 237.1', 242.3', 258.6', 278.7' (without pink feldspar and only minor augite alteration), 296.5', 318.9', and 373.3'.

The light colored plagioclase alteration and brecciation is notable within 199.5'-205.5' locally-moderately developed; 220'-255.6' locally developed but increasing downward; 255.6'-282.1' locally intensely altered and brecciated; 282.1'-301' very spotty minor alteration; 339'-367' moderately developed spottily.

Local intervals are more olivine-rich than average, especially 330-336', and may also contain slightly more chalcopyrite than normal.

385.5'-453.3' REDDISH GREY TO LIGHT GREEN GREY ALTERED COARSE-GRAINED ANORTHOSITIC GABBRO AND ANORTHOSITE WITH SCATTERED MYLONITIC SHEARS.

Parent rock believed to be same as in previous unit, with the same alteration types represented. Entire unit contains alteration of one type or another, with ferromagnesian showing alteration ubiquitously. Coarsest-grained material is anorthositic gabbro scattered within 441'-451'.

Mylonitic shears (with K-feldspar, zeolites, calcite, quartz, chlorite, and zeolites are located at 387.3' (3 cm shear), 388.9', 390.0' (1-4 cm shear with acicular natrolite crystals in vug), 397'-399' (1 cm shear), 401.7' 2 cm shear, 403.0', 415.0', 425.7', 426.5', 426.5', 427.6, 427.8, 434.1 (1 cm shear with calcite and zeolites), 434.6', 436.5, 437.3' ($\frac{1}{2}$ cm shear with calcite and zeolites), 438.3', 446.0'-447.3' (1-2 cm shear with breccia fragments), 449.2' (1 cm shear), 451.4'-451.9' (coalescing shears-veins with much calcite, voids). These shears vary from 5-50° to core axis with most about 30-35°. Plagioclase alteration associated with brecciation and pseudobrecciation and resulting finer grain size is scattered within 394.3'-399.1' and 428'-433.8'; and is locally very intense within 408.9'-412.5' and 415.7'-423.7'. Ferromagnesian in these intervals, besides being altered, are also rimmed with a paler green alteration product.

Between these areas, the core is altered reddish grey. This hematite replaces the ferromagnesian, rims the plagioclase, partially replaces the oxides, and is found along slip-fractures in the rock (more oxidizing solutions compared with light-pale green grey plagioclase brecciation-alteration areas?). Locally this is sporadic. Magnetism in

unit is slight and even less in these oxidized portions. The interval 441'-442.5' contains very dark grey opalescent plagioclase and appears relatively unaltered except for minor ferromagnesian. Unit is essentially free of sulfides.

453.3'-576.5' MEDIUM-COARSE-GRAINED OLIVINE-BEARING ANORTHOSITIC GABBRO AND MINOR ANORTHOSITE WITH LOCAL SHEARS AND ALTERATION.

Unaltered Mode:

60-95% (70% avg) Plagioclase; laths 2-10 mm, with occasional larger ones. Plagioclase euhedralism is variable but is in general less than previous units, along with preferred orientation.

3-25% (15% avg) Augite; interstitial forming oikocrysts to 2 cm locally.

0-20% (8% avg) Olivine; chadacrysts and intergranular often with oxides, pyroxene.

2-7% (5% avg) Oxides; intergranular.

0-5% (2% avg) Biotite; interstitial.

$\frac{1}{4}$ - $\frac{1}{2}$ %(?) Chalcopyrite; very finely disseminated.

Unit is similar to previous units except plagioclase % is smaller on the average, with smaller and fewer anorthositic intervals. Olivine (and augite(?) and oxides) amount increasing downward on the average. Chalcopyrite amount is slightly elevated(?) compared with previous units, with the amount increasing downward. It occurs as disseminations sometimes associated with hairline fractures. Texture changes also downhole, with rock becoming more allotriomorphic in general. Lower contact is a .6' thick coarser (than average) grained interval that is bounded by a 2 cm thick plagioclase alteration breccia. Minor shears with associated alteration (as in previous unit) occur at 457.9', 463.3', 472.2', and 487.9'. Chlorite-hornblende-serpentine alteration of pyroxene is scattered. Serpentinization of the olivine is minor. Smaller hairline shears with chlorite, calcite, and slickensides also occur. Oxides sometimes have leucoxene rims. Plagioclase alteration associated with brecciation is weakly developed compared with previous units, probably reflecting lesser amounts of the more anorthositic intervals. These altered intervals are 472.7'-472.9'; 484.2'-488.5' with locally intense alteration that is at least partly related to the shear at 487.9' along with minor hematitic alteration; 504.5'-504.6' (directly above a short pegmatoidal interval); 571.8'-571.9' and at the basal contact. Unit is locally pegmatoidal (plagioclase, augite to 2 cm) gabbro at 504.6'-505.1' which also contains a trace of pyrrhotite with the chalcopyrite.

576.5'-791' MEDIUM TO VERY COARSE-GRAINED (COARSE-GRAINED AVERAGE)
T.D. TROCTOLITIC ANORTHOSITE WITH LOCAL ANORTHOSITE AND ALTERATION.

Unaltered mode:

- 70-97% (85% avg) Plagioclase; laths to 15 mm, with good preferred orientation locally, especially near top of unit. It is broken, finer grained in altered breccia areas.
- 0-15% (5% avg) Olivine; in general increases with depth.
- 0-10% (4% avg) Augite; forming spottily distributed oikocrysts to 2 cm and in general increases downward.
- 1-4% (3% avg) Biotite; interstitial, perhaps increasing slightly downward.
- 2-5% (3% avg) Oxides, at least partially intergranular with scattered(?) subhedral grains.
- $\frac{1}{2}$ - $\frac{1}{2}$ % Chalcopyrite, disseminated, perhaps increasing downward(?). Overall amount is perhaps greater than previous units.

Plagioclase oriented fabric is not as prominent in higher mafic areas and tends to be destroyed with progressive brecciation (resulting plagioclase lath fragments produce a finer grained texture).

Alteration is similar in type to the previous units. The pyroxene oikocryst alteration continues to be spottily ubiquitous. Shears and the associated K-feldspar alteration are not as numerous or prominent as in previous units. They are typically thinner, more chloritic, quartzose, and zeolitic, especially within 709'-722'. The thicker, more K-feldspar bearing ones are at 644.6', 654.9'-657' (2 cm wide with voids and zeolites), 674'-675' 1-2 cm wide, 739.7'-740.2' (1 cm wide) and 742.7'-743.2' (1 cm wide). They are oriented 5-30° to the core axis.

Plagioclase alteration associated with brecciation-pseudobrecciation is spotty and affects perhaps 25% of the core and still tends to favor plagioclase and plagioclase-richer areas. Other minerals present are also affected where it is more intense, such as 597'-611' and 618.7'-621.6'. These intervals have slightly better developed fractures-shears than previous alteration of this type. Where oxides have alteration rims, the product appears to be leucoxene. Olivine has scattered serpentine alteration along fractures within grains. The interval 757.5'-758.5' contains several 1-2 cm dikes-veins of biotitic quartz diorite (oriented 5 and 15° to core axis) which locally have more of an igneous texture than metasomatic, as with other veins or shears.

791'

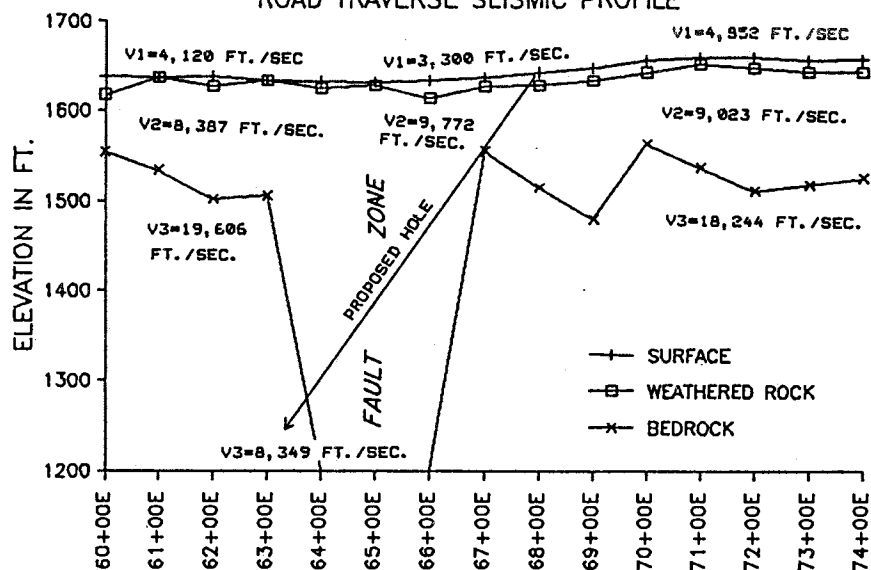
TOTAL DEPTH

Note: Drill hole was logged without benefit of thin sections, but ferromagnesian identification is believed to be correct.

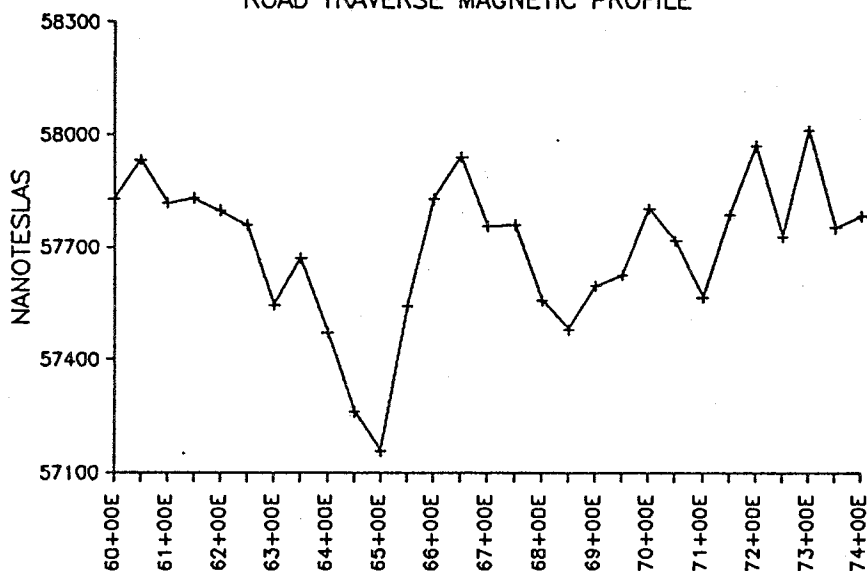
Analytical results of drill hole SL-4 follow in Table 7.

FIG. 25 RAILROAD TROCTOLITE HOLE SL-4

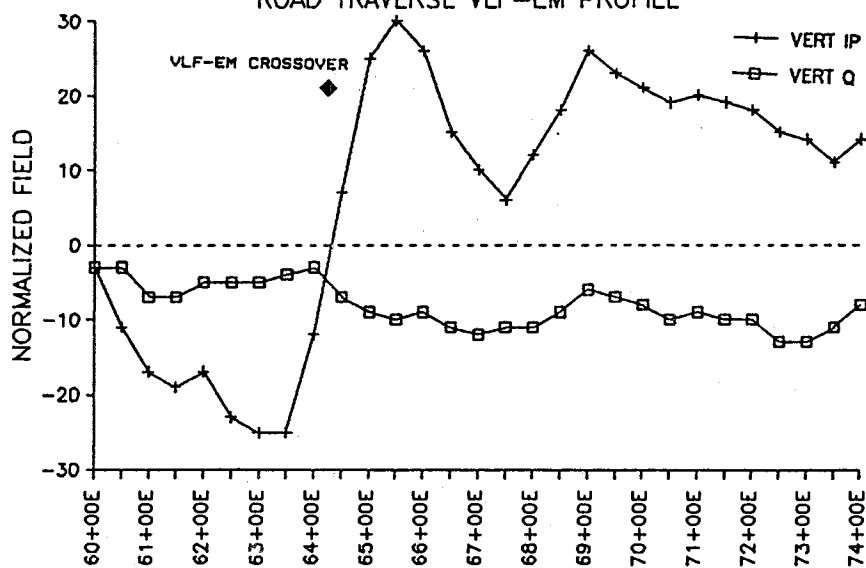
ROAD TRAVERSE SEISMIC PROFILE



ROAD TRAVERSE MAGNETIC PROFILE

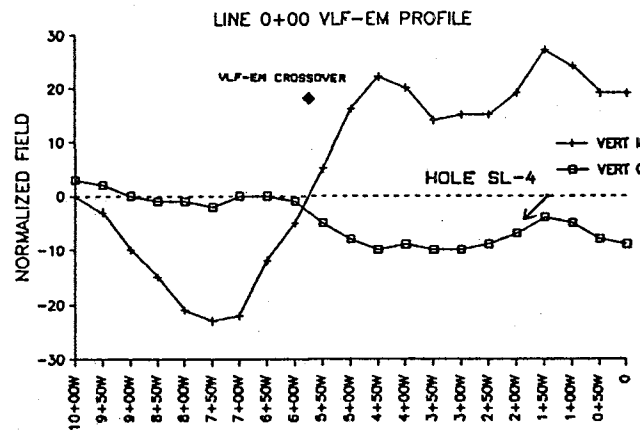
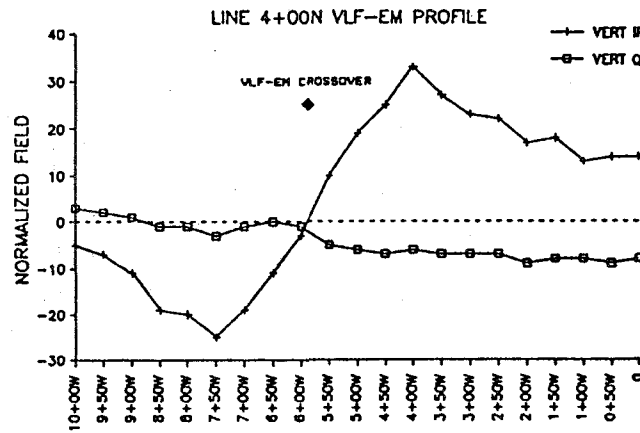
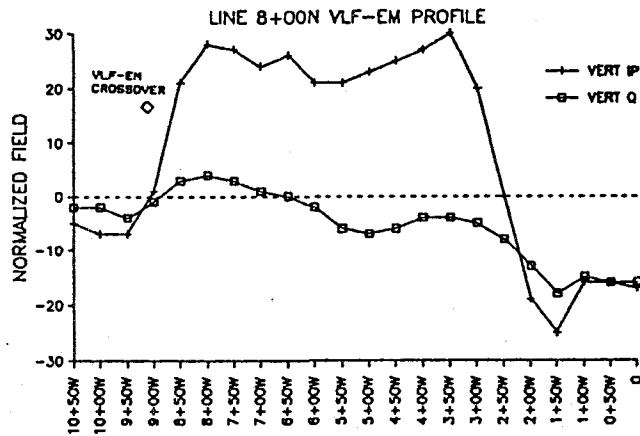
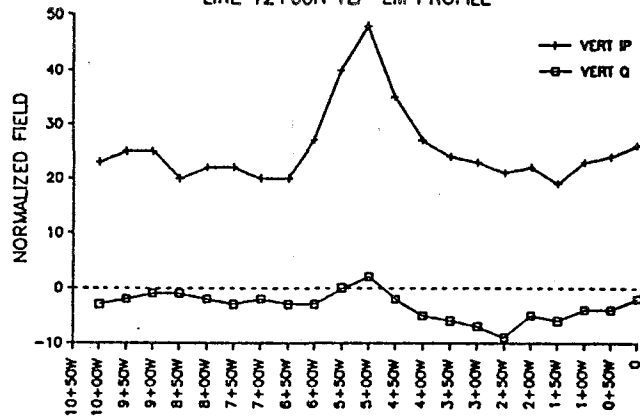


ROAD TRAVERSE VLF-EM PROFILE



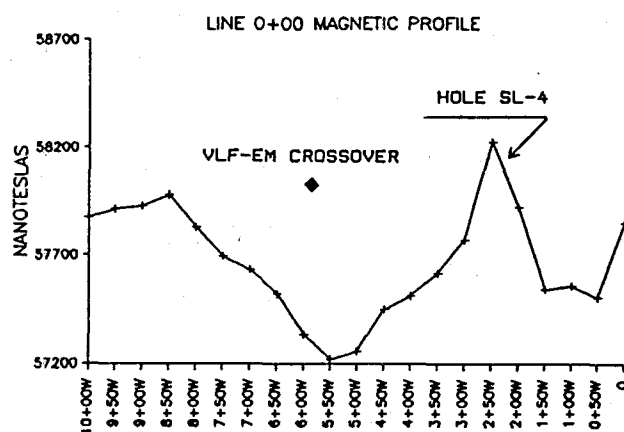
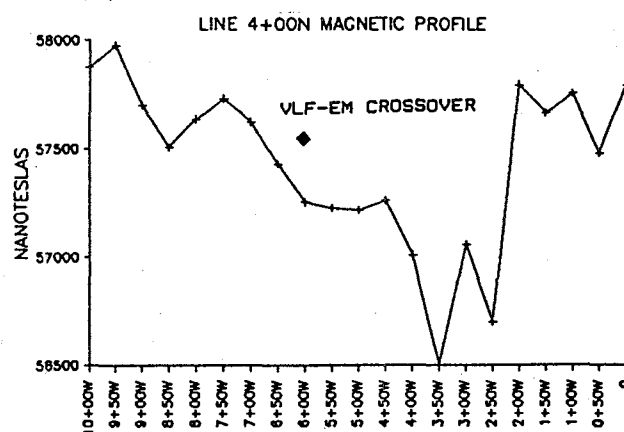
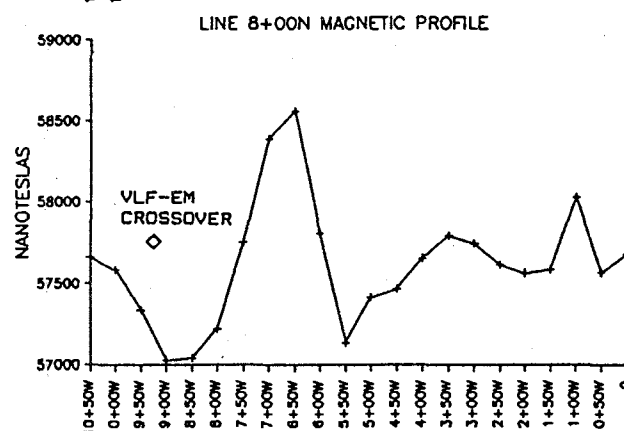
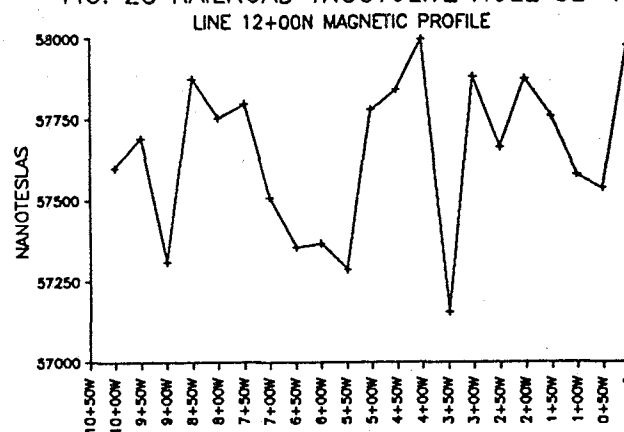
STATION INTERVAL 100 FT.

FIG. 27 RAILROAD TROCTOLITE HOLE SL-4
LINE 12+00N VLF-EM PROFILE



STATION INTERVAL 50 FT.

FIG. 28 RAILROAD TROCTOLITE HOLE SL-4



STATION INTERVAL 50 FT.

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	SiO2 %	Al2O3 %	Fe2O3 %	Fe %	MgO %	CaO %	Na2O %	NA %	K2O %	TiO2 %
CSL 19213	SL-4	33-35	48.60	22.80	8.66	4.90	5.66	10.10	3.24	1.80	0.40	0.59
CSL 19214	SL-4	38.5-40.4	51.20	27.50	1.88	1.10	0.79	11.80	4.08	2.50	1.12	0.30
CSL 19215	SL-4	42.7-44.7	48.90	22.90	8.12	5.60	5.04	9.60	3.28	2.30	0.67	0.77
CSL 19216	SL-4	81.3-87.0	48.20	15.40	13.90	9.30	6.30	3.42	5.33	3.50	0.30	2.51
CSL 19220	SL-4	87-97	48.50	15.20	14.40	11.00	4.99	2.94	5.90	4.10	0.60	2.51
CSL 19226	SL-4	97-103.8	48.90	15.90	12.40	8.70	5.47	2.90	5.21	3.80	1.50	2.40
CSL 19227	SL-4	103.8-121	49.20	18.70	11.50	9.10	4.40	2.76	5.17	3.80	1.40	1.68
CSL 19234	SL-4	121-131.3	49.60	16.40	13.50	10.00	3.96	2.71	5.71	3.90	1.10	2.33
CSL 19240	SL-4	131.3-137	46.70	18.50	15.00	11.00	4.38	2.67	4.99	3.70	1.00	2.27
CSL 19250	SL-4	137-147	50.00	24.40	5.55	4.10	2.90	9.74	3.51	2.30	0.90	0.66
CSL 19256	SL-4	163-179	49.50	24.10	5.65	4.40	3.01	10.10	3.52	2.50	0.80	0.71
CSL 19265	SL-4	180.5-181.7	52.00	21.30	5.37	3.90	3.56	6.81	4.24	3.00	2.40	0.73
CSL 19266	SL-4	191-193	50.10	24.80	5.50	4.00	3.10	11.10	3.54	2.50	0.40	0.65
CSL 19267	SL-4	199-207	50.10	23.80	5.28	3.80	2.94	9.43	3.68	2.50	1.00	0.78
CSL 19272	SL-4	231-243	50.00	24.70	4.87	3.40	2.41	10.30	3.86	2.70	0.80	0.68
CSL 19279	SL-4	271-283	49.40	25.20	4.56	3.00	2.52	10.60	3.61	2.60	0.76	0.59
CSL 19286	SL-4	295-298	46.00	21.40	9.15	6.60	4.94	8.98	3.85	2.30	0.60	1.17
CSL 19287	SL-4	323-327	49.10	23.50	7.41	5.40	3.88	10.30	3.48	2.40	0.50	0.86
CSL 19289	SL-4	385-399.1	49.90	25.60	4.40	2.50	2.24	10.50	3.98	2.30	0.80	0.74
CSL 19297	SL-4	399.1-408.9	50.00	25.70	3.55	2.40	2.02	9.61	4.47	2.60	0.80	0.56
CSL 19300	SL-4	408.9-423.7	49.40	26.60	2.58	1.80	1.24	10.80	4.04	2.70	0.90	0.39
CSL 19304	SL-4	433.8-453	49.70	24.40	4.27	3.20	2.18	9.71	4.34	3.00	0.70	0.80
CSL 19316	SL-4	453-467	50.30	23.70	6.40	5.00	3.06	10.40	3.79	2.70	0.40	0.96
CSL 19324	SL-4	483-491	50.00	24.50	4.68	4.10	1.79	9.67	4.24	2.90	0.80	0.89
CSL 19329	SL-4	503-517	47.30	20.90	10.00	7.50	6.03	9.28	3.20	2.30	0.20	0.78
CSL 19337	SL-4	569-581	48.60	23.20	8.03	6.00	4.12	10.10	3.55	2.40	0.30	1.66
CSL 19345	SL-4	597-611	50.60	26.30	3.06	2.40	1.36	11.00	4.21	2.90	0.50	0.74
CSL 19353	SL-4	611-623	50.50	24.90	4.61	3.60	2.31	11.10	3.91	2.80	0.30	0.98
CSL 19360	SL-4	649-661	49.50	23.80	4.95	3.50	2.37	10.40	3.84	2.70	0.60	1.24
CSL 19367	SL-4	673-687	50.60	24.60	5.49	4.50	2.42	10.80	3.82	2.60	0.40	1.40
CSL 19375	SL-4	691-703	50.10	23.90	6.27	4.60	2.79	10.60	3.69	2.60	0.50	1.62
CSL 19515	SL-4	720-721	47.40	23.10	7.04	4.80	3.42	9.83	3.66	2.50	0.40	1.81
CSL 19506	SL-4	739-751	50.50	25.20	4.52	3.70	1.95	11.10	3.82	2.60	0.40	1.12
CSL 19513	SL-4	757-759	52.10	24.30	4.48	2.90	1.96	10.60	3.97	2.60	0.50	1.17
CSL 19514	SL-4	787-791	48.90	24.40	5.89	4.20	2.62	10.80	3.67	2.70	0.40	1.62

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	TA PPM	CU PPM	NI PPM	CR PPM
CSL 19213	SL-4	33-35	0.26	0.10	0.11	0.01*	0.02	50	8	99	140	76
CSL 19214	SL-4	38.5-40.4	0.40	0.02	0.07	0.50	0.01*	60	10	72	50*	74
CSL 19215	SL-4	42.7-44.7	0.24	0.10	0.07	0.10	0.02	50*	3*	87	120	83
CSL 19216	SL-4	81.3-87.0	0.59	0.11	0.21	5.00	0.04	50*	3	127	58	50*
CSL 19220	SL-4	87-97	0.64	0.08	0.08	3.40	0.01	50	6	17	54	50*
CSL 19226	SL-4	97-103.8	0.54	0.11	0.02	3.70	0.01*	50	4	29	50*	50*
CSL 19227	SL-4	103.8-121	0.40	0.10	0.01*	3.70	0.01	50*	3*	19	50*	50*
CSL 19234	SL-4	121-131.3	0.59	0.10	0.04	3.20	0.01*	50*	10	22	50*	50*
CSL 19240	SL-4	131.3-137	0.60	0.08	0.01*	3.00	0.01*	50*	11	17	73	50*
CSL 19250	SL-4	137-147	0.24	0.06	0.19	1.60	0.01	50	3*	68	87	130
CSL 19256	SL-4	163-179	0.24	0.06	0.13	1.50	0.01	50*	4	71	97	170
CSL 19265	SL-4	180.5-181.7	0.23	0.07	0.11	3.70	0.02	80	5	72	100	140
CSL 19266	SL-4	191-193	0.27	0.07	0.12	0.20	0.01	50*	5	69	130	170
CSL 19267	SL-4	199-207	0.31	0.06	0.11	1.80	0.02	60	11	63	79	160
CSL 19272	SL-4	231-243	0.25	0.06	0.23	1.60	0.02	60	7	59	81	170
CSL 19279	SL-4	271-283	0.17	0.05	0.35	1.00	0.02	80	3*	53	60	200
CSL 19286	SL-4	295-298	0.25	0.10	0.08	2.00	0.02	50*	13	92	160	270
CSL 19287	SL-4	323-327	0.21	0.08	0.01*	0.20	0.02	50*	4	96	120	220
CSL 19289	SL-4	385-399.1	0.21	0.05	0.22	2.10	0.01	60	5	62	57	130
CSL 19297	SL-4	399.1-408.9	0.41	0.06	0.34	2.00	0.01*	80	3	25	62	79
CSL 19300	SL-4	408.9-423.7	0.36	0.04	0.46	1.00	0.01*	80	9	28	50*	63
CSL 19304	SL-4	433.8-453	0.41	0.07	0.12	2.20	0.01*	80	7	54	50*	98
CSL 19316	SL-4	453-467	0.43	0.09	0.09	0.40	0.01	50*	3*	73	130	210
CSL 19324	SL-4	483-491	0.52	0.07	0.11	1.00	0.01	60	13	52	76	210
CSL 19329	SL-4	503-517	0.39	0.15	0.15	0.20	0.01*	50*	6	69	230	200
CSL 19337	SL-4	569-581	0.36	0.12	0.16	0.20	0.01*	50*	3	62	90	140
CSL 19345	SL-4	597-611	0.37	0.04	1.06	1.50	0.01*	90	13	37	50*	56
CSL 19353	SL-4	611-623	0.28	0.05	0.17	0.00	0.01*	80	3	45	90	79
CSL 19360	SL-4	649-661	0.29	0.06	0.18	1.20	0.01	50*	19	50	51	66
CSL 19367	SL-4	673-687	0.31	0.06	0.06	0.60	0.02	50*	17	52	63	100
CSL 19375	SL-4	691-703	0.28	0.07	0.07	0.30	0.02	60	15	118	72	120
CSL 19515	SL-4	720-721	0.25	0.08	0.12	2.90	0.01*	50*	15	77	89	110
CSL 19506	SL-4	739-751	0.27	0.05	0.14	0.60	0.01*	50*	8	49	77	93
CSL 19513	SL-4	757-759	0.26	0.06	0.18	0.50	0.01*	70	7	57	50*	96
CSL 19514	SL-4	787-791	0.29	0.07	0.09	1.20	0.01	60	3	58	66	83

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	CO PPM	V PPM	ZN PPM	PB PPM	MO PPM	PT PPB	PD PPB	IR PPB	AU PPB	AG PPM
CSL 19213	SL-4	33-35	50	51	200*	5*	2*	15*	2*	100*	5*	5*
CSL 19214	SL-4	38.5-40.4	10*	18	200*	5*	2*	15*	2*	100*	5*	5*
CSL 19215	SL-4	42.7-44.7	47	46	200*	5	2*	15*	2*	100*	5*	5*
CSL 19216	SL-4	81.3-87.0	43	356	200*	6	2*	15*	2*	100*	5*	5*
CSL 19220	SL-4	87-97	44	438	200*	9	2*	15*	4	100*	5*	5*
CSL 19226	SL-4	97-103.8	37	270	260	6	2*	15*	2	100*	5*	5*
CSL 19227	SL-4	103.8-121	38	200	200*	5*	2*	15*	2	100*	5*	5*
CSL 19234	SL-4	121-131.3	34	270	240	8	2*	15*	2*	100*	5*	5*
CSL 19240	SL-4	131.3-137	51	329	240	5	2*	15*	2	100*	5*	5*
CSL 19250	SL-4	137-147	32	74	200*	6	2*	15*	2	100*	5*	6
CSL 19256	SL-4	163-179	29	84	200*	6	2*	15*	2*	100*	5*	8
CSL 19265	SL-4	180.5-181.7	19	86	200*	7	2*	15*	2*	100*	5*	5*
CSL 19266	SL-4	191-193	29	77	200*	5*	2*	15*	2*	100*	5*	5
CSL 19267	SL-4	199-207	31	79	200*	5	2*	15*	2	100*	5*	6
CSL 19272	SL-4	231-243	17	82	200*	5*	2*	15*	2*	100*	5*	5*
CSL 19279	SL-4	271-283	18	77	200*	8	2*	15*	2	100*	5*	5*
CSL 19286	SL-4	295-298	59	150	200*	11	2*	15*	2	100*	5*	5*
CSL 19287	SL-4	323-327	39	146	200*	5*	2*	15*	2	100*	5*	5*
CSL 19289	SL-4	385-399.1	21	105	200*	5*	2*	15*	6	100*	5*	5*
CSL 19297	SL-4	399.1-400.9	17	59	200*	5*	2*	15*	10	100*	6	5*
CSL 19300	SL-4	400.9-423.7	13	47	200*	5*	2*	15*	4	100*	5*	5*
CSL 19304	SL-4	433.8-453	24	86	200*	5*	2*	15*	2	100*	5	5*
CSL 19316	SL-4	453-467	34	130	200*	5*	2*	15*	15	100*	6	5*
CSL 19324	SL-4	483-491	19	157	200*	5	2*	15*	10	100*	5*	5*
CSL 19329	SL-4	503-517	65	134	200*	5*	2*	15*	4	100*	5*	5*
CSL 19337	SL-4	569-581	43	137	200*	5*	2*	15*	4	100*	5*	5*
CSL 19345	SL-4	597-611	10*	46	200*	5*	2*	15*	40	100*	5*	5*
CSL 19353	SL-4	611-623	22	66	200*	5*	2*	15*	6	100*	5*	5*
CSL 19360	SL-4	649-661	22	79	200*	5	2*	15	4	100*	5*	5*
CSL 19367	SL-4	673-687	30	86	200*	5*	2*	15*	6	100*	5*	5*
CSL 19375	SL-4	691-703	34	98	200*	5*	2*	15*	6	100*	5*	5*
CSL 19515	SL-4	720-721	33	97	200*	5*	2*	15*	4	100*	5*	5*
CSL 19506	SL-4	739-751	22	70	200*	5*	2*	15*	2*	100*	5*	5*
CSL 19513	SL-4	757-759	23	64	200*	8	2*	15*	2	100*	5*	5*
CSL 19514	SL-4	787-791	31	83	200*	5	2*	15*	4	100*	5*	5*

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
CSL 19213	SL-4	33-35	6	1*	295	60	4.90	5*	5*	46	2*	9
CSL 19214	SL-4	38.5-40.4	9	1*	385	110	3.00	5*	6	48	2*	8
CSL 19215	SL-4	42.7-44.7	20	1	320	120	5.90	5*	5	49	2*	7
CSL 19216	SL-4	81.3-87.0	5*	1*	105	20*	30.00	20	40	270	8	13
CSL 19220	SL-4	87-97	5*	1*	77	20*	29.00	24	44	300	10	18
CSL 19226	SL-4	97-103.8	33	1*	175	100	27.00	25	44	265	9	17
CSL 19227	SL-4	103.8-121	37	3	235	90	21.00	5*	35	175	6	12
CSL 19234	SL-4	121-131.3	21	1*	68	20*	28.00	19	46	277	8	18
CSL 19240	SL-4	131.3-137	30	1*	85	70	28.00	23	41	265	7	12
CSL 19250	SL-4	137-147	8	1*	335	230	6.50	5*	5*	41	2*	8
CSL 19256	SL-4	163-179	12	1	340	190	6.50	5*	5*	42	2*	8
CSL 19265	SL-4	180.5-181.7	56	4	475	720	6.10	5*	5*	30	2	5*
CSL 19266	SL-4	191-193	5*	1*	335	70	6.20	5*	5*	35	2*	9
CSL 19267	SL-4	199-207	7	1	410	410	7.20	5*	5*	33	2*	11
CSL 19272	SL-4	231-243	12	2	410	1500	5.80	5*	5*	26	2*	9
CSL 19279	SL-4	271-283	21	1*	400	240	5.00	5*	5*	31	2*	6
CSL 19286	SL-4	295-298	15	2	315	180	8.60	5*	6	53	2	7
CSL 19287	SL-4	323-327	5*	1*	305	60	8.40	5*	6	46	2*	5*
CSL 19289	SL-4	385-399.1	10	5	415	220	5.30	5*	5*	28	2*	6
CSL 19297	SL-4	399.1-408.9	20	4	455	220	3.10	5*	5*	23	2*	7
CSL 19300	SL-4	408.9-423.7	30	4	500	160	2.40	5*	5*	22	2*	8
CSL 19304	SL-4	433.8-453	31	3	410	170	5.40	5*	5	37	2*	9
CSL 19316	SL-4	453-467	6	1*	325	110	7.50	5*	5*	42	2*	7
CSL 19324	SL-4	483-491	19	4	435	120	4.90	5*	7	49	2*	10
CSL 19329	SL-4	503-517	5*	1*	285	70	8.00	5*	5*	40	2*	6
CSL 19337	SL-4	569-581	5*	1	295	50	9.50	5*	5*	43	2	14
CSL 19345	SL-4	597-611	7	3	385	60	3.90	5*	5*	35	2*	5
CSL 19353	SL-4	611-623	5*	1	340	70	6.80	5*	5*	39	2*	6
CSL 19360	SL-4	649-661	10	1	370	130	7.20	5*	5*	42	2*	6
CSL 19367	SL-4	673-687	15	1*	335	20*	7.60	5*	5	43	2*	8
CSL 19375	SL-4	691-703	15	1	315	20*	9.30	5*	5*	55	2*	12
CSL 19515	SL-4	720-721	5*	1	420	50	8.70	5*	5*	41	2*	8
CSL 19506	SL-4	739-751	5*	1	340	90	6.50	5*	5*	47	2*	7
CSL 19513	SL-4	757-759	15	3	310	110	6.40	5*	5*	49	2*	15
CSL 19514	SL-4	787-791	5*	1*	315	70	9.10	5*	5*	50	2*	10

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
CSL 19213	SL-4	33-35	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19214	SL-4	38.5-40.4	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19215	SL-4	42.7-44.7	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19216	SL-4	81.3-87.0	1*	2*	10*	1*	0.20*	2*	10*	13	5*	110
CSL 19220	SL-4	87-97	1	2*	10*	2	0.30	2*	10*	10*	5*	110
CSL 19226	SL-4	97-103.8	1*	2*	10*	2	0.20*	2*	10*	10*	5*	110
CSL 19227	SL-4	103.8-121	1*	2*	10*	2	0.20	4	10*	11	5*	95
CSL 19234	SL-4	121-131.3	1*	2*	10*	1*	0.40	2*	10*	10*	5*	120
CSL 19240	SL-4	131.3-137	1	2*	10*	1*	0.20*	2*	10*	15	5*	100
CSL 19250	SL-4	137-147	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19256	SL-4	163-179	1*	2*	10*	1*	0.20*	8	10*	10*	5*	10*
CSL 19265	SL-4	180.5-181.7	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	11
CSL 19266	SL-4	191-193	1*	2*	10*	1*	0.20*	5	10*	10*	5*	10*
CSL 19267	SL-4	199-207	1*	2*	10*	1*	0.20*	10	10*	10*	5*	11
CSL 19272	SL-4	231-243	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19279	SL-4	271-283	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19286	SL-4	295-298	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19287	SL-4	323-327	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	13
CSL 19289	SL-4	385-399.1	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	12
CSL 19297	SL-4	399.1-408.9	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19300	SL-4	408.9-423.7	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19304	SL-4	433.8-453	1*	2*	10*	1*	1.60	2*	10*	10*	5*	10*
CSL 19316	SL-4	453-467	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19324	SL-4	483-491	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19329	SL-4	503-517	1*	2*	10*	1*	0.20*	2	10*	10*	5*	10*
CSL 19337	SL-4	569-581	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19345	SL-4	597-611	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19353	SL-4	611-623	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19360	SL-4	649-661	1*	2*	10*	1*	1.30	2*	10*	10*	5*	10*
CSL 19367	SL-4	673-687	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19375	SL-4	691-703	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	11
CSL 19515	SL-4	720-721	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19506	SL-4	739-751	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	11
CSL 19513	SL-4	757-759	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	10*
CSL 19514	SL-4	787-791	1*	2*	10*	1*	0.20*	8	10*	10*	5*	10*

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM	BE PPM
CSL 19213	SL-4	33-35		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19214	SL-4	38.5-40.4		1.50	2*	5*	0.50*	0.60	0.50*	10*	1*	
CSL 19215	SL-4	42.7-44.7		1.30	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19216	SL-4	81.3-87.0		10.00	3	5	0.50	5.30	0.80	10*	1	
CSL 19220	SL-4	87-97		10.00	2	5*	0.50*	6.30	1.60	10*	2	
CSL 19226	SL-4	97-103.8		10.00	2*	5*	0.50*	5.60	1.10	10*	1	
CSL 19227	SL-4	103.8-121		7.50	2	5*	0.50*	3.70	0.60	10*	1*	
CSL 19234	SL-4	121-131.3		10.00	2*	5*	0.50*	5.60	1.10	10*	1	
CSL 19240	SL-4	131.3-137		10.00	3	5*	0.60	5.50	1.20	10*	2	
CSL 19250	SL-4	137-147		1.00	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19256	SL-4	163-179		1.00	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19265	SL-4	180.5-181.7		1.20	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19266	SL-4	191-193		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19267	SL-4	199-207		1.10	2	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19272	SL-4	231-243		1.00	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19279	SL-4	271-283		0.90	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19286	SL-4	295-298		1.30	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19287	SL-4	323-327		1.30	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19289	SL-4	385-399.1		0.80	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19297	SL-4	399.1-408.9		0.60	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19300	SL-4	408.9-423.7		0.60	2*	5*	0.50*	0.60	0.50*	10*	1*	
CSL 19304	SL-4	433.8-453		1.20	2*	5*	0.50*	0.60	0.50*	10*	1*	
CSL 19316	SL-4	453-467		1.20	2*	5*	0.50*	0.90	0.50*	10*	1*	
CSL 19324	SL-4	483-491		1.90	2*	5*	0.50*	0.90	0.50*	10*	1*	
CSL 19329	SL-4	503-517		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19337	SL-4	569-581		0.80	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19345	SL-4	597-611		0.70	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19353	SL-4	611-623		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19360	SL-4	649-661		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19367	SL-4	673-687		1.30	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19375	SL-4	691-703		1.40	2*	5*	0.50*	0.90	0.50*	10*	1*	
CSL 19515	SL-4	720-721		1.00	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19506	SL-4	739-751		1.20	2*	5*	0.50*	0.50*	0.50*	10*	1*	
CSL 19513	SL-4	757-759		1.20	2*	5*	0.50*	1.20	0.60	10*	1*	
CSL 19514	SL-4	787-791		1.20	2*	5*	0.50*	0.50	0.50*	10*	1*	

* denotes the figure is less than the detection limit

Table 7
Analytical Results of Drill Hole SL-4

Sample #	Drill Hole#	Depth	B PPM	GE PPM	F PPM
CSL 19213	SL-4	33-35			80
CSL 19214	SL-4	38.5-40.4			60
CSL 19215	SL-4	42.7-44.7			90
CSL 19216	SL-4	81.3-87.0			700
CSL 19220	SL-4	87-97			800
CSL 19226	SL-4	97-103.8			850
CSL 19227	SL-4	103.8-121			575
CSL 19234	SL-4	121-131.3			750
CSL 19240	SL-4	131.3-137			975
CSL 19250	SL-4	137-147			100
CSL 19256	SL-4	163-179			70
CSL 19265	SL-4	180.5-181.7			120
CSL 19266	SL-4	191-193			70
CSL 19267	SL-4	199-207			75
CSL 19272	SL-4	231-243			65
CSL 19279	SL-4	271-283			55
CSL 19286	SL-4	295-298			85
CSL 19287	SL-4	323-327			80
CSL 19289	SL-4	385-399.1			55
CSL 19297	SL-4	399.1-408.9			45
CSL 19300	SL-4	408.9-423.7			65
CSL 19304	SL-4	433.8-453			65
CSL 19316	SL-4	453-467			70
CSL 19324	SL-4	483-491			120
CSL 19329	SL-4	503-517			65
CSL 19337	SL-4	569-581			55
CSL 19345	SL-4	597-611			50
CSL 19353	SL-4	611-623			60
CSL 19360	SL-4	649-661			75
CSL 19367	SL-4	673-687			85
CSL 19375	SL-4	691-703			80
CSL 19515	SL-4	720-721			85
CSL 19506	SL-4	739-751			65
CSL 19513	SL-4	757-759			110
CSL 19514	SL-4	787-791			70

* denotes the figure is less than the detection limit