

south of the baseline. The magnetic map also suggests drag folding along the fault zone with left lateral movement.

HLEM readings were taken at 100 foot intervals with a 200 meter coil separation using frequencies of 444 and 1777 hertz. The 1777 hertz responded with stronger anomalies than the 444 hertz. As shown on figure 10 the HLEM profiles map the linear nature of the fault when they are stacked. This interpretation is stronger when the VLF-EM crossovers are put on the profiles. The strongest crossovers follow the fault zone and on lines 8+00W and 16+00W bracket the more conductive zone. The Ronka EM-16 was used for this survey with the Cutler, Maine transmitter for most of the lines. On line 16+00W Annapolis, Maryland, was substituted because Cutler was off the air. For these profiles VLF-EM observations were taken at fifty foot intervals.

Magnetic, VLF-EM and HLEM surveys provide reasonable definition of the fault zone and the high iron content of the lithologic units deformed by the fault (figures 9 and 10). On the magnetic profile of line 33+00W, a 5,000 gamma magnetic anomaly is interrupted by the fault zone between stations 0+00 and 15+00 south. Figure 11 displays the magnetic profile and the fault zone defined by a refraction seismic profile. Hole CW-1 was drilled to test this fault zone. Usually a diamond core drill hole through sediments or shearing will bend to follow a course perpendicular to the plane of foliation, depending somewhat on the angle of intersection. If they are vertical, the course of the hole will trend toward horizontal. Had that happened the hole would have been continued through the second or south fault zone. Hole CW-1 took a course trending toward vertical and was terminated at 1277 feet. A geologic log is included but as a general observation the core is very sheared, altered, and contained considerable secondary sulfides.

LOG OF DRILL HOLE CW-1  
by B. Frey, K. Malmquist

- |             |  |
|-------------|--|
| 0'-251'     | OVERBURDEN, no recovery.   |
| 251'-329'   | SAND, fine to very fine-grained. Composition is mainly quartz (80%+) grains and are angular to well rounded. Well sorted. Occasional dark minerals present. Sand is slightly to highly calcareous. Color of this unit is pale yellowish brown and consistent throughout.     |
| 329'-338.5' | GLACIAL TILL composed of angular pieces of chloritic schist. Non calcareous and light olive grey in color. Several cobbles of this schist are located throughout the unit. Minor iron staining occurs on a schist cobble at 330'. A transitional zone occurs at 337'-338.5'. |
| 338.5'-351' | GLACIAL TILL; pale yellowish brown, composed of very fine to fine sand and occasional pebbles and cobbles. Cobble content increased with depth. These cobbles are of granophyre, altered granite and a green chloritic schist. The schists contain slickensides.             |

Remarks: Samples start at 251'. Fine sand samples between 251' & 329' are evidently partial samples (core loss).

Overburden Interpretation - Fine sand within 251'-329' is probably fine outwash with a brown till source. Green till - Till source is sheared, weathered bedrock as found in the drill core below the overburden. Source of carbonate? Unknown? Carbonate added to brown till during or after glaciation.

351' LEDGE(?)

351'-392.2' ALTERED METAGABBRO.

Rock is medium-grained, dark greenish grey (wet). Rock is cut by local fractures-shears(?) which are characterized by intense brown clay and local red-orange iron oxide alteration and weathering products (gouge?). Upper ones are probable bedrock cracks (Cretaceous weathering products(?)) while lower ones show evidence of shearing. Plagioclase and pyroxene largely altered to hydrous phases and local 2-3% carbonate. Oxides are altered to leucoxene.

Original mode:

45%	Plagioclase.
50%	Pyroxene.
5%	Oxides.

Grain size originally 1-2 mm. Small 2 cm granitic dike occurs at 376.6'. More highly altered, clayey intervals are 351'-364.4' (scattered small intervals); 364.4'-365.5'; 373.0'-373.5'; 376.6'-376.9'; 376.9'-392.2' (scattered intervals except basal 2' which shows increased alteration associated with shearing). Rock is locally brecciated with grey clay gouge interstitial material (especially 390.5'-391'). Quartz vein fragment at 362.1'. Recovery is less than 60% in some of the softer intervals. Core is fairly broken.

392.2'-499.7' ALTERED SCHISTOSE SHEAR ZONE.

Most of interval has a planar fabric oriented 77-85° to core axis (angle increasing(?) with depth). Linear fabric is developed locally. Alteration is slight to pervasive, with alteration products including hematite, limonite, talc, and clays. Most alteration is probably fault related, although some of the more intensely altered areas may be pre-faulting (these are indicated below with an \*).

392.2'-399' - Dark yellowish brown to pale brown, increasingly sheared and altered metagabbro schist. Much sheet silicates, ferruginous.

399'-403'\* - Moderate yellowish brown to pale yellowish brown to pale olive brown talcy ferruginous schist.

403'-407'\* - Pale yellowish brown to yellowish orange to grayish orange pink ferruginous, clayey schist with minor chert.

407'-420' - Dark yellowish brown to light brown to greyish red to medium and very light grey hematite-chert banded iron formation with minor magnetite, local limonite, and iridescent goethite(?) coatings. Chert is folded to brecciated.

420'-422.3' - Dark green grey, very fine grained talc-minnesotaite schist with moderate yellowish brown, more ferruginous intervals at top.

422.3'-428' - Interbedded, very fine grained, sheared, light brown to greyish red chert and limonitic, talcy, mylonitic schist with much flattening.

428'-434.5'\* - Altered greyish red to dark yellowish brown ferruginous, clayey schist which becomes less altered or ferruginous with depth. Contains minor vugs.

434.5'-444.3' - Pale red to pale brown to olive grey siliceous, biotitic, talcy, very fine-grained mylonitic schist and local flattened intervals of chert and/or siliceous tuffs. Unit becomes less ferruginous with depth. Some recrystallized flattened quartz grains in schistose intervals may have been phenocrysts within volcaniclasts. Contains 2-3% pyrite and pyrrhotite.

444.3'-458.0'\* - Altered greyish olive to dark yellow orange to pale brown ferruginous, talcy, clayey mylonitic schist.

458.0'-472.0' - Slight to moderately altered, light olive grey to medium grey to light brownish grey, siliceous, biotitic, sericitic, talcy, mylonitic schist with minor chlorite in fractures and vugs. Rock is folded to fragmental (well cemented). At least part of protolith was felsic volcanics and chert(?). Fragments were largely primary(?). Rock is locally silicified(?). A more linear fabric is locally developed. Porphyroblastic biotite occurs locally to 1 mm.

472.0'-496.0'\* - Altered moderate yellow brown to greyish red to pale red to light brown ferruginous, talcy, sericitic, siliceous to clayey mylonitic schist. Alteration decreases below 492'. Remnants of original fragmental textures locally common.

496.0'-499.7' - Very fine-fine-grained brownish grey to medium grey biotite, sericite, plagioclase, siliceous schist. Schistose fabric, plagioclase alteration, and minor iron staining decreases with depth. Unit contains minimal carbonate, but calcite does increase downward to about 15%. Parent rock was probably fine-grained extrusive or volcaniclastic.

499.7'-621.9' METABASALT-ANDESITE.

Rock is fine-grained, olive grey, with scattered calcite, quartz, epidote, chlorite veins. Probably flows or dikes, but may be volcaniclastic in places.

Mode:

Original plagioclase; 50-60% now partially altered.

Original clinopyroxene; 40-50% now half of this is fibrous amphibole.

Original oxides; 2-7% now leucoxene.

Other alteration or metamorphic minerals are

0-15%	Calcite.
10-15%	Chlorite in veins and matrix.
10-15%	Epidote.
1-2%	Quartz in veins.
1%	Pyrite in veins.
2-3%	Epidote in veins.
0-3%	Biotite in veins.

Almost all minerals show wavy extinctions in thin section. Calcite has deformation lamellae. Veins are of two types: 1) slip veins with chlorite, calcite, pyrite, epidote, quartz, slickensides, and 2) tension-gash veins (perpendicular to slip veins) with chlorite and lesser calcite. Calcite is limited to veined areas except in 499.7'-505.0' where it is more pervasive. Schistose fabric is only weakly developed.

621.9'-639.6' CALCAREOUS MYLONITIC CHLORITE SCHIST.

Rock is very fine-grained, medium greenish grey.

Mode:

40-60%	Chlorite, minnesotaite, and stilpnomelane.
20-30%	Calcite.
0-5%	Quartz.
2-7%	Leucoxene.
0-5(?)	Plagioclase.
0-5%	Biotite (with some veins).

Rock is sheared to mylonitic with probable parental rock being a mafic-intermediate volcaniclastic, although deformation makes identity uncertain. Basal contact with medium-grained metagabbro is gradational due to deformation and recrystallization.

639.6'-818.2' METAGABBRO-METADIORITE.

Rock is fine to medium-grained greenish grey to medium grey to light olive grey. Fabric ranges from massive slightly schistose to veined to sheared. Both contacts are finer grained, more schistose, more calcareous, and more apparently porphyritic (plagioclase). Whether the finer groundmass surrounding the plagioclase is original or is due to increased shear is unknown. Unit was probably a dike.

Mode:

40-60%	Plagioclase, 1-4 mm, somewhat saussuritized.
20-40%	Chlorite (after hornblende or pyroxene).
2-10%	Calcite.
2-3%	Epidote.
2-5%	Opaques and leucoxene.
2-5%	Biotite.
trace	Pyrite, chalcopyrite, pyrrhotite(?)

Veins are typically segregations in shears with chlorite, calcite, quartz, local epidote, brecciation, slickensides. Calcite near contacts also occurs in irregular tension veins and is a more pervasive alteration product.

818.2'-840.6' CALCAREOUS CHLORITE SCHIST.

Rock is fine to very fine-grained, light greenish grey, locally mylonitic. Becomes more flattened-mylonitic with depth in general. Original rock was fine- medium-grained andesite tuff(?). Unit is slightly graphitic locally, with minor small chert fragments. Schistosity measures 50-53° to core axis.

Mode:

40-50%	Chlorite (and stilpnomelane, minnesotaite).
30-50%	Calcite.
0-5%	Quartz (chert).
0-5%(?)	Graphite.
trace to ½%	Chalcopyrite.

May be somewhat sericitic(?).

840.6'-841.3' SHEARED QUARTZITE-METACHERT SCHIST.

Rock is very fine-grained white to grey to black, calcareous, and graphitic. Rock is recrystallized to sheared with much flattening and some brecciation. Schistosity and compositional banding measures 45-58° to core axis.

Mode:

35-45%	Quartz.
45-55%	Calcite.
10%	Graphite.
0-5%	Pyrrhotite-pyrite.

841.3'-887.6' METAVOLCANIC BRECCIA SCHIST.

Rock is fine to coarse-grained, dark green grey chloritic-graphitic, with chert fragments (accidentals?) and scattered interbeds of black graphitic schist and light to medium grey folded-brecciated chert beds. Breccia fragments range up to 2 cm, but are typically 1-3 mm. They are largely chlorite with about 5% chert fragments. Chlorite fragments are very fine-grained and schistose. Matrix is fine-grained, schistose, chloritic-graphitic, with calcite locally in basal 6 feet. Scattered calcite tension fractures occur locally, especially the basal 2 feet. Matrix contains up to 5% pyrite and chalcopyrite, which is often found as pressure

shadows surrounding chert fragments and is more common in the upper 17' of unit. Matrix/fragment ratio varies from .75 to 2. Graphitic-chloritic schist interbeds are 842.0'-844.2', 852.9'-853.7' scattered, 855.2'-856.2'. This rock is schistose-recrystallized with 60%(?) chlorite and 5-10% pyrrhotite-pyrite. Units are relatively conductive. Folded chert interbeds are 853.7'-854.4', 856.2'-856.9', and 853.7'-854.4'. Chert appears recrystallized and is locally brecciated with minor vugs. Sulfides within 852'-854' show local efflorescence to melanterite in the boxes. Unit represents a shear zone(?) or volcanic breccia. Schistosity measures 65-68° to core axis.

887.6'-894.7' **CALCAREOUS-CHLORITIC STILPNOMELANE AMPHIBOLE SCHIST.**  
Unit is laminated-banded medium grey to pale red to light greenish grey, very fine to fine-grained, with minor meta-chert, veining, folding, and brecciation. Goethitic, sideritic locally. Darker laminations probably contain minor graphite, magnetite, increased stilpnomelane, manganese(?) oxides. Local chloritic breccia at 888.7'-889.3'. Veins are largely calcite with local goethite.

Mode:	Avg.
0-60%	30% Calcite.
0-80%	20% Chlorite - stilpnomelane-minnesotaite.
0-80%	30% Amphibole, pale green (actinolite?, grunerite?).
0-80%	10% Recrystallized chert.
0-20%	4% Red, altered, amphibole-goethitic.
0-5%	3% Magnetite.
0-5%	2% Graphite.
0-5%	1% Goethite.

Bedding measures 0-50° to core axis.

894.7'-974.0' **LAMINATED-BANDED BROWNISH BLACK MAGNETITE AND LIGHT GREENISH GREY CALCAREOUS AMPHIBOLITE (ACTINOLITE-GRUNERITE?).**  
Rock is fine to very fine-grained, with scattered talcose mylonitic shears, breccia zones, veining, and folding. Black layers increase from 5-10% at top to 90% at 941' to 30% at 958', although amphibolitic layers typically are darker colored below 916'. Magnetite is locally porphyroblastic. Darker layers also appear to contain very fine graphite, possible Mn oxides, chlorite (stilpnomelane?), more quartz(?) and local sulfides which causes the core to form a white melanterite efflorescence after exposure to air for several days (patterns in general cut across bedding so most sulfides are probably secondary). The fine-grained graphite, chlorite-stilpnomelane(?), and sulfides increase with depth, so the darker material becomes less magnetic with depth. Amphibole is locally altered to a reddish to yellowish mixture of goethite, hematite or limonite and talc(?). This usually occurs along veins or shears, but

also has affected amphiboles that have undergone minor porphyroblastic growth within actinolitic-gruneritic layers, particularly down to 911', or in areas with higher calcite contents. This zone appears to be centered around a large quartz-calcite (minor) vein with breccia fragments (quartz cemented breccia) which is located from 901.0' to 904.1'. Another 1 cm quartz vein with minor calcite occurs from 918'-919.5'. Scattered veins with amphibole alteration often have hairline sulfide selvages, especially toward the base of the unit. Talcose shears are generally thin, often cross cut, and sometimes have local asbestiform fibers. The thickest talcose shear is from 938.1'-939.0'. Oxide cemented shears are notable at 918.8'-919.1' and 952.4'-955'. Folding is disharmonic with various orientations. Bedding is oriented 0-58° to core axis, with schistosity best developed where bedding coincides with it (45-58°).

Approximate Mode:

5-40%	Magnetite (increase toward center).
5-15%	Graphite (increase downward).
2-5%(?)	Pyrite-pyrrhotite-chalcopryrite (increase? downward).
5-65%	Actinolite-grunerite (decrease downward).
0-20%	Altered actinolite-grunerite (scattered).
0-25%	Calcite (decrease downward).
0-20%	Chlorite-stilpnomelane-minnesotaite (increasing downward).
10-30%(?)	Quartz.

Beside being magnetic, unit is locally conductive.

974.0'-983.0' CHLORITIC SCHISTOSE CATACLASTIC-MYLONITIC VOLCANIC BRECCIA. Rock is very fine-grained, black greenish grey to dark greenish grey. Chloritic fragments are to 2 cm, but are usually 1-3 mm. Matrix is very fine-grained chloritic, mylonitic with oxides. Unit is slightly magnetic. Some portions have hairline carbonate rims around fragments, while basal portion has irregular white melanterite efflorescence (from sulfides). Massive, black, somewhat siliceous, interval from 974.5'-975.2' contains minor hairlike veins and fracture fillings of pyrrhotite, chalcopryrite, bornite(?) and sphalerite(?).

Mode:

70-85%	Chlorite, minnesotaite, stilpnomelane.
2-5%	Magnetite.
0-5%	Graphite.
1/2-5%	Sulfide.
0-5%	Carbonate.
0-20%?	Quartz.

Schistosity measures 55-70° to core axis and is only moderately developed.

983.0'-986.1' LAMINATED, BROWNISH BLACK MAGNETITE AND LIGHT GREENISH GREY AMPHIBOLITE.

Unit is very fine-grained, with quartz, calcite, siderite veining containing minor chlorite and sulfides. Upper .7' of unit is a siderite-quartz vein with chlorite. Other veins are usually 1-2 mm and are relatively ubiquitous. Minor amounts of pyrrhotite, pyrite, and chalcopyrite are found in the more sideritic veins. The smaller veins make up 5-10% of the rock.

Mode (outside of large quartz-carbonate vein):

20-25%	Magnetite.
70-75%	Actinolite-grunerite.
1-3%	Calcite (veins).
2-4%	Siderite (veins).
1-3%	Quartz (veins).
1-2%	Sulfide.

Bedding measures 55-60° to core axis. Unit probably was a tectonic sliver within the chloritic breccia of adjacent units.

986.1'-989.9' CHLORITIC SCHISTOSE CATACLASTIC-MYLONITIC VOLCANIC BRECCIA. Unit is very fine-grained, greenish grey to dark greenish grey. Similar to 974.0'-983.0'. Unit has increased sulfides and white efflorescence near contacts. Unit has a few 1 cm chert(?) fragments.

989.9'-998.2' GREENISH BLACK GRAPHITIC, SILICEOUS, CHLORITIC SCHIST. Rock is very fine-grained with local white efflorescence. Unit contains scattered recrystallized chert fragments and laminae. Sulfides are present as hairline veins, envelopes surrounding quartz, and probably as fine disseminations. Sulfides are very golden in color, probably due to oxidation. Schistosity measures about 70° to core axis.

Mode:

40-50%	Quartz.
30-40%	Chlorite, stilpnomelane, minnesotaite.
10-20%	Graphite.
2-10%	Sulfides-pyrrhotite, pyrite, chalcopyrite.
0-5%	Magnetite(?).

998.2'-1066.0' DARK GREEN GREY CHLORITIC SCHISTOSE VOLCANIC BRECCIA GRADING INTO A CHLORITIC, DACITIC, LAPILLI ASH METATUFF SCHIST.

Rock is fine to coarse-grained (very fine-grained mineralogically), with chert fragments-beds, laminated siliceous siltstone beds, black graphitic siliceous schist beds and sulfides. Some non-chloritic lithologies are probably tectonic slivers. Most fragments probably represent intermediate-mafic lapilli and accidental fragments. Volcaniclast size decreases downhole and schistosity becomes better developed where rock appears to grade into a



porphyritic dacite (chloritic). Unit is similar to 841.2'-887.6' in most aspects. Highest sulfides (5-10%?) and white efflorescence is found within 1026.5'-1050.0' and 1057.5'-1059.4'. Unit is locally calcareous within 1008'-1022'. Unit contains scattered, irregular, tan vugs (interfragmental) below 1012' containing magnetite, siderite, pyrite, and quartz (x-ray diffraction) crystals. Bedding of siltstone is 65° to core axis. Schistosity in finer tuff measures 67° to core axis.

1066.0'-1079.1' BRECCIATED-DEFORMED LIGHT GREY CHERT and DARK GREENISH GREY TO OLIVE BLACK GRAPHITE CHLORITIC SILICEOUS SCHIST. Rock is 25% chert and 5-10% sulfides and was probably largely intraformational originally and only tectonically modified, with sulfides (pyrite) in vuggy strain shadows. Minor discontinuous tension fractures contain siderite, chalcopyrite, and a trace of bornite and magnetite. Minor melanterite efflorescence occurs locally. Bedding and schistosity measure 75-80° to core axis.

1079.1'-1153.2' INTERLAMINATED-INTERBEDDED LIGHT GREENISH GREY AMPHIBOLITE (ACTINOLITE-GRUNERITE), BROWNISH BLACK MAGNETITE AND DARK GREENISH GREY GRAPHITIC, SILICEOUS, MANGANIFEROUS(?), CHLORITIC SCHIST. Rock is generally fine to very fine-grained, but is locally medium-grained with porphyroblastic magnetite and amphibole. Unit has enough magnetite to be magnetic from 1080.4'-1103.4', 1120.0'-1137.8', and 1145.3'-1150.6'. These intervals are more laminated than other sections which contain the graphitic, siliceous, chlorite schist, intervals of which appear manganiferous, especially 1103.8'-approximately 1115' (containing psilomelane?). These schist intervals also show some melanterite efflorescence, mainly from 1112'-1114.5'. Local medium-grained amphiboles are altered red, with some color contributed by stratigraphic layers and cross-cutting veins. Same for minor amounts of pyrite-pyrrhotite. Veins are scattered, but ubiquitous, with altered amphibole, goethite, minor quartz, pyrite-pyrrhotite, carbonate, chlorite, and oxides. Brecciation and folding is minor. Some layers have been boundinaged. Bedding measures 85-45° to 25° (at base) to core axis.

Mode:

5-60%	Actinolite-grunerite.
0-30%	Altered amphibole (goethitic).
5-50%	Magnetite.
10-50%	Quartz.
0-5%	Graphite.
0-30%	Chlorite (also stilpnomelane and minnesotaite).
0-10%?	Mn oxides?.
1-5%	Sulfides.

1153.2'-1268.4' INTERBEDDED FINE TO COARSE-GRAINED, DARK GREEN GREY CHLORITIC SCHISTOSE METAVOLCANIC BRECCIA; VERY FINE TO MEDIUM-GRAINED PORPHYRITIC, DARK GREEN GREY SCHISTOSE, METABASALT (flows and porphyritic equivalent of first); and BANDED GREY TO DARK GREY CHERT, SILICATE (ACTINOLITE-MINNESOTAITE-GRUNERITE), OXIDE IRON-FORMATION.

Chloritic units also typically contain stilpnomelane and minnesotaite.

Subunits as follows:

- 1153.2'-1165.1' Metavolcanic breccia.
- 1165.1'-1166.3' Laminated chert, siltstone, chloritic-minnesotaite schist.
- 1166.3'-1180.1' Metavolcanic breccia.
- 1180.1'-1186.1' Porphyritic(?) metabasalt.
- 1186.1'-1186.7' Laminated black chert-siltstone and chloritic-minnesotaite schist.
- 1186.7'-1189.5' Metavolcanic breccia.
- 1189.5'-1193.2' Laminated siltstone, actinolite-grunerite and chlorite-minnesotaite schist (contorted).
- 1193.2'-1201.6' Metavolcanic breccia.
- 1201.6'-1206.1' Porphyritic(?) metabasalt.
- 1206.1'-1215.4' Metavolcanic breccia and porphyritic metabasalt with minor contorted quartz-amphibole-chlorite-minnesotaite schist.
- 1215.4'-1228.8' Laminated magnetite, chloritic-minnesotaite schist, actinolite-grunerite, chert, with minor siderite-calcite layers-veins and reddish amphibole alteration.
- 1228.8'-1236.4' Metavolcanic breccia.
- 1236.4'-1247.0' Banded-laminated magnetite and actinolite-minnesotaite-grunerite with some folding and alteration of amphiboles.
- 1247.0'-1248.3' Metavolcanic breccia.
- 1248.3'-1252.2' Massive fine-grained oxide and uniform chlorite schist (metabasalt?) with a deformed interior with up to 50% calcite-siderite-dolomite(?).
- 1252.2'-1257.9' Metavolcanic breccia.
- 1257.9'-1258.8' Uniform fine-grained chlorite schist.
- 1258.8'-1261.1' Laminated chert, magnetite, and actinolite-minnesotaite-grunerite.
- 1261.1'-1268.4' Metavolcanic breccia grading into porphyritic metabasalt into uniform chlorite schist with schistosity increasing downward.

Most of porphyritic (plagioclase phyric(?)) metabasalt does have a fragmental texture. Irregular plagioclase phenocrysts are  $\frac{1}{2}$  to 2 mm but they do get up to 4 mm. All have been at least partially altered to calcite. Some calcite rhombs(?) also occur. Local alteration of iron silicates

(reddish goethite-hematite) occur in the interval between 1219' and 1259'. Veining is relatively minor and predominantly affects the iron formation. A 1 mm chlorite vein and associated hairline pyrite-chalcopryrite vein runs discontinuously from 1186'-1188.6'. Trace amounts of pyrite are scattered. Trace amounts of disseminated chalcopryrite occur within 1203'-1206' along with a lesser amount of bornite (purple-gold reflections). Bedding in laminated rock varies from 50-75°. Schistosity towards base measures 70°. Minor melanterite efflorescence occurs locally.

1268.4'-1282' GREENISH GREY, SLIGHTLY CALCAREOUS, SILICEOUS, MYLONITIC, CHLORITE SCHIST.

Rock is very fine to fine-grained. Schistosity is well developed. Probably an andesitic-dacitic metatuff with plagioclase (now calcite) and quartz relict phenocrysts.

Mode:

60-90%	Chlorite, stilpnomelane, minnesotaite.
0-5%	Quartz phenocrysts.
0-20%	Plagioclase phenocrysts (now calcite).
10-30%	Intermediate-felsic volcaniclasts (now quartz, carbonate, muscovite?).
trace	Pyrite-pyrrhotite.

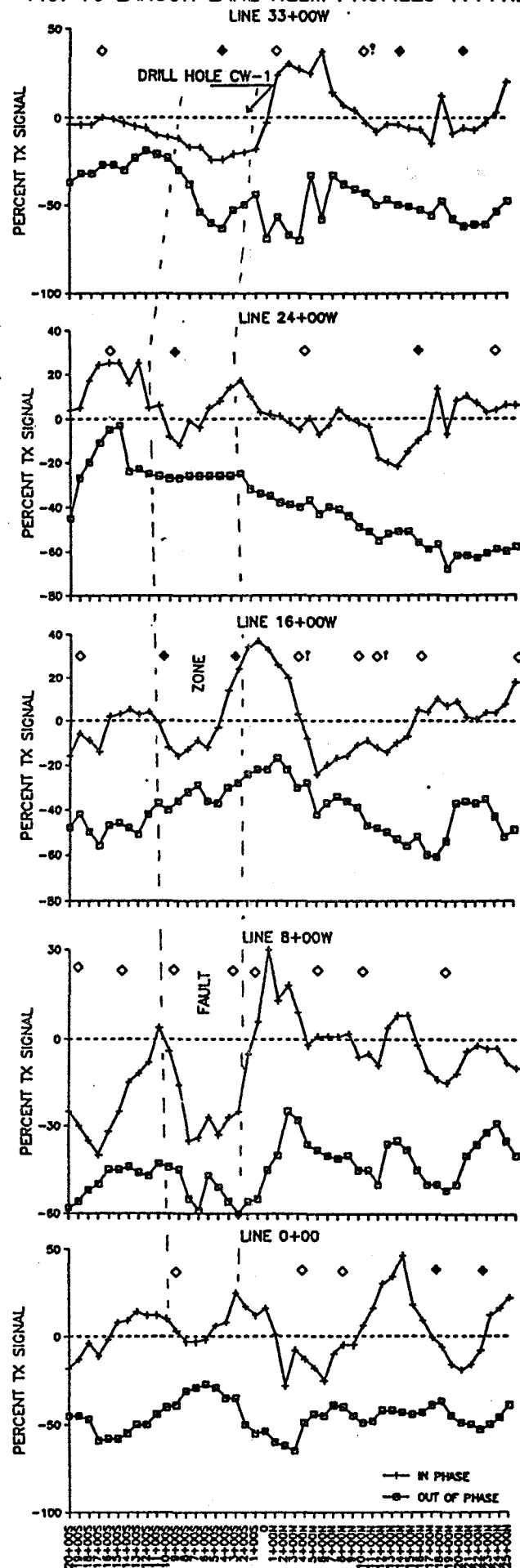
Basal two feet returns to a uniform chlorite schist without phenocrysts and a schistosity that is less well developed. Schistosity measures 75° to core axis.

1282' TOTAL DEPTH

Analytical results of drill hole CW-1 follow in Table 4.

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FIG. 10 LARSON LAKE HLEM PROFILES 1777HZ



STATION INTERVAL 100 FT.  
VLF-EM CROSSOVER ♦ STRONG ◊ WEAK ◊? QUESTIONABLE

FIGURE 11 MAGNETIC SUSCEPTIBILITY AND REFRACTION SEISMIC PROFILES HOLE CW-1

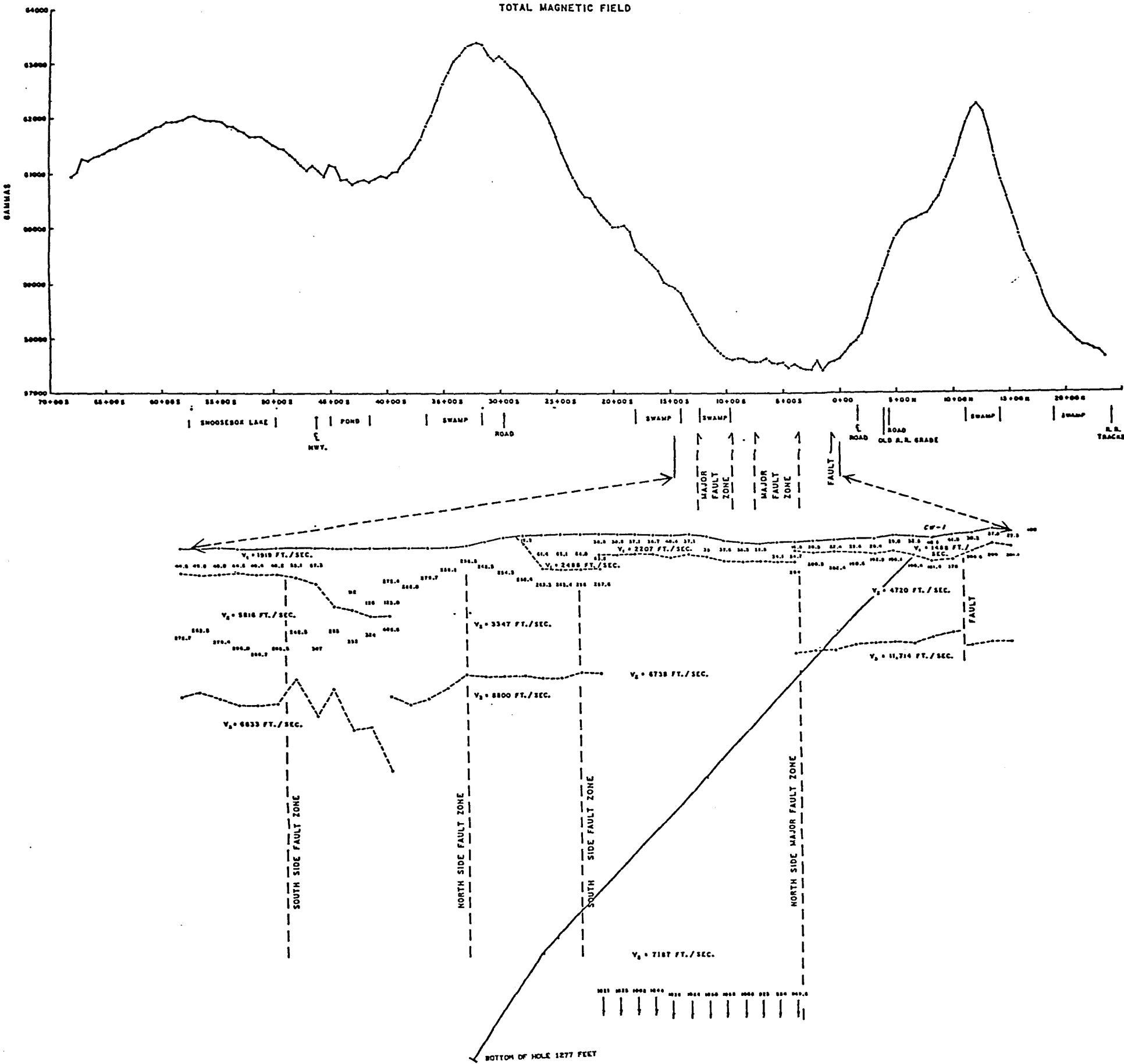


Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	SiO2 %	Al2O3 %	Fe2O3 %	Fe %	MgO %	CaO %	Na2O %	NA %	K2O %	TiO2 %
CCW 17470	CW-1	329-337	47.40	14.90	16.10		4.95	3.40	2.72		1.92	2.24
CCW 17473	CW-1	337-338.5	54.30	11.40	14.00		3.36	4.00	1.82		2.43	2.06
CCW 17474	CW-1	338.5-344.5	60.60	9.99	10.90		2.49	4.11	1.30		2.01	1.49
CCW 17475	CW-1	344.5-351	58.20	12.30	10.20		2.82	5.23	1.99		1.98	1.29
CCW 17476	CW-1	351-364.4	49.10	14.40	14.90		5.24	5.52	2.87		1.45	2.11
CCW 17481	CW-1	364.4-365.5	41.30	11.80	15.50		4.46	9.75	2.12		0.52	1.73
CCW 17482	CW-1	365.5-378.5	48.70	14.50	15.40		5.30	5.31	3.41		1.00	2.11
CCW 17488	CW-1	380.2-392.2	48.60	13.80	15.60		6.81	1.79	1.87		1.93	2.07
CCW 17497	CW-1	392.2-399	48.20	14.00	16.10		6.47	0.85	0.69		2.96	2.05
CCW 17819	CW-1	399-407	51.70	14.80	17.80		1.68	0.75	0.03		1.28	2.30
CCW 17824	CW-1	407-420	49.60	7.47	33.20		0.57	0.57	0.01		0.30	0.78
CCW 17828	CW-1	420-424	37.00	15.50	23.90		10.20	0.39	0.03		0.64	1.48
CCW 17831	CW-1	424-434.5	52.30	14.30	17.80		3.01	0.40	0.05		2.69	1.49
CCW 17837	CW-1	434.5-444.3	50.20	14.00	14.90		8.67	0.51	0.06		2.19	1.63
CCW 17843	CW-1	444.3-458	46.00	16.80	18.30		4.58	0.44	0.12		3.25	1.95
CCW 17851	CW-1	458-472	49.00	15.20	14.30		7.04	0.65	1.83		2.10	1.78
CCW 17859	CW-1	472-484	47.00	16.80	18.80		4.01	0.41	0.09		2.43	1.99
CCW 17866	CW-1	484-496	46.60	18.00	20.40		1.16	0.22	0.06		0.87	2.07
CCW 17873	CW-1	496-512	50.50	13.80	12.30		5.91	5.50	3.81		1.70	1.43
CCW 17882	CW-1	518-534	49.60	13.30	12.00		5.67	7.76	4.04		1.24	1.37
CCW 17891	CW-1	562.8-565.5	50.70	12.60	11.20		5.68	8.54	4.07		1.01	1.27
CCW 17892	CW-1	572-577	48.90	13.50	12.10		5.63	8.58	3.66		1.51	1.38
CCW 17893	CW-1	588-600	50.30	13.50	12.00		5.85	7.60	4.08		1.24	1.41
CCW 17900	CW-1	600-616	49.50	13.50	11.80		5.67	7.47	4.20		1.20	1.41
CCW 17909	CW-1	616-632	46.50	13.00	11.90		6.15	7.44	2.72		1.26	1.35
CCW 17918	CW-1	634-646	43.70	17.10	10.00		6.36	7.10	2.75		1.68	0.98
CCW 17925	CW-1	646-662	46.40	17.90	9.54		5.62	8.23	3.97		0.78	1.07
CCW 17934	CW-1	686-698	44.80	16.90	10.90		5.76	9.42	3.66		0.45	1.02
CCW 17941	CW-1	698-700.5	22.00	8.06	17.30		4.20	24.70	0.24		0.93	0.32
CCW 17942	CW-1	700.5-712	44.70	16.60	12.10		5.79	8.36	3.51		0.93	1.19
CCW 17949	CW-1	714-726	44.70	16.60	10.70		5.69	12.10	2.74		0.84	0.98
CCW 17956	CW-1	738-740	47.50	16.50	10.50		5.76	9.90	3.53		0.66	1.05
CCW 17957	CW-1	754-768	44.00	16.90	11.70		8.14	6.22	3.17		0.84	1.13
CCW 17965	CW-1	768-782	42.00	15.20	11.10		7.52	9.27	2.62		0.93	1.03
CCW 17973	CW-1	810-824	44.50	15.90	10.70		5.90	8.08	3.18		1.03	1.12
CCW 17990	CW-1	830-842	42.80	15.70	10.90		7.52	7.30	1.11		2.14	0.91
CCW 17997	CW-1	842-858	46.10	10.70	23.70		8.26	1.16	0.12		0.24	0.93
CCW 18006	CW-1	868-882	39.20	11.80	27.00		10.40	0.60	0.28		0.60	1.00
CCW 18040	CW-1	884-887.6	32.80	10.80	30.10		10.40	2.54	0.37		0.83	0.91
CCW 18043	CW-1	887.6-894.7	59.80	0.73	14.10		1.59	11.80	0.07		0.31	0.06
CCW 18047	CW-1	894.7-911	42.80	0.64	38.50		2.25	5.50	0.01*		0.36	0.05
CCW 18056	CW-1	912-926	37.80	0.95	45.90		2.58	2.90	0.03		0.56	0.10
CCW 18064	CW-1	926-942	33.30	1.23	48.30		2.58	3.42	0.11		0.63	0.09
CCW 18073	CW-1	944-960	31.10	2.27	46.30		2.98	1.90	0.31		1.05	0.13
CCW 18082	CW-1	966-982	33.80	6.19	38.70		5.10	1.92	0.40		1.18	0.46
CCW 18091	CW-1	982-998	40.60	7.01	33.70		5.73	1.49	0.34		0.93	0.63
CCW 18201	CW-1	998-1016	39.50	11.30	30.40		0.90	0.36	0.33		0.78	0.97
CCW 18211	CW-1	1024-1038	37.50	9.84	34.00		6.81	0.47	0.40		1.02	0.87
CCW 18219	CW-1	1038-1052	39.50	10.10	31.30		7.40	0.81	0.29		0.70	0.83
CCW 18226	CW-1	1058-1074	50.00	9.53	22.50		6.97	0.79	0.01*		0.11	0.79
CCW 18235	CW-1	1074-1090	43.40	2.27	38.10		3.33	2.15	0.26		0.96	0.11

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	Fe %	MgO %	CaO %	Na <sub>2</sub> O %	Na %	K <sub>2</sub> O %	TiO <sub>2</sub> %
CCW 18244	CW-1	1092-1106	34.20	1.61	44.40		2.90	1.96	0.16		0.80	0.10
CCW 18252	CW-1	1106-1120	34.10	3.47	38.10		3.80	1.74	0.51		1.53	0.21
CCW 18260	CW-1	1120-1134	36.90	0.74	50.00		2.57	2.10	0.01*		0.48	0.05
CCW 18268	CW-1	1134-1150	40.20	1.89	39.90		3.56	2.78	0.18		0.99	0.11
CCW 18277	CW-1	1150-1166.6	38.00	6.60	34.00		6.37	2.96	0.43		1.23	0.55
CCW 18286	CW-1	1180-1194	41.50	8.19	27.70		8.56	2.93	0.28		0.80	0.67
CCW 18294	CW-1	1194-1210	32.90	11.40	31.80		10.70	1.33	0.28		0.84	0.97
CCW 18303	CW-1	1214-1230	40.10	2.33	40.40		3.09	4.42	0.14		0.64	0.17
CCW 18312	CW-1	1234-1248	40.00	3.28	41.10		3.66	3.33	0.13		0.85	0.25
CCW 18320	CW-1	1248-1262	41.30	6.27	33.00		5.85	3.17	0.40		1.16	0.52
CCW 18328	CW-1	1272-1282	36.20	15.10	23.90		13.70	0.29	0.01*		0.08	1.35

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CCW 17470	CW-1	329-337		0.20	0.14	5.54	NIL	150	1300	83	360*	40
CCW 17473	CW-1	337-338.5		0.18	0.59	5.39	0.05	50*	1200	96	290*	90
CCW 17474	CW-1	338.5-344.5		0.16	1.24	5.70	NIL	50*	850	98	240*	110
CCW 17475	CW-1	344.5-351		0.18	1.08	4.47	0.04	250	530	87	120*	90
CCW 17476	CW-1	351-364.4		0.22	0.05	3.38	NIL	50*	1100	79	320*	40
CCW 17481	CW-1	364.4-365.5		0.21	0.48	7.62	NIL	100	5600	140	450	40
CCW 17482	CW-1	365.5-378.5		0.27	0.15	3.54	NIL	50*	1100	120	350*	40
CCW 17488	CW-1	380.2-392.2		0.28	0.01	5.85	NIL	50*	1000	260	330*	50
CCW 17497	CW-1	392.2-399		0.33	0.01*	8.00	NIL	250	990	260	370	40
CCW 17819	CW-1	399-407		0.39	0.11	8.39	NIL	50*	690	280	310*	40
CCW 17824	CW-1	407-420		0.57	0.29	6.62	NIL	750	200	320	250*	90
CCW 17828	CW-1	420-424		0.33	0.01	8.70	0.11	50*	520	320	310*	80
CCW 17831	CW-1	424-434.5		0.17	0.02	7.16	NIL	50*	300	130	280*	80
CCW 17837	CW-1	434.5-444.3		0.15	0.01*	5.70	NIL	50*	680	130	320*	40
CCW 17843	CW-1	444.3-458		0.28	0.01	8.23	NIL	50*	660	180	630	40
CCW 17851	CW-1	458-472		0.11	0.01*	5.77	NIL	50*	740	160	420	40
CCW 17859	CW-1	472-484		0.18	0.01	8.47	NIL	50*	540	230	310*	40
CCW 17866	CW-1	484-496		0.31	0.01*	9.85	NIL	100	200	210	330*	40
CCW 17873	CW-1	496-512		0.17	1.39	3.85	NIL	50*	540	150	160*	70
CCW 17882	CW-1	518-534		0.18	1.24	3.00	0.02	50*	600	150	350*	70
CCW 17891	CW-1	562.8-565.5		0.18	1.73	3.23	NIL	50*	660	110	150*	80
CCW 17892	CW-1	572-577		0.19	1.15	2.47	0.02	50*	490	160	390	60
CCW 17893	CW-1	588-600		0.19	0.69	2.16	NIL	50*	560	150	350*	80
CCW 17900	CW-1	600-616		0.19	1.39	2.93	0.03	350	610	140	160*	60
CCW 17909	CW-1	616-632		0.21	4.66	7.85	NIL	50*	550	180	320*	60
CCW 17918	CW-1	634-646		0.17	4.68	8.54	NIL	150	280	130	310*	80
CCW 17925	CW-1	646-662		0.15	2.21	5.08	NIL	150	270	130	320*	80
CCW 17934	CW-1	686-698		0.19	2.69	5.31	NIL	50*	290	120	320*	80
CCW 17941	CW-1	698-700.5		0.42	19.30	20.20	0.59	50*	200	520	200*	40
CCW 17942	CW-1	700.5-712		0.20	2.36	5.08	NIL	50*	270	57	150*	100
CCW 17949	CW-1	714-726		0.18	2.10	4.23	NIL	50*	240	120	290*	110
CCW 17956	CW-1	738-740		0.16	0.83	3.16	NIL	50*	260	120	150*	100
CCW 17957	CW-1	754-768		0.19	1.81	6.16	NIL	100	230	140	270*	100
CCW 17965	CW-1	768-782		0.20	4.59	8.70	NIL	50	250	140	290	100
CCW 17973	CW-1	810-824		0.17	4.99	8.23	NIL	150	270	120	280*	90
CCW 17990	CW-1	830-842		0.21	5.47	9.77	0.02	50*	320	110	240*	80
CCW 17997	CW-1	842-858		0.26	1.24	6.77	0.20	50*	280	150	230*	90
CCW 18006	CW-1	868-882		0.23	0.13	7.16	NIL	50*	510	16	230*	70
CCW 18040	CW-1	884-887.6		0.30	3.66	10.50	NIL	50*	240	16	250*	60
CCW 18043	CW-1	887.6-894.7		0.86	9.94	10.60	NIL	50*	240	12	120*	70
CCW 18047	CW-1	894.7-911		1.61	6.88	7.31	0.08	50	360	48	170*	60
CCW 18056	CW-1	912-926		2.02	5.54	6.31	0.01	200	340	14	120*	30
CCW 18064	CW-1	926-942		2.36	6.85	7.54	0.07	50	500	9	190*	50
CCW 18073	CW-1	944-960		2.58	8.03	10.80	NIL	100	320	18	200*	40
CCW 18082	CW-1	966-982		1.52	5.12	9.93	0.14	200	260	34	210*	50
CCW 18091	CW-1	982-998		0.54	0.17	8.70	0.46	150	460	130	210*	60
CCW 18201	CW-1	998-1016		0.20	0.20	7.16	NIL	150	340	18	250*	80
CCW 18211	CW-1	1024-1038		0.25	0.09	8.00	0.81	250	500	83	140*	60
CCW 18219	CW-1	1038-1052		0.26	0.07	8.54	1.45	200	700	170	140*	70
CCW 18226	CW-1	1058-1074		0.18	0.39	7.23	1.47	150	560	80	190*	80
CCW 18235	CW-1	1074-1090		0.96	4.00	7.70	0.75	50*	630	72	250	50

\* denotes the figure is less than the detection limit



Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CCW 18244	CW-1	1092-1106		2.57	8.89	10.80	0.24	200	530	44	200*	50
CCW 18252	CW-1	1106-1120		3.33	9.24	13.00	NIL	100	510	3	210*	40
CCW 18260	CW-1	1120-1134		1.52	4.13	5.23	0.20	50	610	76	180*	30
CCW 18268	CW-1	1134-1150		1.46	4.55	7.47	0.08	50	580	57	200*	30
CCW 18277	CW-1	1150-1166.6		0.57	3.75	9.00	NIL	450	330	19	280	50
CCW 18286	CW-1	1180-1194		0.35	3.24	8.62	NIL	150	580	57	210*	50
CCW 18294	CW-1	1194-1210		0.20	1.68	8.47	NIL	150	190	73	250*	50
CCW 18303	CW-1	1214-1230		1.14	4.67	6.08	0.12	100	440	75	120*	50
CCW 18312	CW-1	1234-1248		1.02	3.36	5.85	0.23	50	320	130	260	30
CCW 18320	CW-1	1248-1262		0.40	2.60	7.47	NIL	100	460	15	220*	40
CCW 18328	CW-1	1272-1282		0.25	0.06	7.77	NIL	50*	300	45	350	80

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	CO PPM	V PPM	ZN PPM	PB PPM	MO PPM	PT PPB	PD PPB	IR PPB	AU PPB	AG PPM
CCW 18244	CW-1	1092-1106	8	44	100*	6	1*	10*	2	100*	5*	2*
CCW 18252	CW-1	1106-1120	16	48	100*	5*	1*	10*	2*	100*	5*	2*
CCW 18260	CW-1	1120-1134	7	30	100*	5*	1*	10*	2*	100*	4*	2*
CCW 18268	CW-1	1134-1150	21	47	100*	5*	1*	10	2	100*	5*	4*
CCW 18277	CW-1	1150-1166.6	24	140	100	5*	2	10*	2*	100*	6*	6*
CCW 18286	CW-1	1180-1194	23	200	100	5*	1*	10*	2*	100*	5*	2*
CCW 18294	CW-1	1194-1210	27	260	100	8	2	10*	2*	100*	6*	2*
CCW 18303	CW-1	1214-1230	10	82	100*	5	1*	10*	2*	100*	4*	2*
CCW 18312	CW-1	1234-1248	22	77	100*	6	1*	10*	2*	100*	5*	2*
CCW 18320	CW-1	1248-1262	22	140	100	5*	1*	10*	2	100*	5*	2*
CCW 18328	CW-1	1272-1282	37	350	200	5*	3*	10	3	100*	7*	2*

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
CCW 17470	CW-1	329-337	54	1.70*	380	500	32.00	36	39	160	4	38
CCW 17473	CW-1	337-338.5	70	3.20	320	490	24.60	32	36	180	4	32
CCW 17474	CW-1	338.5-344.5	58	2.20	270	510	18.00	30	29	190	4	22
CCW 17475	CW-1	344.5-351	58	1.20*	240	510	17.90	38	29	220	5	22
CCW 17476	CW-1	351-364.4	40	1.60*	510	760	33.00	30	33	140	4	32
CCW 17481	CW-1	364.4-365.5	16	2.00	360	240	27.50	32	44	120	3	30
CCW 17482	CW-1	365.5-378.5	28	2.00*	480	410	31.00	34	36	140	4	36
CCW 17488	CW-1	380.2-392.2	62	2.30	180	550	32.00	32	35	140	3	36
CCW 17497	CW-1	392.2-399	74	2.40	94	540	31.00	44	35	140	3	36
CCW 17819	CW-1	399-407	46	2.80	40	210	35.00	88	43	150	4	40
CCW 17824	CW-1	407-420	12	2.60	28	90	14.70	36	18	58	1	16
CCW 17828	CW-1	420-424	16	1.50*	24	70	32.00	30	22	98	1	20
CCW 17831	CW-1	424-434.5	50	2.70	38	350	32.00	26	19	100	2	22
CCW 17837	CW-1	434.5-444.3	46	3.50	52	330	35.00	24	19	130	3	24
CCW 17843	CW-1	444.3-458	62	3.20	48	400	43.00	34	24	130	3	26
CCW 17851	CW-1	458-472	40	1.60*	150	380	37.00	34	24	140	2	26
CCW 17859	CW-1	472-484	82	3.20	48	300	42.00	50	40	140	4	28
CCW 17866	CW-1	484-496	36	3.30	42	180	46.00	28	23	140	3	28
CCW 17873	CW-1	496-512	32	3.90	450	540	33.00	24	24	120	3	22
CCW 17882	CW-1	518-534	20	1.70*	510	550	32.80	22	24	120	2	20
CCW 17891	CW-1	562.8-565.5	14	1.70*	330	470	30.00	20	22	110	2	18
CCW 17892	CW-1	572-577	20	2.10	500	620	33.00	22	25	110	2	20
CCW 17893	CW-1	588-600	18	1.60*	370	440	33.00	22	25	110	3	22
CCW 17900	CW-1	600-616	20	1.70*	380	630	33.00	22	24	110	3	22
CCW 17909	CW-1	616-632	30	1.60*	230	330	31.00	22	26	110	2	20
CCW 17918	CW-1	634-646	28	1.50*	450	1100	26.00	14	10	66	2	12
CCW 17925	CW-1	646-662	18	2.30	750	420	27.00	18	7	72	1	14
CCW 17934	CW-1	686-698	14	1.60*	520	210	27.00	16	10	66	1*	14
CCW 17941	CW-1	698-700.5	22	1.80	330	170	10.50	2	8	26	1*	6
CCW 17942	CW-1	700.5-712	20	1.30*	530	330	32.00	18	10	70	1	14
CCW 17949	CW-1	714-726	18	1.40*	700	320	27.00	14	10	60	2	12
CCW 17956	CW-1	738-740	18	1.50*	780	180	29.00	14	10	66	1	12
CCW 17957	CW-1	754-768	16	1.30*	500	220	32.00	18	10	70	1	14
CCW 17965	CW-1	768-782	18	1.70	490	340	28.00	14	10	64	2	12
CCW 17973	CW-1	810-824	24	1.40*	570	470	31.00	18	11	70	1	14
CCW 17990	CW-1	830-842	40	1.20*	150	730	27.00	14	9	58	1	12
CCW 17997	CW-1	842-858	10	2.20	12	50	24.00	14	11	66	2	14
CCW 18006	CW-1	868-882	16	6.00	16	90	27.00	18	11	62	1	16
CCW 18040	CW-1	884-887.6	20	8.80	46	50	24.00	14	10	54	1	14
CCW 18043	CW-1	887.6-894.7	10	1.90	150	50	1.20	8	6	18	1*	6
CCW 18047	CW-1	894.7-911	8	1.50	72	30	0.70	4	9	18	1*	10
CCW 18056	CW-1	912-926	8	1.80	40	20	1.00	4	11	20	1*	12
CCW 18064	CW-1	926-942	12	4.00	44	20	1.50	6	13	18	1*	10
CCW 18073	CW-1	944-960	22	9.90	28	70	2.10	8	16	26	1*	12
CCW 18082	CW-1	966-982	26	13.80	30	110	11.10	8	13	40	1	16
CCW 18091	CW-1	982-998	22	8.90	22	120	12.90	22	18	78	2	20
CCW 18201	CW-1	998-1016	20	8.00	10	70	24.50	14	10	60	1	16
CCW 18211	CW-1	1024-1038	24	10.50	12	60	20.80	12	13	70	2	18
CCW 18219	CW-1	1038-1052	18	6.30	18	50	20.10	26	15	68	2	14
CCW 18226	CW-1	1058-1074	6	1.10	18	60	16.40	28	16	66	1	14
CCW 18235	CW-1	1074-1090	18	5.70	32	60	2.00	20	12	28	1*	10

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
CCW 18244	CW-1	1092-1106	14	4.50	28	40	1.70	8	11	24	1*	12
CCW 18252	CW-1	1106-1120	26	11.90	24	50	4.00	10	18	34	1*	12
CCW 18260	CW-1	1120-1134	6	0.50*	30	30	0.70	10	11	18	1*	12
CCW 18268	CW-1	1134-1150	14	6.10	40	30	2.30	14	15	22	1*	10
CCW 18277	CW-1	1150-1166.6	22	8.90	48	50	13.80	10	12	38	1	14
CCW 18286	CW-1	1180-1194	16	5.30	38	50	17.40	20	12	44	1	12
CCW 18294	CW-1	1194-1210	18	6.30	28	50	26.00	8	8	56	1	16
CCW 18303	CW-1	1214-1230	12	4.00	50	30	4.30	10	12	24	1*	12
CCW 18312	CW-1	1234-1248	14	4.20	48	40	6.10	6	13	26	1	10
CCW 18320	CW-1	1248-1262	22	10.30	52	40	13.30	16	11	38	1	12
CCW 18328	CW-1	1272-1282	6	1.30*	8	50	35.00	26	12	74	1	18

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
CCW 17470	CW-1	329-337	2.30*	3*	10*	1.40	0.20*	2*	5*	10*	1*	76
CCW 17473	CW-1	337-338.5	1.80*	2*	10*	3.30	0.20	2*	5*	10*	1*	75
CCW 17474	CW-1	338.5-344.5	1.50*	2*	10*	5.40	0.20	2*	5*	10*	1*	58
CCW 17475	CW-1	344.5-351	1.70*	2*	10*	6.50	0.10*	2*	7	10*	1*	54
CCW 17476	CW-1	351-364.4	2.10*	3*	10*	1.20*	0.20*	2*	9*	10*	1*	67
CCW 17481	CW-1	364.4-365.5	2.00*	2*	10*	2.70	0.20*	2*	5*	10*	1*	76
CCW 17482	CW-1	365.5-378.5	2.30*	3*	10*	3.10	0.20*	2*	5*	10*	1*	64
CCW 17488	CW-1	388.2-392.2	2.00*	3*	10*	1.30*	0.20*	2*	5*	10*	1*	72
CCW 17497	CW-1	392.2-399	1.50*	3*	10*	1.40	0.30	2*	5*	10*	1*	65
CCW 17819	CW-1	399-407	1.90	3*	10*	13.00	0.20*	2*	6*	10*	1*	74
CCW 17824	CW-1	407-420	0.90*	2*	10*	24.00	0.40	2*	5*	10*	1*	34
CCW 17828	CW-1	420-424	1.10*	3*	10*	64.00	0.20*	2*	5*	10*	1*	37
CCW 17831	CW-1	424-434.5	1.20	3*	10*	14.00	0.20	2*	5*	10*	1*	33
CCW 17837	CW-1	434.5-444.3	1.50*	3*	10*	3.00	0.20*	2*	9*	10*	1*	44
CCW 17843	CW-1	444.3-458	1.60	3*	10*	5.50	0.20*	2*	9*	10*	1*	44
CCW 17851	CW-1	458-472	0.50*	3*	10*	9.40	0.20*	2*	5*	10*	1*	43
CCW 17859	CW-1	472-484	1.00	3*	10*	7.90	0.20*	2*	5*	10*	1*	62
CCW 17866	CW-1	484-496	1.10*	3*	10*	7.70	0.20*	2*	5*	10*	1*	49
CCW 17873	CW-1	496-512	0.50*	3*	10*	2.40	0.20	2*	5*	10*	1*	47
CCW 17882	CW-1	518-534	3.50	3*	10*	2.90	0.20*	2*	5*	10*	1*	48
CCW 17891	CW-1	562.8-565.5	0.50*	3*	10*	6.90	0.20	2*	5*	10*	1*	42
CCW 17892	CW-1	572-577	2.10*	3*	10*	1.90	0.20*	2*	9*	10*	1*	50
CCW 17893	CW-1	588-600	2.30*	3*	10*	2.70	0.20*	2*	5*	10*	1*	49
CCW 17900	CW-1	600-616	0.50*	3*	10*	6.60	0.20*	2*	5*	10*	1*	51
CCW 17909	CW-1	616-632	2.00*	3*	10*	18.00	0.20*	2*	5*	10*	1*	54
CCW 17918	CW-1	634-646	2.00*	3*	10*	20.00	0.10*	2*	9*	10*	1*	23
CCW 17925	CW-1	646-662	2.10*	1*	10*	7.40	0.10*	2*	5*	10*	1*	22
CCW 17934	CW-1	686-698	2.10*	3*	10*	11.00	0.20*	2*	5*	10*	1*	27
CCW 17941	CW-1	698-700.5	0.80*	2*	10*	0.80	0.10*	2*	5*	10*	1*	16
CCW 17942	CW-1	700.5-712	2.00*	3*	10*	14.00	0.20*	2*	5*	10*	1*	24
CCW 17949	CW-1	714-726	1.00*	3*	10*	12.00	0.30	2*	5*	10*	1*	18
CCW 17956	CW-1	738-740	0.50*	3*	10*	17.00	0.30	2*	5*	10*	1*	26
CCW 17957	CW-1	754-768	1.80*	2*	10*	18.00	0.20*	2*	5*	10*	1*	21
CCW 17965	CW-1	768-782	1.60*	2*	10*	18.00	0.10*	2*	7*	10*	2	27
CCW 17973	CW-1	810-824	1.80*	3*	10*	27.00	0.20*	2*	5*	10*	1*	26
CCW 17990	CW-1	830-842	1.40*	2*	10*	28.00	0.10*	2*	5*	10*	1*	22
CCW 17997	CW-1	842-858	0.70*	2*	10*	47.00	0.10*	2*	6*	10*	1*	24
CCW 18006	CW-1	868-882	0.80*	2*	10*	18.00	0.10*	2*	5*	10*	1*	23
CCW 18040	CW-1	884-887.6	1.10	2*	10*	12.00	0.10*	2*	5*	10*	1*	23
CCW 18043	CW-1	887.6-894.7	0.50*	1*	10*	12.00	0.10	2*	5*	10*	1*	10
CCW 18047	CW-1	894.7-911	0.50*	1*	10*	2.10	0.20	2*	5*	10*	1*	11
CCW 18056	CW-1	912-926	0.50*	1*	10*	17.00	0.50	2*	5*	10*	1*	19
CCW 18064	CW-1	926-942	0.70*	1*	10*	33.00	0.30	2*	5*	10*	1*	26
CCW 18073	CW-1	944-960	0.80*	1*	10*	14.00	0.80	2*	5*	10*	1*	28
CCW 18082	CW-1	966-982	0.90*	2*	10*	20.00	0.40	2*	5*	10*	1*	26
CCW 18091	CW-1	982-998	0.80*	2*	10*	12.00	0.40	2*	9	10*	1*	36
CCW 18201	CW-1	998-1016	0.90*	2*	10*	27.00	0.10*	2*	5*	10*	1*	21
CCW 18211	CW-1	1024-1038	0.50*	2*	10*	23.00	0.20	2*	5*	10*	1*	23
CCW 18219	CW-1	1038-1052	0.80*	2*	10*	46.00	0.20*	2*	5*	10*	1*	28
CCW 18226	CW-1	1058-1074	0.70*	2*	10*	34.00	0.10*	2*	6*	10*	1*	27
CCW 18235	CW-1	1074-1090	0.70*	1*	10*	15.00	0.40	2*	5*	10*	1*	21

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
CCW 18244	CW-1	1092-1106	0.70*	1*	10*	2.30	0.40	2*	5*	10*	1*	17
CCW 18252	CW-1	1106-1120	0.90*	2*	10*	8.90	0.40	2*	5*	10*	1*	29
CCW 18260	CW-1	1120-1134	0.50*	1*	10*	3.00	0.40	2*	5*	10*	1*	17
CCW 18268	CW-1	1134-1150	0.50*	1*	10*	28.00	0.80	2*	5*	10*	1*	23
CCW 18277	CW-1	1150-1166.6	0.90*	2*	10*	39.00	0.40	2*	5*	10*	1*	20
CCW 18286	CW-1	1180-1194	0.70*	2*	10*	14.00	0.20	2*	5*	10*	1	19
CCW 18294	CW-1	1194-1210	0.80*	2*	10*	9.80	0.10*	2*	5*	10*	1	20
CCW 18303	CW-1	1214-1230	0.70*	1*	10*	6.20	0.40	2*	5*	10*	1*	15
CCW 18312	CW-1	1234-1248	0.70*	2*	10*	14.00	0.70	2*	5*	10*	1*	21
CCW 18320	CW-1	1248-1262	0.90*	2*	10*	13.00	0.20	2*	5*	10*	1*	22
CCW 18328	CW-1	1272-1282	0.70*	3*	10*	10.00	0.20*	2*	5*	10*	1*	24

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM	BE PPM
CCW 17470	CW-1	329-337	33	8.70	2.00	2.50	0.36	3.60	1.70			6
CCW 17473	CW-1	337-338.5	28	7.50	1.20	2.50	0.46	4.10	1.10			5
CCW 17474	CW-1	338.5-344.5	24	6.20	1.50	2.10	0.38	4.50	1.60			4
CCW 17475	CW-1	344.5-351	27	6.60	1.40	2.50	0.39	4.10	1.70			4
CCW 17476	CW-1	351-364.4	19	7.50	2.80	2.20	0.34	2.70	1.00*			5
CCW 17481	CW-1	364.4-365.5	35	8.20	2.10	2.00	0.31	3.20	2.20			5
CCW 17482	CW-1	365.5-378.5	25	7.60	1.90	1.90	0.30	2.80	1.10*			5
CCW 17488	CW-1	380.2-392.2	16	7.70	1.20	1.80	0.28	3.40	1.00*			5
CCW 17497	CW-1	392.2-399	21	7.60	1.80	2.20	0.35	3.30	1.40			5
CCW 17819	CW-1	399-407	25	9.20	2.60	3.30	0.63	2.60	1.10*			6
CCW 17824	CW-1	407-420	13	4.50	1.70	2.40	0.36	1.10	1.20			9
CCW 17828	CW-1	420-424	22	5.40	0.70	1.60	0.25	1.70	1.30			5
CCW 17831	CW-1	424-434.5	19	5.00	1.80	1.80	0.31	2.50	1.40			5
CCW 17837	CW-1	434.5-444.3	20	5.80	1.30	2.20	0.33	3.60	1.60			4
CCW 17843	CW-1	444.3-458	19	7.60	2.00	2.40	0.32	3.50	1.30			6
CCW 17851	CW-1	458-472	17	6.80	2.30	2.40	0.41	0.50*	0.90*			4
CCW 17859	CW-1	472-484	32	12.70	3.70	3.70	0.54	4.70	1.10			6
CCW 17866	CW-1	484-496	20	6.40	1.70	2.40	0.32	2.70	1.20*			7
CCW 17873	CW-1	496-512	21	6.20	1.80	1.80	0.32	3.70	2.00			4
CCW 17882	CW-1	518-534	25	6.30	3.00	2.10	0.35	4.10	1.00*			4
CCW 17891	CW-1	562.8-565.5	22	5.60	0.80*	2.00	0.30	2.90	1.20			4
CCW 17892	CW-1	572-577	13	6.20	1.90	2.20	0.27	3.00	1.70			4
CCW 17893	CW-1	588-600	18	6.20	1.50	1.70	0.33	3.90	1.10*			4
CCW 17900	CW-1	600-616	12	6.20	2.00	1.80	0.39	3.50	0.80*			5
CCW 17909	CW-1	616-632	21	6.00	1.70	1.70	0.30	2.40	1.00*			4
CCW 17918	CW-1	634-646	14	3.50	1.50	1.30	0.18	1.50	1.40			3
CCW 17925	CW-1	646-662	9	2.50	1.00	1.10	0.20	0.70	1.00			3
CCW 17934	CW-1	686-698	12	3.50	1.50	1.00	0.17	1.30	1.30			3
CCW 17941	CW-1	698-700.5	5	1.90	0.70	1.00	0.17	0.60	0.60*			4
CCW 17942	CW-1	700.5-712	7	3.70	0.90	1.50	0.22	1.50	0.70*			3
CCW 17949	CW-1	714-726	12	3.40	1.70	1.00	0.17	0.60*	0.90			4
CCW 17956	CW-1	738-740	11	3.60	1.00	1.30	0.24	0.70	0.90*			3
CCW 17957	CW-1	754-768	8	3.50	1.10	1.20	0.22	0.80	0.80*			3
CCW 17965	CW-1	768-782	14	3.50	1.10	0.90	0.17	1.00	0.80*			3
CCW 17973	CW-1	810-824	11	4.00	1.20	1.40	0.24	1.50	1.20			3
CCW 17990	CW-1	830-842	7	3.30	1.10	1.00	0.21	1.00	0.80*			4
CCW 17997	CW-1	842-858	10	2.90	0.70	1.30	0.23	2.10	1.60			6
CCW 18006	CW-1	868-882	8	3.60	1.00	1.40	0.21	1.50	1.40			7
CCW 18040	CW-1	884-887.6	5	3.30	100.00	1.40	0.25	0.80	0.70*			8
CCW 18043	CW-1	887.6-894.7	5*	1.00	0.40	0.70	0.14	0.20*	0.30*			3
CCW 18047	CW-1	894.7-911	5	1.60	0.70	0.90	0.18	0.50	0.90			8
CCW 18056	CW-1	912-926	5	1.80	0.50	1.00	0.15	0.30*	0.50*			9
CCW 18064	CW-1	926-942	6	2.00	0.60	1.20	0.20	0.80	0.50*			10
CCW 18073	CW-1	944-960	8	2.30	0.80	1.20	0.18	1.60	1.10			10
CCW 18082	CW-1	966-982	10	2.80	0.40	1.10	0.18	2.50	1.00			9
CCW 18091	CW-1	982-998	12	3.60	1.20	2.00	0.34	3.30	4.30			8
CCW 18201	CW-1	998-1016	8	3.00	0.60	1.60	0.23	1.40	1.00			7
CCW 18211	CW-1	1024-1038	11	3.50	1.10	1.30	0.22	2.30	2.40			9
CCW 18219	CW-1	1038-1052	14	4.40	0.70	1.70	0.28	2.10	1.70			8
CCW 18226	CW-1	1058-1074	14	3.70	1.10	1.70	0.25	1.70	2.10			6
CCW 18235	CW-1	1074-1090	6	2.30	1.20	1.40	0.19	1.20	1.60			8

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CO PPM	TB PPM	BE PPM
CCW 18244	CW-1	1092-1106	5*	1.80	0.50	1.00	0.16*	0.50	0.60			10
CCW 18252	CW-1	1106-1120	8	2.70	0.50	1.20	0.19	1.50	1.20			9
CCW 18260	CW-1	1120-1134	5*	2.00	0.80	1.20	0.19	0.30*	0.60*			9
CCW 18268	CW-1	1134-1150	5*	2.50	0.80	1.30	0.21	1.10	0.60			9
CCW 18277	CW-1	1150-1166.6	13	2.80	0.90	1.30	0.21	0.70	0.90			7
CCW 18286	CW-1	1180-1194	7	3.50	1.20	1.30	0.16	0.90	0.60*			7
CCW 18294	CW-1	1194-1210	7	3.10	0.50	1.10	0.16	1.10	0.80*			8
CCW 18303	CW-1	1214-1230	5	2.30	0.90	1.20	0.20	0.80	0.60*			9
CCW 18312	CW-1	1234-1248	6	2.30	1.00	1.10	0.21	0.50	0.60*			9
CCW 18320	CW-1	1248-1262	14	3.00	0.60	1.10	0.23	0.80	0.70*			7
CCW 18328	CW-1	1272-1282	12	4.10	0.90	1.60	0.23	1.70	0.80*			6

\* denotes the figure is less than the detection limit



Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	B PPM	GE PPM	P PPM
CCW 17470	CW-1	329-337	10*	10*	2700
CCW 17473	CW-1	337-338.5	10	10*	2500
CCW 17474	CW-1	338.5-344.5	30	10*	2100
CCW 17475	CW-1	344.5-351	30	10*	1200
CCW 17476	CW-1	351-364.4	10*	10*	2400
CCW 17481	CW-1	364.4-365.5	10*	10*	19000
CCW 17482	CW-1	365.5-378.5	10*	10*	2300
CCW 17488	CW-1	380.2-392.2	10*	10*	2300
CCW 17497	CW-1	392.2-399	10*	10	2200
CCW 17819	CW-1	399-407	20	10	3000
CCW 17824	CW-1	407-420	20	10*	2800
CCW 17828	CW-1	420-424	10	10	1600
CCW 17831	CW-1	424-434.5	30	20	1600
CCW 17837	CW-1	434.5-444.3	10*	10*	1400
CCW 17843	CW-1	444.3-458	20	10*	1700
CCW 17851	CW-1	458-472	10	10*	1700
CCW 17859	CW-1	472-484	10	10*	1700
CCW 17866	CW-1	484-496	30	10*	1500
CCW 17873	CW-1	496-512	10*	10*	1300
CCW 17882	CW-1	518-534	10*	10*	1300
CCW 17891	CW-1	562.8-565.5	10*	10*	1200
CCW 17892	CW-1	572-577	10*	10*	1400
CCW 17893	CW-1	588-600	10*	10	1400
CCW 17900	CW-1	600-616	10*	10*	1400
CCW 17909	CW-1	616-632	10*	10*	1300
CCW 17918	CW-1	634-646	10	10*	840
CCW 17925	CW-1	646-662	10*	10*	880
CCW 17934	CW-1	686-698	10*	10*	880
CCW 17941	CW-1	698-700.5	10*	10*	1200
CCW 17942	CW-1	700.5-712	10*	10*	940
CCW 17949	CW-1	714-726	10	10*	800
CCW 17956	CW-1	738-740	20	10*	850
CCW 17957	CW-1	754-768	10	10*	850
CCW 17965	CW-1	768-782	10*	10*	840
CCW 17973	CW-1	810-824	10*	10*	850
CCW 17990	CW-1	830-842	20	10	930
CCW 17997	CW-1	842-858	10*	10*	1200
CCW 18006	CW-1	868-882	10*	10*	2000
CCW 18040	CW-1	884-887.6	10*	10	990
CCW 18043	CW-1	887.6-894.7	10*	10*	1400
CCW 18047	CW-1	894.7-911	10*	10*	3000
CCW 18056	CW-1	912-926	10*	10*	3100
CCW 18064	CW-1	926-942	10*	10*	4000
CCW 18073	CW-1	944-960	10*	10*	3200
CCW 18082	CW-1	966-982	10*	10*	2300
CCW 18091	CW-1	982-998	10*	10	2500
CCW 18201	CW-1	998-1016	10*	10*	1300
CCW 18211	CW-1	1024-1038	10*	10*	1900
CCW 18219	CW-1	1038-1052	10*	10*	3100
CCW 18226	CW-1	1058-1074	10*	10*	2900
CCW 18235	CW-1	1074-1090	10*	10*	4500

\* denotes the figure is less than the detection limit

Table 4  
Analytical Results of Drill Hole CW-1

Sample #	Drill Hole#	Depth	B PPM	GE PPM	P PPM
CCW 18244	CW-1	1092-1106	10*	10*	3800
CCW 18252	CW-1	1106-1120	10*	10*	3400
CCW 18260	CW-1	1120-1134	10*	10*	4700
CCW 18268	CW-1	1134-1150	10*	10*	4800
CCW 18277	CW-1	1150-1166.6	10*	10*	2600
CCW 18286	CW-1	1180-1194	10*	10*	3400
CCW 18294	CW-1	1194-1210	10*	10*	1200
CCW 18303	CW-1	1214-1230	10*	10*	3700
CCW 18312	CW-1	1234-1248	10*	10*	3000
CCW 18320	CW-1	1248-1262	10*	10*	3500
CCW 18328	CW-1	1272-1282	10*	10	970

\* denotes the figure is less than the detection limit