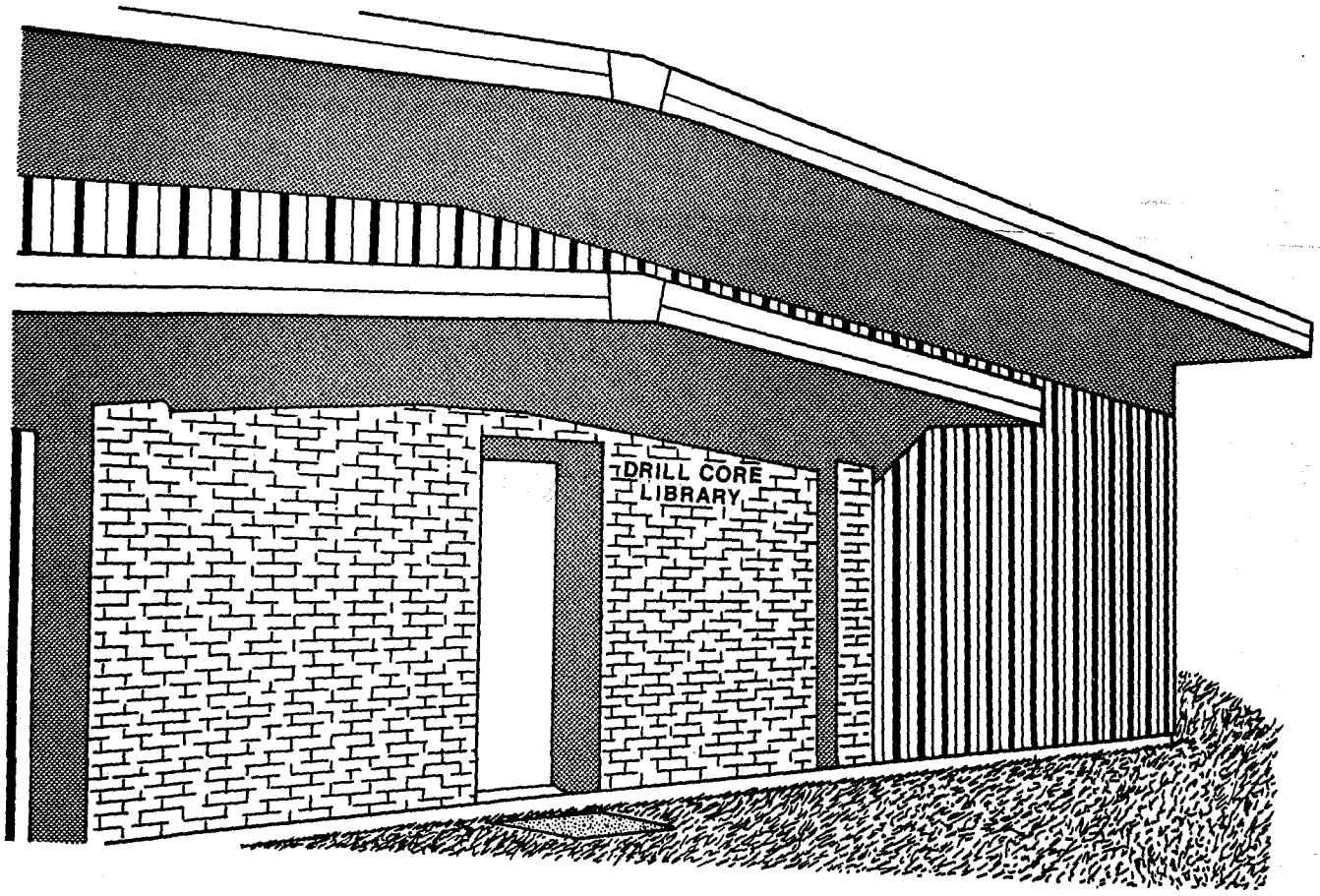
Minnesota Department of Natural Resources

Core Repository

Hibbing, Minnesota



Minnesota Department of Natural Resources
Division of Minerals
Hibbing, Minnesota

Report 255
1987

Errata

This errata sheet replaces the errata sheet on page 39.

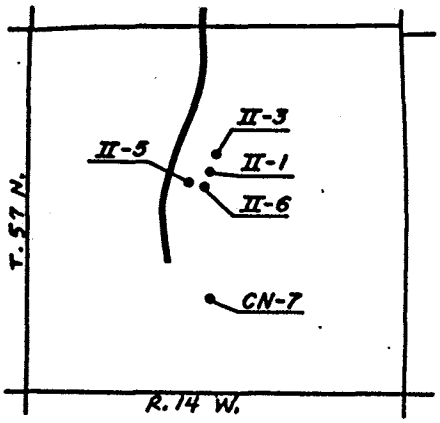


Plate 3: Diamond drill hole II-5 was omitted and is shown above.
Diamond drill hole DU-11 is shown above; no oxide-rich sections have been reported.

On pages 8, 10, 13, 14, 15 and 21 the 'o' means approximately, e.g., 940°-968.6 should read: 940 approximately - 968.6.

Chemical analyses: LOI* = (-) Loss of Ignition
Sum oxides 93.1%-100.7%. CSL 10952; 88.3%.

Table III, pages 6, 13, 20, 27, 34, and 41: For CSL19443 W-8B, the correct depth is 746-753.6.

Table IV, page 1: In samples 16638 and 16639, Fe as reported is in ppm not %.
page 3: The Ag values are in ppm. Note 16637 = 5*, 16638 = 0.5*, and 16639 = 0.5*.
page 4: The Mn values are in ppm. Note 16638 = 24 and 16639 = 2.
page 5: The As values are in ppm. Note 16638 = 5* and 16639 = 5*.
page 6: The U values are in ppm. Note 16637 = 0.5*, 16638 = 10*, and 16639 = 10*.

Table VII, page 3: Add CSL18589 BA-1 2680 troctolite with Cu-sulfide.
page 4: For CSL19389 BA-2 the correct depth is 1678.7.
page 5: For CSL19424 BI-147 the correct depth is 1928.8-1939.8.
For FL16449 the correct sample number is FL16472 and the correct location is TRS = 61/11/9.
For CSL17289 D-10 the correct depth is 782-798.
page 6: For CSL18444 D-4 the correct depth is 1282.5.
page 7: For CSL16676 D-8 the correct location is TRS 61/12/35.
page 8: For CSL17709 DU-9 the correct location is TRS 61/12/36.
Delete CSL18435.
page 9: For OC11172 OTC the correct location is TRS 65/3/36.
For OC11695 OTC the correct location is TRS 65/3/36.
For OL17221 OTC the correct location is Stop 10.
page 10: For OSL16640 OTC the correct location is 61/12/35.
page 11: For CSL19443 W-8B the correct depth is 746-753.7.

DRILL CORE EVALUATION FOR PLATINUM GROUP MINERAL POTENTIAL OF THE BASAL ZONE OF THE DULUTH COMPLEX

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LEGISLATIVE COMMISSION ON MINNESOTA RESOURCES
CORE REPOSITORY PROJECT

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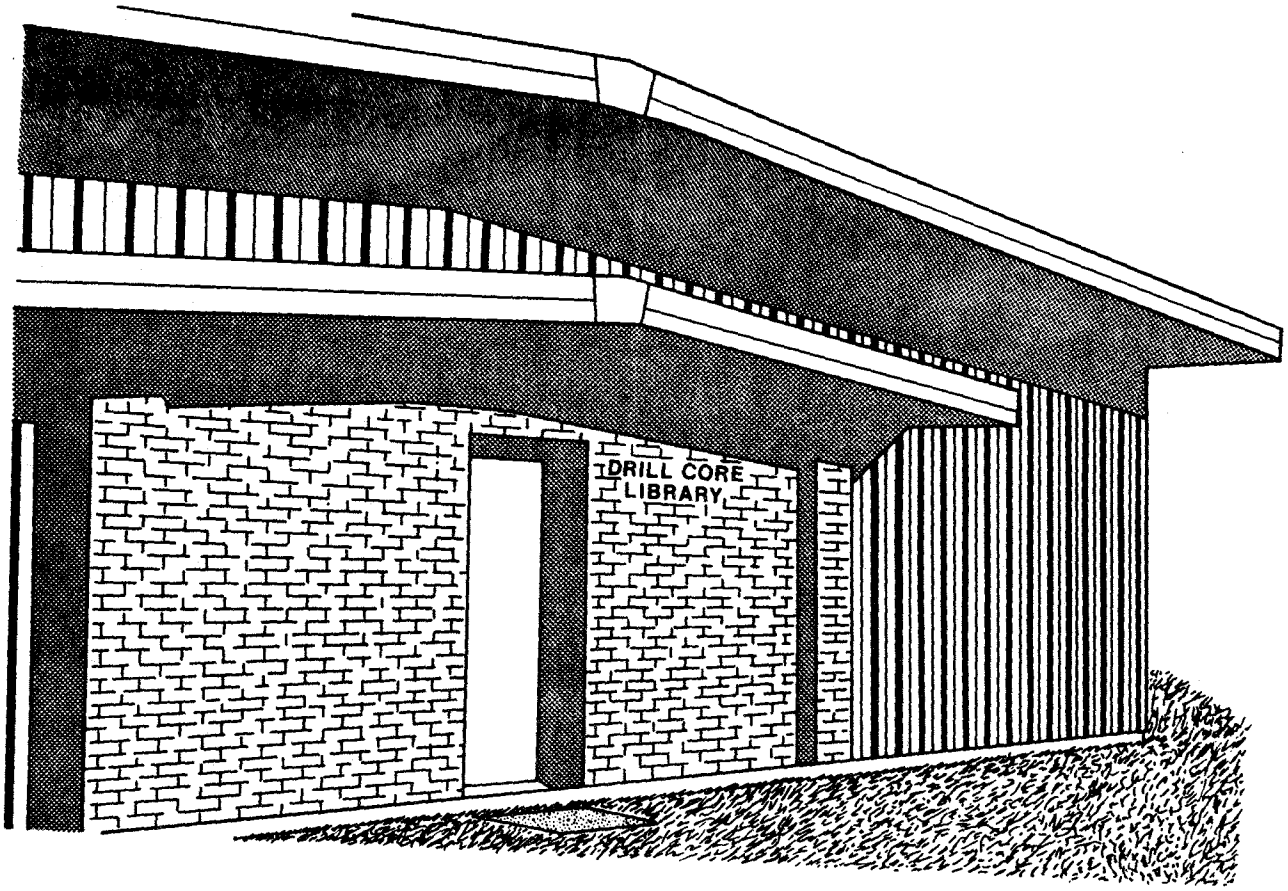
DRILL CORE
LIBRARY

Acknowledgements

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The author wishes to thank Leon Gladen for the introduction to this project as well as Barry Frey, Ron Graber and Jim Atkinson for the many fruitful discussions on its subject matter. The author also extends his appreciation to Michael McKenna for the critical reading of the manuscript, to Richard Ruhanen and Peter Jagaraj for the data processing, to Gregory Walsh for the art work and to Julie Erickson and Helen Koslucher for the word processing and editing of the manuscript.

TABLE OF CONTENTS

Abstract

This project consisted of three phases designed to aid in the mineral potential evaluation of state administered mineral lands. These consisted of: (1.) an evaluation of open-file drill core housed in the DNR Core Library in Hibbing; (2.) an evaluation of continuous core analysis techniques; and (3.) investigating the feasibility of moving Minnesota drill core from the USBM Core Library in St. Paul to the DNR Core Library in Hibbing.

1.) Drill core evaluation

The drill core examination phase focused on the Duluth Complex because of the presence of PGM in DDH DU-15 located in the complex and because of the current interest in PGE. Approximately 300,000' of drill core represented by 259 summarized drill logs were evaluated and ultimately resulted in the selection 40 drill holes for study.

15,336' of core were logged in detail, of which 2441.2' were analyzed for 55 elements. Fourteen of the 40 drill holes, including the DU-15 drill hole PGE occurrence are characterized by an oxide-ultramafic association. Significant PGE mineralization, i.e., 3.35 ppm Pt + Pd was found only in DDH DU-9, located about 2400' to the southeast of DDH DU-15. A structural control is apparent, given the relatively high density of northwest trending structures in the Birch Lake-Dunka Pit Area.

Another area of interest which emerged from the study is located to the east and southeast of the Amax shaft, where elevated Pt + Pd values were found in drill cores from DDH's BA-1, BA-2, BI-134, (BI-144 showing a high of 1240 ppb Pt + Pd over 10' interval), and BI-147. These values were found over stretches of several hundred feet, in an area which is also considered to be part of a northwest trending tectonic zone. Cluster analyses, using the IBM personal computer and SPSS-PC software, have potential for use as an exploration tool to discriminate oxide-rich rock with PGE potential.

2.) Continuous drill core analytical technique evaluation.

Technology for continuous drill core analysis has been under development for approximately ten years and shows potential for allowing rapid and nondestructive analysis of drill core. Several agencies have been investigating various approaches to this technology, which is still in development state.

3.) Transfer of U.S. Bureau of Mines (USBM) drill core to the DNR drill core library in Hibbing, Minnesota.

In late 1985, the feasibility of moving Minnesota drill core from the USBM Core Library in St. Paul to the DNR Core Library in Hibbing was investigated. Subsequently, the Exploration Section transferred 336,870' of drill core from the USBM to the DNR facility in Hibbing during 1986 and 1987. This was done because of the USBM's intention to dismantle its drill core repository in St. Paul, and the DNR felt that it was important to retain the Minnesota portion of this drill core in Minnesota where it would be readily available for inspection.

Introduction

Approximately 2.5 million feet of drill core are available for public examination at the Department of Natural Resources - Minerals Division drill core repository in Hibbing. These drill cores have been accumulating since the turn of the century and they constitute a record of exploration and development in the diverse geologic terraines of Minnesota.

This project is based on the knowledge that since the drilling of these holes, evolution of analytical techniques and understanding of ore deposits models have significantly improved. For example, it is now known that base metal sulfide and gold deposits are often associated with iron formation (Sopuck and others 1980, Sawkins 1984, Wood and Wallace 1986) and that copper-nickel deposits found at the base of the Duluth Complex have associated Platinum Group Element (PGE) minerals (Cabri and Naldrett 1984).

A significant aspect of massive sulfide and precious metal deposits is the invariable presence of alteration zones. These zones are quite apparent to the naked eye when examining drill core and they also have a distinct chemical signature that is reflected in their analytical data. Consequently, they normally provide a much larger exploration target.

Depending on policy objectives, a choice must be made as to whether to analyze a large volume of core samples only for precious metals based on cursory inspection, or to analyze fewer samples for a much broader spectrum of elements based on carefully logged core sections.

The first approach addresses minerals of only current economic interest, whereas the second approach provides additional information on minerals of both current and possible future interest as well as improving our understanding of alteration processes and ore zonation.

The project was started in Duluth Complex rocks as a follow-up to significant PGE mineralization found in diamond drill hole (DDH) DU-15 stored at the DNR core repository (Sabelin 1985). A dual track approach was adopted, the objectives of which were to simultaneously find additional drill holes with significant PGE mineralization and to generate a lithochemical data base. The latter objective was designed to characterize the geochemistry of host and country rock, a prerequisite for the identification of primary and secondary ore-forming processes. Two secondary objectives that were an adjunct to this project were:

- -to evaluate continuous drill core analysis techniques
- -to study the transfer of drill core from the U.S. Bureau of Mines in St. Paul to the Hibbing repository.

Regional Geology

The study area is located along the basal contact zone of the Duluth Complex and hornfelsic footwall rocks. The mode of occurrence of the intrusive rocks of the Duluth Complex is characterized by a patchwork of gabbroic, troctolitic and anorthositic bodies, which are subdivided according to Foose and Weiblen (in press) into an older Anorthositic Series and a younger Troctolitic Series.

Heterogeneous anorthositic gabbros and mixed troctolitic and anorthositic rocks, mapped as Anorthositic Series, are found in the northeastern portion of the area, in a conformable relationship with rocks of the Troctolitic Series.

The basal zone is transected in a northwestern direction by diabase dikes, (Morey and Cooper 1976), which vary in thickness at the Peter Mitchel Mine from about 20 feet up to about 35 feet (Jim Emanualson, pers. comm.).

The contact between the igneous rocks of the Duluth Complex and the lower to middle Proterozoic metasedimentary and Archaean granite greenstone basement is transgressive, the intrusive rocks cutting across the lower stratigraphic levels in a northeasterly direction along the strike of the contact. This is evidenced by the wedging out of the Virginia Formation metasediments and the Biwabik Iron Formation (BIF) between rocks of the Duluth Complex and the Archean granite-greenstones.

Lineaments have been projected across the footwall of the Duluth Complex (Chandler, 1986) based on interpretation of regional-scale gravity and magnetic anomaly data, primarily using the shaded relief and second derivative maps, (see plate 2, lineament map). The strike of these lineaments conforms with the Northwest-trending dikes in the area. The northwest orientation of layering and lamination of the Duluth Complex rocks as well as the foliation of the footwall metasediments is a deviation from the regional northeast-trending grain in the vicinity of these lineaments and dikes in the Birch Lake/Dunka Pit and Amax Shaft areas.

Two major igneous bodies have been inferred in the study area by Foose and Weiblen (op.cit.), based on slightly differing textures. These are the South Kawishiwi intrusion to the northeast and the Partridge River intrusion to the southwest. They are separated by a curved north-northeast-trending fault which follows the Dunka River valley. A break in the lineations, as evident from Cooper's lineament map (1976), along roughly east-west trending sets of faults, is a further delineation of these bodies. Foose (1984) distinguishes an upper, sulfide-free zone and a lower sulfide-bearing basal zone in the South Kawishiwi intrusion, separated by a laterally continuous 30-100 meter thick, plagioclase-rich, commonly pegmatoidal section. This plagioclase pegmatoid, according to Foose and Weiblen, (op. cit.), is the lowermost part of a repeated succession of plagioclase cumulates which grade upward into plagioclase-olivine cumulates. The sulfide-bearing zone is a heterogeneous, 70 to 350 meter thick sequence, of fine to medium grained troctolites, picrites, norites, anorthosites and thin oxide cumulate layers.

According to Tyson and Chang (1984), the Partridge River troctolite is less stratified than the South Kawishiwi intrusion. Xenoliths of rhythmically layered dunite, melatroctolite and troctolite occur in the main Partridge River troctolite intrusion. The lowest portion of the basal zone of this intrusion is characterized by oxide-rich olivine gabbro's with a high content of intercumulus clinopyroxene, orthopyroxene, Fe-Ti oxides, biotite and trace amounts of apatite (Chalokwu and Grant, 1987).

In order to become familiar with the regional geology, field excursions were undertaken during the summer of 1986. The areas of interest were in the vicinity of the Dunka Road, Spuce Road and Omaday Lake. Outcrop samples were collected from these areas for use as reference samples during examination of drill core.

Methodology
(Plate 3, drill hole location map.)

Initially, drill core of hole DU-15 was logged and sampled in detail with emphasis on the mineralized section. The objective was to categorize characteristics of the relevant lithological associations. Subsequently, an inventory was made of available summarized drill logs in (preparation) for 259 drill holes penetrating the basal zone of the Duluth Complex, and representing a total of about 300,000 feet of drill core. Those drill holes exhibiting oxide ultramafic associations similar to those found in the mineralized zone of DU-15 were selected for study.

The following description lists the drill holes selected for detailed logging and sampling and further indicates whether the entire hole was logged and sampled or only a portion thereof. Also, additional lithologic and/or structural features influencing hole selection are described. Drill hole locations are shown on Plate 3.

Nine drill holes having lithological associations similar to DU-15 and were initially logged in detail. These included drill holes DU-9, DU-12, DU-14, DU-16, 34870, 34872, D-6A, D-8 and D-10, seven of which were sampled and analyzed.

Drill holes, D-4, D-5, and D-9 were partially logged and sampled because of the occurrence of massive copper and nickel sulfides in gabbroic and troctolitic rocks near the footwall.

Drill hole BA-2 and portions of drill holes BA-1 and BA-5 were logged and sampled because of their proximity to the area of the projected contact between the South-Kawishiwi and Partridge River intrusions.

Selected intervals of drill holes BI-134, BI-144, and BI-147, located in the vicinity of the AMAX shaft were logged and sampled because of reported brine discharge and their coincidence with ore zones.

Portions of drill holes W-9, W-14, and W-8B located in the vicinity of a major NW-SE trending fault near Babbitt in the southwestern portion of the basal zone were also logged in detail and sampled.

Drill hole W-4, located at the elbow-turn of the contact of the Complex and footwall to the south, was partially logged and sampled. Four drill holes, II-1, II-3, II-5 and II-6, located along the western contact of the Complex and exhibiting a lithological association similar to the mineralized zone of DDH DU-15 and containing graphite were logged and sampled in part.

For comparative purpose, other samples with oxide-ultramafic associations were also included. These were: DDH CN-7 (1 sample), along the western contact; the Long Nose Creek (3 samples); Dunka Road (1 sample); and the gabbro-banded or Biwabik Iron Formation (BIF) contact at the Dunka Pit (34 samples of which 15 were analyzed).

Additionally, detailed logs were made and samples taken for analysis from DDH's SE-2, FHL-2, 64048, 66017, 66014, 66010, 64046, 65223, 64060 and 66012, in order to supplement the data base.

Polished thin sections and thin sections have been made from the majority of the analyzed intervals. (See Table II, III, and VII). The locations (Township-Range-Section) have also been indicated in table VII.

Summarized detailed logs of portions of drill holes
Depths are indicated in feet and modal compositions in percentages. The rock identifications are based on Phinney's classification (1972).

Portions of DDH D-8

940°-968.6
ol.-brg. gabb. to troct., fgr to mgr, suboph. to granlr., w/ cgr to pegmtdl. patches composed of plag. clots & veins. Serp. hflsic. incls. at the top. Cp + po (2-5%) locly. up to 10% as fgr diss's. & clots assoc. w/ pegmtdl. spots. Cp rims po at (955).

945.6-949.6 feldsp. peridotite, fgr, magnetic, partly serpent. w/ diss'd. biot.

950.8-952.8 norite, fgr, granlr., mass.

960-963 plag., cgr in a fgr to mgr ground mass. (2-5%) Cp + po as clots assoc. w/ ox. & biot. booklets

963-966.2 gab. anorth. w/ rounded, fgr ol.-brg. xenoliths, 1-2% sul.

966.2-967.7 ol.-brg. gabb.; fgr to mgr w/ plag. veining

967.7-968.6 troct. w/ fgr to mgr mgt. lenses & wisps, which are partly assimilated, surrounded by (2-5%) cp + bo specks, 5-15% ox.

968.6-991.8
plag.-pyx-olivine-brg.-ox. rock w/ oxidite incls. Layered upper & lwr. contact zones.

968.6-972.5 ol.-brg. ox.-rich mela gabb. to pyroxenite w/ fgr pyx-brg. oxidite xenoliths. Lower 0.5' w/ closely spaced mgt. lenses 20 deg. to core axis. Cgr to pegmtdl. spots w/ milky plag., biot. booklets & sul. clots. Sul. also as fine diss's. (2-5%), 15-30% ox.

972.5-976.8 ox.-ol.-brg. gabb. More homogeneous ox. distrib. than in above section. Pegmtdl. spots w/ milky plag., biot. booklets & cp clots & veins, 30-50% ox.

975.7 fault w/ coinciding anort. vein 30 deg. to core axis

976.8-988.3 plag.-pyx-ol.-brg. ox. rock w/ 0.2' oxidite lenses 50 deg. to core axis. Pegmtdl. spots w/ cp + po clots & biot. booklets. Layering disappears in upper 1.8' to be replaced w/ homogeneous plag.-pyx-ox. rock w/ oxidite incls. Lower 0.8' w/ ox. laminae orient. 20 deg. to core axis. 75-100% ox.

988.3-990.2 ox. gabb. overlying ox.-rich troct., w/ diffused plag.-pyx-ox. incls. & oxidite lenses & wisps, 15-30% ox.

990.2-991.8 ol. & ox.-brg. gabb. to troct. w/ serpent. zones. Biotite assoc. w/ sul. clots & appears younger than locl. serpentn., 2-5% sul.

991.8-1002.3
ol.-brg. gabb, fgr to mgr, granlr. to suboph., w/ diss'd. biot. booklets. Po clots rimmed w/ biot. occas. w/ cp in between. Dendritic, tarnished cp, rims mgt. in altered ultrmaf. portion.
1002.3-1011°
biot. & ol.-brg. gabb., mgr, suboph. Cpx oiks. Biot. rims ox. Locly. up to 15% ox. strongly tarnished cp + po, (2-5%) grades locly. 5-10%. Gradual decrease of grainsize dwnwd.

Portions of DDH DU-16

3336-3363.2

3336-3343 norite; (plag. 40-50, pyx 50-60) fgr granlr., weakly foliated
3343-3344.2 feldspathic pyroxenite.
3344.2-3347.3 troct.; cgr to pegmtdl., 2-5% cp.
3347.3-3349 troct., fgr to mgr, layered w/ picrite. Higher sul. (2-5%) in layers w/ higher ol. content.
3349-3355 troct., w/ cgr anhdrl plag., pegmtdl. & serpent. intrcals. 30-50% ox., increases up to 75% in (3354-3355).
3355-3355.6 ol.-plag.-oxidite, plag. w/ cp cores, 50-75% ox.
3355.6-3356.3 cgr plag. w/ fgr ox.-rich incls.
3356.3-3359.7 troct., fgr, granlr.
3359.7-3363.2 anort. troct., pegmtdl. w/ oxidite incls. & diss'd. ox. Up to 20%. Cp + pn + pyx as clots. Feldsp. peridotite (3362.2-3363.2).
3363.2-3363.9 gabb., pegmtdl. w/ heterogeneous distribution of pyroxenite xenoliths, cp & py blebs mainly in pyx. Reaction rims on cumulates of ol. or opx & ox. against plag. of underlying troc. anorth.
3363.9-3366.3 troc. anorth.
3366.3-3368 troct., heterogeneous w/ picritic spots & plag. xenocrysts up to 0.5", upper 0.2' w/ bluish hfls. incl., tr. of sul.
3368-3371.5 picrite to pyroxenite w/ troct. & fgr picritic intrcals., 0-tr. of sul.
3371.5-3372.5 ol. gabb. to troct., grades into ox. troc. gabb. Heterogeneous, fgr oxidite incls. w/ sharp boundaries, 15-30% ox., tr.-5% sul.
3372.5-3374.5 troc. anorth., (plag 80, ol. 15, pyx 5), Locl. weakly dev. foliation subparallel to core axis, 2-5% sul.
3374.5-3376.5 troct. w/ picritic spots w/ higher sul. contents
3376.5-3377.1 troct. w/ ox.-brg. picrite intrcals. & oxidite incls., 5-15% ox. & 2-5% cp + po.
3371.1-3378.2 gab. anorth., pegmtdl. w/ ox. clots.
3378.2-3378.7 picrite, pegmtdl. w/ mgr to cgr ox. clots & concentrations of 5-15% ox.
3378.7-3384.7 troct., mgr to cgr, w/ picrite & pegmtdl. intrcals., 2-5% sul.
3384.7-3385.2 serpent. picrite to troct.
3385.2-3388° ol.-brg. norite, fgr to mgr, weakly foliated

3610°-3627
troc. anorth., cgr to pegmtdl. w/ serpent. ol., 2-5% cp + po, as clots & fgr diss's.

3625-3627 troct., mgr-cgr w/ serpent. picritic intrcals.
3627-3627.7 gabb.; pegmtdl. w/ ox. clots & granlr. concentrations, 2-5% sul.
3627.7-3628.7 ol.-brg. oxidite; fgr to mgr
3628.7-3630.2 troct. to picrite, fgr to mgr, chilled lwr. contact (?), 2-5% sul.

3630.2-3645°
troc. anorth., fgr, sharp contact w/ overlying unit. Tr. of sul. locly. up to 10% cp + (bo?), assoc. w/ pegmtdl. portions. Locly. opx crystalloblasts.

Portions of DDH D-10

773°-821°
ol.-brg. gabb., troc. anorth., pegmtdl. anorth, troct. & pyroxenite to peridotite, 0-5% sul.

773°-782 ol.-brg. gabb., cgr & slightly brecciated. Mgt.-brg., plag. content decreases dwnwd. 2-5% cp + bo + po clots assoc. w/ mgt.
782-789 troct. (upper 2') & troc. anorth.
789-791.7 gab. anorth,; pegmtdl. ol.-brg. w/ cp + bo clots, tr.-2% sul.
791.7-793 ol.-brg. mgr gabb., tr.-2% sul.
793-798 gab. anorth.; cgr to pegmtd. White diseased plag. w/ amph. pseudomorths after pyroxene.
798-800 ox.-brg., biot.-rich gabb. w/ diseased plag.
800-809 troct., mgr, decreasing Color Index dwnwd w/ pyroxenite & peridotite lenses & incls. w/ locl. networks & clots of cp + po + (bo), up to 5%
809-812.6 ultrmaf. rock
812.6-814.1 troct.; tr.-2% sul.
814.1-817.5 peridotite, partly serpent. & locly. assimilated by gabb. (?) Locly. pegmtdl. clots & veins of up to 2% cp + po + bo
817.5-818.3 ol. gabb. to troct.; mgr.
818.3-821° troct. to anorth.; pegmtdl.

1446.7°-1468.8
anort. troct., mainly fgr, & troct., mgr & suboph. w/ 0-10% sul.

1446.7°-1448.4 anort. troct. (plag. 80, ol. 10, pyx 5, biot. 2, sul. 3), fgr, biot. diss'd. as well as cgr poik. Ox.-brg. peridotitic wisps. Po + cp + py (2-5%) in pegmtdl. spots (up to 0.3' thick) w/ biot. booklets.
1448.4-1448.7 pegmtd.
1448.7-1456 the same as (1446.7°-1448.4), w/ pegmtdl. intrcals. Tr. of sul. Magnetic & non-magnetic ox. clots in lwr. part.
1456-1456.5 pegmtd.
1456.5-1465 troct., (plag. 70, ol. 25, sul. 1-3); mgr suboph. w/ large milky-white plag., & ol.-brg. anort. gabb., suboph. (plag. 80, pyx 10, ol. 5, ox. tr, biot. tr., sul. 5)
1465-1476.3 ol.-brg. gabb.; mainly fgr granular; coarser gr. milky-white plag. pockets or lenses. Sul. clots, surrounded by diss'd. halos (0-5%) in cgr parts.

1476.3-1479.2 oxidite & plag.-ol.-ox. rock, oriented 70 deg. to core axis & in relative sharp contact w/ overlying unit. Lower 0.5' alternating w/ serpent. ultrmaf. layers, cp + bo clots assoc. w/ biot. booklets up to 10%. Cgr po-rich portions w/ graphite (?) & apatite needles. 50-75% ox..

1479.2-1479.9 serpent. ultrmaf. rock & picrite; mixed & locly. pegmtd. 2-5% sul. 5-15% ox.

1479.9-1486.6 gabb., fgr, (plag. 70, pyx 25, ol. tr., sul. 5), troct. to picritic incls. & cgr plag. patches & lenses. Po. clots & bo. incl. & veins, diss'd. cp + bo 2-10%.

1486.6-1534.4

oxidite & plag.-ol.(?)-pyx-qtz. rock, layered & laminated, alternating w/ fgr norite, pyroxenite, periodotite & troct. Lwr. 1 30-50% ox., 2-5% sul.

1486.6-1489.2 plag.-pyx-ox. rock, layered & laminated 45-60 deg. to core axis. Locly. veined & brecciated. Cgr opx layers along lwr. contact. Biot. booklets & apatite needles near the base, w/ tabular ilm.. 50-75% ox., 2-5% sul.

1489.2-1489.6 feldsp. ox.-rich pyroxenite w/ fragmented incls. of oxidite laminae. Cp + po + bo diss's. & clots, 5-10%

1489.6-1491 the same as (1486.6-1489.2). Oxidite layers w/ corroded (?) rel. sharp upper contacts & gradational lwr. contacts. Cgr poik. milky-white plag. x-stals. Po clots w/ apatite needles. 30-50% ox. & 2-10% sul.

1491-1493.8 Oxidite; alternating rel. cgr (°100%) oxidite layers & finer-gr. plag.-ol.-pyx-brg. layers. Locly. cp + po & some bo specks, 1-2%; 75-100% ox.

1493.8-1495.9 oxidite & plag.-ol. ox. rock, laminated & layered perp. to 45 deg. to core axis. Corroded upper as well as lwr. contacts. Cgr pegmtdl. along upper contact w/ biot. booklets & serpent. ultrmaf. parts. 50-75% ox., 1-2% cp + po clots. Po clots w/ bo incls.

1495.9-1497 mixed zone of: wispy oxidite lenses, opx-quartz poikiloblasts & plag.-ol.(?)-opx-ox. rock, 30-50% ox, 3-5% sul.

1497-1497.6 pegmtdl. serpent.-opx-plag.-qtz w/ bo + cp & minor po clots. (2-5%), 50-75% ox.

1497.6-1498.2 oxidite & plag.-pyx-ox. rock; laminated & layered. Plag. veining, 2-5% sul., 50-75% ox.

1498.2-1498.9 norite, fgr, granlr., w/ oxidite xenoliths. Cgr to pegmtdl. syenite vein, partly replaced by bo + po + cp-ilm. clot. 5-10% sul., 5-15% ox.

1498.9-1499.4 oxidite, relative mass., w/ bo + po impregnations. Lower contact intruded & disrupted by partly serpent. feldspathic pyroxenite; 5-10% sul., 50-75% ox.

1499.4-1500.3 norite, fgr granlr., w/ fgr plag.-brg. oxidite incls. w/ diffused contacts. 5-10% sul., 50-75% ox.

1500.3-1501.1 oxidite; mass. to weakly laminated. Cp + bo conc. in rel. cgr portions. 1-2% sul., 75-100% ox.

1501.1-1501.3 gabb.; cgr to pegmtdl., w/ poik. plag. Contact discordant to layering. Cgr ox. in gabb., 30-50%. Bo + cp + po, mainly in gabb., 2-5%

1501.3-1507.5 oxidite & ox. norite layers & laminae about 45 deg. to core axis, 0-5% sul., 50-75% ox.

1506.7 abrupt appearance of fgr dunite & occasional cgr pyroxenite layers. Bo + cp w/ tendency to concentrate in sil.-rich portions.

1507.5-1507.9 opx quartzite in sharp, resorbed contact w/ overlying ox.-rich section. Grades dwnwd into: mgr to cgr ox.-brg. norite to cgr feldsp. pyroxenite (w/ bo + cp + po clots) - fgr peridotite - fgr opx (plag. 10, pyx 90, sul. tr.)

1507.9-1513.8 Feldsp. pyroxenite w/ rounded quartzite incls. w/ opx poikiloblasts. Incls. of oxidite & opx-plag.-ox. rock w/ diffused contacts in feldsp. peridotite, 2-5% sul., 15-30% ox.

1513.8-1514.6 oxidite, ox. norite & feldsp. pyroxenite; 2-5% sul., 50-75% ox.

1514.6-1520.3 mixed zone of: feldspathic pyroxenite, peridotite & fgr norite w/ wispy oxidite incls. w/ diffused contacts & quartzite incls. w/ opx poikilobl. 2-5% po + cp + bo. Tr.-30% ox.

1520.3-1521.4 fgr troct.-picrite & mgr ol.-brg. gabb; layering 30 deg. to core axis, 2-5% po + cp + bo.

1521.4-1523.9 norite; fgr to mgr, granlr.. Gradual increase grainsize dwnwd. Lower 0.4' cgr-granular lens, po clots w/ cp + bo specks along margin, 2-5% sul.

1523.9-1525 heterogeneous mixt.; ox.-rich gabb. w/ oxidite incls. w/ diffused contacts, pyroxenite & incls. of opx-quartzite poikiloblasts. Grades dwnwrds into feldspathic pyroxenite 5-15% ox.. Po clots w/ apatite needles, cp & bo, 2-5%.

1525-1528.8 oxidite & ox.-rich pyroxenite in layered & laminated sequence 45-60 deg. to core axis., 2-5% po + cp + bo, 50-75% ox.

1528.8-1529.6 oxidite.

1529.6-1532.9 the same as (1525-1528.8).

1532.9-1533.7 ox.-opx-qtz.(?)-plag. rock w/ oxidite selvage. Granulitic charnockite gradg. into vfgr norite, 5-10% po + cp + bo., 15-30% ox.

1533.7-1534.4 oxidite.

1534.4-1577
troct. to picrite, mainly fgr, gradg. into fgr granlr. gabb., w/ intrcals. of brecciated (feldsp.) peridotite to picrite & mgr troct., 2-5% sul.

1534.4-1535.6 ox. norite, fgr, heterogeneous, w/ oxidite lenses & wisps. 15-30% ox., 2-5% cp + bo + po. assoc. w/ fgr to mgr gabb. w/ serpent. ultrmaf. incl.

1535.6-1537.5 feldsp. peridotite w/ poik. plag. (plag. 10, ol. 60, pyx 30). Cgr pyroxenite at the base, 2-5% po + cp.

1537.5-1539.8 troct. to picrite, fgr, gradg. into ol.-brg. gabb., fgr granlr.. 2-5% po clots & cp + bo specks, assoc. w/ apatite needles.

1539.8-1540.2 oxidite wisps & cgr poik. plag. w/ po+cp clots & fine diss'd. bo specks.

1540.2-1548.7 ol.-brg. gabb., fgr, plag. (60-70, pyx 20-30, ol. tr.-10, sul. tr.-5)

1548.7-1549.3 feldspathic peridotite, fgr, w/ poik. milky plag. & vermiform po (2-5%)

1549.3-1550.3 the same as (1540.2-1548.7)

1550.3-1553.4 feldsp. peridotite w/ cgr plag. clasts (?) in sharp contact w/ overlying unit. Upper 2' brecciated (?) mixt. w/ cgr ol. gabb. Po clots w/ cp rims assoc. w/ biot. booklets, bo specks, 2-5%

1553.4-1554.6 picrite, fgr (plag. 30, ol. 35, pyx 35) grades dwnwd into ol.-brg. gabb. (plag. 70, ol. 15, pyx 15). Po + cp, some bo, 2-5%.

1554.6-1556.1 serpent. ultrmaf. rock in sharp contact w/ overlying unit; tr.-2% sul.
1556.1-1558.3 troct., mgr, serpent., w/ po clots, overgrowths on serpent. slksids, 2-5% po + cp + bo
1558.3-1561.6 ol. gabb.; fgr (plag 60, pyx 25, ol. 10, sul. 5-10). Vermiform po clots & cp + bo specks
1561.6-1562.0 picrite, fgr diss'd. bo or oxidized native copper (?) 5-10% sul.
1562.0-1577° gabb., finer-gr & more granlr. (plag. 70, pyx 20, ol. tr., sul. 2-10). Po + cp clots w/ biot. selvages, po network w/ rim of cp, some bo specks.

1581°-1618
ol.-brg. gabb.; mainly fgr & mgr., decrease of grainsize dwnwd. Sul. cont. varying from 0 to mass..
1581°-1583 ol.-brg. gabb, fgr to mgr opx incls. up to 1". Mgr diseased plag. Cp + po + pn (?) + tr. of bo, mostly clots, intergr. w/ apatite needles & mgt.
1583-1591 ol. gabb. to troct., fgr diss'd. cp + po up to 5%
1591-1595.4 ol.-brg. gabb., fgr to mgr, cp + po + bo clots 10-15%, increase in size dwnwd, assoc. w/ apatite needles.
1595.4-1603.7 gabbro; fgr to mgr; 10-15% sul.
1603.7-1605 mass. po + cp + bo, diseased plag. & about 10% mgt.
1605-1614.7 the same as 1595.4-1603.7; lwr. 7'° are barren.
1614.7-1616.2 mass. po + cp in fgr gabb., 50-80% sul., 5-10% ox.
1616.2-1618 chilled gabb.
1618-1620 footwall, enderbite, tr. of cp.

Portions of DDH D-5

1285°-1314.2
mixed zone of ol. gabb., cgr,: troct. to picrite, fgr; & pyroxenite, cgr locly. serpent. Pegmtdl. intrcals. 1-15% sul.
1285°-1290 mixed graphite-brg. ol. gabb. to anorth. (plag. 90, ol. + pyx 10, sul. tr., graph. 0-10); cgr, troct. to picrite (plag. 25, ol. 40, pyx 30, sul. 5); fgr, & pyroxenite, cgr. Fgr diss'd. cp + po + pn (?) + bo (2-5%). Mostly assoc. w/ ol.-rich portions.
1290-1293.8 partly serpent. pyroxenite gradg. dwnwd into ol. gab. through mixed zone of cgr gabb. & cgr pyroxenite 5-10% sul.
1293.8-1296 ol. gabb., mgr w/ sul. clots (10-15%), higher (15-20%) in serpent. ultrmaf. portions.
1296-1303.8 mixed ol. gabb. & serpent. ultrmaf. rock, w/ anorth. incls. w/ serpentinite rind on po or pn. 1-5% diss'd. po + pn + bo + cp, & locly. up to 10% at base of serpent. pyroxenite.
1303.8-1308 mainly troct., cgr to pegmtdl., (plag. 75, ol. 20, pyx 3, sul. 2). Locly. exclusively developed as cgr pyx oiks.
1308-1314.2 mixt. of ol. gabb. to troct. & fgr serpent. picrite or pyroxenite 1-2% sul.

1314.2-1327.3
anort. troct., (plag. 80, ol. 20) in rather sharp contact w/ overlying mixed rocks, tr. of sul.

1315.2-1315.7 cross-cutting anort. vein w/ milky plag. & graphitic po + pn (?) + bo aggregates. Bo or cp rims po or pn.

1318.5-1319 the same as (1315.2-1315.7) w/ biot. booklets, no graphite

1322.5-1322.9 cgr diseased plag. segregations w/ graphite, sul. specks (tr.) & ilm.

1324.3-1324.6 the same as (1322.5-1322.9)

1327.0-1327.3 the same as (1322.5-1322.9) w/ 2% graphite aggregates.

1327.3-1394
alternating sections of (feldsp.) pyroxenite, cgr, picrite, fgr serpent. ultrmaf. rock, gabb. to troct., cgr to pegmtdl., mixed maf. & ultrmaf. rocks, & anort. troct., cgr

1327.3-1331 feldsp. pyroxenite, cgr in sharp contact w/ overlying section. Up to 15% ilm. clots along contact. Po + pn + bo clots (2-5%).

1331-1332.6 ilm.-brg. gabb., fgr, w/ ilm. oiks, in sharp contact w/ overlying section. Fgr diss'd. po + pn + bo; 5-10%.

1332.6-1340.3 troct. & ol.-brg. gabb. to gabb., cgr to pegmtdl., w/ intrcals. of fgr troc. portions bearing up to 20% diss'd. & vein type (po + pn + bo) (in upper 2').

1340.3-1349 serpent. pyroxenite, cgr, & picrite, fgr semi-massive po + pn + bo + cp intrcals. in upper 3' w/ apatite prisms & ilm. (10-15% sul.)

1349-1356 mixed section of ol. gabb. (plag. 75, ol. 15, pyx 8, sul. 2) w/ serpent. picrite & troct. w/ higher (2-3%) sul. content. Ol.-brg. gabb. to troc. anorth. portions. (Average 1-2% sul.)

1356-1371.3 anort. troct. w/ ilm. blebs & serpent. picrite intrcals. w/ higher sul. cont. (average sul. 2-5%)

1371.3-1394° mainly partly serpent. dunite w/ cgr plag.-rich incls. or intrcals. of anort. troct., 3-5% sul. Coarse clots & aggregates of po + cp at (1382.5)

1606°-1636°
gabb. norite & gabb., fgr, & serpent. maf. to ultrmaf. rocks w/ mass. sul. intrcals.

1606°-1609.5 gabb. norite, fgr, cp.-brg.

1609.5-1610.5 mass. to semi-mass. po + cp + pn (?) + Cu-sul. + bo; 50-80% sul.

1610.5-1611.8 gabb., fgr, w/ diss'd. cp or cubanite specks. Lwr. 0.5' w/ up to 15% mgt. & diss'd. cubanite.

1611.8-1615.5 mass. po + bo + Cu-sul.; incls. of Fe-Mg silicates w/ qtz. (80-100% sul.)

1615.5-1616 mass. po + cp or cubanite + bo + py (?) amorphous silicate on joints & as off-shoots in sul., 80-100%

1616-1620.7 mass. po + py + pn (?) + cubanite + bo, 80-100%

1620.7-1627.3 serpent. maf. to ultrmaf. rock, fgr w/ semi-mass. & diss'd. po (tr.-50% sul.)

1627.3-1636° gabb. norite, fgr to mgr w/ intrcals. of serpent. ultrmaf. rock; tr.-10% sul. including Cu-sul.

Portion of DDH D-9

1293°-1321°
gneissic diorite w/ intrcals. of fgr to mgr & hflsic. gabb., norite, 0-30% sul.

1293°-1295.6 fgr to mgr norite (plag. 75, opx 25), w/ poikilobl. plag. enclosing opx. Opx-brg. quartzitic (?) patches. Semi-massive 2", magnetic po veins w/ cp & ilm. incls. Semi-massive po + cp patches & veins along lwr. margin of intrcal.

1295.6-1299 leuco norite & diorite, cgr to mgr, (plag 80, opx 5-10, cpx 5-10, sul. 0-10). Mass., cgr mgt. po w/ cp & serpent. ultrmaf. incls., cp-rich along contacts, 5-30% sul.

1299-1305.8 leuco diorite, (plag. 85, biot. + amph. 10, sul. 5) cgr. Fgr. diss'd. cp + (po) assoc. w/ cpx (?) patches. Increase of biot. + amph. dwnwd, replacing pyx (plag. 85 biot. + amph. 10 Sul. 5). Cp + po as fgr diss'd. 5-50%.

1305.8-1309 diorite, fgr (plag. 60-70, Fe-Mg hydrosil. 10-20, sul. 10-30) w/ diss'd. po + cp & locly. cp + bo veinlets, 5-30% sul.

1309-1312 gabb., mgr to cgr (plag. 75, cpx. 25, sul. tr.)

1312-1316.5 gabb., fgr to mgr, w/ po + cp patches & veinlets (plag 20-50, pyx 20-30, sul. tr.-50). Below (1313.6) - less sul. & appearance of opx.

1316.5-1318 gabb., fgr to hflsic. Increase of color index & hflsic. aspects dwnwrds. Sharp lwr. contact, 5-10% sul.

1318-1320 opx.-brg. gneissic diorite plag. 80, cpx (+ opx) 10, cp + (po) 0-10.

1320-1321° opx-brg. gabb., fgr to m-gr., (plag. 75, cpx 5, opx 10, sul. 10).

Portion of DDH D-4

1271°-1310
gab. anorth. & (leuco) diorite w/ fgr & hflsic. gab. intrcals.

1271°-1283 gab. anorth. to leuco diorite (plag. 85-90, pyx + amph. + biot 15) mgr w/ scattered plag. megacrysts. Sharp contacts w/ fgr gabb. intrcals. (plag. 60, pyx 40). Cp + bo specks, locly. forming network (up to 10%), including pn (?).

1283-1286.4 hflsic. micro gabb., sharp upper contact, grad. lwr. contact perp. core axis. Tr. of sul. Locly. cp clots & fgr cp + bo up to 10%. Diss'd. in thin lenses perp. core axis & along carbonate-brg. feldspar-rich veins.

1286.4-1299 brecciated gabb. anorth. or leuco diorite, w/ slksids sub-parallel to core axis & joints sub-parallel to 45 deg. to core axis, tr.-10% sul. Sharp drop to tr. of sul. below (1294.6). Diss'd. cp + po + bo, conc. up to 10% from (1298.1-1298.4).

1299-1302.4 fgr gneissic monzonite, locly. pinkish, gradg. into qtz-brg. diorite. Tr. cp + bo.

1302.4-1303.1 qtz-brg. diorite. Joints covered w/ chlorite & clay minerals sub-parallel to core axis.

1303.1-1303.6 hornblendite, fgr to mgr in sharp contact w/ country rock 60 deg. to core axis.

1303.6-1304.2 diorite.

1304.2-1305 hflsic. micro gabb.; partly assimilated, 2-5% sul.

1305-1308.2 diorite. At (1307.5) cp + bo concentrations up to 10%.
1308.2-1308.8 partly assimilated fgr gabb., (plag. 50, cpx 30, biot. 20) w/ locly. up to 25% cp + (bo).

DDH BA-2

0-38
Overburden
38-387.1
troct. & gab. anorth. (plag. 80-85, ol. tr.-20, pyx 1-10, ox. 1-10), mgr to cgr, & ol. gabb., mgr to cgr (plag. 70-75, ol. 15, pyx 10-15) w/ ultrmaf. & mixed sections at the base.

182.5-186.4 fault zone; upper 1' sheared, lwr. portion more cataclastic, w/ microcline growth.
286.7-288.7 anorth., milky-white-gray-green, ilm. & po-brg. w/ patches of partly digested country rock in the middle. Sharp upper & lwr. contacts. Underlain by pegmtdl., mgt.-brg. gabb. (plag. 70, cpx 25, mgt. 5, ol. tr.)
368.5-374 layered (troct.) to picrite to dunite (plag. 10-25, ol. 60-85, pyx 5-10) w/ fracture cleavage. Locally tr. of py. Sharp upper & lwr. contacts.
385.6-387.1 serpent. peridotite w/ hematite staining

387.1-443
Mixed & partly homogenized anorth., troct., picrite, & subordinate gab.

399-401 anorth.; fgr to cgr gradg. into pegmtdl. anorth., grading into mela gabb.; (plag. 35, partly altered pyx 60, mgt. 5), w/ cp specks.
404-407.2 the same as (399-401)

443-1682.8
ol.-brg. norite & gabb., fgr w/ variable magnetic characteristics (plag. 50-75, pyx 25-40, ol. tr.-10, ox. 5) probably metabasalt, partly hflsic..

475-477 pyroxenite + mgt., cgr segregations about perp. core axis.
566.7-567.1 pyroxenite, cgr, intrusion or segregation. Milky-white feldspathic portions w/ po + bo specks.
572.8-581 serpent. feldspathic pyroxenite (plag. 10, ol. 10, pyx 80) (upper part) & feldsphatic dunite (lwr. part). Hematite staining.
664-894 micro gabb., hflsic., zones w/ milky-white plag. spots; probably recrystallized vesicles gradg. into veins.
894-923.8 pegmtdl. troct. (plag. 50-75, ol. 20-40, pyx 0-5, ox. tr.-3) w/ intrcals. of heterogeneous troc.-picritic-anort. rocks. Tr. of cp + bo in anort. portions.
949-1137.2 mixt. of hflsic. micro troct., micro gabb. & hfls. (locly. w/ purple tones) & mgr to pegmtdl. troct., picrite & pyroxenite. The troct. appears to assim. the hfls.
1137.2-1285 troct. (plag. 60-80, ol. 15-20, pyx 5-10), weakly foliated & locl. modal layered. Intrcals. ranging in composition from anorth. to picrite.
1285-1302 feld. dunite w/ milky-white-blue plag. veins & networks (plag. 10-20, serpent. ol. 80-90)

1302-1310.6 tectonic zone w/ hflsic. micro gabb., serpent. ultrmaf. rock & anorth.
1310.6-1322 mixed zone of partly homogenized (anort. to troc. to picritic) hfls. & troct.
1322-1595.5 ol. gabb. to troct. w/ anort. & picritic patches, modal layered. (plag. 50-80, ol. 15-25, pyx tr.-25, mgt. 0-2). Intrcals. of cgr to pegmtdl. ol. gabb. up to about 16' thick.
1595.5-1682.8 magnetic hflsic. micro gabb. (plag. 70, pyx 30) w/ pyroxenite & plag. patches; probably recrystallized vesicles. Pegmtdl. anort. (dikes?). Locly. gradg. into plag.-qtz. graphic intergrowths. Po + cp along contact w/ country rock & assoc. w/ serpentinite-pyx-ol.-mgt. incls.(?) w/ or without calcite at 1608-1609.5, 1635.5-1636, 1638.7-1639, 1640.7-1641, 1643-1643.3, 1646-1650.3, 1665.6-1666.3, 1672.8-1673.7

1682.8-2746

ol. gabb., troct. & anort. rocks, partly layered, & partly ophitic w/ picritic intrcals., lwr. 78' w/ ox. oiks

1682.8-1715 troc. anorth. to troct. plag. 75-80, (serpent.) ol. 20-25, pyx tr., ox. tr.
1715-1722.6 ol. gabb. (plag. 70, ol. 15, pyx 15) mgr, pyx partly developed as oiks.
1722.6-1726 gab. anorth., cgr to pegmtdl.
1726-1730.5 gabb., gradg. into serpent. pyroxenite.
1730.5-1739.4 anorth. gradg. into anort. troct. 0.4' gab. pegmatite overlies 0.8' picrite at the base.
1739.4-1752 heterogeneous troc. anorth. (plag. 90, serpent. ol. 10, ox. tr.). Sharp slightly foliated contact w/ overlying section. Spotted conc. of Fe-Mg sil.
1752-1793 mgt.-brg. gabb. & troc. to anort. rock; (plag. 80, ol. 15., pyx 5) cgr to pegmtdl. w/ intrcals. of fgr ol. gabb. Tr. of cp + po specks surrounded by serpentine or chlorite (?)
1793-1797.2 picrite (plag. 50, ol. 50, pyx tr., ox. tr.), fgr to mgr, tr. cp + bo.
1797.2-1818 troct. & troc. anorth., tr. cp + bo. Alternating sections of altered & unaltered Fe-Mg silicates.
1818-1866.2 troc. anorth. (plag. 85, ol. 15, ox. tr.) w/ mgt. as small dendritic-textured oiks. 1848 - beginning of jointing & faulting.
1866.2-1875 layered picrite to troct.-anorth., troct. & troc. anorth. Picritic portions strongly to moderately serpent., 2-5% cp + bo, incls. of native copper (?) in uppermost picrite.
1875-1897.1 anort. troct. to troc. anorth., tr. of cp + bo + minor po
1897.1-1959.4 layered troct., mela troct. (plag. 50-75, ol. 25-50). 1930 - end of jointing & faulting.
1959.4-1972.3 troct.; cgr gradg. to pegmtdl. (plag. 75, ol. 25, ilm. tr.) tr. of cp + po specks, po veinlet w/ apatite incls. Diseased rims of plag. assoc. w/ secndry. amph.
1972.3-2210 layered alternation of troct., troc. anorth. to anorth., homogeneous & monotonous (plag. 75-80, ol. 15-20, ilm. tr.) w/ intrcals. of ol. gabb. (plag. 75, ol. 12, pyx 13) & pyroxenite to picrite (plag. 25, ol. 50, pyx 25).

2091-2224 suboph. or lath-textured ol. gabb. to troct., w/ intergr. partly serpent. ol. + pyx.

2210-2358.5 ol. gabb. to troct. (plag. 75-80, ol. 10-17, pyx 5-12, ox. tr.-3) Pyx occurs intergrown w/ ol. & as oiks. Incidental segregations (?) or dikes of cgr ilm.-pyx lenses w/ anorth. compositions at upper margin.

2358.5-2372 troc. to anort. alternating mgr to pegmtdl. rock. Milky-white anort. portions w/ up to 5% dendritic ilm. Tr. of cp + po as specks, & locly. cgr aggregates of sul. assoc. w/ tremolite.

2372-2432.5 anort. troct. (plag. 80, ol. 15, pyx 5, ilm. tr.), w/ locl. intrcals. of biot.-rich & cp-brg. hfls. & strongly altered pegmtd.

2432.5-2441.4 cyclic & modal layered alternation of: mgr to cgr pegmtdl. troct. to anorth., troct. to picrite, troct. w/ troc.-anorth. patches, cp brg. (5%), biot. schist., troct. to anorth. and cgr pegmtdl. gabb. Ilm. up to 15% in lowermost 1.4'

2441.4-2495.2 cgr ox.-brg. troct. to anort. troct. (plag. 80, ol. 10, pyx 5, ilm. 5)

2495.2-2522.1 gabb.; cgr to pegmtdl. (plag. 75, serpentine 10, secndry. amph. 10, ilm. 5) & (plag. 60, ol. 30, pyx 10, ilm. tr.) w/ biot. booklets. Tr. of cp + po diss's. + strongly tarnished Cu-sul.

2522.1-2616.8 troc. anorth. partly serpent. (plag. 75-80, ol. 20, pyx 0-5, ox. tr), mgr homogeneous, w/ intrcals. of partly schistose graphite-rich hfls.: 2542-2544.1 - w/ tr. of po., & pegmatite. 2579-2582 - norite, w/ cp + po + Cu-sul. clots partly replacing serpent. opx. Tr.-5% sul. (2580-2613).

2616.8-2659.7 mixed rock; mgr anorth. (50-66) w/ partly serpent. picrite (34-50) patches.

2659.7-2668 diseased anorth. to troct., plag. partly replaced w/ cavities. Underlain by anorth. & troct.

2668-2673.3 ol.-brg. ox. gabb. w/ ox. oiks (plag. 80, ol. 5, pyx 5, ox. 10).

2673.3-2746 troc. anorth, (plag. 80, serpent. ol. 10-15, pyx 5. ox 5) intrcals.2689.4-2690 of troc. pegmtd. w/ mgt. & ilm. sheets & clots, increasing dwnwrd up to 10%. Locly. strongly diseased plag., cp & strongly tarnished Cu-sul.

2746-2784.6

troc. anorth. to anort. pegmtd., (plag. 90, serpentine + secndry amph. 8, ox. tr.) & (plag. 90, ol. tr., pyx 5, sul. 3-5) overlain by pegmtdl. anort. w/ diseased plag. & secndry amph. & cp specks. Lowest 3.6 ultrmaf. rock.

2746-2748 anort. pegmtd., 1-2% sul.

2748-2781 troc. & gab. pegmtd. w/ dunite & picrite (plag. 30, opx. 35, ol. 15, mgt. 10, biot. 5, sul. 3-5) intrcals. (1-2% sul.)

2781-2784.6 ultrmaf. rock (plag. 60, partly serpent. ol. 35, pyx tr., sul. 5)

2784.6-3210.5

layered troc. anorth. & troct. & fgr granlr. mela troct.

2784.6-2878 partly layered (?) anort. troct., troct. to mela troct. (plag. 75-80, ol. 15-20, biot. tr., ox. tr., sul. 3-5) w/ pegmtdl. Cu-sul.-brg. intrcals.

2878-2913 mela troct., fgr to mgr w/ granlr. (or cumulus) texture, (plag. 60, ol. 40).

2913-3000 troct. & troc. anorth., mgr to cgr, pegmtdl. (lwr. 50') (plag. 70-80, ol. 20, sul. 3-5, ox. tr.) 0-5% diss'd. cp + bo + po. Beginning of rather consistent sul.locly. up to 7%, at about (2940) w/ preference for anort. and/or pegmtdl. patches.

3000-3054 the same as (2913-3000), except w/ higher volume of fgr troct., locly. gradg. into mela troct. (plag. 40-50, ol. 50-60). Apatite needles in sul. clots of pegmtdl. portions.

3054-3062 heterogeneous mixt. of fgr anort. w/ picritic patches & po + cp conc. Milky-white pegmtdl. intrcals. w/graphic or myrmekitic plag. + (qtz.) intergrowths.

3062-3105.5 troc. anorth. (plag. 85, ol. 10, pyx 3, sul. 2-3), heterogeneous w/ milky-white plag. patches.

3105.5-3150 troct. to troc. anorth., w/ biot. booklets intergrown w/ po + cp. (plag. 80, ol. 15, sul. 3-5).

3150-3210.5 sequence of (top-bottom); troct. w/ (calc sil.?) hflsic. incl.; partly altered, pegmtdl. pyroxenitic gabb. w/ clots (5%) of mainly po; troct.; pegmtdl. troct. to troc. anorth.; layered troct. gradg. into fgr to mgr picrite, tr.-5% sul.

3210.5-3421.8

gab. rocks, w/ intrcals. of qtz.-brg., hflsic., ultrmaf., pegmtdl., oxidite, BIF, norite & charnockite. (3302.8-3364); rusty fluid drops on core; possibly related to saline incls.

3210.5-3213.5 heterogeneous troc. gabb. w/ pyx oiks up to 2", no sul.

3213.5-3215.5 gab. anorth., mgr to cgr, w/ heterogeneous pyx distribution, & up to 5% mgt. as clots & dispersed specks, no sul.

3215.5-3244.5 ol.-brg. gab. anorth. (plag. 90, pyx 8, ol. 2, ox. tr., biot. tr.) cgr to pegmtdl. Ol. & pyx closely intergrown. Locly. tr. of Cu-sul., assoc. w/ apatite needles.

3244.5-3256.5 gabb. w/ greenish altered Fe-Mg silicates & white plag. in graphic intergr. w/ up to 20% qtz. Lower 3' partly assim. hydrated gabb. & graphic plag.-qtz. Rounded clots & diss'd. Cu-sul. or cp (1-2%)

3256.5-3259.3 micro gabb. gradg. into gabb. w/ hflsic. incls.; (1-2% cp + po)

3259.3-3278 sequence of (top-bottom): fgr feldspathic pyroxenite gradg. into mela gabb. (plag. 10-20, pyx 80-90, sul. 2-3) w/ up to 15% mgt. as clots; gabb. w/ gab. anorth. intrcals.; mgr pyroxenite w/ up to 20% ilm.; pegmtdl. gab. anorth. w/ (tr-2%) cp + po + pn (?) + py.

3278-3317.5 mela gabb., cataclastic (plag. 60, pyx 35, ol. 5) w/ hflsic & white graphic plag.-qtz. intrcals., w/ greenish biot. booklets. Clots of cp intergrown w/ ilm. & apatite (?) prisms along lwr. contacts, tr.-3% sul.

3317.5-3342 layered oxidite (75-100% ox.) adcumulates w/ poik. postcumulus plag., (plag tr-2%, mgt. 95%, ol. + pyx tr.-3%), tr. of py + po.

3342-3394.7 serpent. ol.-brg. pyroxenite, less altered, mgt. segregations or cumulates) tr.-3% sul. Lower 16.7' partly cataclastic mixt. of cgr to pegmtdl. troct. & pyroxenite w/ up to 50% cgr diseased plag. patches (plag. 20, partly serpent. ol. 40, opx 40) mgt. locly. up to 10%, sul. tr.-3%.

3394.7-3406.5 lensoid mixt. of Biwabik Iron Formation (BIF) (incl.?) and mgr to cgr pyroxenite gradg. into mela norite w/ oxidite lenses (=cumulates). 2-3% po + cp + (bo tr.-3%) in ox. cumulate segregations.
3406.5-3408 quartzitic & hflsic. BIF.
3408-3421.8 norite, fgr, w/ layered charnockitic & bluish quartzitic intrcals., tr.-5% sul.

3421.8-3574 EOH
footwall; pyroxene granite to monzonite, foliated, hflsic. leuco norite or charnockite, enderbitic gneiss, (tr.-5% sul. 3421.8-3530).
3421.8-3460.7 pyx granite foliated w/ diss'd. po + Cu-sul.; intrcals., up to 2" peridotite & mela norite to pyroxenite lenses w/ up to 50% sul. mainly as po.
3460.7-3474 leuco norite or charnockite, fgr to hflsic. w/ semi-mass. po lenses, clots & incls. (tr.-5% cp + po).
3474-3497.3 enderbitic gneiss w/ Cu-sul. (average 5%) conc. in pyroxene clusters & lenses. Grades into fgr enderbite.
3497.3-3574 EOH pyroxene monzonite, mgr to cgr w/ feldspar megacrysts & intrcals. of hflsic. noritic patches. At (3530') drop of sul. content concommittant w/ appearance of biot.

Portions of DDH BA-1

150 approx.-250 approx.
ol.-brg. anorth., cataclastic & recrystallized (plag. 85-95, ol. 5-15, pyx 5, sul. tr.). Heterogeneously distributed troc. portions, ol. & pyx partly altered to Fe-Mg hydrosil. Tr. of cp & po.

350 approx. - 400
the same as (150°-250°), w/ fgr to mgr, granlr. ol. gabb. intrcals. White, diseased plag. forms fgr to mgr groundmass for grayish plag. xenoclasts.

500 approx.-560
slightly altered Fe-Mg-sil.-brg. anorth. & gab. anorth., cataclastic w/ natrolite cavity fillings. Diss'd. po & Cu-sul. (2-3%).

1097 approx.-1150
troc. to ox.-brg. troc. anorth. (plag. 80, ol. 15, ox. 5), mgr, locly. gradg. into fgr troct., underlain by partly serpent. feldspathic dunite w/ milky-white-blue plag. Tr. of po + cp.

1900 approx.-2050 approx.
1900 approx.-1936.6 approx. troct.; mgr to cgr.
1936.6-1989 troct. & norite, cgr to pegmtdl. w/ mgt. segregations. Tr.-3% po + Cu sul. specks.
1989-2008 troct., mainly cgr w/ pegmtdl. intrcals. (Cu-sul. + po + cp).
2008-2018 ol. gabb. to troct., fgr, tr. of sul.
2018-2050 approx. ol. gabb. to troct. w/ pegmtdl. noritic & troc. intrcals. (plag. 75, pyx 20, mgt. 5).

2600 approx.-2800 approx.
2600 approx.-2635 mesocrate to melanocrate ol.-brg. norite (plag. 20-40, pyx 60-80, ol. tr.), cataclastic (?) & partly altered.
2635-2680 the same as (2600 approx.-2635) w/ pegmtdl. intrcals. consisting of biot. booklets & Cu-sul. clots & specks. Fgr diss'd. specks of Cu-sul.intergrown w/ amph. (pseudomorphs after pyx.) Tr. of sul.

2680-2685 troct.
2685-2726 troct., mgr w/ pegmtdl. noritic & anorth. spots & fgr pyroxenitic incls. w/ up to 10% Cu-sul. Mineralized cataclastic troc. portions. Diss'd. graphite at about (2700'). 1-2% sul.
2726-2800 ol. gabb., fgr, tr. of po (clots).

2900 approx.-3049 approx.
mixed norite & troct. (plag. 75, pyx 12, ol. 10, biot. 3) w/ anort. patches & cgr troc. anorth. patches. Grades into micro gabb. & hfls. w/ po & cp & (1-2%) metasedimentary intrcals.

Portion of DDH BA-5

120-146 approx.
120-127 mixed cgr milky-white anorth. (60%), partly serpent. ol.-brg. pyroxenite (20%) & ol.-brg. gabb. (10%) w/ mgt. clots (5%). Locly. up to 20% biot. & tr. of cp.
127-129.8 ox.-rich sul.-brg. pyroxenite (pyx 15-80, sul. 10, mgt. 10-80). Upper 1' semi-mass. mgt. + sul. Lower 0.2' cgr; (mgt. 80, cp 20). Average ox. 5-15%, sul. 5-10%.
129.8-135.5 ol.-brg. gabb., (plag. 75, ol. 5, pyx 15, mgt. 5)
135.5-137 anorth., pegmtdl. w/ mgt. + ilm. clots & ol.-rich portions.
137-139 ol. gabb. to troct. w/ anort. patches (plag. 75, ol. 5, pyx 20).
140-146 approx. the same as (120-127).

Portions of DDH BI-134

1150-1268
alternation of mgr to cgr, partly laminated & slightly brecciated anort. gabb. (plag. 80, pyx 15, sul. 3-5) & loc. faintly layered (Virginia Formation?) hfls. incls., micro gabb. & micro norite. Cgr to pegmtdl. ol. gabb. (plag. 75, ol. 10, pyx 10, sul. 5) intrcals. On the average 3-5% Cu-sul. & vermiform po incls.

1650 approx.-1750 approx.
the same rock types as (1150-1268); mainly mgr ol.-brg. gab., (plag. 70, ol. 10, pyx 20). Fgr to mgr ol.-brg. gabb. gradg. into hfls., (plag. 70, ol. 10, pyx 15, ilm. + biot. 5). Tr.-2% cp + po + Cu-sul., mostly in hflsic. portions, assoc. w/ biot. booklets.

Portions of DDH BI-144

633°-715.3
mgr ol.-brg. gabb. (plag. 75-80, ol. 10-15, pyx 10-15) & anort. troct. (plag. 80, ol. 15, pyx 5) w/ gab. anorth. intrcals. Cu-sul. & cp specks & clots (2-5%) mostly in troct. & pegmtdl. anorth.

1400 approx.-1493 approx.
fgr to mgr mela ol. gabb. (plag. 65, ol. 20, pyx 10, sul. 5). Pegmtdl. biot.-rich sections w/ ilm. tablets, occasionally in bladed intergrowths w/ Cu-sul. Underlain by ol. micro gab., (plag. 65, pyx 18, ol. 15, Cu-sul. 2-3).

Portion of DDH II-1

188 approx.-235 approx.

188 approx.-190 troc. anorth.; cgr, (plag.) w/ 2-3% po + cp.
190-205.7 mixed rock of anort. & picritic patches w/ up to 5% sul.
205.7-207 pegmtd. w/ ox.-rich peridotidic intrcals. (up to 20% po + cp); grades into:
207-223.3 pyx-ol.-ox. cumulate w/ intergranlr. po + cp. Sul. up to 90%, average 5-30%.
223.3-235 mixed picrite to serpent. dunite w/ cgr plag. & intergranlr. po + Cu-sul. + ilm. & graphite. Locly. up to 75% graphite.

Portion of DDH II-3

161 approx.-218 approx.

161 approx.-186.5 anort. troct.; (plag. 80, ol. 18, sul. 2-3), po + Cu-sul. At 179' cp + po clots w/ graphite rosettes.
186.5-194.7 serpent. fgr ultrmaf. rock w/ graphite diss's. & rosettes.
194.7-218 approx. heterogeneous mixt. of: fgr to mgr picrite; feldsp. peridotite & anorth.; gradg. into graphite-brg. pegmtd. w/ serpent. dunite incl. w/ (po + cp) + Cu-sul. clots (up to 10%) assoc. w/ graphite. Purplish hfls. incls., (198-199)

Portion of DDH II-5

242 approx.-281 approx.

242 approx.-267.5 mixt. of: fgr to mgr plag.; partly serpent. ultrmaf. rock & dunite; pinkish & greenish hfls., cgr to pegmtdl. intrcals. w/ biot. booklets, ilm. & cp + po clots, 1-2% sul.
267.5-272.4 partly serpent. ultrmaf. pyx-ol.-ox. (ilm.?) cumulate w/ po clots, ox. up to 25%, sul. up to 30%, locly. graphite.-brg.
272.4-281 mixed anorth., picrite & hfls.

Portion of DDH II-6

209 approx.-278 approx.

209 approx.-218.6 partly serpent. anort. troct., mgr to cgr (plag. 80, ol. 20)
218.6-220.3 feldsp. ol.-brg. pyroxenite, cgr, in sharp contact w/ overlying section. Slightly brecciated milky-blue-white anort, spots.
220.3-230 semi-mass. po. w/ serpent. ol.-pyx cumulate. Intrcals. of cgr ol. gabb. (30-50% sul.)
230-232 cataclastic mixt. of cgr milky-white anorth. & dunite w/ intergranlr. po + cp clots & veins. Cp rims po.
232-240 heterogeneous mixt. of cgr plag. & partly serpent. ol. aggregates.
240-278 approx. gradually homogenized plag. & ol. becoming troct. (plag. 75, ol. 25).

Portion of DDH BI-147

1446 approx.-1740

1446 approx.-1534 mela gabb., cgr to pegmtdl. Biot. & ilm. conc. Brecciated & serpent., locly. becoming feldsp. pyroxenite in comp. 2-3% cp. From (1494) to bottom of section heterogeneous mixt. of troc. & anort. comp., (plag. 70, pyx 30, ol. tr.) w/ mgt.-rich patches (1505'). At (1530') apatite prisms in Cu-sul. + po clots.

1534-1556.7 mixed section of: fgr to mgr ol.-brg. gabb; serpent. ultrmaf. incls.; anort. patches. Mgt. patches w/ conc. of Cu-sul. averaging 1-2% sul.

1556.7-1619 alternating sections of: fgr to mgr mela gabb. to feldsp. pyroxenite & cgr to pegmtdl. gabb. & anort. troct. Up to 10% Cu-sul. in pyroxenitic portions. Average 1-2% sul.

1619-1728 ol. gabb., mgr, locly. cgr (plag. 70-75, ol. 10-13, pyx 10-15, biot. + mgt. 5, sul. 2-3) Cu-sul. & po intergrown w/ apatite prisms.

1728-1740 approx. layered hflsic. qtz. argillite (Virginia Form.) alternating w/ ol. gabb.

Portions of DDH W-9

336 approx.-382 approx.
altered gabb., mgr to cgr w/ serpent. ultrmaf. & cataclastic anort. intrcals. Cu-sul. (2-4%), assoc. w/ ilm. in cataclastic portions.

900 approx.-974 approx.
ol. gabb., fgr to mgr w/ cgr cataclastic & serpent. ultrmaf. intrcals., 2-3% Cu-sul. + po.

Portion of DDH W-14

400 approx.-500 approx.
troc. anorth., mgr, (plag. 80, ol. 20, biot. tr.) w/ intrcal. of plag.-opx-pegmtdl. having ilm. & up to 30% (Cu-sul. + po) concentrations.

Portions of DDH W-8B

491 approx.-558 approx.

491 approx.-543 heterogeneously mixed troct. & fgr picrite, gradg. into homogeneous troct. (plag. 75, ol. 20, pyx 5, sul. 1-2) w/ pegmtdl. intrcals. 2-3% cp & po, assoc. w/ ilm.

543-558 approx. barren hflsic. micro gabb. alternating w/ slightly altered ol. gabb. Intrcal. of slightly magnetic, 1-2% po-brg. ox.-ol.-px cumulate.

746 approx.-793 approx. ol.-brg. gabb., fgr to mgr (1-3% po + Cu-sul.). Intrcal. of cgr to pegmtdl. gabb. w/ plag. & poik. opx intergrown w/ ilm., po & Cu-sul.

Portions of DDH W-4

186 approx.-225 approx.

186 approx.-213 ol.-brg. gabb., fgr euhdrl. & fgr anhdrl. ol. gabb. to anorth. w/ up to 5% Cu-sul. + po.

213-225 approx. anort. pegmt. in sharp contact w/ overlying section. Increasing ol. content dwnwrd, (plag. 80, opx 10, ol. 5, ilm. 5, sul. tr.). Diseased white plag. in voids in gray plag.

2144 approx.-2200 approx.

ol.-brg. gabb., fgr to mgr, (plag. 75, pyx 15-20, ol. 2-10, sul. 1-5) w/ intrcal. of cgr, plag.-rich layers w/ up to 10% po + pn (?) Also intrcal. of fgr ol. pyroxenite.

2515 approx.-2544 approx.

ilm. oik.-brg. troct., fgr to mgr, granlr. to subhedral (plag. 75, ol. 15, pyx 5, ilm. 5, sul. 1-2), w/ cgr to pegmtdl. portions. 2-3% Finely diss'd., cp + po.

Computer-generated graphic logs, combining chemistry with lithology, were made using the Logger software package developed by Rockware International. Drill hole DU-15, and portions of DDH'S DU-14, 34872, D6-A and DU-9 were graphed with this software (see figures 3-7).

Descriptions of DDH's 64048, 66017, 66014, 66010, 64046, 66012, and 65223 have been omitted since the data were derived from scrambled 5 foot portions of split drill core. The reader is referred to Geodrilling Report #251 (Frey and Lawler, 1987) for the data on DDH's SE-2 and FHL-2.

Major Lithologic Associations of DDH DU-15 (figure 3)

This drill hole is located to the south of the East-West break trending through Birch Lake across the contact of the Duluth Complex and footwall rocks.

According to Foose (1984), the drill holes in the Birch Lake area are characterized by two sharply delineated sections: a sulfide-bearing lowermost zone, overlain by a sulfide-free zone.

The sulfide-bearing zone

Two oxide-rich zones are associated with serpentinized feldspathic ultramafic rocks and are incorporated with a 140.5' thick sulfide zone (2302'-2442.50'), which constitutes the lowermost portion of the basal zone of the Duluth Complex. This sulfide zone has been reported to contain from 2-10% (chalcopyrite + pyrrhotite + bornite + pyrite) with occasional traces of native copper in company logs.

The lowermost oxide zone, (2393.5'-2442.5') directly overlies the granite footwall and averages 1.70 ppm Pt+Pd (2400'-2442') with a 5' enriched zone of 7.44 ppm Pt+Pd (2411'-2416'), Sabelin (1985). As a whole, this oxide zone consists of discontinuous and heterogeneous oxide-rich (15-50%), partly serpentinized troctolite and olivine gabbro, with a fine-grained oxide-rich section (50%-100% oxide) from 2410'-2416'. The latter oxide-rich interval is composed of granular magnetite, ilmenite and green to dark green brown spinel, olivine and plagioclase. Plagioclase (An 27-52) and olivine are developed as anhedral crystals and oikocrysts in the lowermost oxide zone.

The poikilitic plagioclase has a typical milky blue color. Red brown biotite and amphibole rim the oxides and silicates. The lower 20' contains apatite-bearing pegmatoidal intercalations of olivine gabbro, gabbro norite, troctolite and anorthositic compositions, with labradorescent plagioclase and alkali-feldspar perthite inclusions.

The uppermost oxide-rich zone (2339.4'-2358.6') averages 535 ppb Pt+Pd and consists of a medium to coarse-grained, partly massive oxidite with milky-white granular and poikilitic plagioclase crystals and granular olivine.

The upper oxide-rich zone is overlain by a thick (2323.4'-2339.4') pegmatoid of gabbroic to anorthositic composition, grading locally into apatite-bearing clinopyroxene granite, wherein orthoclase replaces plagioclase. This interval averages 547 ppb Pt+Pd. Underlying the upper oxide-rich zone (2358.6'-2385.4'), is a partly serpentinized, locally oxide-rich feldspatic dunite and picrite averaging 219 ppb Pt + Pd.

Overlying the pegmatoid is a section (2307.5'-2323.4') consisting of partly serpentinized picrite with granular anorthositic patches and poikilitic plagioclase fields and averages 719 ppb Pt+Pd, except for a barren 5' upper section.

The sulfide-free zone

The sulfide zone of DDH DU-15 is overlain by a relatively barren sequence of olivine-bearing gabbroic to anorthositic rocks, locally of troctolitic composition, with pegmatoidal intercalations of similar compositions. Under the microscope two major rock types are distinguishable, namely an upper (from 0' to about 900'), olivine-bearing gabbroic to anorthositic rock with locally developed plagioclase lamination and an ophitic to subophitic texture, and a lower (about 900'-2302') olivine gabbroic and troctolitic variety having highly irregular textures and variable compositions. In the upper rock type olivine occurs mostly as inclusions in clinopyroxene oikocrysts and occasionally is rimmed by orthopyroxene. Voids between the plagioclase, (up to 3 vol %) are filled with alkali feldspar (- 2V 30-40 degrees), biotite, apatite, olive green amphibole, cummingtonite, carbonate and colorless mica. In the lower rock sequence, the lithology increasingly becomes a mixture of both rock types. Older plagioclase (An 56-67) appears to be resorbed by younger plagioclase (An 40-47). The plagioclase is cyclicly zoned, apparently as a resorbed part of multiple reaction rims on olivine,including pyroxene symplectite.

Evaluation of available open-filed company information of sulfide zones for drill holes adjacent to DU-15, namely DU-12, DU-14 and DU-16 show that DU-15 has a relatively high (41%) ultramafic component as well as a relatively high (31%) oxide-rich zone as compared to about 21-31% and 2% in DDH's DU-12, DU-14, and DU-16 respectively. The analyses of the oxide-ultramafic rock associations of these drill holes failed, however, to produce significant PGE values.

Chemical analyses

Drill core were analyzed by X-Ray Laboratories Ltd., Don Mills, Ontario and Bondar-Clegg & Co., Ltd., North Vancouver, B.C., using the following techniques:

TABLE I
X-RAY LAB ANALYTICAL METHODS

Element	Method	Lower Detection Limit
AU	NA	5.000 PPB
AU	DCP	1.000 PPB
CO2	WET	0.010 %
F	WET	20.000 PPM
NA	NA	0.050 %
WRMAJ	WR	0.010 %
S	XRF	0.010 %
CL	XRF	50.000 PPM
IR	NA	100.000 PPB
SC	NA	0.500 PPM
V	DCP	1.000 PPM
CR	NA	50.000 PPM
FE	NA	0.500 %
CO	NA	10.000 PPM
NI	NA	50.000 PPM
CU	DCP	1.000 PPM
ZN	NA	200.000 PPM
AS	NA	1.000 PPM
SE	NA	10.000 PPM
BR	NA	5.000 PPM
RB	XRF	2.000 PPM
SR	XRF	2.000 PPM
Y	XRF	2.000 PPM
ZR	XRF	2.000 PPM
NB	XRF	2.000 PPM
MO	NA	2.000 PPM
PD	FADCP	2.000 PPB
AG	NA	5.000 PPM
SN	ICPMS	10.000 PPM
SB	NA	0.200 PPM
TE	ICPMS	10.000 PPM
CS	NA	2.000 PPM
BA	XRF	10.000 PPM
LA	NA	5.000 PPM
CE	NA	5.000 PPM
ND	NA	10.000 PPM
SM	NA	0.500 PPM
EU	NA	0.500 PPM
YB	NA	0.500 PPM
LU	NA	0.200 PPM
HF	NA	2.000 PPM
TA	NA	1.000 PPM
TA	XRF	2.000 PPM
W	NA	2.000 PPM
PT	FADCP	10.000 PPB
PB	ICPMS	5.000 PPM
BI	ICPMS	2.000 PPM
TH	NA	0.500 PPM
U	NA	0.500 PPM

Table I (continued)

NA = nuetron activation
DCP = D.C. plasma
WET = wet chemical specific methods
WR = whole rock
XRF = x-ray fluorescence
FADCP = fire assay/D.C. plasma finish
ICPMS = inductively compiled plasma mass spectrometry

Chrome values are questionable due to the low analytical precision of this analytical technique where high Cr values exist.

Table I (continued)

BONDAR-CLEGG ANALYTICAL METHODS

Element		Lower Detection Limit	Extraction	Method
Au	Gold	5 PPB	NOT APPLICABLE	IND. NEUTRON ACTIV.
Sb	Antimony	0.2 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
As	Arsenic	1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Br	Bromine	1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Cd	Cadmium	10 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Ce	Cerium	10 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Cs	Cesium	1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Cr	Chromium	50 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Co	Cobalt	10 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Eu	Europium	2 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Hf	Hafnium	2 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Ir	Iridium	100 PPB	NOT APPLICABLE	IND. NEUTRON ACTIV.
Fe	Iron	0.5 PCT	NOT APPLICABLE	IND. NEUTRON ACTIV.
La	Lanthanum	5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Lu	Lutetium	0.5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Mo	Molybdenum	2 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Ni	Nickel	50 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Sm	Samarium	0.1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Sc	Scandium	0.5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Se	Selenium	10 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Ag	Silver	5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Na	Sodium	0.05 PCT	NOT APPLICABLE	IND. NEUTRON ACTIV.
Ta	Tantalum	1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Tb	Terbium	1 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Th	Thorium	0.5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
W	Tungsten	2 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
U	Uranium	0.5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Yb	Ytterbium	5 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Zn	Zinc	200 PPM	NOT APPLICABLE	IND. NEUTRON ACTIV.
Al203	Alumina	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
CaO	Calcium	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
Fe203	Total Iron	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
K2O	Potassium	0.10 PCT	BORATE FUSION	PLASMA EMISSION SPEC
LOI	Loss On Ignition	0.01 PCT		Gravimetric
MgO	Magnesium	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
MnO	Manganese	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
Na2O	Sodium	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
P2O5	Phosphorous	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
SiO2	Silica	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC

Table I (continued)

Element		Lower Detection Limit	Extraction	Method
TiO2	Titanium	0.01 PCT	BORATE FUSION	PLASMA EMISSION SPEC
Total	Whole Rock Totals	0.01 PCT		
S	Sulphur	0.01 PCT		Leco
CO2	Carbon Dioxide	0.01 PCT		Leco
Cl	Chloride	50 PPM	HNO3	Turbidimetric
Bi	Bismuth	2 PPM	MULT ACID TOT DIG	D.C. PLASMA
Cu	Copper	1 PPM	MULT ACID TOT DIG	D.C. PLASMA
Pb	Lead	5 PPM	MULT ACID TOT DIG	D.C. PLASMA
Sn	Tin	10 PPM	MULT ACID TOT DIG	D.C. PLASMA
Te	Tellurium	10 PPM	MULT ACID TOT DIG	D.C. PLASMA
V	Vanadium	1 PPM	MULT ACID TOT DIG	D.C. PLASMA
Ba	Barium	20 PPM		X-RAY Fluorescence
Nb	Niobium	5 PPM		X-RAY Fluorescence
Rb	Rubidium	5 PPM		X-RAY Fluorescence
Sr	Strontium	5 PPM		X-RAY Fluorescence
Y	Yttrium	5 PPM		X-RAY Fluorescence
Zr	Zirconium	5 PPM		X-RAY Fluorescence
F	Fluorine	20 PPM	POT HYDROXIDE FUSION	Specific Ion
Pd	Palladium	2 PPB	FIRE-ASSAY	
Pt	Platinum	15 PPB	FIRE-ASSAY	

PPM = Parts per million
PPB = Parts per billion
PCT = Percent

Summary of analytical results

Lithological associations similar to the PGE-enriched oxide-ultramafic zones of DDH DU-15 have produced only one significant new PGE-occurence, that being in DDH DU-9. This drill hole is located about 2400' to the southeast of DDH DU-15 and the analytical results and lithology of the intervals are described below.

Sample #	Depth'	ppb Pt	ppb Pd	ppb Pt+Pd	Pt/Pt+Pd
CSL 17711	2591.3'-2592.1'	2800	550	3350	0.84
CSL 17713	2593.7'-2596.7'	350	1300	1650	0.21

CSL 17711; magnetite(30-40%)-olivine(10%) cumulate(?) with poikilitic plagioclase(50-60%).
CSL 17713; medium-grained troctolite with pegmatoidal patches.

The oxide-rich PGE-bearing interval is overlain by 3.3' of heterogenous pegmatoid of anorthositic-troctolitic, dunitic and pyroxenitic compositions. It is underlain by 1.6'of coarse-grained, magnetite-bearing picrite, which is in turn underlain by 10.0' of medium-grained troctolite with pegmatoidal patches from a few inches to 1.3' thick. The uppermost 3',(CSL 17713), assayed 1650 ppb Pt+Pd.

Other drill holes having anomalous chemistry in close proximity to DDH DU-15 are: DU-16 (3625'-3627'), 35 ppm Ag; DU-14 (3898.8'-3901.2'), 3200 ppm Cl. In a Dunka mine pit bench one anomalous sample (OSL 16626) was found to contain 960 ppm Pd and 12 ppm Ag.

Elevated PGE, Ag, Cl and F values were found in the following drill cores: NM-5, Pd; BI-128, Pt+Pd and Cl; D-5, Pt+Pd; DU-15 Pt+Pd,Cl, and F; 64048, F; BA-1, Pt+Pd and Cl; BA-2, Pt+Pd and Cl; BI-134, Pt+Pd; BI-144, Pt+Pd and Ag; BI-147, Pt+Pd; II-1, Ag; II-3, Ag; II-5, Ag; II-6 Ag; W-4, Ag; W8-B, Ag; and W-9, Ag.

An 0.5' interval of DDH D-5 assayed 18% Cu, 4.5% Ni, 1300 ppm Co, 360 ppb Pd and 26 ppm Ag.

Statistical analysis of analytical data

Procedures for cluster analyses and scatter diagrams were established by Peter Jongewaard (1986) of UMD (supervised by Dr. Penelope Morton), using analytical data from DDH DU-15, obtained from the Minnesota Resources Research Center (MRRC), industry, and the DNR. Cluster analysis employing the "single linkage method" was performed on the data in his report using SPSS-PC statistical analysis software on an IBM-PC-AT located at the DNR Minerals Office in Hibbing. According to Jongewaard, (op.cit), cluster analysis is a statistical method by which individual cases are compared to each other according to common variables (Davis, 1973). In this instance the cases are rock samples and the variables are the chemical components of

the individual samples. The values of the components from each sample are first standardized; these standardized values are compared to each other and grouped according to their nearness in value (similarity). The resulting groups, or "clusters", thereby indicate rocks of similar chemical composition.

The rock samples of DDH DU-15 were classified as "troctolitic", (actually gabbroic, anorthositic and troctolitic rocks, mainly from the sulfide-free zone), picrites, hornfelses, oxides from the upper oxide zone and the mineralized lower oxide zone, respectively, and rocks of mixed composition representing the oxide-rich silicate rocks of the sulfide zone. A total of 59 clustered samples were plotted in horizontal icicle and variation diagrams.

Cluster analysis was performed using the major oxides (SiO2, Al2O3, Fe2O3, MgO, CaO, K2O, NA2O, TiO2, MnO, P2O5), base and precious metals (Cr, V, Cu, Co, Pt, Pd and Au) as well as a combination of the major oxides and base and precious metals. It is evident that the major oxides yielded the best clustering, namely:

- a strong grouping of the sulfide-free zone gabbros, anorthosites and troctolites (upper 2300').
- a strong clustering of picrites found at 2308'-2323' and 2364'-2386'.
- separate clustering of the upper oxide zone with low PGE-content and lower oxide zone with high PGE-content.

All diagrams are available for inspection in DNR-Open Files #255 and 258. A summary of this information is presented in this report.

Clustering of the major oxides was continued for this report with 98 additional rock samples from the contact zone between the Duluth gabbro and Biwabik Iron Formation in the Dunka Pit, the Long Nose Creek peridotite, Nathans Layered Series, (Units G and T), DDH's CN-7, DU-14, DU-15, DU-16, D-6A, D-8, D-10, NM-5, 34872, NM-9 and BI-128.

Again, the oxide-rich samples of DDH DU-15 with high and low PGE content cluster in discrete groups. The strongly mineralized oxides of DDH DU-15 were clustered with the following samples:

- DDH DU-14, (CSL 16663, 3898.8-3901.2'); a medium-grained to coarse-grained oxidite, with coarse-grained inter-granular plagioclase containing 3200 ppm Chlorine and sandwiched between fine-grained troctolite.
- DDH 34872, (CL 17201, 1310.5-1315'), upper 4.5' of 18' of plagioclase-olivine oxidite, which is overlain by a mixed pegmatoidal plagioclase and partly serpentinized picrite.
- DDH D-6A, (CSL 16692, 1942.7-1945.2 and CSL 16693, 1945.2-1946.8), plagioclase- olivine-pyroxene oxide cumulate (?), overlain by picrite and olivine gabbro grading into pegmatoidal gabbro, anorthosite, troctolite and underlain by fine-grained picrite and gabbro.

The picrites of DDH's DU-15 and 34872 showed the clearest and most discrete clusters of this rock type.

Clustering of all the 281 cases in this report, however, confirmed the discrete cluster of samples CSL 16663, CL 17201 and CSL 16692 mentioned above. Additionally discrete clusters emerged for the following oxide-rich rocks:

Cluster #	DDH #	Sample #
1	D-10	CSL 17666, CSL 17668
2	D-10	CSL 17664, CSL 17667, CSL 17669
3	(34872	CL 17203, CL 17204
	(D-6A	CSL 16694, CSL 17156
4	D-8	CSL 16678, CSL 16679

A large cluster of samples is apparent, for the remaining rocks, and covers 13.8% of all cases, representing:

DDH#	Sample #
DU-15	CSL 16647, CSL 16648, CSL 16649
D-10	CSL 17284, CSL 17285, CSL 17286
BA-1	CSL 18582, CSL 18585, CSL 18586, CSL 18587, CSL 18588, CSL 18590, CSL 18591, CSL 18592, CSL 18593
BA-2	CSL 18453, CSL 18460, CSL 18536, CSL 18539, CSL 18542, CSL 18544, CSL 18546, CSL 18549, CSL 18551, CSL 19392
W-8B	CSL 19438, CSL 19439, CSL 19440, CSL 19443, CSL 19445
W-9	CSL 19427
BI-134	CSL 19397, CSL 19400, CSL 19401
BI-144	CSL 19412
DU-9	CSL 17709, CSL 17710, CSL 17713
66014	CSL 17240
34872	CL 17193

Variation diagrams

Scatter plots were made by Jongewaard (op.cit.), with data of DDH DU-15 using the following relationships: MgOvsSiO2, Mg/Mg+FevsSiO2, MgOvsTiO2, Cu/Cu+NivsPt/Pt+Pd, MgOvsV, MgOvsCr2O3, CaOvsSiO2, CaOvsTiO2, Al2O3vsTiO2, MgOvsNi, FeO+MgO/Al2O3vsSiO2/Al2O3 and Mg/Mg+FevsNi. In almost all cases, with the exception of MgOvsNi, Mg/Mg+FevsNi and Cu/Cu+NivsPt/Pt+Pd, two clearly crossing trends emerged, those being a troctolite - picrite trend with a gap in between and an oxide rock trend.

Plots with a larger population of 281 samples, in this report, basically confirmed these trends as illustrated by a plot of MgOvsSiO2 in figure 1, with a tendency to be less clear. This tendency is also expressed in a diagram of CaOvsSiO2, figure 2, wherein picrites appear to position between the oxide-rich rocks and troctolites. This plot is further interesting because of the concentration of granite, BIF and hornfels in lower right-hand corner. Of all the rocktypes distinguished, the fine-grained mafic rocks appear to show the largest scatter, in both the MgOvsSiO2 and CaOvsSiO2 plots reflecting possibly different modes of origin.

Comparison with PGE deposits

Recently published data, (Viljoen and others, 1986) on the Amandelbult section of the Rustenburg Platinum Mine Ltd., show a spatial relationship between diabase dikes and faults. These dikes and faults cross cut the contact between the Western portion of the Bushveld Complex and the sedimentary footwall. Iron-rich, pegmatoidal pyroxenite-dunite bodies are associated with these crosscutting structures. The pyroxenite-dunite bodies are pipe-like and appear to have preferentially replaced anorthositic layers. The chromite layers, within the original igneous layering, are consequently replaced by a mineral of the spinel group, which could be labeled a "chrome-titano magnetite", in association with minor ilmenite. Associated volatile-deposited Pt or Pd minerals containing Hg, Pb, Sn, As and Sb also are indicative of a replacement origin according to Viljoen and others, (op. cit). Elements introduced would include Fe, Ti, V, and Ca. Graphite and siderite indicate reducing conditions in the iron-rich pegmatoidal bodies.

Of all the models considered thus far, the Amandelbult section appears to fit best with the mode of occurrence and mineralogy of the PGE occurrences in the Birch Lake and Dunka Pit area. The latter area seems to exhibit a regional geological setting comparable to the transgressive Complex-footwall relationship of the Plat reef area (Wagner, 1929, Gain and Mostert, 1982) in the eastern portion of the Bushveld Complex. According to Wagner, op. cit., the first, but highly erratic PGE occurrences were discovered in that area in native copper workings in the iron formation and the adjoining Plat reef by Pre-European miners. A portion of the Birch Lake area, delineated on Plate 3, and characterized by native copper-bearing oxide-ultramafic lithological associations, is a structural, lithological and mineralogical analogue. In both of these types of PGE deposits in the Bushveld complex, however, the Merensky Reef is considered the most probable source of PGE. The primary (igneous) source of PGE in the Birch Lake - Dunka Pit area has yet to be established. The immediate presence, however, of mixed and heterogeneous rocks of the Anorthositic Series within the Troctolitic Series, as mapped by Morey and Cooper (1976) and as evident from study of the disequilibrium assemblages of the sulfide-free zone of DDH DU-15, might provide the petrogenetic conditions conducive to processes initiating PGE precipitation.

Recent discoveries of significant PGE mineralization in the Lac des Iles Complex in Ontario Canada (Suttcliffe and Sweeney,1985) and the Munni Munni Complex in Western Australia (Hoatson, 1986), have indicated that magma mixing processes acting in other than a strict strata bound setting as the Bushveld Complex and Stillwater Complex (Cabri and Naldrett op. cit.) may also initiate PGE precipitation.

Continuous drill core analysis techniques

In order to evaluate the state-of-the-art of this technique, three drill core specimens from mineralized greenstone in DDH RR-1 (1304.0'-1304.4') were sent to Batelle's Pacific Northwest Laboratories. According to Arthur and others (1984), this laboratory has developed an Energy Dispersive X-Ray Fluorescence analytical technique, for use on intact salt drill cores.

The results of analyses on silicate rocks indicate that the technique has promise for silicate rock. However, two of the major elements, Al and Si, which are important indicators for alteration processes, could not be recorded, and the values for Ca, Ti and Cr proved to be inconsistent (see table V). The samples were scanned at opposite sites using a scanning speed of 0.25" or 0.50" (conflicting data from Batelle Laboratories) per minute, or roughly 2 minutes per sample. The fixed analysis of a homogeneous piece of drill core was performed at a rate of 40 minutes per sample to check reproducibility. The data were generated using a Cadmium-109 radioisotope (Ag x-ray excitation).

Subsequent analyses of these drill cores by X-Ray Laboratory (see Tables V and VI) were not comparable with the Batelle raw data, given the ambiguities in data presentation by the latter and difficult communications with Batelle Laboratories.

Table V

Comparison of concentrations for a 4-inch drill core section on opposite sides of core: runs #6 and #13 and in a fixed position

Element	in situ Concentration		In vacuo Concentration
	Run #13	Run #6	Section #13
Al	-	-	6.2% ± 1.0
Si	-	-	9.4% ± 0.7
Ca	2% ± 0.5	1% ± 0.6	5.3% ± 0.3
Ti	0. 5% ± 0.2	0.25% ± 0.2	0.67% ± 0.3
Cr	0.12% ± 0.06	0.07% ± 0.06	0.14% ± 0.03
Fe	10. 3% ± 0.6	10.5 % ± 0.6	10.5 % ± 0.01
Ni	290 ppm ± 200	270 ppm ± 210	260 ppm ± 17
Cu	0.62% ± 0.05	0.33% ± 0.04	0.66% ± 0.03
Zn	250 ppm ± 130	145 ppm ± 110	200 ppm ± 11
Sr	§20 ppm	§20 ppm	25 ppm ± 4
Zr	§20 ppm	30 ppm ± 12	-

*In situ (=scanned)
In vacuo (=fixed)

Corresponding in situ analysis sections

Run ID (1st analysis)	Run ID (2nd analysis)	Piece Number	DNR Sample Number
One side	Opposite side		
1	-	1	K19477
2	9	1	"
3	10	1	"
4	11	1	"
Break in core			
5	12	2	K19476
Break in core			
6	13	3	K19475
7	14	3	"
8	15	3	"

Information sent to the DNR's Mineral Division, by Dr. P. J. Mathew of Common Wealth Scientific and Industrial Research Organization, Australia, (CSIRO) Division of Mineral Physics, through the kind cooperation of the Director of the Bureau of Mineral Resources of Australia, has indicated that a very efficient and accurate portable x-ray fluorescence spectrograph was developed (Graham and others, 1976) by Falconbridge Metallurgical Laboratories in Ontario. Drill core was analyzed for Fe, Cu and Ni at a speed of at least 2 feet per minute. They state that their results indicate:

-"Reproducibility of replicate scans are of the order of $\pm$ 3% overall.
-For nickel and copper intersections on the order of 50 feet or more in length in Sudbury-type and Northern Manitoba-type mineralization, the grade estimates approach those from wet-chemical assays on split core with standard deviations from mean grade estimates lower than those from the latter method in several cases.
-The non-destructive nature of the method permits successive scans for different elements, and retention of the core for later physical or metallurgical testing.
-The training period for operators is less than four days.
-The sustained rate of determination of a single element, including interpretation and down-time, can reach at least 300 feet per 8-hour shift.
-The operating cost at Sustut, B.C., including labour and transportation, was 30 cents per foot for 15,000 feet of core scanned for copper in 208 hours of operation.
-The instrumental response can be made digital, facilitating electronic recording and handling of data.
-The equipment, with an all-up weight of about 800 lbs, including the portable generator, distributed in five crates, the heaviest of which is 350 lbs., can be transported together with an entire bush-camp for three in a utility vehicle. It can be set up and ready for operation in a tent or other dry accomodation within three hours of arrival on site."

According to one of the authors, Dr. Buchan, (pers. comm.), who is presently with Lakefield Laboratories in Ontario, the project was abandoned by the Company after the initial trials. A newer type has since been developed by a student of Professor Perrault (Helene Dugas 1982) located at the Ecole Polytechnique in Montreal, (Perrault, pers. comm.). Development was abandoned after investment of the first $250,000 of a total of $600,000 development cost. Professor Perrault estimates that $1.5 million will be needed during two years to:

- build a prototype.
- test it with four potential users who have helped fund development.
- build four units for these clients.

According to a leaflet by Dr. Mathew, a similar technology, using neutron activation, has been developed by IRT Neutron Assay System, located in San Diego. The minimum core diameter is 5", with a capacity of only 16 samples in an eight hour shift.

CSIRO, in the early eighties, was in the process of developing similar technologies, in cooperation with the Australian Mineral Industry. This project was suspended due to the downturn in the industry.

Conclusions

Detailed logging and analyses of available drill core located on state land is a rapid and relatively inexpensive tool to obtain additional information and to compare and contrast the geologic environment of an area with known ore deposit models. The results of these studies have been used by the State in the selection of state land for lease sales and by industry to aid in the search for potentially mineralized areas.

Drawing from the experience of this project, it is recommended, with regard to PGE, to look for diagnostic lithological sections to be analyzed only for precious metals, Cr, Ag and a few more elements which may prove to be critical after more statistical analysis of the analytical data.

Clustering of the analyses of major elements of oxide-rich rocks with those of the PGE zone from DDH DU-15, may prove to be an effective exploration technique.

To determine their igneous and/or metasomatic origin, a mineralogical study of the oxides will be important in order to facilitate correlation with the most important mining camps of the Bushveld Complex in South Africa.

Structural studies, employing among other, remote sensing techniques, should focus on the relation of Northwest-trending lineaments, dikes and igneous layering in the Birch Lake, Dunka Road and Babbitt areas.

The continuous drill core analytical technique, developed since 1976, (Graham and others), and Dugas (1982) is very promising. It is recommended to investigate the possibility of a joint project with these pioneers, the university and the industry, if possible supported by the NSF, in the framework of industry/university cooperative research projects grants, along the lines suggested by Professor Perrault. This technique could be made available as pilot project to the DNR facilities in Hibbing. Given the interest expressed by the Australian colleagues of CSIRO, a renowned institute for applied research, backing-up of such a project by CSIRO might produce long-term benefits.

Pertinent correspondence regarding these matters is available for consultations in DNR-Open File #255.

Transfer of Drill core from USBM St Paul

Approval was secured from the Department of the Interior to transport 418,000' of drill core stored at the USBM repository in St. Paul to the DNR core repository in Hibbing.

To date, 336,870' of these cores have been transferred to the Hibbing Library.

The remaining cores (about 81,130') have been returned to the mining companies on their request.

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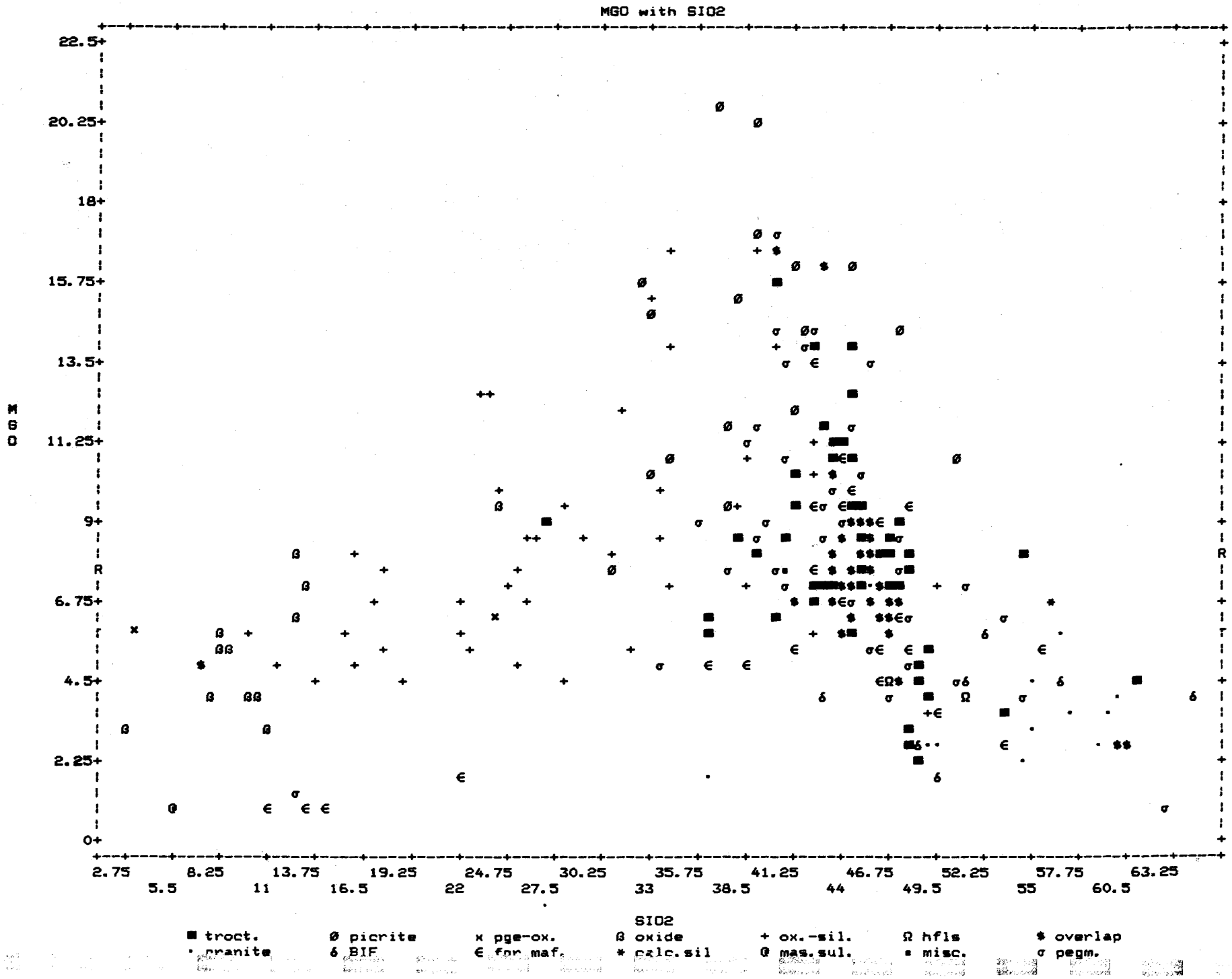
Errata

Chemical analyses: LOI* = (-) Loss of Ignition

Figure 1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SIO2
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20.25
18
15.75
13.5
11.25
9
6.75
4.5
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0
2.75
5.5
8.25
11
13.75
16.5
19.25
22
24.75
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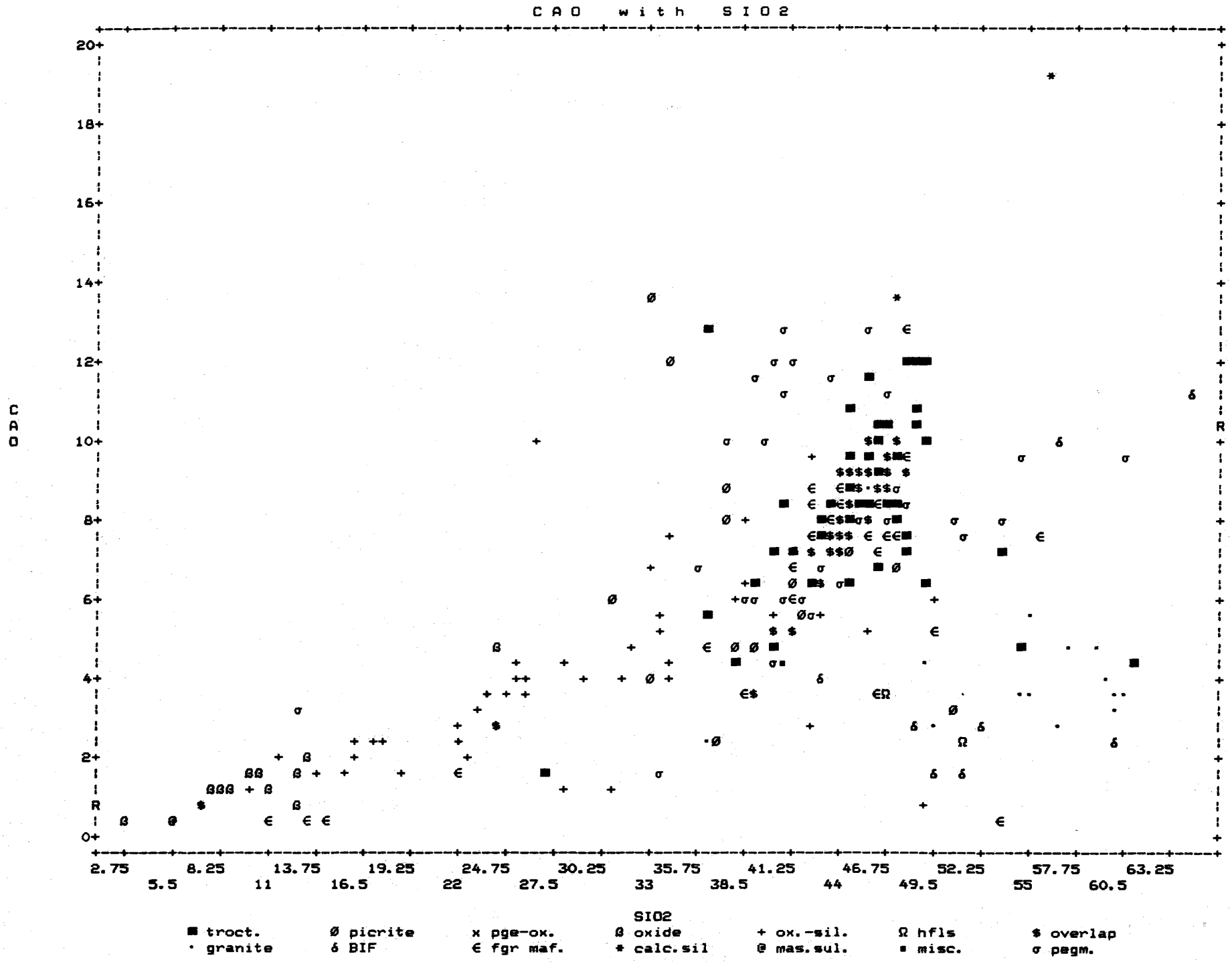
30.25
33
35.75
38.5
41.25
44
46.75
49.5
52.25
55
57.75
60.5
63.25
■ troct.
Ø picrite
× pge-ox.
ß oxide
+ ox.-sil.
Ω hfls
$ overlap
· granite
δ BIF
€ fgn maf.
* calc.sil
@ mas.sul.
▪ misc.
σ pegm.


C A O w i t h S I O 2
CAO
SIO2
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18+
16+
14+
12+
10+
8+
6+
4+
2+
R
0+
2.75
5.5
8.25
11
13.75
16.5
19.25
22
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30.25
33
35.75
38.5
41.25
44
46.75
49.5
52.25
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57.75
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63.25
■ troct.
· granite
Ø picrite
δ BIF
x pge-ox.
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ß oxide
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Ω hfls
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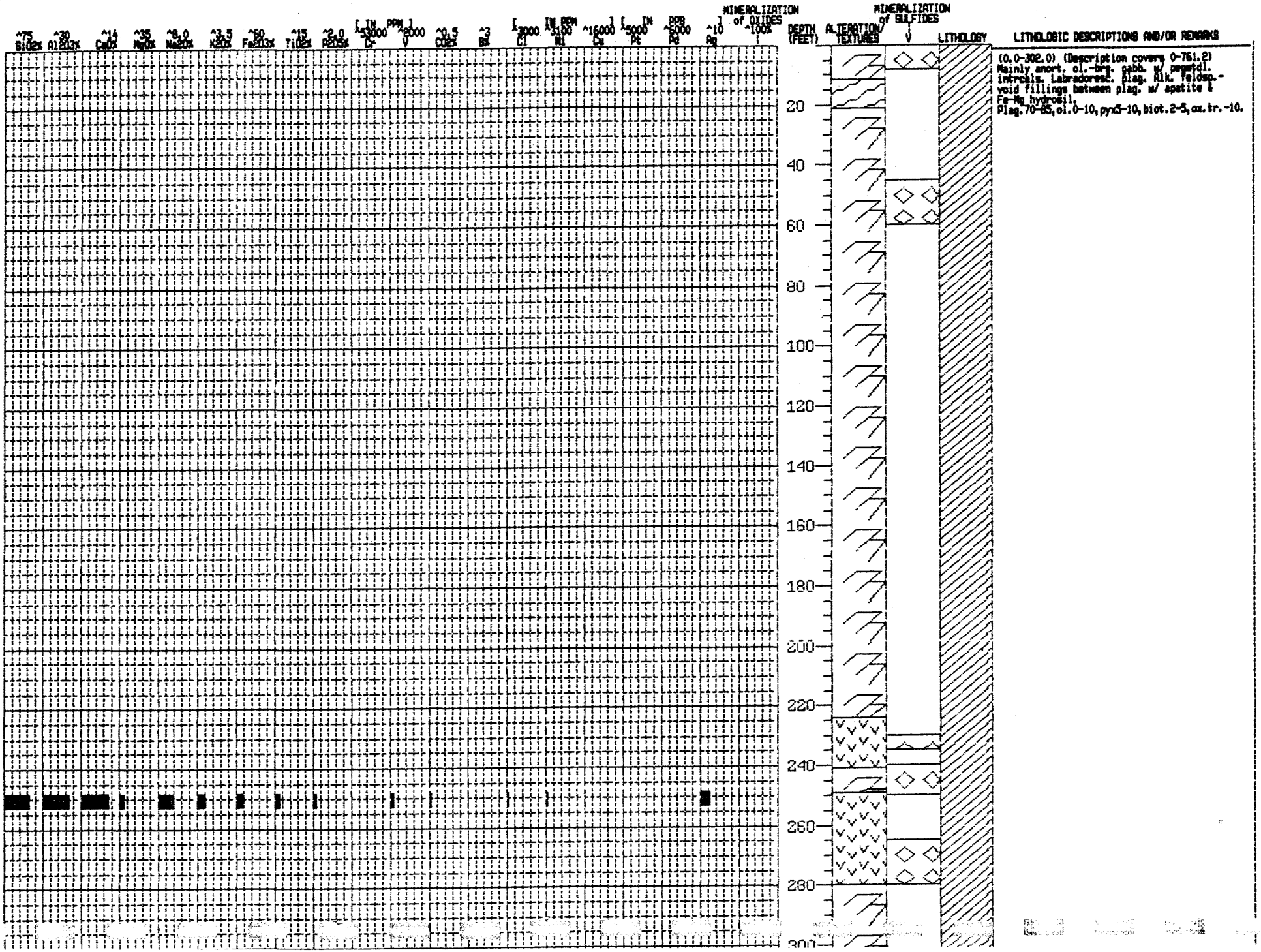

SiO2% Al2O3% CaO% MgO% Na2O% K2O% Fe2O3% TiO2% P2O5%
Cr V Cl Ni Cu Pt Pd Ag
MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
(0.0-302.0) (Description covers 0-761.2)
Mainly anort. ol.-bng. gabb. w/ pegmtdl. intrcals. Labradoresc. plag. Alk. feldsp.-void fillings between plag. w/ apatite & Fe-Mg hydroxil.
Plag.70-85, ol.0-10, pyr3-10, biot.2-5, ox.tr.-10.
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300

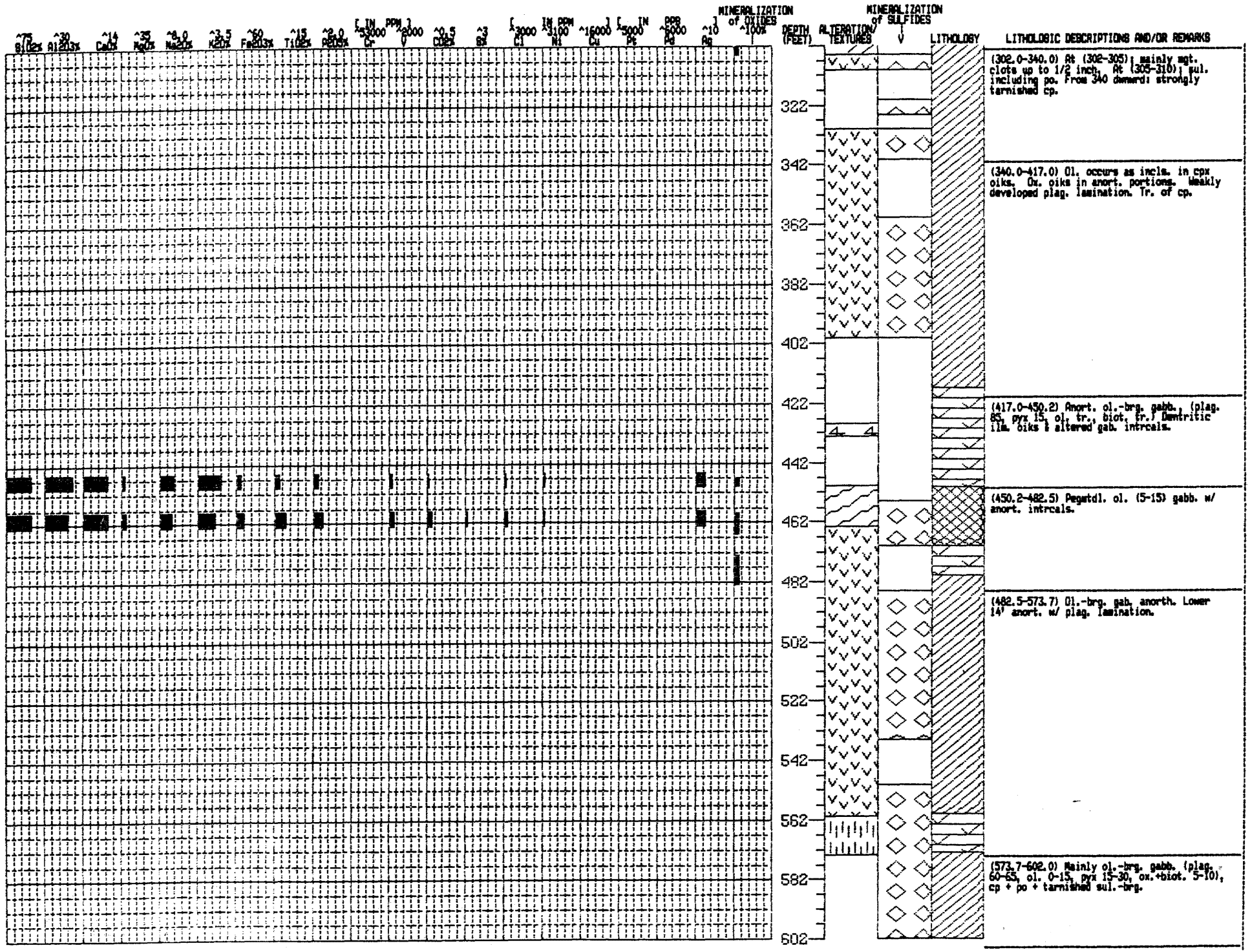
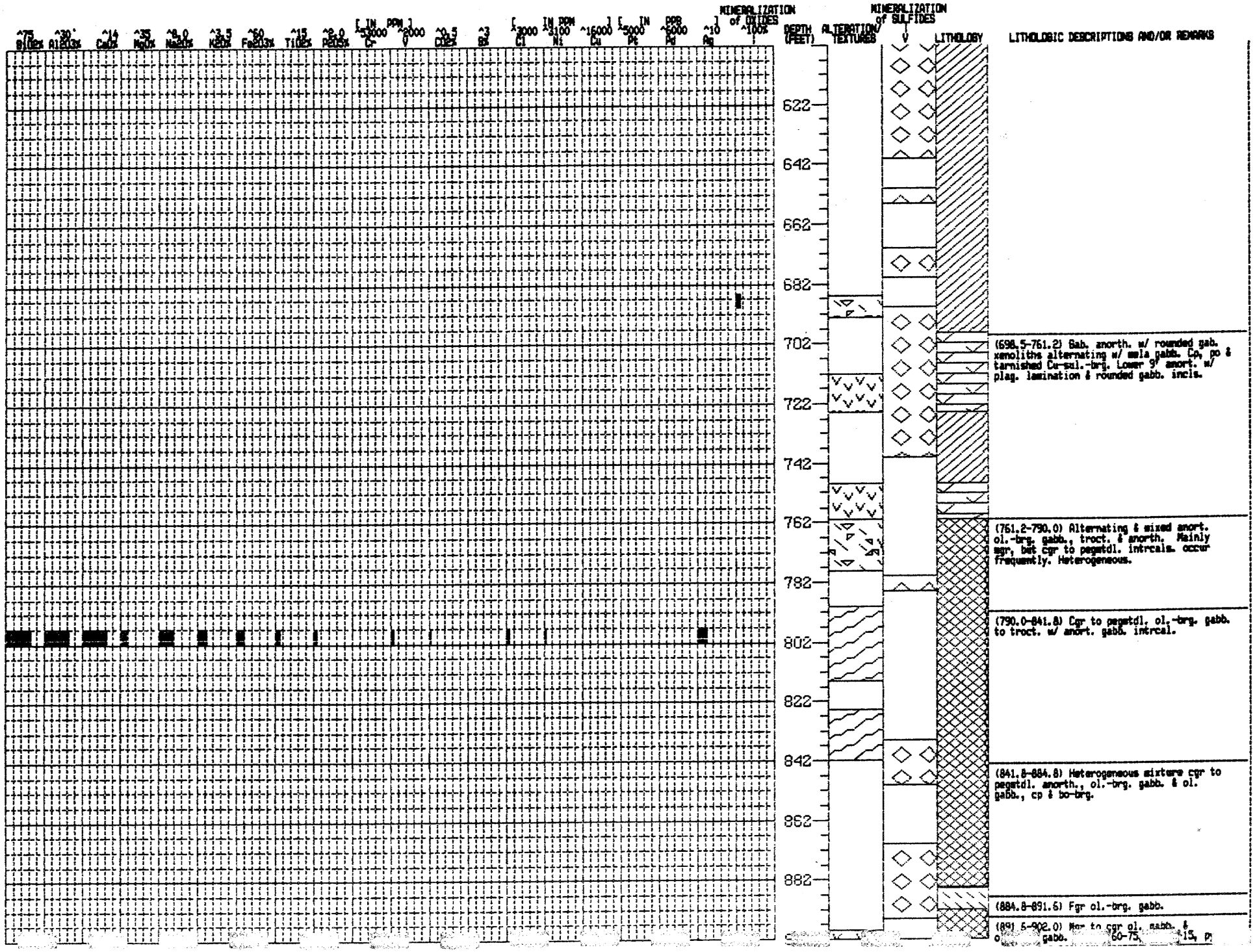
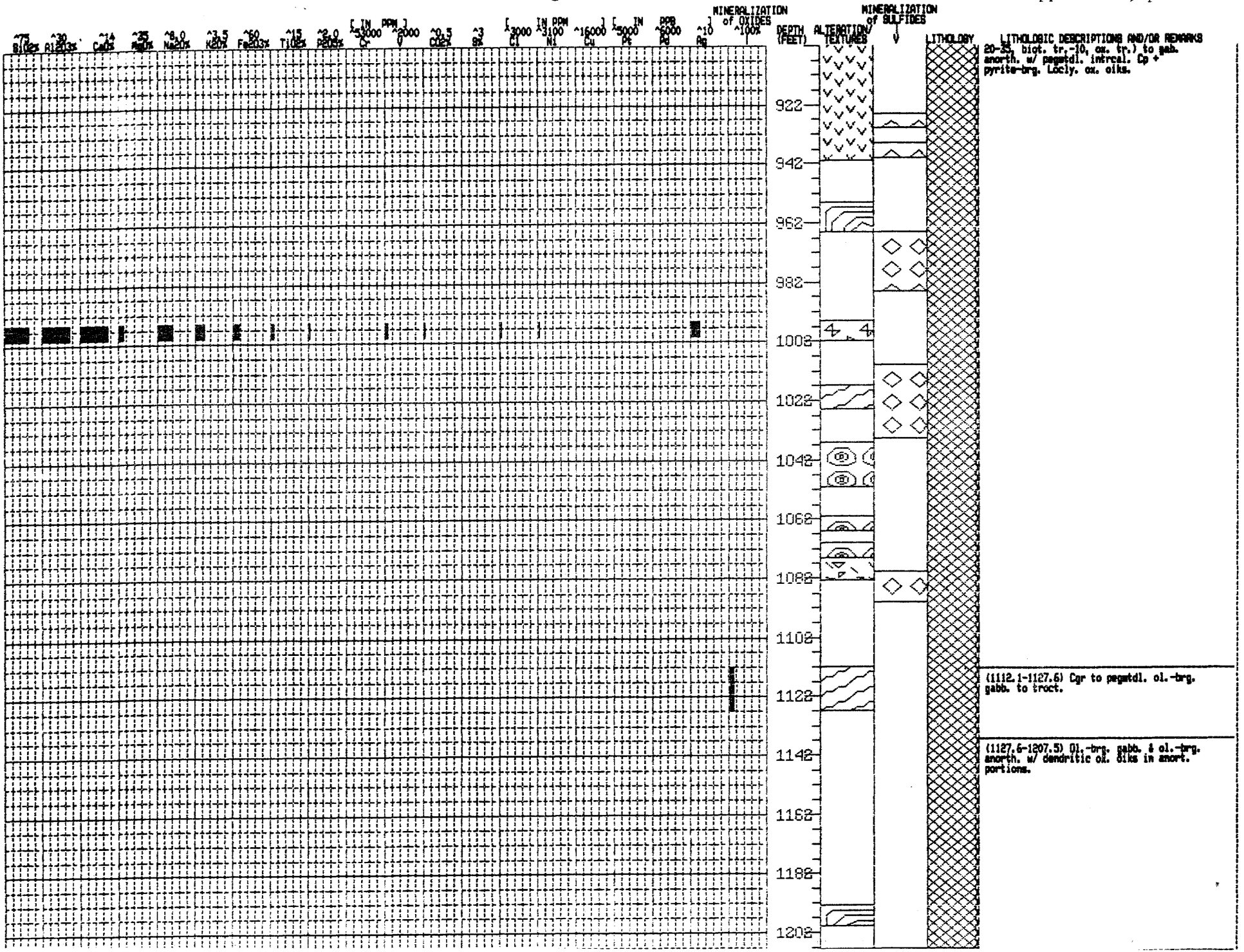
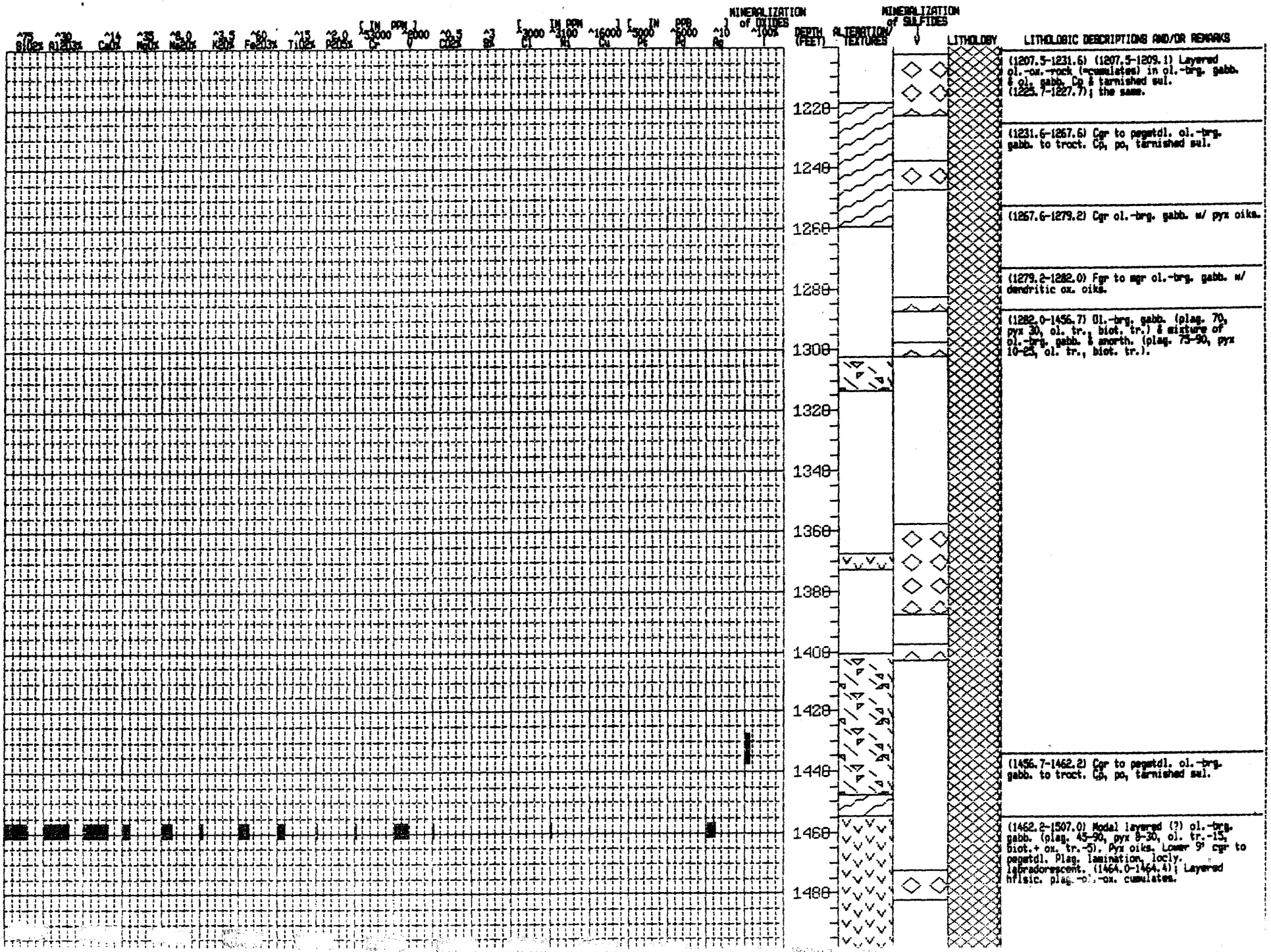

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
322
342
362
382
402
422
442
462
482
502
522
542
562
582
602
(302.0-340.0) At (302-305) mainly mgt. clots up to 1/2 inch. At (305-310) sul. including po. From 340 downard: strongly tarnished cp.
(340.0-417.0) Ol. occurs as incls. in cpx oiks. Ox. oiks in anort. portions. Weakly developed plag. lamination. Tr. of cp.
(417.0-450.2) Anort. ol.-brg. gabb., (plag. 85, pyx 15, ol, tr., biot, tr.) Dentritic ilm. oiks & altered gab. intrcals.
(450.2-482.5) Pegmtdl. ol. (5-15) gabb. w/ anort. intrcals.
(482.5-573.7) Ol.-brg. gab. anorth. Lower 14' anort. w/ plag. lamination.
(573.7-602.0) Mainly ol.-brg. gabb. (plag. 60-65, ol. 0-15, pyx 15-30, ox.+biot. 5-10), cp + po + tarnished sul.-brg.

Figure 3


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
622
642
662
682
702
722
742
762
782
802
822
842
862
882
(698.5-761.2) Gab. anorth. w/ rounded gab. xenoliths alternating w/ mela gabb. Cp, po & tarnished Cu-sul.-brg. Lower 9' anort. w/ plag. lamination & rounded gabb. incls.
(761.2-790.0) Alternating & mixed anort. ol.-brg. gabb., troct. & anorth. Mainly agr, but cgr to pegmtdl. intrcals. occur frequently. Heterogeneous.
(790.0-841.8) Cgr to pegmtdl. ol.-brg. gabb. to troct. w/ anort. gabb. intrcal.
(841.8-884.8) Heterogeneous mixture cgr to pegmtdl. anorth., ol.-brg. gabb. & ol. gabb., cp & bo-brg.
(884.8-891.5) Fgr ol.-brg. gabb.
(891.5-902.0) Mgr to cgr ol. gabb. &
gabb.
60-75
15, P


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
20-35, biot. tr.-10, ox. tr.) to gab. anorth. w/ pegmtdl. intrcal. Cp + pyrite-brg. Locly. ox. oiks.
922
942
962
982
1002
1022
1042
1062
1082
1102
1122
1142
1162
1182
1202
(1112.1-1127.6) Cgr to pegmtdl. ol.-brg. gabb. to troct.
(1127.6-1207.5) Ol.-brg. gabb. & ol.-brg. anorth. w/ dendritic ol. oiks in anort. portions.


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1220
1240
1260
1280
1300
1320
1340
1360
1380
1400
1420
1440
1460
1480
(1207.5-1231.6) (1207.5-1209.1) Layered ol.-ox.-rock (=cumulates) in ol.-brg. gabb. & ol. gabb. Cp & tarnished sul. (1225.7-1227.7); the same.
(1231.6-1257.6) Cgr to pegmtdl. ol.-brg. gabb. to troct. Cp, po, tarnished sul.
(1257.6-1279.2) Cgr ol.-brg. gabb. w/ pyx oiks.
(1279.2-1282.0) Fgr to mgr ol.-brg. gabb. w/ dendritic ox. oiks.
(1282.0-1456.7) Ol.-brg. gabb. (plag. 70, pyx 30, ol. tr., biot. tr.) & mixture of ol.-brg. gabb. & anorth. (plag. 75-90, pyx 10-25, ol. tr., biot. tr.).
(1456.7-1462.2) Cgr to pegmtdl. ol.-brg. gabb. to troct. Cp, po, tarnished sul.
(1462.2-1507.0) Modal layered (?) ol.-brg. gabb. (plag. 45-90, pyx 8-30, ol. tr.-15, biot.+ ox. tr.-5). Pyx oiks. Lower 9' cgr to pegmtdl. Plag. lamination, locly. labradorescent. (1464.0-1464.4); Layered hflsic. plag.-ol.-ox. cumulates.

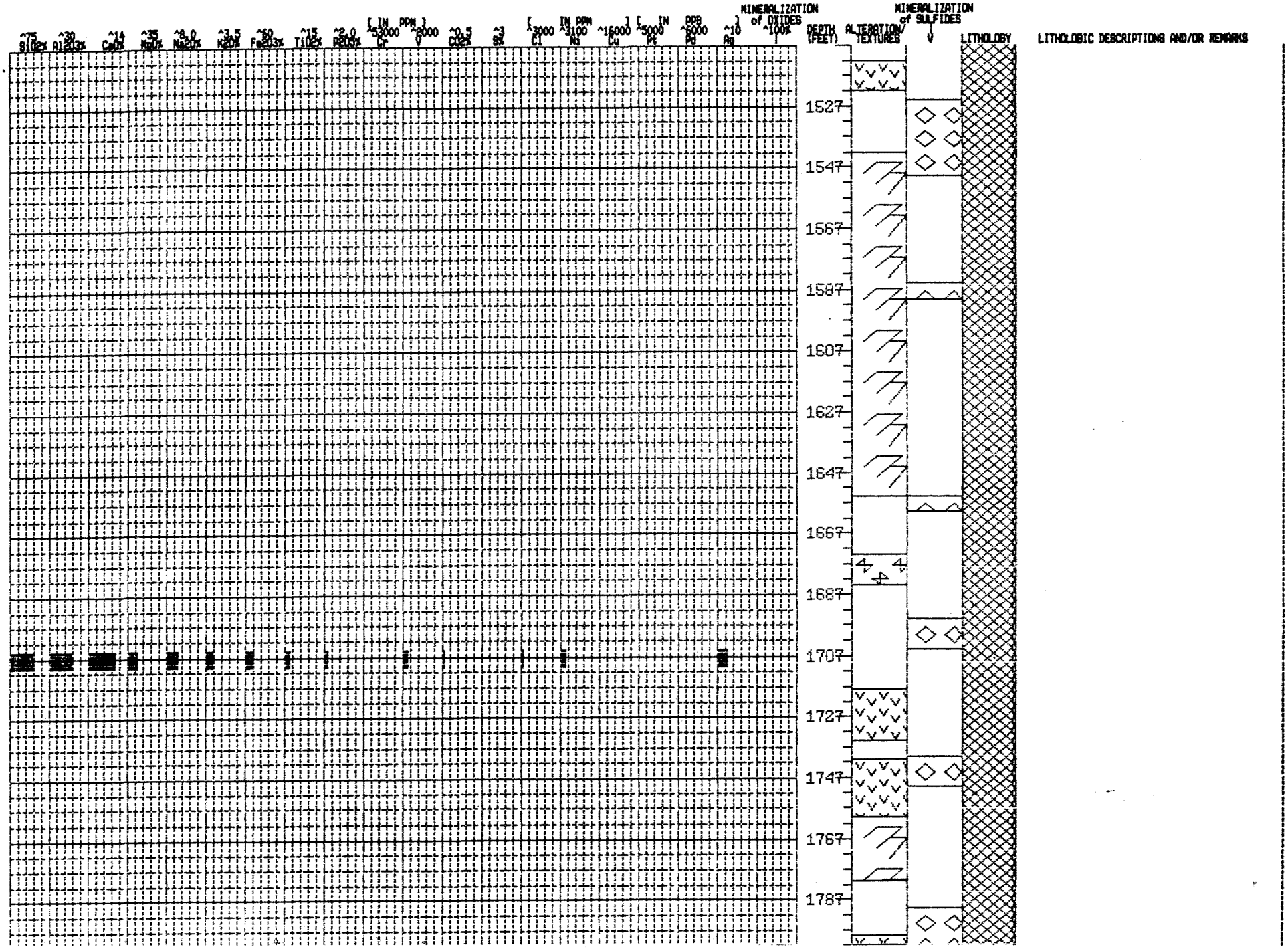
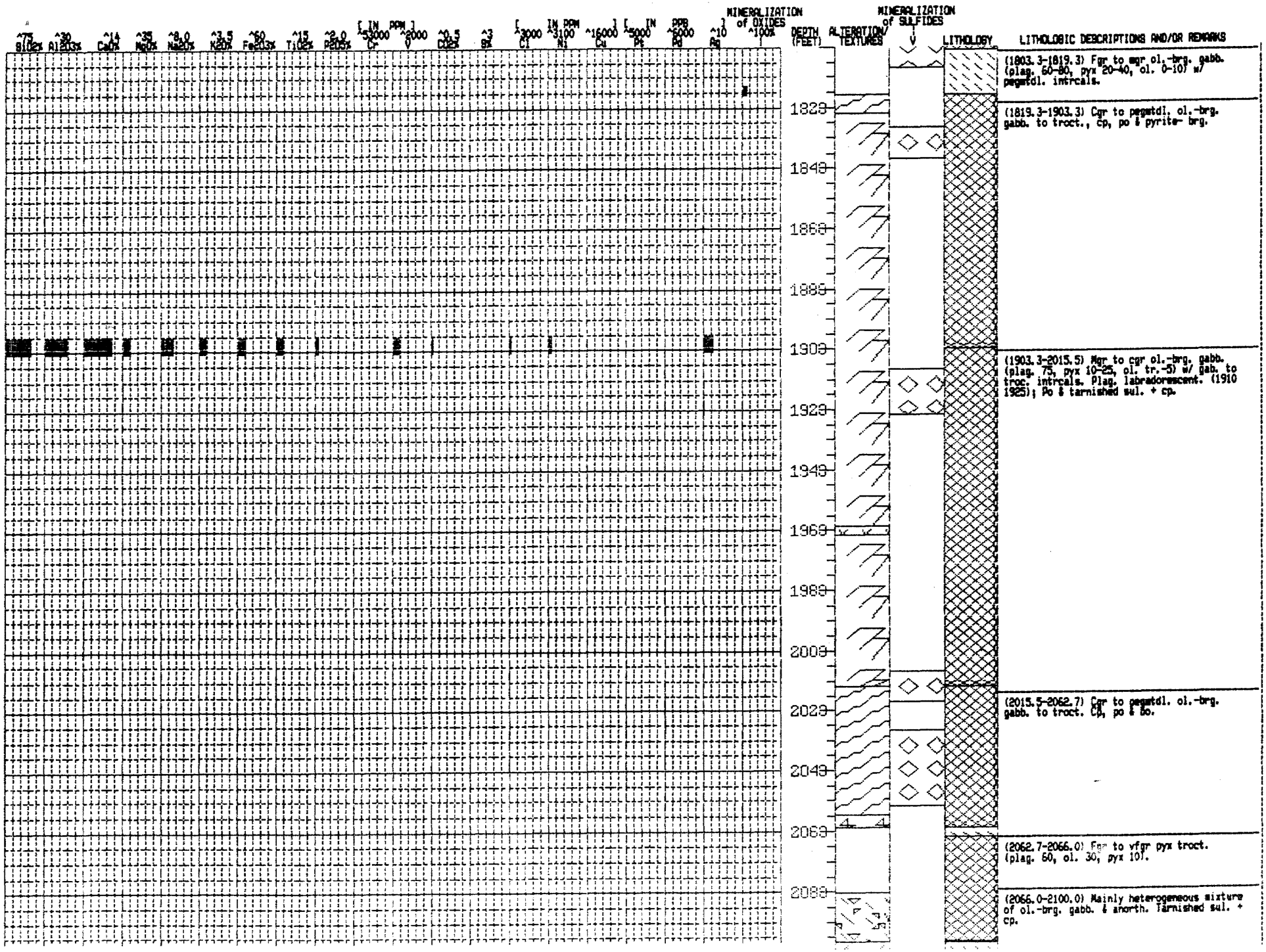

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1527
1547
1567
1587
1607
1627
1647
1667
1687
1707
1727
1747
1767
1787

Figure 3


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1820
1840
1860
1880
1900
1920
1940
1960
1980
2000
2020
2040
2060
2080
(1803.3-1819.3) Fgr to mgr ol.-brg. gabb. (plag. 60-80, pyx 20-40, ol. 0-10) w/ pegmtdl. intrcals.
(1819.3-1903.3) Cgr to pegmtdl. ol.-brg. gabb. to troct., cp, po & pyrite- brg.
(1903.3-2015.5) Mgr to cgr ol.-brg. gabb. (plag. 75, pyx 10-25, ol. tr.-5) w/ gab. to troc. intrcals. Plag. labradorescent. (1910 1925); Po & tarnished sul. + cp.
(2015.5-2062.7) Cgr to pegmtdl. ol.-brg. gabb. to troct. Cp, po & bo.
(2062.7-2066.0) Fgr to vfgr pyx troct. (plag. 60, ol. 30, pyx 10).
(2066.0-2100.0) Mainly heterogeneous mixture of ol.-brg. gabb. & anorth. Tarnished sul. + cp.

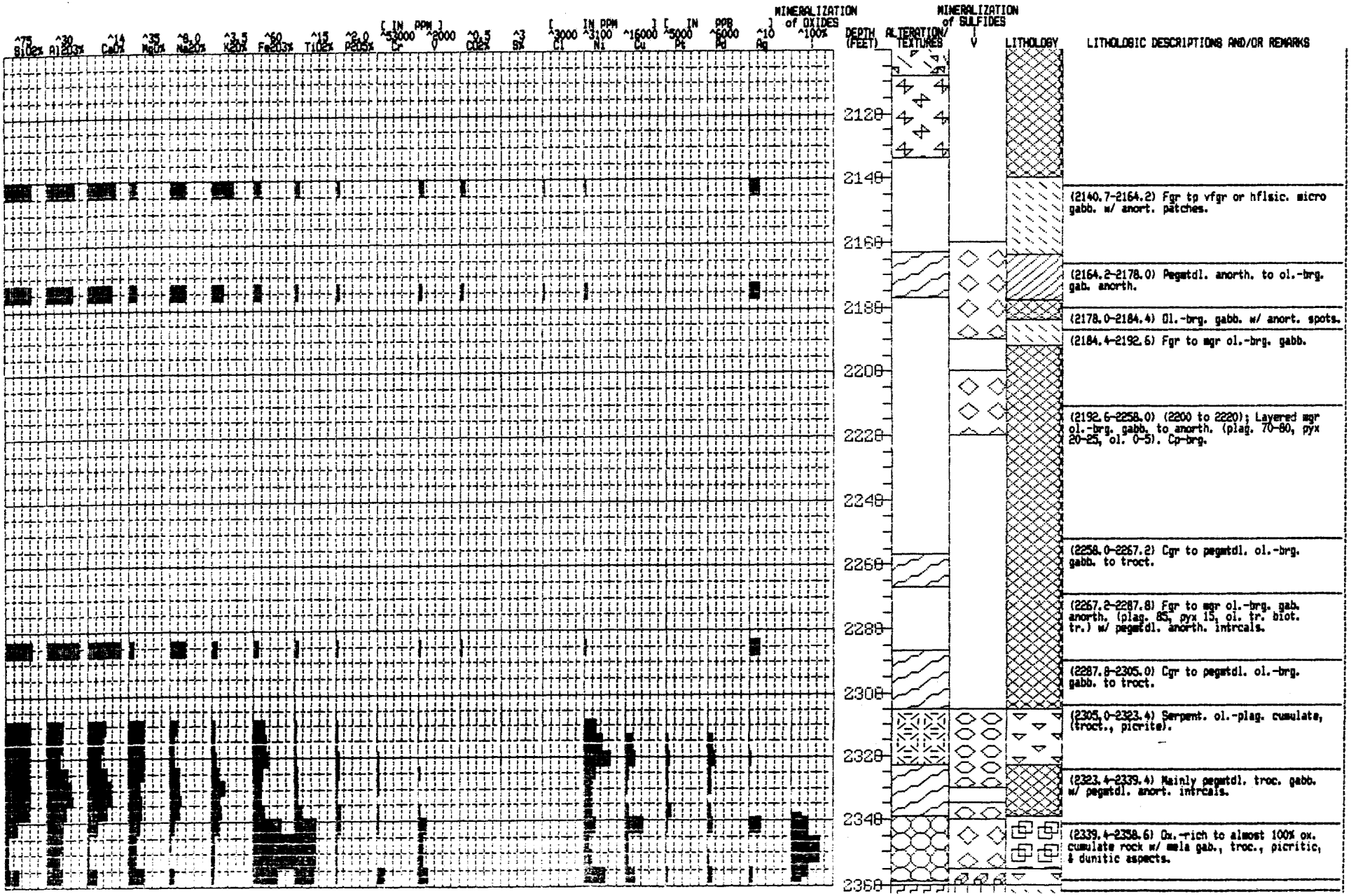
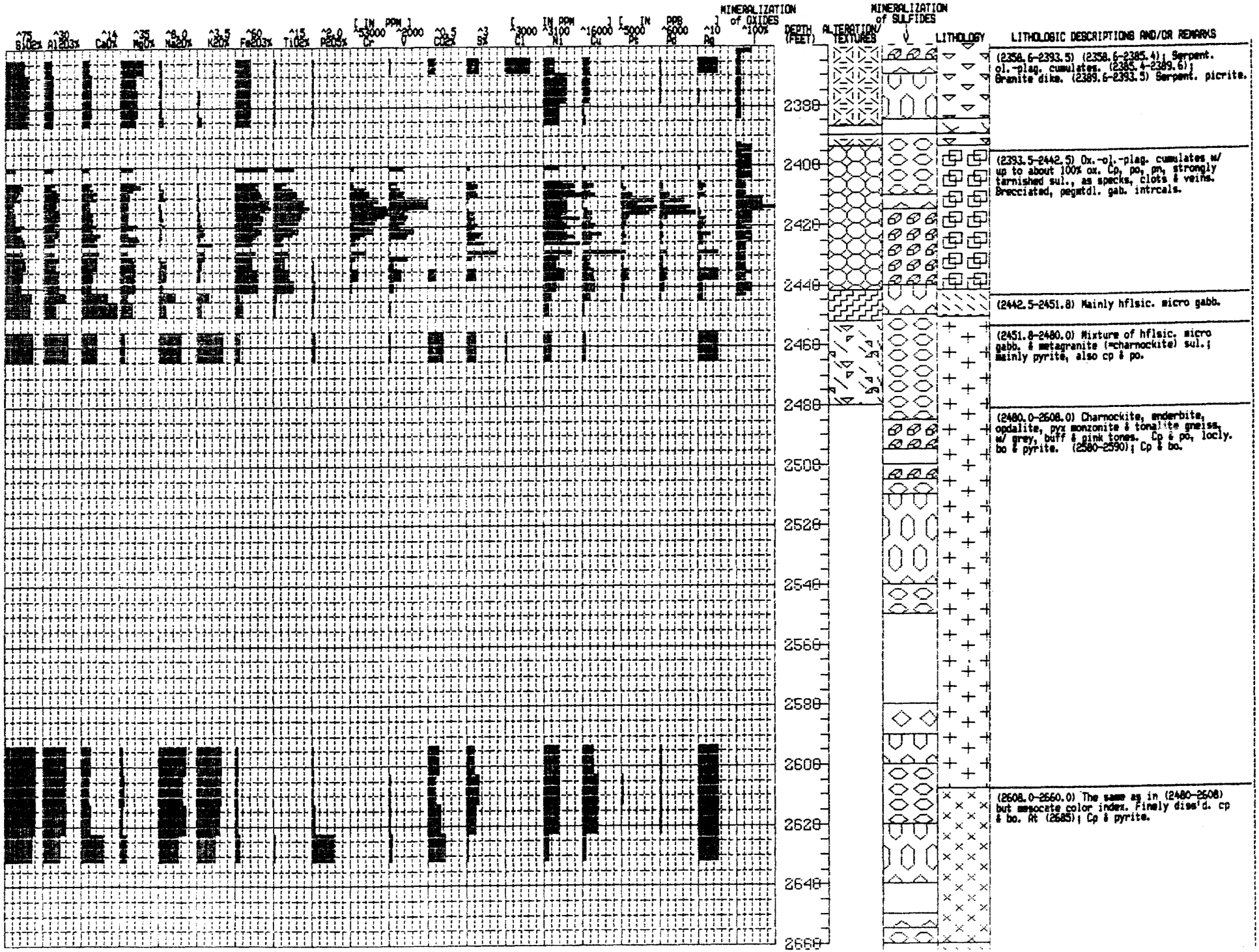

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
V
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
2120
2140
2160
2180
2200
2220
2240
2260
2280
2300
2320
2340
2360
(2140.7-2164.2) Fgr to vfgr or hflsic. micro gabb. w/ anort. patches.
(2164.2-2178.0) Pegmtdl. anorth. to ol.-brg. gab. anorth.
(2178.0-2184.4) Ol.-brg. gabb. w/ anort. spots.
(2184.4-2192.6) Fgr to mgr ol.-brg. gabb.
(2192.6-2258.0) (2200 to 2220); Layered mgr ol.-brg. gabb. to anorth. (plag. 70-80, pyx 20-25, ol. 0-5). Cp-brg.
(2258.0-2267.2) Cgr to pegmtdl. ol.-brg. gabb. to troct.
(2267.2-2287.8) Fgr to mgr ol.-brg. gab. anorth. (plag. 85, pyx 15, ol. tr. biot. tr.) w/ pegmtdl. anorth. intrcals.
(2287.8-2305.0) Cgr to pegmtdl. ol.-brg. gabb. to troct.
(2305.0-2323.4) Serpent. ol.-plag. cumulate, (troct., picrite).
(2323.4-2339.4) Mainly pegmtdl. troc. gabb. w/ pegmtdl. anort. intrcals.
(2339.4-2358.6) Ox.-rich to almost 100% ox. cumulate rock w/ mela gab., troc., picritic, & dunitic aspects.

Figure 3


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
2388
2408
2428
2448
2468
2488
2508
2528
2548
2568
2588
2608
2628
2648
2668
(2358.6-2393.5) (2358.6-2385.4); Serpent. ol.-plag. cumulates. (2385.4-2389.6); Granite dike. (2389.6-2393.5) Serpent. picrite.
(2393.5-2442.5) Ox.-ol.-plag. cumulates w/ up to about 100% ox. Cp, po, pn, strongly tarnished sul., as specks, clots & veins. Brecciated, pegmtdl. gab. intrcals.
(2442.5-2451.8) Mainly hflsic. micro gabb.
(2451.8-2480.0) Mixture of hflsic. micro gabb. & metagranite (=charnockite) sul.; mainly pyrite, also cp & po.
(2480.0-2608.0) Charnockite, enderbite, opdalite, pyx monzonite & tonalite gneiss, w/ grey, buff & pink tones. Cp & po, locly. bo & pyrite. (2580-2590); Cp & bo.
(2608.0-2660.0) The same as in (2480-2608) but mesocate color index. Finely diss'd. cp & bo. At (2685); Cp & pyrite.

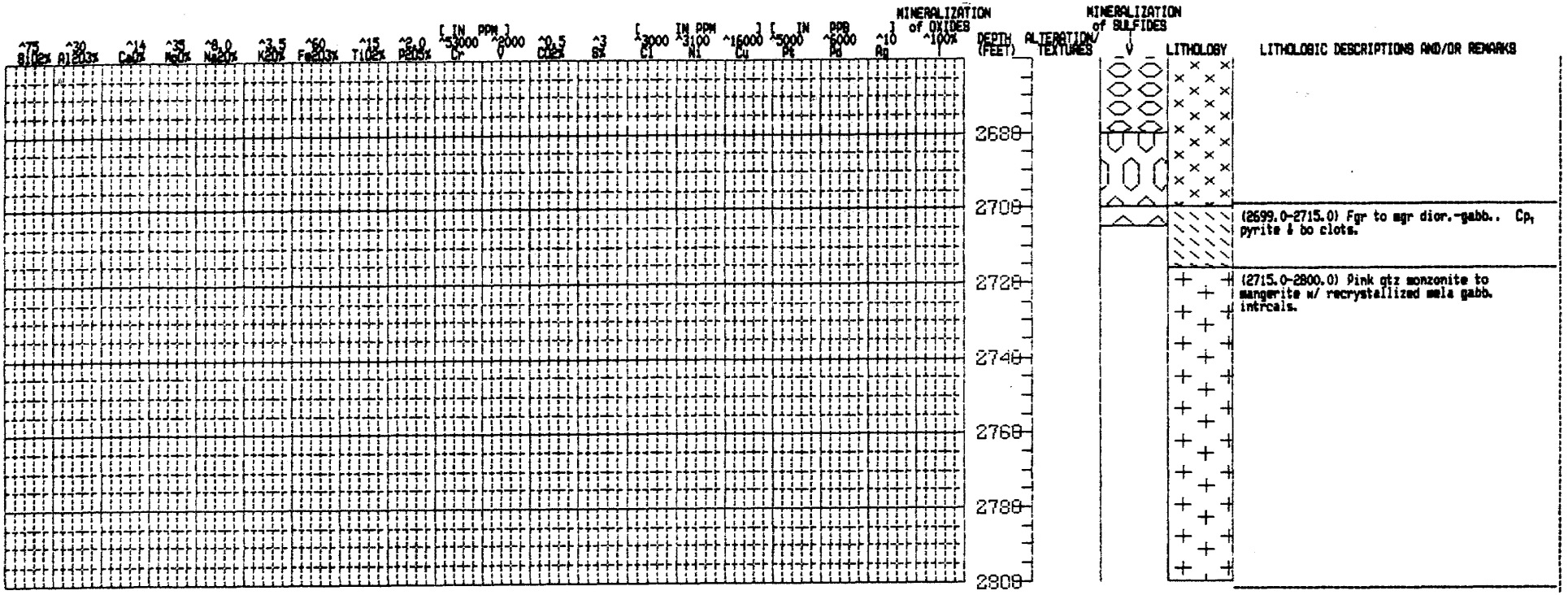
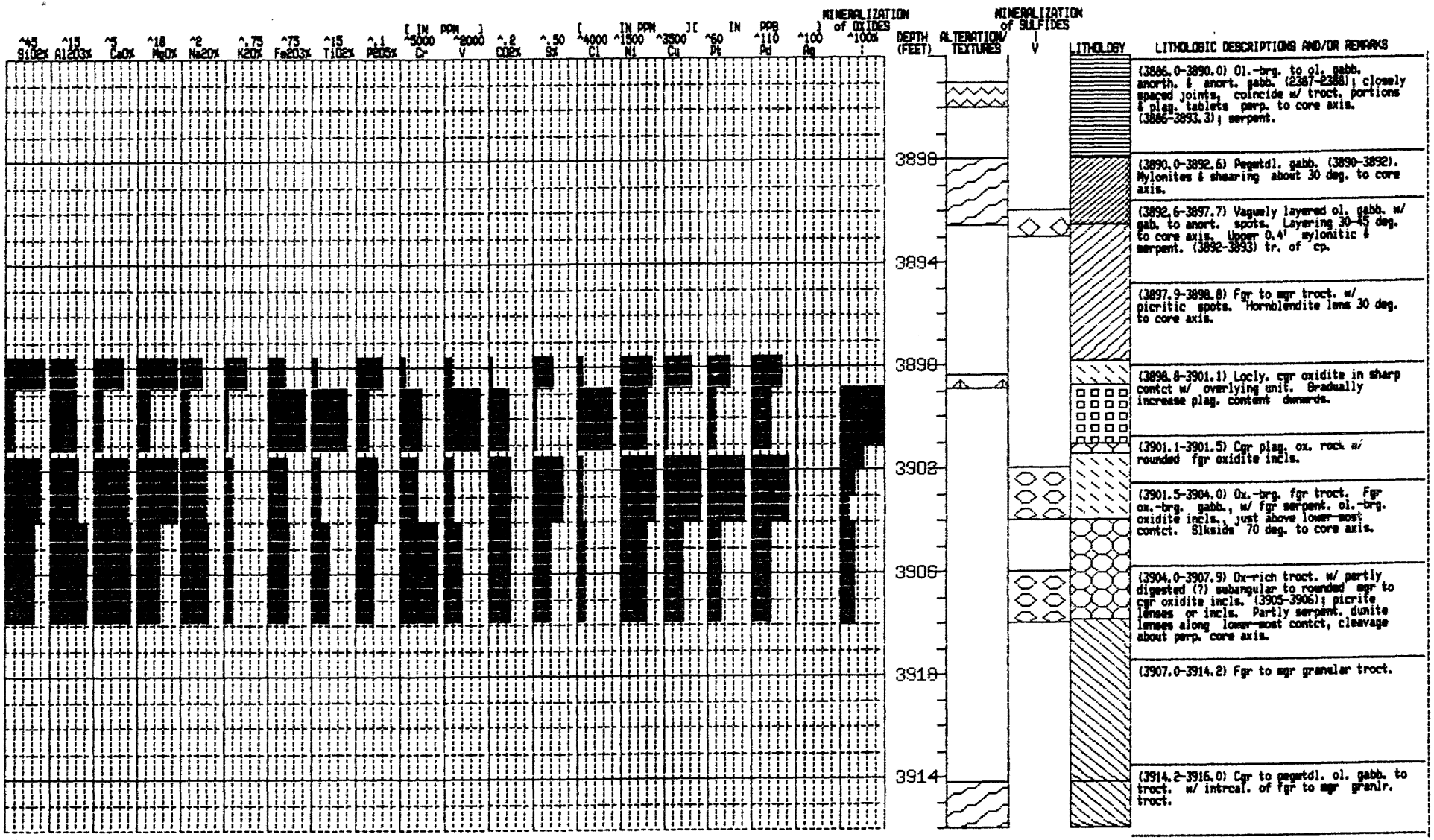

^75 SiO2%
^30 Al2O3%
^14 CaO%
^35 MgO%
^8.0 Na2O%
^2.5 K2O%
^60 Fe2O3%
^15 TiO2%
^2.0 P2O5%
[IN PPM]
^3000 Cr
^2000 V
^0.5 CO2%
^3 S%
[IN PPM]
^3000 Cl
^3100 Ni
^16000 Cu
[IN PPM]
^5000 Pt
^5000 Pd
^10 Ag
MINERALIZATION of OXIDES
^100%
DEPTH (FEET)
ALTERATION/ TEXTURES
MINERALIZATION of SULFIDES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
2688
2708
2728
2748
2768
2788
2808
(2699.0-2715.0) Fgr to mgr dior.-gabb.. Cpy pyrite & bo clots.
(2715.0-2800.0) Pink qtz monzonite to mangerite w/ recrystallized mela gabb. intrcals.

Figure 4

LOG OF A PORTION OF DUVAL DDH DU-14.



LOG OF A PORTION OF DUVAL DDH DU-9.

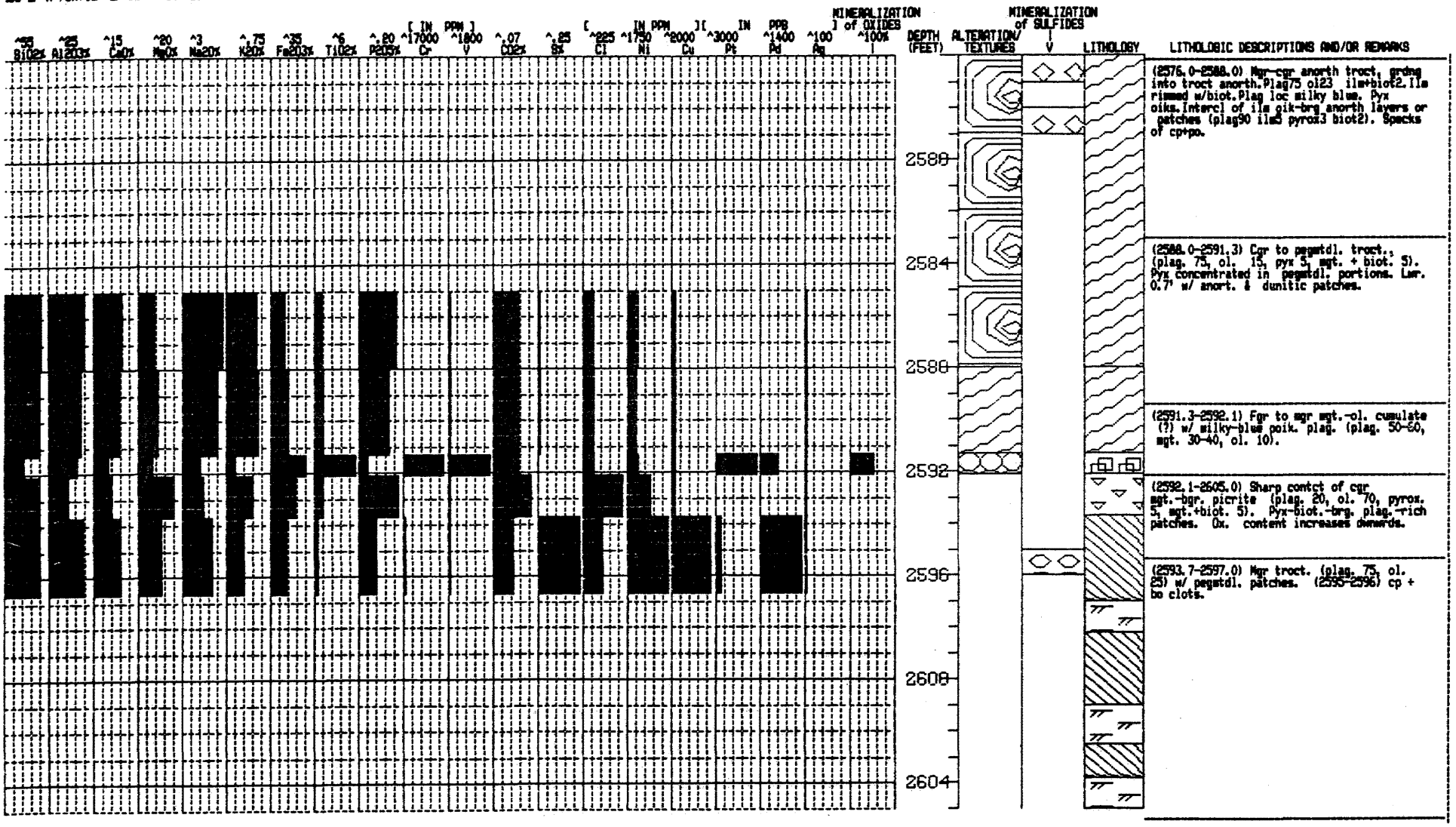
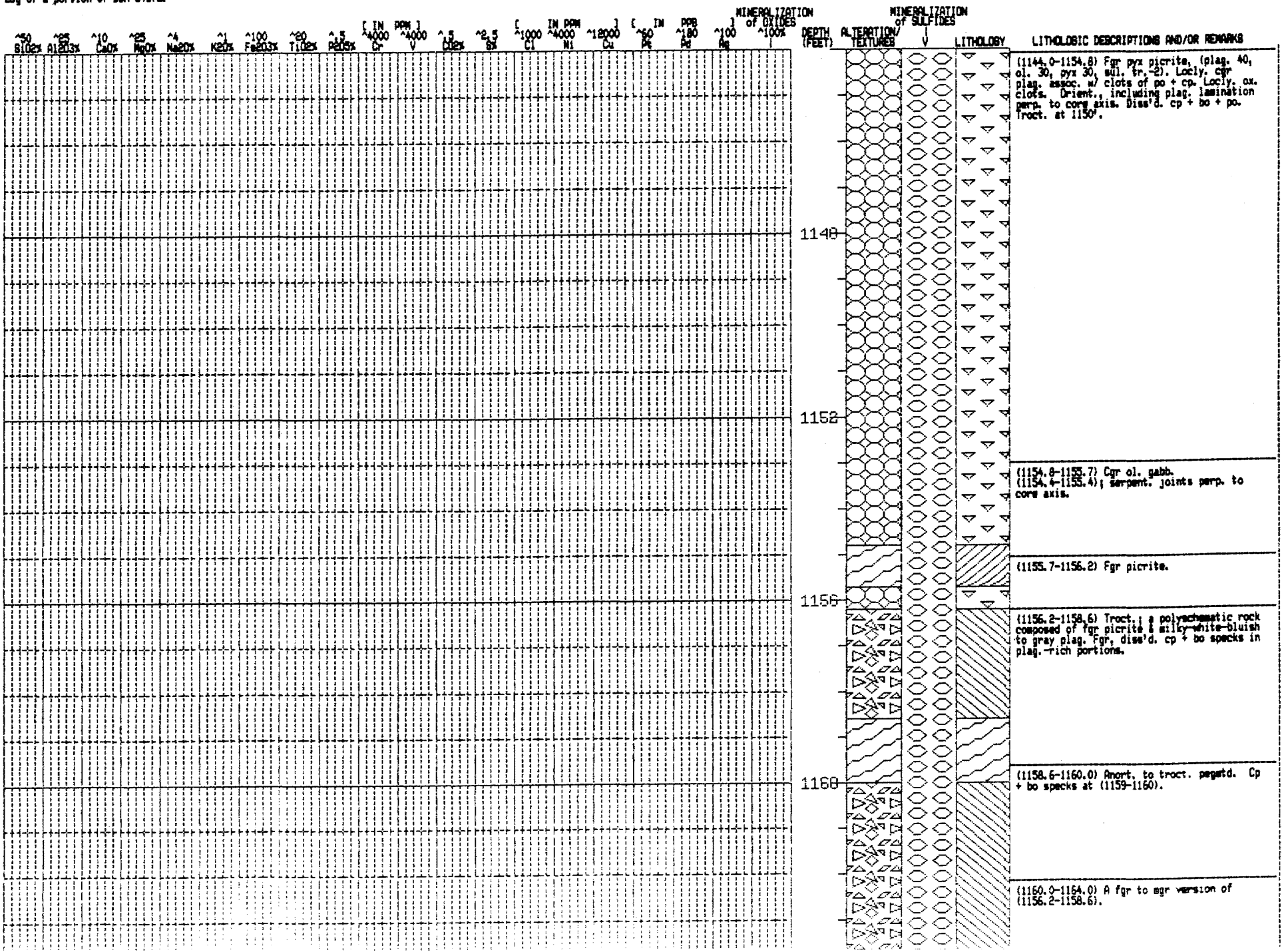
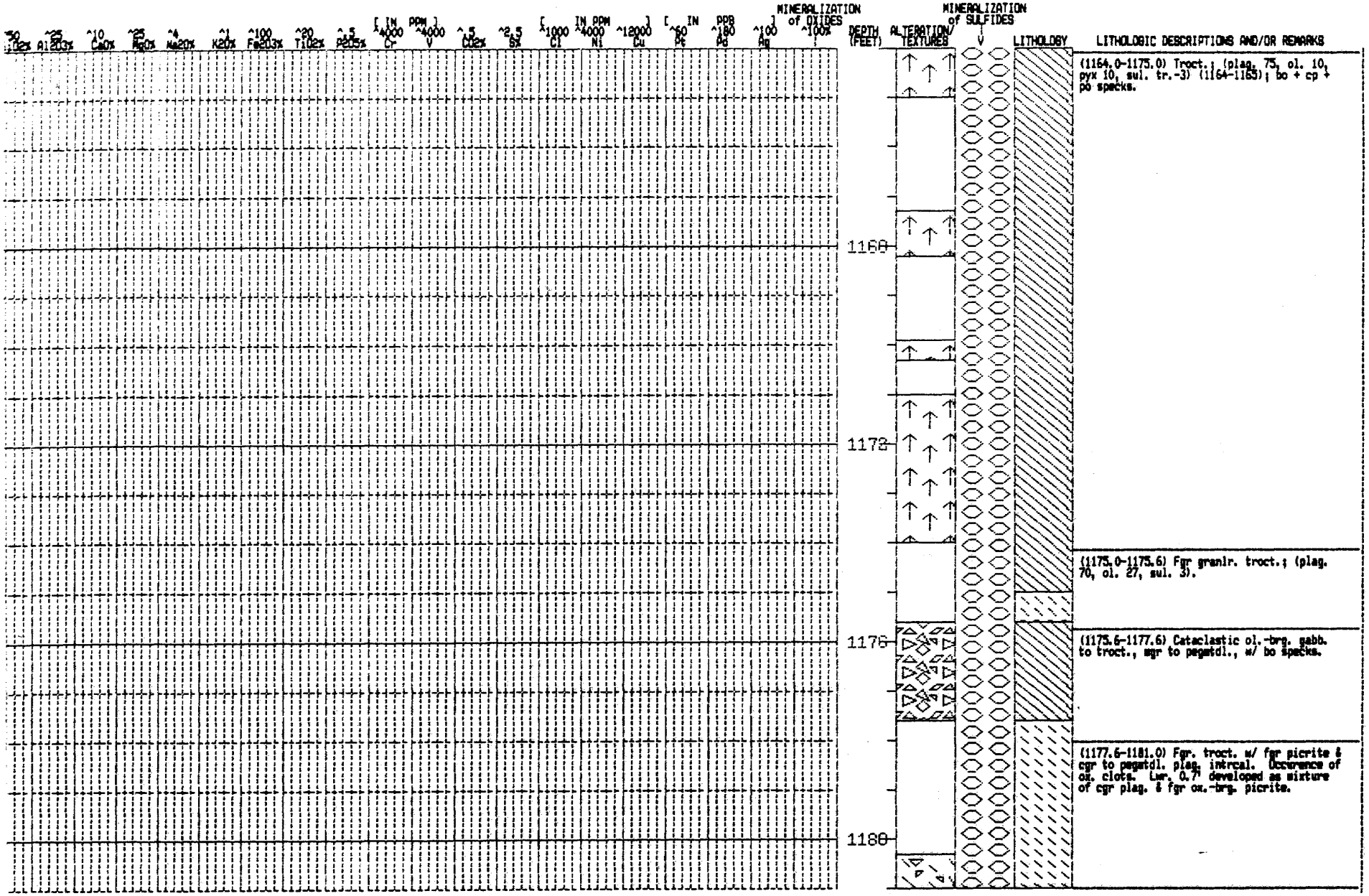


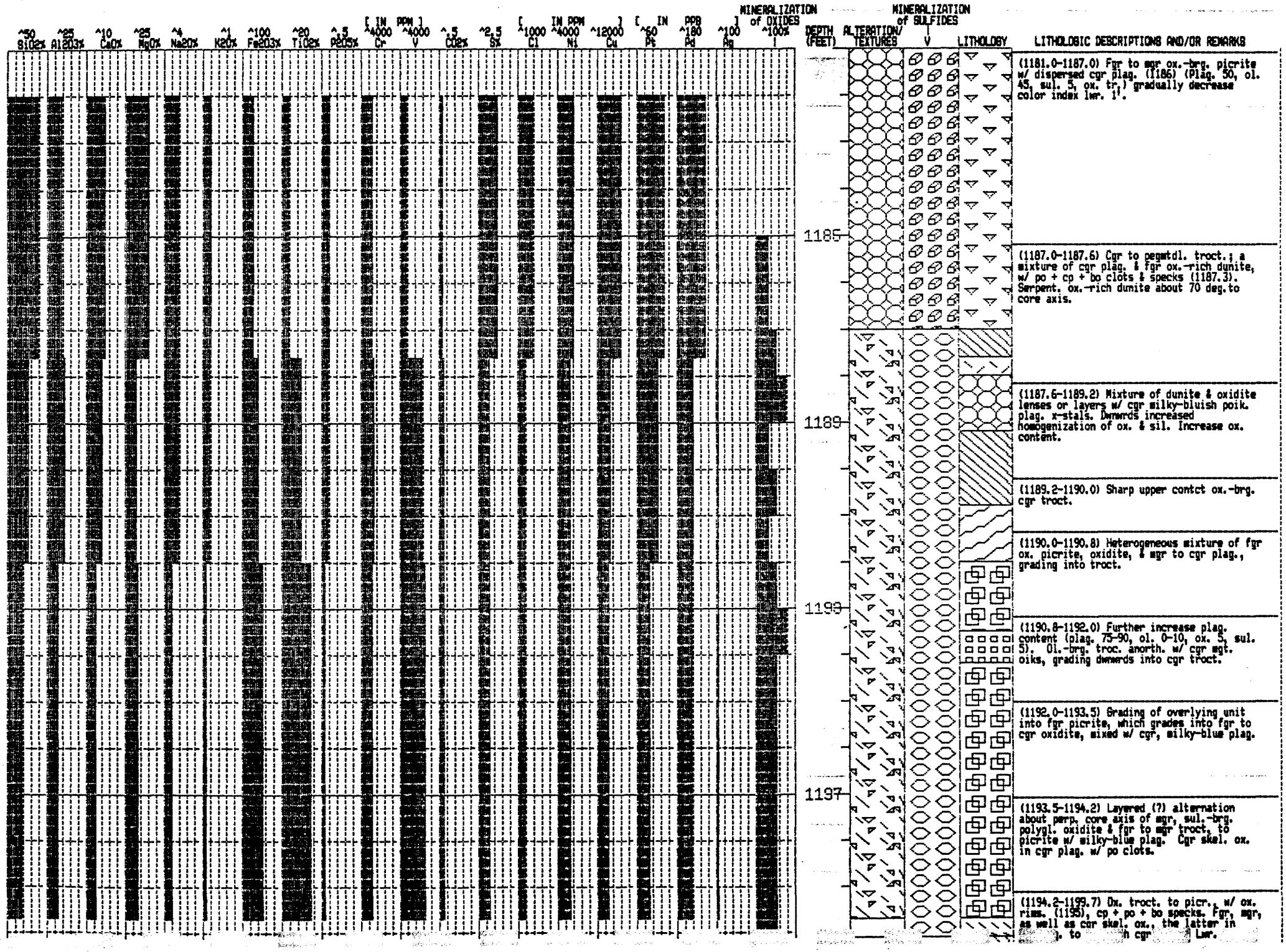
Figure 6

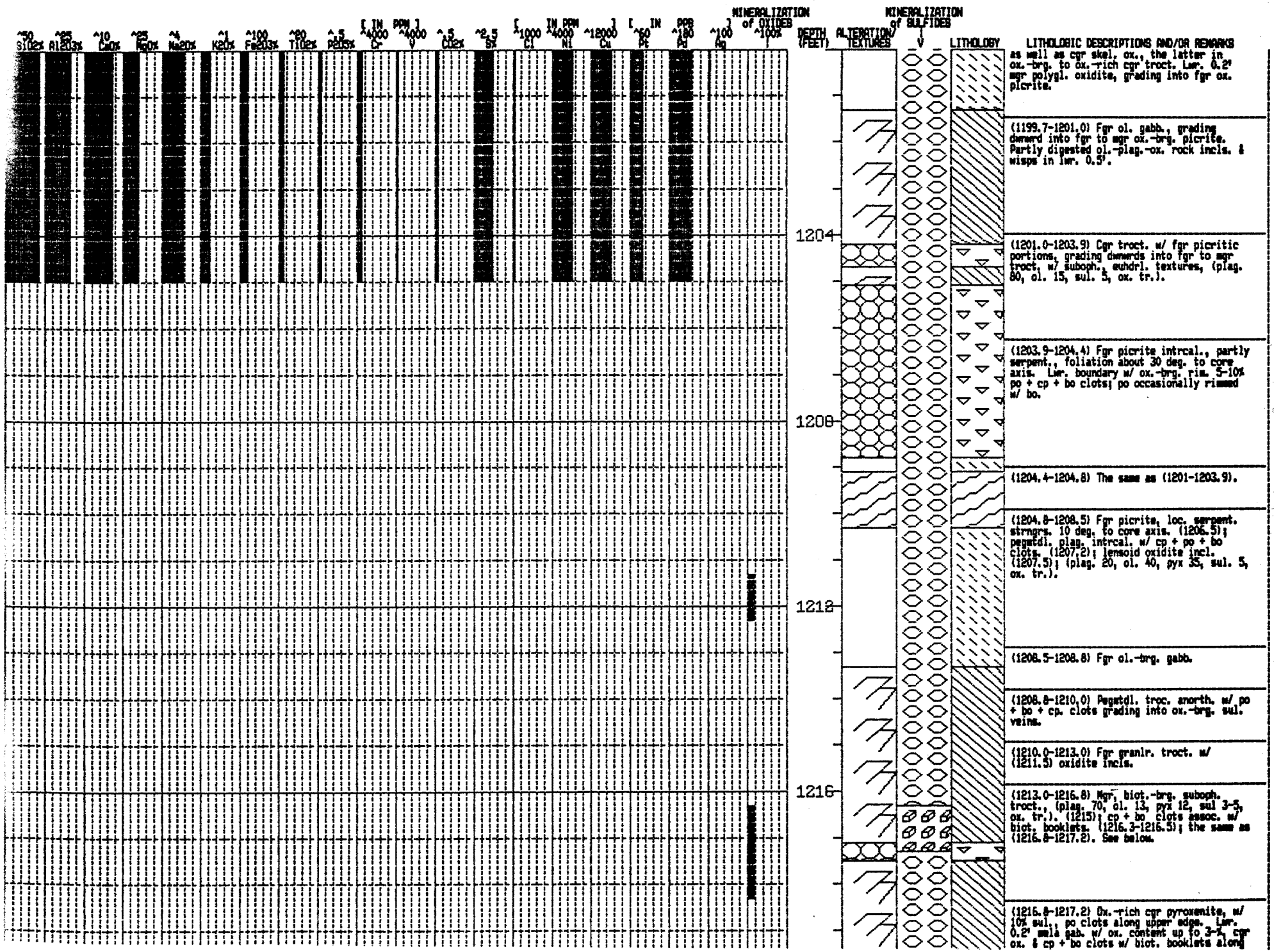
Log of a portion of DDH 34872.




MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1168
1172
1176
1180
(1164.0-1175.0) Troct.; (plag. 75, ol. 10, pyx 10, sul. tr.-3) (1164-1165); bo + cp + po specks.
(1175.0-1175.6) Fgr granlr. troct.; (plag. 70, ol. 27, sul. 3).
(1175.6-1177.6) Cataclastic ol.-brg. gabb. to troct., agr to pegatdl., w/ bo specks.
(1177.6-1181.0) Fgr. troct. w/ fgr picrite & cgr to pegatdl. plag. intrcal. Occurence of ox. clots. Lwr. 0.7' developed as mixture of cgr plag. & fgr ox.-brg. picrite.

Log of a portion of DDH 34872.




^50 SiO2%
^25 Al2O3%
^10 CaO%
^25 MgO%
^4 Na2O%
^1 K2O%
^100 Fe2O3%
^20 TiO2%
^.5 P2O5%
[IN ^4000 PPM] Cr
^4000 V
^.5 CO2%
^2.5 S%
[^1000 Cl
IN PPM ^4000 Ni
^12000 Cu
] [^50 IN Pt
PPB ^150 Pd
^100 Ag
MINERALIZATION of OXIDES ^100%
DEPTH (FEET)
ALTERATION/ TEXTURES
MINERALIZATION of SULFIDES
V
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1204
1208
1212
1216
as well as cgr skel. ox., the latter in ox.-brg. to ox.-rich cgr troct. Lwr. 0.2' mgr polygl. oxidite, grading into fgr ox. picrite.
(1199.7-1201.0) Fgr ol. gabb., grading downard into fgr to mgr ox.-brg. picrite. Partly digested ol.-plag.-ox. rock incls. & wisps in lwr. 0.3'.
(1201.0-1203.9) Cgr troct. w/ fgr picritic portions, grading dwnwrds into fgr to mgr troct, w/ suboph., euhdrl. textures, (plag. 80, ol. 15, sul. 5, ox. tr.).
(1203.9-1204.4) Fgr picrite intrcal., partly serpent., foliation about 30 deg. to core axis. Lwr. boundary w/ ox.-brg. rim. 5-10% po + cp + bo clots; po occasionally rimmed w/ bo.
(1204.4-1204.8) The same as (1201-1203.9).
(1204.8-1208.5) Fgr picrite, loc. serpent. strngrs. 10 deg. to core axis. (1206.5); pegmtdl. plag. intrcal. w/ cp + po + bo clots. (1207.2); lensoid oxidite incl. (1207.5); (plag. 20, ol. 40, pyx 35, sul. 5, ox. tr.).
(1208.5-1208.8) Fgr ol.-brg. gabb.
(1208.8-1210.0) Pegmtdl. troc. anorth. w/ po + bo + cp. clots grading into ox.-brg. sul. veins.
(1210.0-1213.0) Fgr granlr. troct. w/ (1211.5) oxidite incls.
(1213.0-1216.8) Mgr, biot.-brg. suboph. troct., (plag. 70, ol. 13, pyx 12, sul 3-5, ox. tr.). (1215); cp + bo clots assoc. w/ biot. booklets. (1216.3-1216.5); the same as (1216.8-1217.2). See below.
(1216.8-1217.2) Ox.-rich cgr pyroxenite, w/ 10% sul., po clots along upper edge. Lwr. 0.2' anls gab. w/ ox. content up to 3-4, cgr ox. & cp + bo clots w/ biot. booklets along

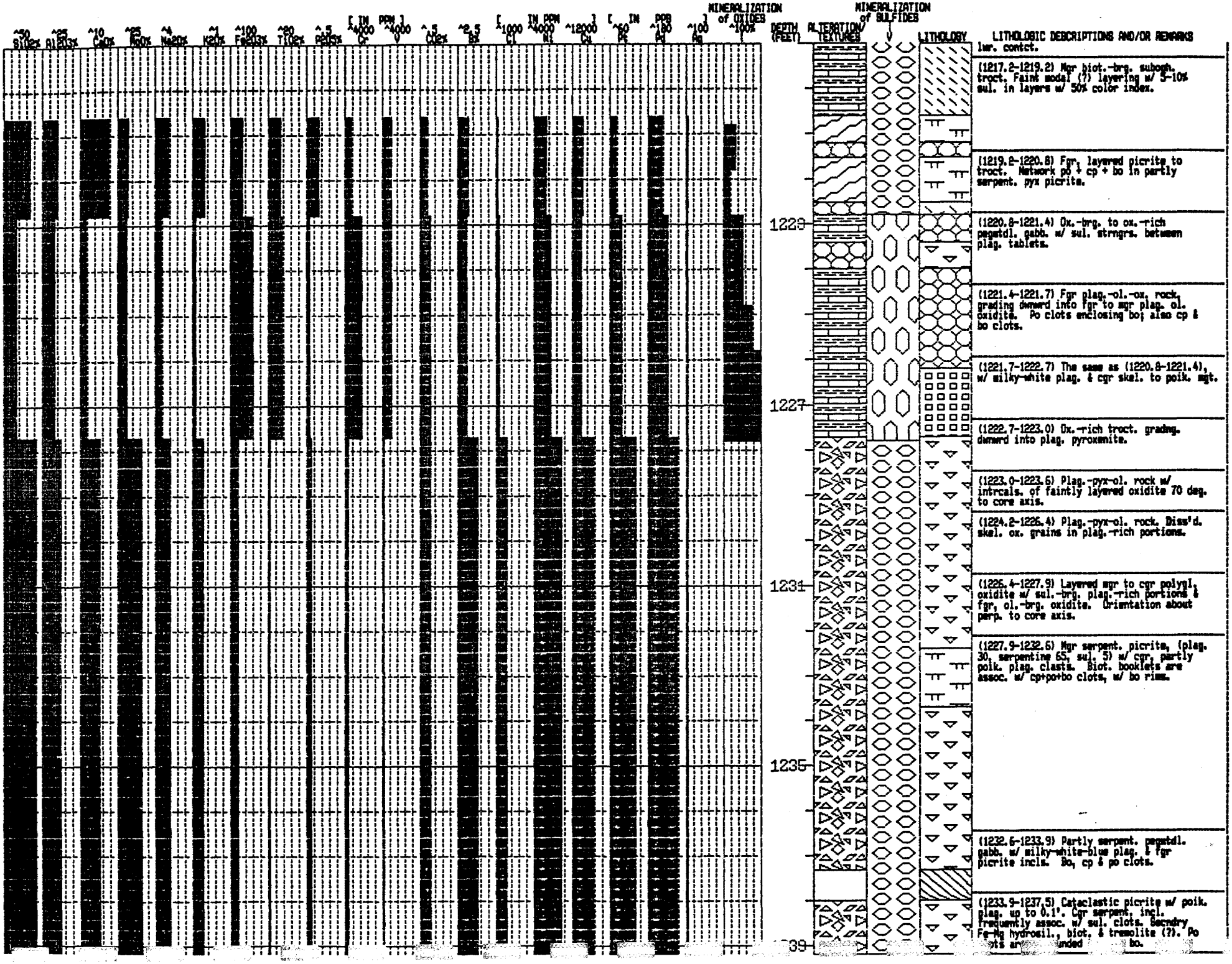
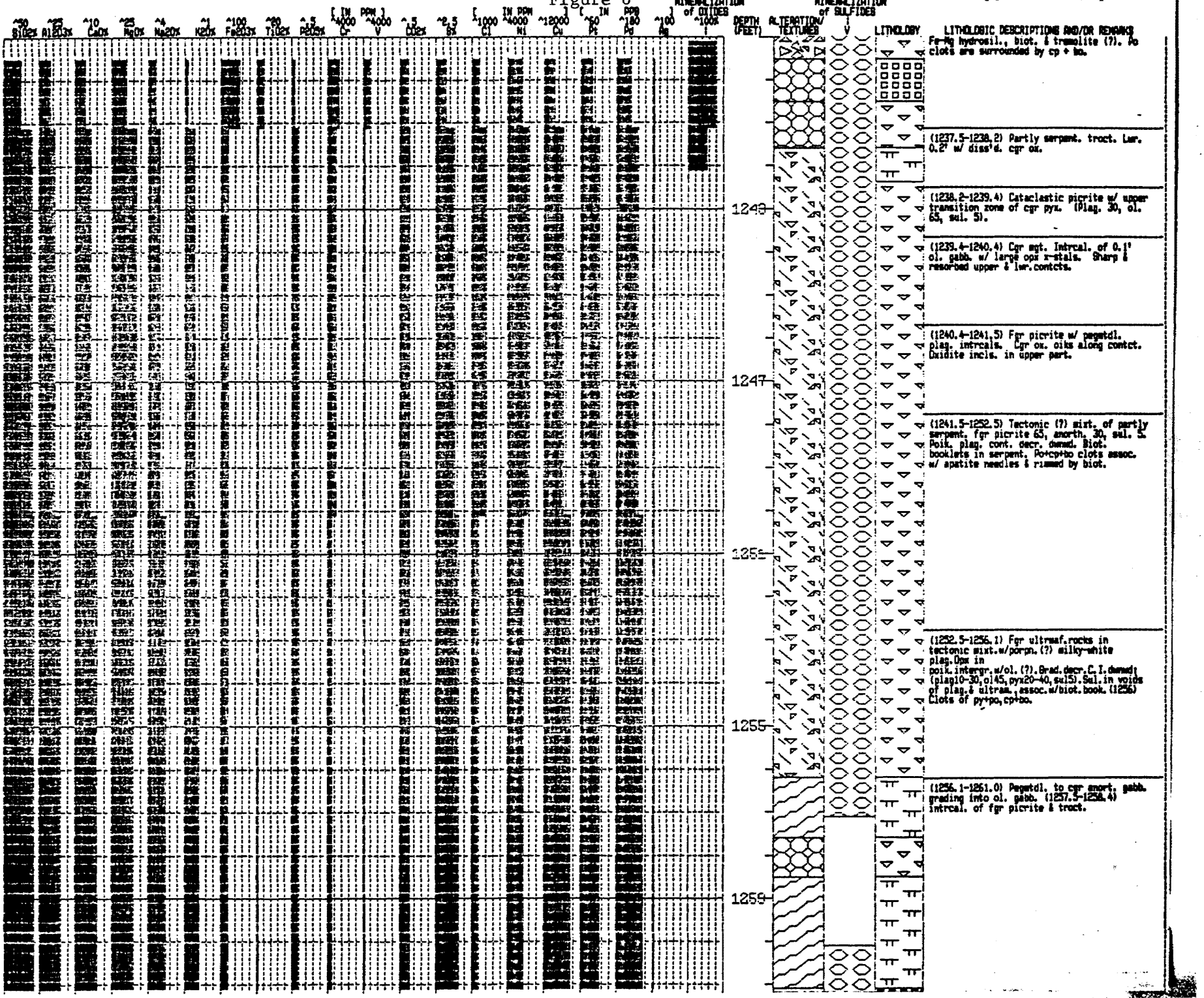

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
lwr. contct.
(1217.2-1219.2) Mgr biot.-brg. subogh. troct. Faint modal (?) layering w/ 5-10% sul. in layers w/ 50% color index.
(1219.2-1220.8) Fgr, layered picrite to troct. Network po + cp + bo in partly serpent. pyx picrite.
(1220.8-1221.4) Ox.-brg. to ox.-rich pegmtdl. gabb. w/ sul. stringrs. between plag. tablets.
(1221.4-1221.7) Fgr plag.-ol.-ox. rock, grading dwnward into fgr to mgr plag. ol. oxidite. Po clots enclosing bo; also cp & bo clots.
(1221.7-1222.7) The same as (1220.8-1221.4), w/ milky-white plag. & cgr skel. to poik. mgt.
(1222.7-1223.0) Ox.-rich troct. grading dwnward into plag. pyroxenite.
(1223.0-1223.6) Plag.-pyx-ol. rock w/ intrcals. of faintly layered oxidite 70 deg. to core axis.
(1224.2-1226.4) Plag.-pyx-ol. rock. Diss'd. skel. ox. grains in plag.-rich portions.
(1226.4-1227.9) Layered mgr to cgr polygl. oxidite w/ sul.-brg. plag.-rich portions & fgr, ol.-brg. oxidite. Orientation about perp. to core axis.
(1227.9-1232.6) Mgr serpent. picrite, (plag. 30, serpentine 65, sul. 5) w/ cgr, partly poik. plag. clasts. Biot. booklets are assoc. w/ cp+po+bo clots, w/ bo rims.
(1232.6-1233.9) Partly serpent. pegmtdl. gabb. w/ milky-white-blue plag. & fgr picrite incls. Bo, cp & po clots.
(1233.9-1237.5) Cataclastic picrite w/ poik. plag. up to 0.1". Cgr serpent. incl. frequently assoc. w/ sul. clots. Secndry Fe-Mg hydrosil., biot. & tremolite (?). Po
bo.
1229
1227
1231
1235
39

Figure 6

Log of a portion of DDH 34872.



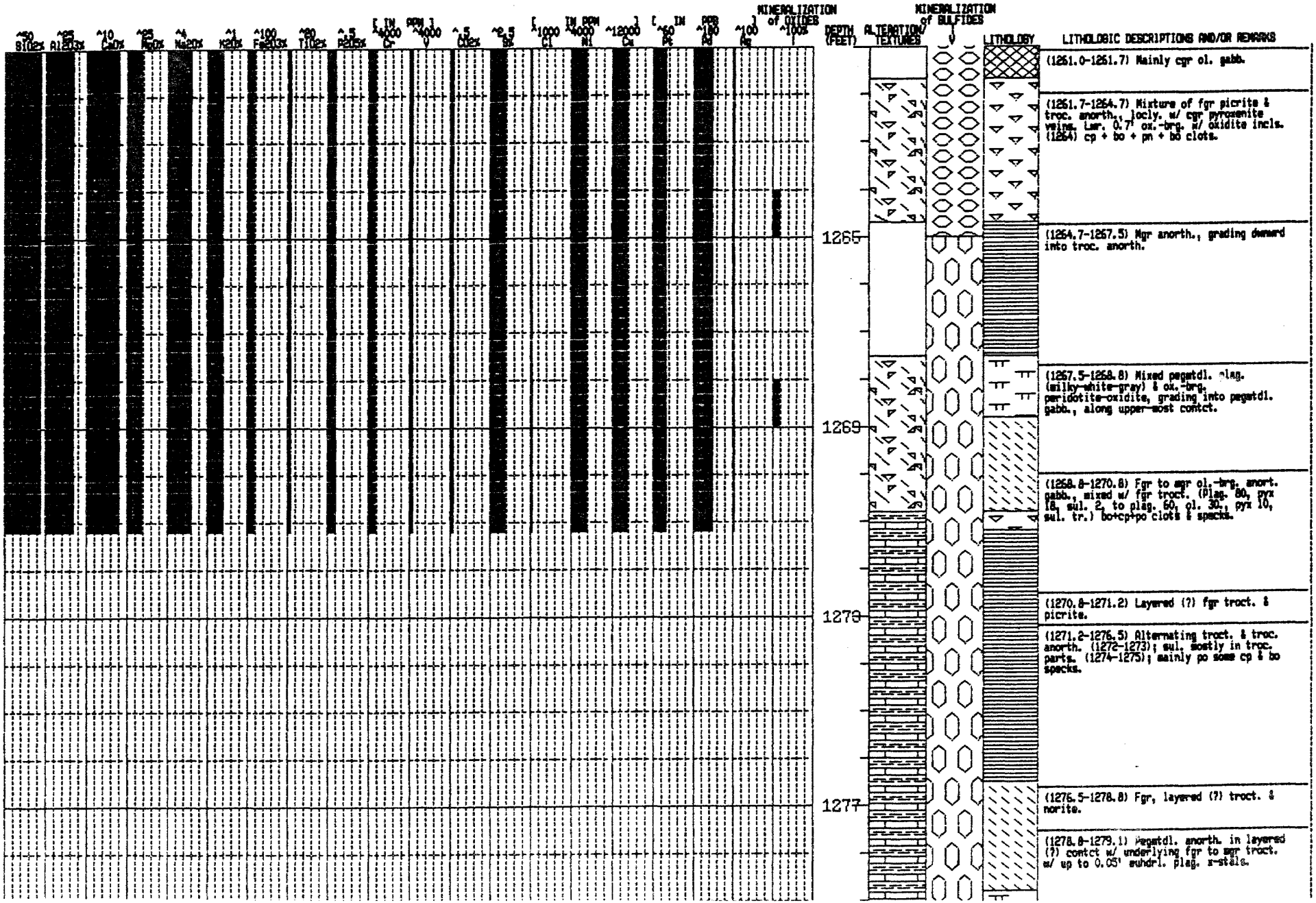
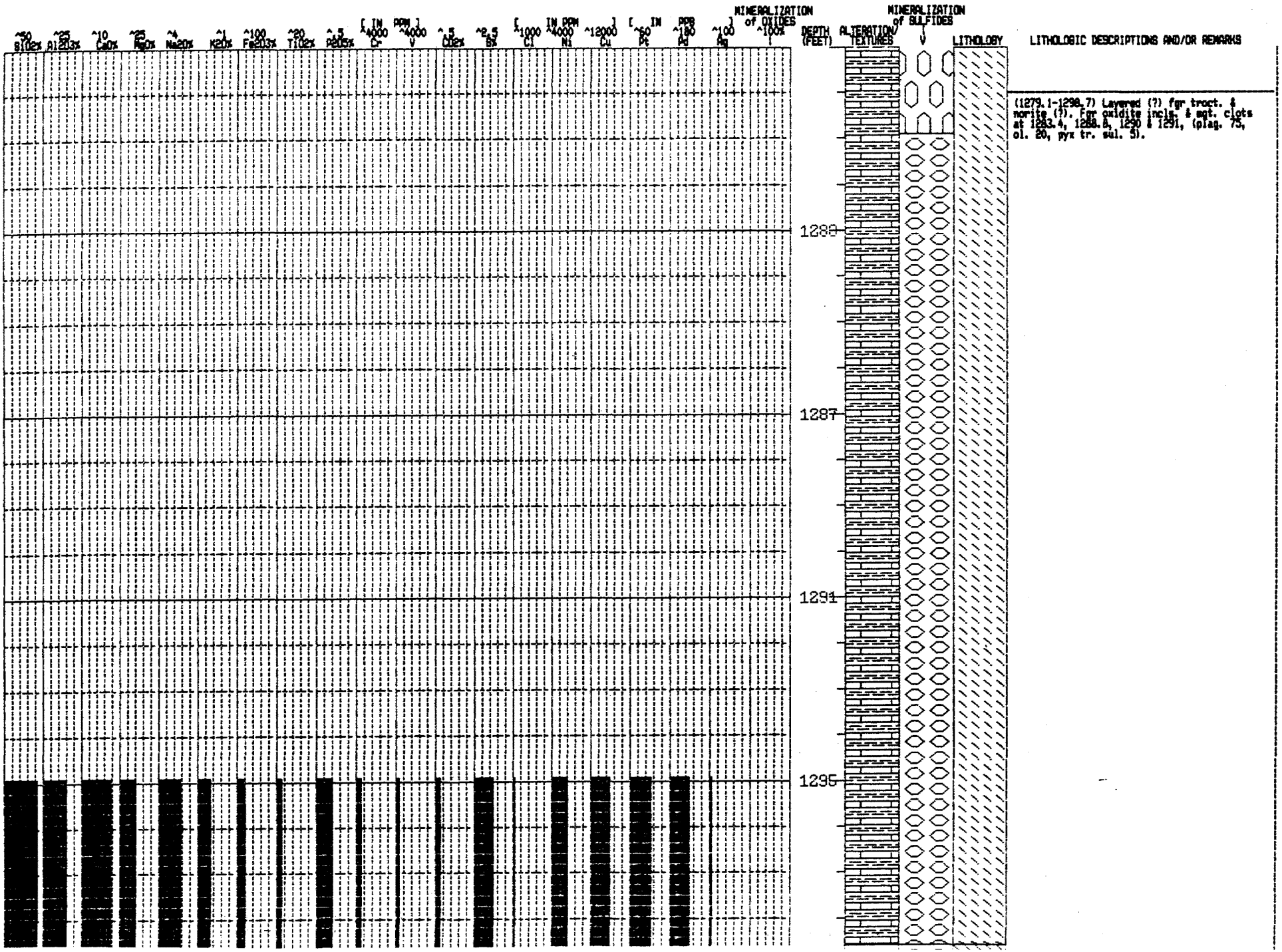
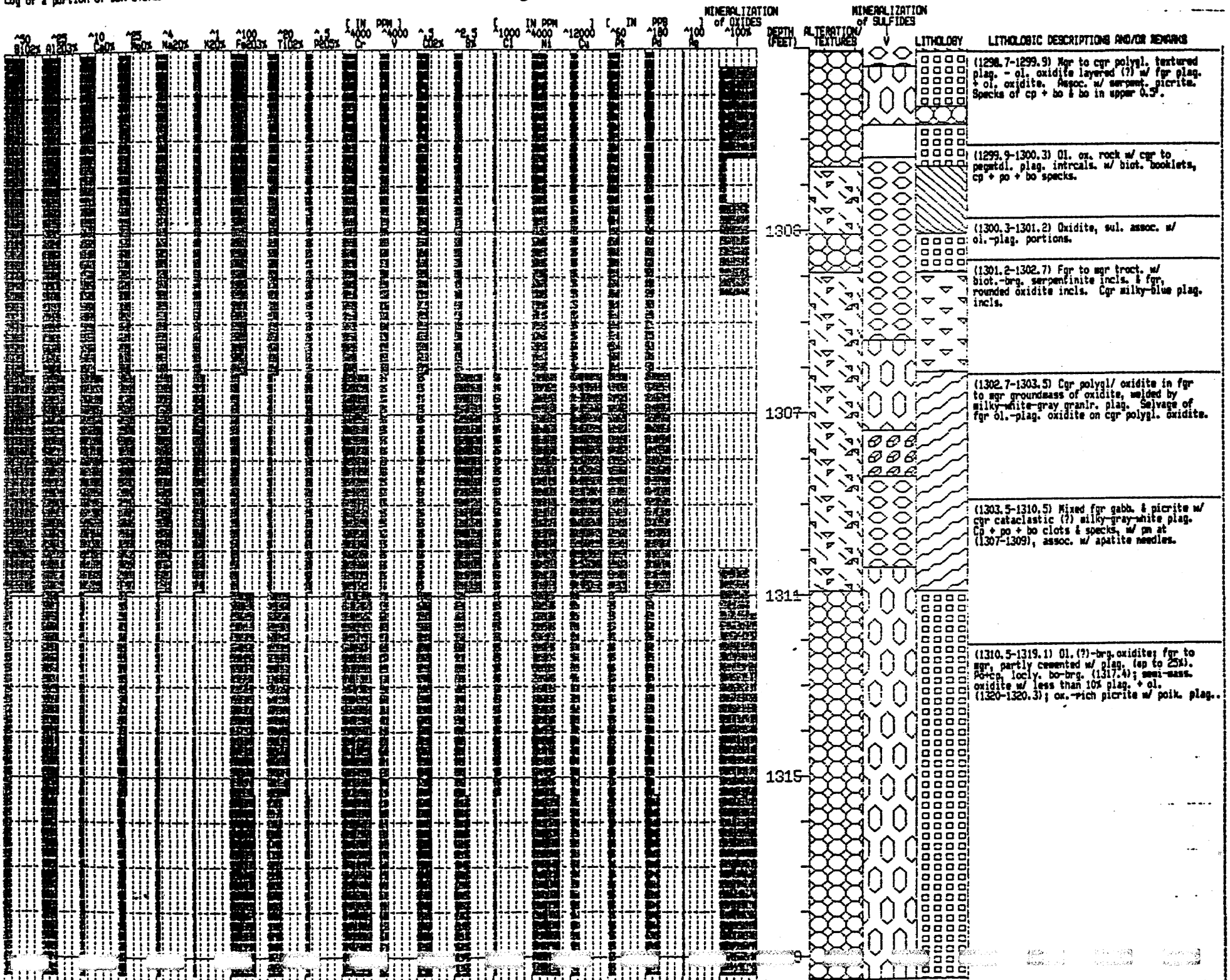

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1265
1269
1273
1277
(1261.0-1261.7) Mainly cgr ol. gabb.
(1261.7-1264.7) Mixture of fgr picrite & troc. anorth., locly. w/ cgr pyroxenite veins. Lwr. 0.7' ox.-brg. w/ oxidite incls. (1264) cp + bo + pn + bo clots.
(1264.7-1267.5) Mgr anorth., grading downard into troc. anorth.
(1267.5-1268.8) Mixed pegatdl. plag. (milky-white-gray) & ox.-brg. peridotite-oxidite, grading into pegatdl. gabb., along upper-most contct.
(1268.8-1270.8) Fgr to mgr ol.-brg. anort. gabb., mixed w/ fgr troct. (Plag. 80, pyx 18, sul. 2, to plag. 60, ol. 30., pyx 10, sul. tr.) bo+cp+po clots & specks.
(1270.8-1271.2) Layered (?) fgr troct. & picrite.
(1271.2-1276.5) Alternating troct. & troc. anorth. (1272-1273); sul. mostly in troc. parts. (1274-1275); mainly po some cp & bo specks.
(1276.5-1278.8) Fgr, layered (?) troct. & norite.
(1278.8-1279.1) Pegatdl. anorth. in layered (?) contct w/ underlying fgr to mgr troct. w/ up to 0.05' euhdrl. plag. x-stals.

Figure 6

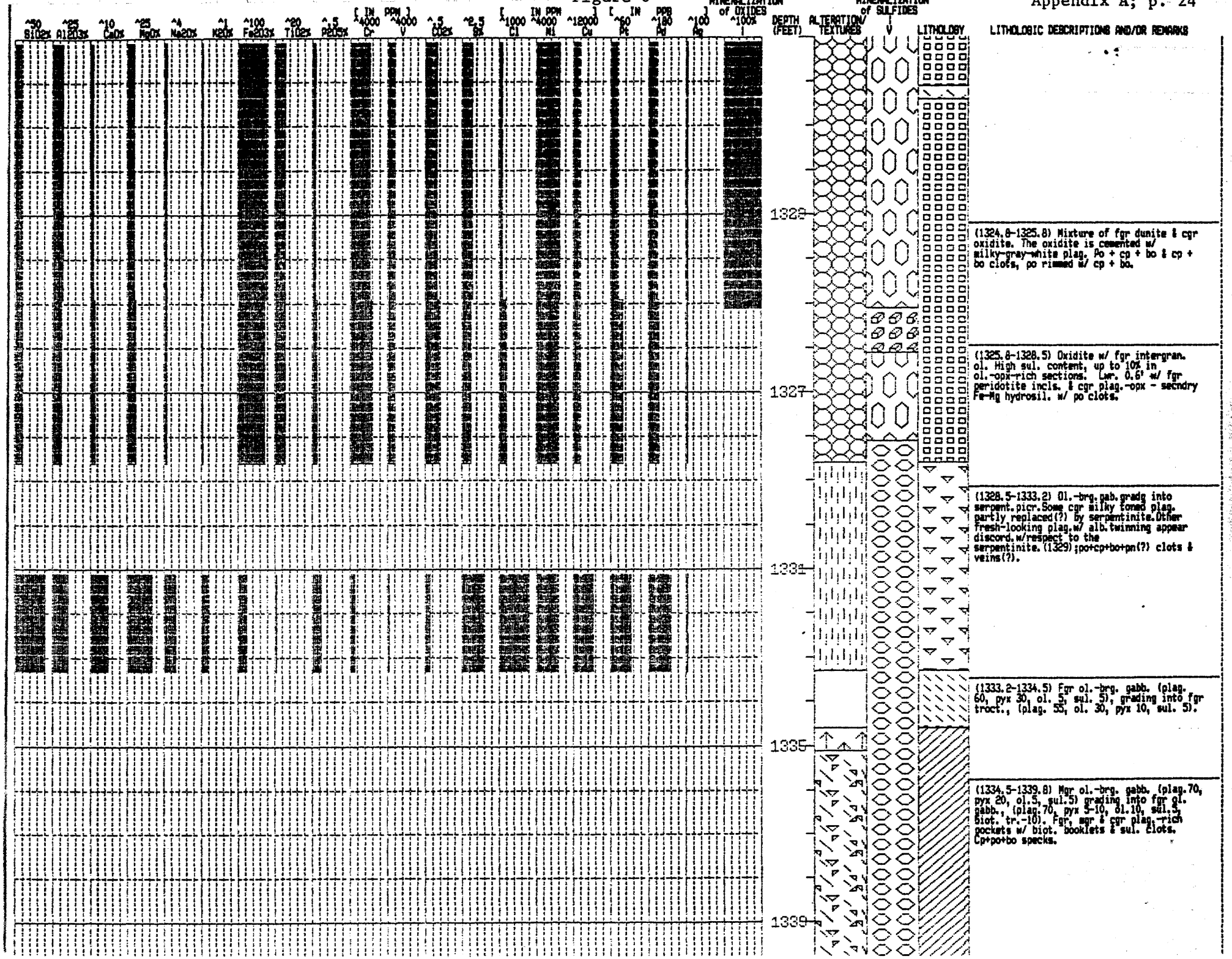

~50 SiO2%
~25 Al2O3%
~10 CaO%
~25 MgO%
~4 Na2O%
~1 K2O%
~100 Fe2O3%
~20 TiO2%
~.5 P2O5%
[IN ~4000 Cr PPM] ~4000 V
~.5 CuO%
~2.5 S%
[~1000 Cl IN PPM ~4000 Ni ~12000 Cu]
[~50 Pt IN PPB ~150 Au ~100 Ag]
MINERALIZATION of OXIDES ~100%
DEPTH (FEET)
ALTERATION/ TEXTURES
MINERALIZATION of SULFIDES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1283
1287
1291
1295
(1279.1-1298.7) Layered (?) fgr troct. & norite (?). Fgr oxidite inclg. & mgt. clots at 1283.4, 1288.8, 1290 & 1291, (plag. 75, ol. 20, pyx tr. sul. 5).

Log of a portion of DDH 3A872.



Log of a portion of DDH 34872.

Figure 1



LITHOLOGIC DESCRIPTIONS AND/OR REMARKS

(1324.8-1325.8) Mixture of fgr dunite & cgr oxidite. The oxidite is cemented w/ milky-gray-white plag. Po + cp + bo & cp + bo clots, po rimmed w/ cp + bo.

(1325.8-1328.5) Oxidite w/ fgr intergran. ol. High sul. content, up to 10% in ol.-opx-rich sections. Lwr. 0.6' w/ fgr peridotite incls. & cgr plag.-opx - secndry Fe-Mg hydrosil. w/ po clots.

(1328.5-1333.2) Ol.-brg.gab.gradg into serpent.picr.Some cgr milky toned plag. partly replaced(?) by serpentinite.Other fresh-looking plag.w/ alb.twinning appear discord.w/respect to the serpentinite. (1329);po+cp+bo+pn(?) clots & veins(?).

(1333.2-1334.5) Fgr ol.-brg. gabb. (plag. 60, pyx 30, ol. 5, sul. 5), grading into fgr troct., (plag. 55, ol. 30, pyx 10, sul. 5).

(1334.5-1339.8) Mgr ol.-brg. gabb. (plag.70, pyx 20, ol.5, sul.5) grading into fgr ol. gabb., (plag.70, pyx 5-10, ol.10, sul.5, biot. tr.-10). Fgr, mgr & cgr plag.-rich pockets w/ biot. booklets & sul. clots. Cp+po+bo specks.

Figure 6

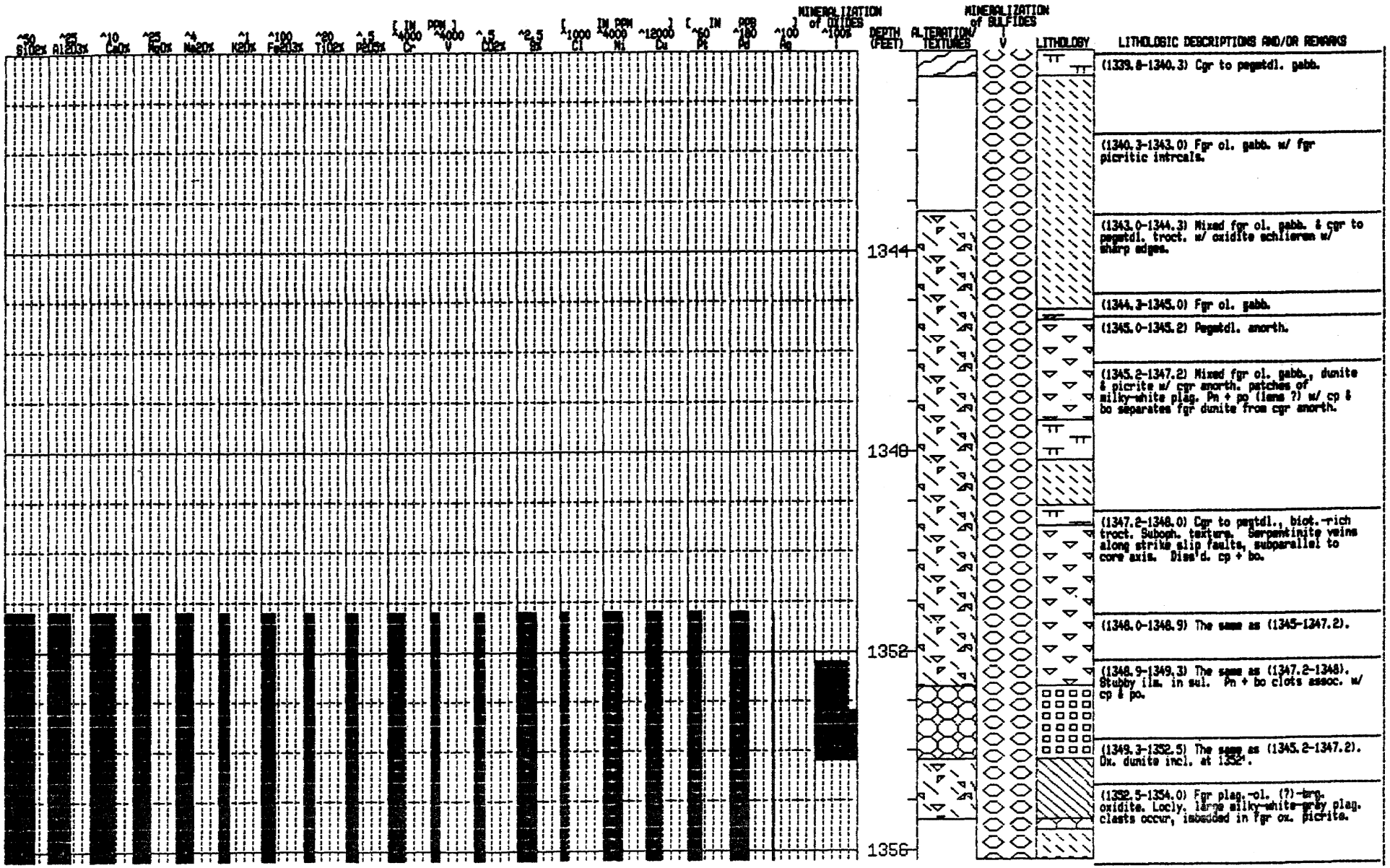
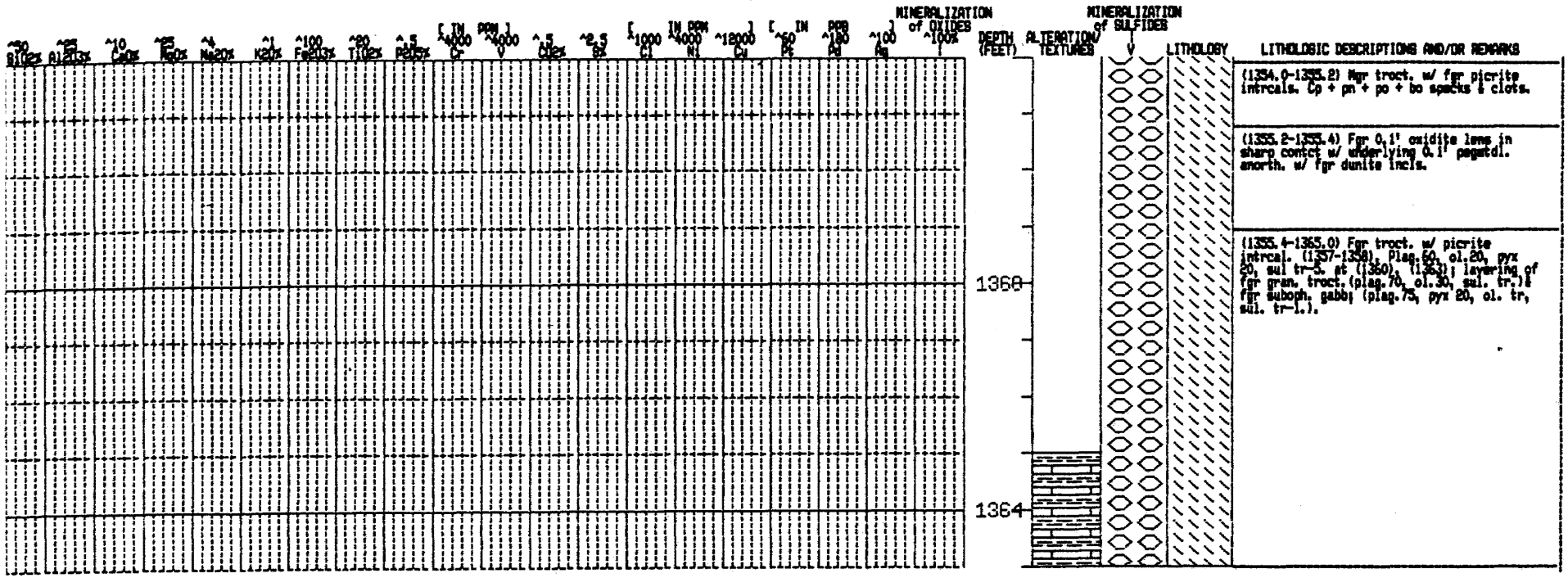
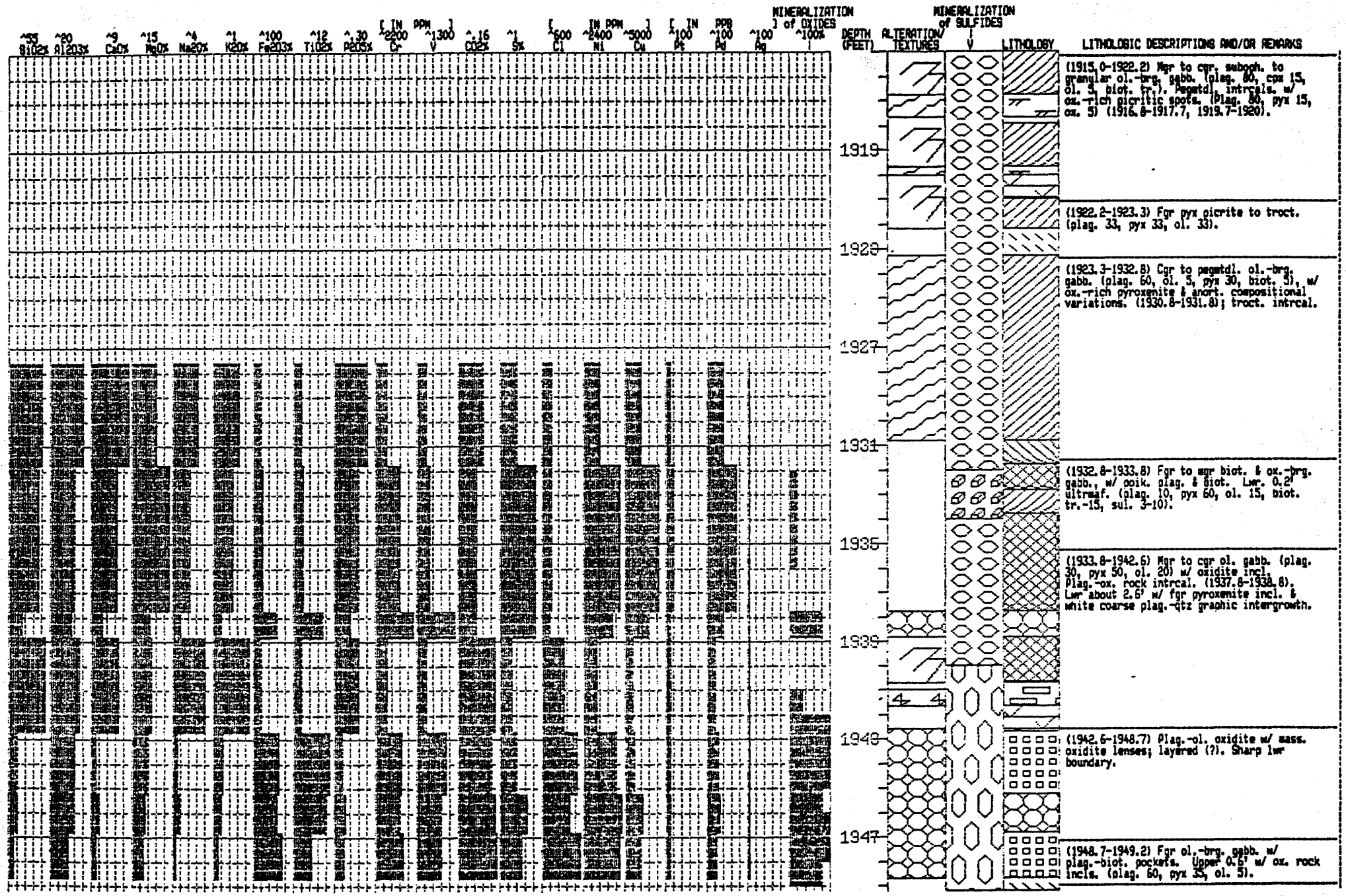

MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1344
1348
1352
1356
(1339.8-1340.3) Cgr to pegmtdl. gabb.
(1340.3-1343.0) Fgr ol. gabb. w/ fgr picritic intrcals.
(1343.0-1344.3) Mixed fgr ol. gabb. & cgr to pegmtdl. troct. w/ oxidite schlieren w/ sharp edges.
(1344.3-1345.0) Fgr ol. gabb.
(1345.0-1345.2) Pegmtdl. anorth.
(1345.2-1347.2) Mixed fgr ol. gabb., dunite & picrite w/ cgr anorth. patches of milky-white plag. Pn + po (lens ?) w/ cp & bo separates fgr dunite from cgr anorth.
(1347.2-1348.0) Cgr to pegtdl., biot.-rich troct. Subophi. texture. Serpentinite veins along strike slip faults, subparallel to core axis. Diss'd. cp + bo.
(1348.0-1348.9) The same as (1345-1347.2).
(1348.9-1349.3) The same as (1347.2-1348). Stubby ilm. in sul. Pn + bo clots assoc. w/ cp & po.
(1349.3-1352.5) The same as (1345.2-1347.2). Dk. dunite incl. at 1352'.
(1352.5-1354.0) Fgr plag.-ol. (?)-bng. oxidite. Locly. large milky-white-gray plag. clasts occur, imbedded in fgr ox. picrite.

Figure 6


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1360
1364
(1354.0-1355.2) Mgr troct. w/ fgr picrite intrcals. Cp + pn + po + bo specks & clots.
(1355.2-1355.4) Fgr 0.1' oxidite lens in sharp contct w/ underlying 0.1' pegatdl. anorth. w/ fgr dunite incls.
(1355.4-1365.0) Fgr troct. w/ picrite intrcal. (1357-1358); Plag.60, ol.20, pyx 20, sul tr-5. at (1360), (1363); layering of fgr gran. troct.(plag.70, ol.30, sul. tr.) & fgr suboph. gabbj (plag.75, pyx 20, ol. tr, sul. tr-1.).

LOG OF A PORTION OF EXXON DDH D-6A.



LITHOLOGIC DESCRIPTIONS AND/OR REMARKS

(1915.0-1922.2) Mgr to cgr, subogh. to granular ol.-brg. gabb. (plag. 60, cpx 15, ol. 5, biot. tr.). Pegmtdl. intrcals. w/ ox.-rich picritic spots. (plag. 60, pyx 15, ox. 5) (1916.8-1917.7, 1919.7-1920).

(1922.2-1923.3) Fgr pyx picrite to troct. (plag. 33, pyx 33, ol. 33).

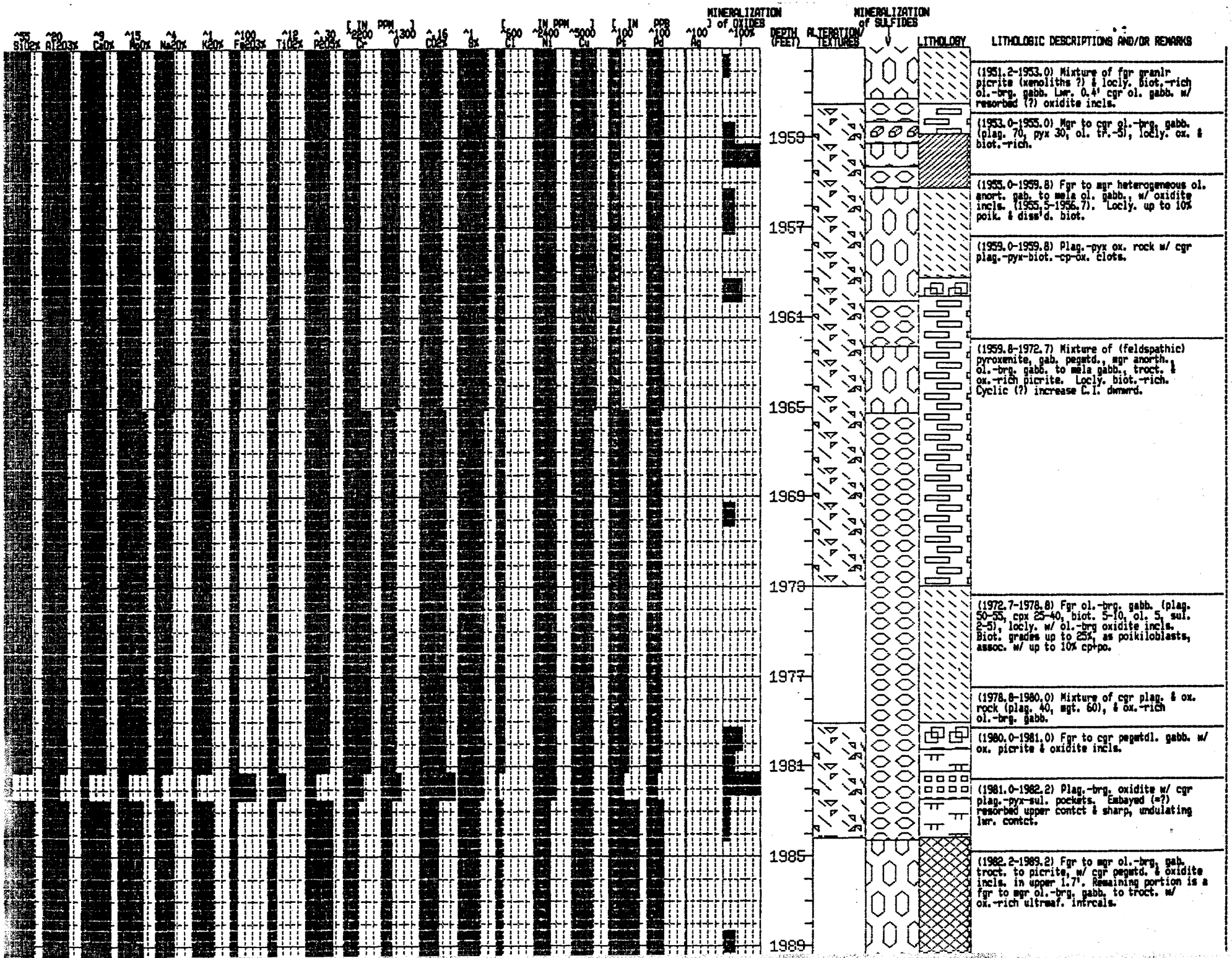
(1923.3-1932.8) Cgr to pegmtdl. ol.-brg. gabb. (plag. 60, ol. 5, pyx 30, biot. 5), w/ ox.-rich pyroxenite & anort. compositional variations. (1930.8-1931.8); troct. intrcal.

(1932.8-1933.8) Fgr to mgr biot. & ox.-brg. gabb., w/ poik. plag. & biot. Lwr. 0.2' ultramaf. (plag. 10, pyx 60, ol. 15, biot. tr.-15, sul. 3-10).

(1933.8-1942.6) Mgr to cgr ol. gabb. (plag. 30, pyx 50, ol. 20) w/ oxidite incl. Plag.-ox. rock intrcal. (1937.8-1938.8). Lwr about 2.6' w/ fgr pyroxenite incl. & white coarse plag.-qtz graphic intergrowth.

(1942.6-1948.7) Plag.-ol. oxidite w/ mass. oxidite lenses; layered (?). Sharp lwr boundary.

(1948.7-1949.2) Fgr ol.-brg. gabb. w/ plag.-biot. pockets. Upper 0.5' w/ ox. rock incls. (plag. 60, pyx 35, ol. 5).


MINERALIZATION of OXIDES
MINERALIZATION of SULFIDES
DEPTH (FEET)
ALTERATION/ TEXTURES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1959
1961
1965
1969
1973
1977
1981
1985
1989
(1951.2-1953.0) Mixture of fgr granlr picrite (xenoliths ?) & locly. biot.-rich ol.-brg. gabb. Lwr. 0.4' cgr ol. gabb. w/ resorbed (?) oxidite incls.
(1953.0-1955.0) Mgr to cgr ol.-brg. gabb. (plag. 70, pyx 30, ol. tr.-5), locly. ox. & biot.-rich.
(1955.0-1959.8) Fgr to mgr heterogeneous ol. anort. gab. to mela ol. gabb., w/ oxidite incls. (1955.5-1956.7). Locly. up to 10% poik. & diss'd. biot.
(1959.0-1959.8) Plag.-pyx ox. rock w/ cgr plag.-pyx-biot.-cp-ox. clots.
(1959.8-1972.7) Mixture of (feldspathic) pyroxenite, gab. pegmtd., mgr anorth., ol.-brg. gabb. to mela gabb., troct. & ox.-rich picrite. Locly. biot.-rich. Cyclic (?) increase C.I. dwnwrd.
(1972.7-1978.8) Fgr ol.-brg. gabb. (plag. 50-55, cpx 25-40, biot. 5-10, ol. 5, sul. 2-5), locly. w/ ol.-brg oxidite incls. Biot. grades up to 25%, as poikiloblasts, assoc. w/ up to 10% cp+po.
(1978.8-1980.0) Mixture of cgr plag. & ox. rock (plag. 40, mgt. 60), & ox.-rich ol.-brg. gabb.
(1980.0-1981.0) Fgr to cgr pegmtdl. gabb. w/ ox. picrite & oxidite incls.
(1981.0-1982.2) Plag.-brg. oxidite w/ cgr plag.-pyx-sul. pockets. Embayed (=?) resorbed upper contct & sharp, undulating lwr. contct.
(1982.2-1989.2) Fgr to mgr ol.-brg. gab. troct. to picrite, w/ cgr pegmtd. & oxidite incls. in upper 1.7'. Remaining portion is a fgr to mgr ol.-brg. gabb. to troct. w/ ox.-rich ultramf. intrcals.

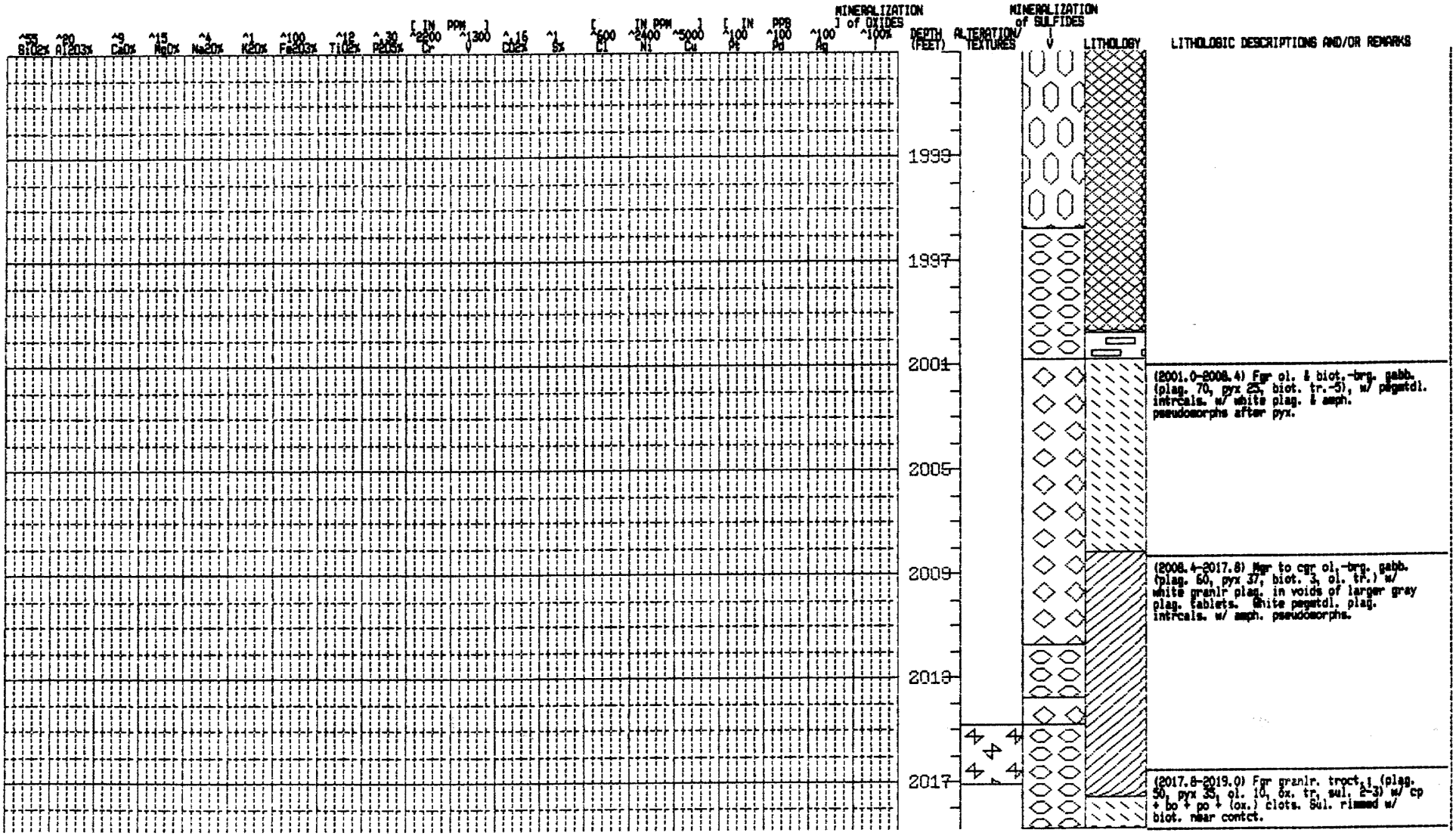

^55 SiO2%
^20 Al2O3%
^9 CaO%
^15 MgO%
^4 Na2O%
^1 K2O%
^100 Fe2O3%
^18 TiO2%
^.30 P2O5%
[IN PPM]
^2200 Cr
^1300 V
^.15 CO2%
^1 Sx
[^600 Cl
IN PPM]
^2400 Ni
^5000 Cu
[IN ^100 Pt
PPB ^100 Pd
^100 Ag
MINERALIZATION of OXIDES ^100%
DEPTH (FEET)
ALTERATION/ TEXTURES
MINERALIZATION of SULFIDES
LITHOLOGY
LITHOLOGIC DESCRIPTIONS AND/OR REMARKS
1993
1997
2001
2005
2009
2013
2017
(2001.0-2008.4) Fgr ol. & biot.-brg. gabb. (plag. 70, pyx 25, biot. tr.-5), w/ pegmtdl. intrcals. w/ white plag. & amph. pseudomorphs after pyx.
(2008.4-2017.8) Mgr to cgr ol.-brg. gabb. (plag. 60, pyx 37, biot. 3, ol. tr.) w/ white granlr plag. in voids of larger gray plag. tablets. White pegmtdl. plag. intrcals. w/ amph. pseudomorphs.
(2017.8-2019.0) Fgr granlr. trocto.l (plag. 50, pyx 35, ol. 10, ox. tr, sul. 2-3) w/ cp + bo + po + (ox.) clots. Sul. rimmed w/ biot. near contct.

Figure 8

LEGEND GRAPHIC LOGS

LITHOLOGY


ANORTHOSITE, OLIVINE-BEARING


ANORTHOSITIC: (QUARTZ-BEARING) PEGMATOIDAL


OLIVINE GABBRO


GABBROID


PEGMATITE


TROCTOLITE


ANORTHOSITE: TROCTOLITIC


ANORTHOSITE: PEGMATOIDAL


ANORTHOSITE


OLIVINE BEARING GABBRO


FINE-GRAINED GABBRO & TROCTOLITE


FINE-GRAINED NORITE


PERIDOTITE


PYROXENITE


DUNITE


PICRITE


CALCSILICATE ROCK


MARBLE


PELITIC HORNFELS


BIF


QUARTZITE


PYROXENE MONZONITE, CHARNOCKITE


DIORITE GNEISS


GRANITE (GNEISS)


GRAPHITE GRANITE

OXIDE SILICATES


OXIDE-BEARING ROCK (5-15% OXIDE)


OXIDE-RICH ROCK (15-30% OXIDE)


OXIDE ROCK (30-50% OXIDE)


OXIDITE (50-75% OXIDE)


OXIDITE (75-100% OXIDE)

SULFIDE CONTENT


TRACE


1-2%


2-4%


4-10%


10-15%


15-30%


30-50%

TEXTURE/ALTERATION


SERPENTINATION


FE-MG-HYDROSILICATES


CARBONATE

LOW TEMPERATURE ALTERATION

DISEASED PLAGIOCLASE

MOTTLED (PYROXENE + OLIVINE)

EUHEDRAL-SUBOPHITIC

CUMULATES

PEGMATOIDAL

MIXED ASPECTS

LAMINATION

OIKOCRYSTS

HORNFELSIC

JOINTS

BRECCEOUS

CATACLASTIC

MYLONITIC

VUGS

SLICKEN SIDES

TABLE II
Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
OC 11695	OTC	Gunflint L.Quad	12.80	4.82	55.90		6.17	1.48	0.37		0.05	17.80
OC 11172	OTC	Unit G	12.80	3.70	58.00		8.08	0.66	0.31		0.03	17.70
OC 11176	OTC	Unit T	9.72	5.37	60.80		3.89	1.58	0.50		0.05	19.70
OC 19480	OTC	Gunflint L.Quad	2.89	3.79	64.50		2.98	0.45	0.21		0.02	25.60
FSL 14168	OTC	L. Nose Creek	36.40	18.10	19.00		6.20	13.00	1.12		0.13	4.50
FSL 14169	OTC	L. Nose Creek	32.80	3.32	25.90		10.20	13.80	0.26		0.02	12.90
FSL 14170	OTC	L. Nose Creek	26.50	3.03	34.70		8.58	10.20	0.20		0.01	16.30
OSL 16623	OTC	Dunka pit	46.30	13.90	18.40		4.46	8.29	2.97		0.49	5.09
OSL 16624	OTC	Dunka pit	49.70	0.47	46.00		1.90	1.75	0.04		0.02	0.75
OSL 16625	OTC	Dunka pit	33.50	10.50	36.90		8.74	5.02	1.11		0.32	3.69
OSL 16626	OTC	Dunka pit	25.00	0.69	57.30		7.17	3.53	0.11		0.04	1.11
OSL 16627	OTC	Dunka pit	52.40	1.01	37.50		6.05	2.83	0.16		0.26	0.19
OSL 16628	OTC	Dunka pit	31.00	0.63	55.00		8.04	1.01	0.20		0.01	7.30
OSL 16629	OTC	Dunka pit	42.10	0.67	38.80		11.40	2.75	0.04		0.08	3.36
OSL 16630	OTC	Dunka pit	42.30	10.70	23.40		6.01	9.72	1.99		0.39	3.25
OSL 16631	OTC	Dunka pit	47.10	14.40	11.90		6.60	13.80	1.10		0.78	1.11
OSL 16632	OTC	Dunka pit	25.10	8.53	51.40		4.87	4.34	1.04		0.22	4.62
OSL 16633	OTC	Dunka pit	43.90	14.30	18.00		6.05	6.58	2.23		1.59	3.11
OSL 16634	OTC	Dunka pit	33.80	18.00	25.80		5.16	1.58	1.04		1.54	1.21
OSL 16635	OTC	Dunka pit	37.30	2.42	33.20		9.33	8.72	0.48		0.11	0.68
OSL 16636	OTC	Dunka pit	12.60	0.35	84.70		1.28	3.26	0.07		0.02	0.04
OSL 16640	OTC	Dunka pit	19.70	4.10	60.60		3.06	2.36	0.66		0.09	2.08
OSL 16364	OTC	Dunka road	45.40	2.37	19.40		13.60	12.70	0.35		0.06	5.21

* denotes the figure is less than the detection limit

TABLE II

Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
OC 11695	OTC	Gunflint L.Quad	0.04	0.27	0.01*	2.77*	0.04	50*	50	650	600	5600
OC 11172	OTC	Unit G	0.03	0.28	0.01*	2.77*	0.11	50*	40	2500	1000	3300
OC 11176	OTC	Unit T	0.13	0.28	0.01*	3.38*	TRACE	50*	20*	650	600	5100
OC 19480	OTC	Gunflint L.Quad	0.03	0.26	0.01	3.85*	0.38	50*	20*	320	900	5200
FSL 14168	OTC	L. Nose Creek	0.03	0.16	0.10	1.08	0.01	50*	20*	120	200	1100
FSL 14169	OTC	L. Nose Creek	0.02	0.21	0.08	0.00	TRACE	50*	20*	490	300	190
FSL 14170	OTC	L. Nose Creek	0.02	0.23	0.05	0.92*	*	50*	30	80	300	450
OSL 16623	OTC	Dunka pit	0.57	0.22	0.06	0.92*	0.05	150	210	360	200*	120
OSL 16624	OTC	Dunka pit	0.02	0.45	0.05	1.07*	*	50*	20*	25	200*	170
OSL 16625	OTC	Dunka pit	0.20	0.23	0.04	0.46*	0.11	50	480	160	300	1100
OSL 16626	OTC	Dunka pit	0.66	1.14	0.02	1.39	7.14	150	280	23000	4200	160
OSL 16627	OTC	Dunka pit	0.13	0.77	0.15	0.84*	0.17	100	250	810	200*	120
OSL 16628	OTC	Dunka pit	0.45	0.59	0.01	4.00*	0.04	250	260	33	200*	60
OSL 16629	OTC	Dunka pit	1.30	0.54	0.03	1.46*	0.11	450	720	110	300	250
OSL 16630	OTC	Dunka pit	0.68	0.19	0.04	0.92	2.03	250	310	5900	1800	520
OSL 16631	OTC	Dunka pit	0.27	0.13	0.14	1.00	1.26	100	570	6100	700	370
OSL 16632	OTC	Dunka pit	0.28	0.25	0.04	0.92*	0.10	50	210	240	300	460
OSL 16633	OTC	Dunka pit	0.50	0.23	0.10	3.54	0.05	300	480	710	200*	190
OSL 16634	OTC	Dunka pit	0.06	0.06	0.04	10.50	10.50	100	600	1400	400	430
OSL 16635	OTC	Dunka pit	0.23	0.25	0.09	4.92	11.80	150	160	22000	5800	270
OSL 16636	OTC	Dunka pit	0.16	0.63	0.06	2.69*	0.43	50*	40	110	200*	40
OSL 16640	OTC	Dunka pit	0.07	0.15	0.19	7.38	23.30	50*	40	11000	8900	60
OSL 16364	OTC	Dunka road	0.03	0.30	0.18	0.46	0.66	350	40	1900	500	510

* denotes the figure is less than the detection limit

TABLE II

Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	CO PPM	V PPM	ZN PPM	PB PPM	MO PPM	PT PPB	PD PPB	IR PPB	AU PPB	AG PPM
OC 11695	OTC	Gunflint L.Quad	200	4700	750	5	5*	40	37	100*	16	5*
OC 11172	OTC	Unit G	240	4500	710	5	5*	10	10	100*	10	5*
OC 11176	OTC	Unit T	180	3600	770	5*	5*	10	10	100*	2	5*
OC 19480	OTC	Gunflint L.Quad	250	6400	880	5*	5*	10*	6	100*	3	5*
FSL 14168	OTC	L. Nose Creek	71	780	240	5*	5*	10*	2*	100*	1*	5*
FSL 14169	OTC	L. Nose Creek	110	2400	310	5*	5*	10*	2*	100*	1*	5*
FSL 14170	OTC	L. Nose Creek	150	4100	550	5*	5*	10	2*	100*	1*	5*
OSL 16623	OTC	Dunka pit	60	560	350	5*	5*	10	12	100*	8	5*
OSL 16624	OTC	Dunka pit	18	300	200*	5*	5*	10	2*	100*	2	5*
OSL 16625	OTC	Dunka pit	110	580	330	5	5*	10	3	100*	1*	5*
OSL 16626	OTC	Dunka pit	220	120	420	5*	5*	10	960	100*	150	12
OSL 16627	OTC	Dunka pit	18	49	200*	5*	5*	10*	27	100*	4	5*
OSL 16628	OTC	Dunka pit	96	430	290	5*	5*	10*	2	100*	1*	5*
OSL 16629	OTC	Dunka pit	91	690	410	5*	5*	10*	8	100*	1*	5*
OSL 16630	OTC	Dunka pit	120	380	260	11	7	30	110	100*	33	5*
OSL 16631	OTC	Dunka pit	60	240	280	17	5*	80	98	100*	36	5*
OSL 16632	OTC	Dunka pit	83	500	310	5*	5*	10*	2*	100*	1*	5*
OSL 16633	OTC	Dunka pit	49	290	200	10	5*	10*	6	100*	4	5*
OSL 16634	OTC	Dunka pit	92	500	1100	6	74	10*	9	100*	8	5*
OSL 16635	OTC	Dunka pit	430	130	340	5*	14	30	220	100*	59	5*
OSL 16636	OTC	Dunka pit	17	74	200*	5*	5*	10*	2*	100*	1*	5*
OSL 16640	OTC	Dunka pit	810	160	200	5*	9	10*	84	100*	6	5*
OSL 16364	OTC	Dunka road	100	630	400	20	5*	10	8	100*	6	5*

* denotes the figure is less than the detection limit

TABLE II

Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
OC 11695	OTC	Gunflint L.Quad	6	2*	36	150	28.70	2*	2	50	3	20
OC 11172	OTC	Unit G	6	2*	18	10*	25.20	2*	1	42	3	18
OC 11176	OTC	Unit T	6	2*	36	130	27.00	2*	3	56	4	22
OC 19480	OTC	Gunflint L.Quad	4	2*	12	160	31.30	2*	1	46	2	20
FSL 14168	OTC	L. Nose Creek	8	2*	190	50	37.70	2*	3	38	2*	8
FSL 14169	OTC	L. Nose Creek	6	2*	14	30	111.00	4	3	56	3	12
FSL 14170	OTC	L. Nose Creek	6	2*	12	90	98.50	2*	2	48	3	16
OSL 16623	OTC	Dunka pit	12	2*	400	250	37.40	54	40	240	8	34
OSL 16624	OTC	Dunka pit	6	2*	8	130	11.30	2*	1	18	2*	10
OSL 16625	OTC	Dunka pit	12	2*	110	180	34.80	2*	10	62	2	14
OSL 16626	OTC	Dunka pit	4	2*	16	250	16.20	2*	18	22	2*	12
OSL 16627	OTC	Dunka pit	10	2*	88	320	2.60	2	7	26	2*	10
OSL 16628	OTC	Dunka pit	4	2*	12	150	23.20	2*	10	40	2*	30
OSL 16629	OTC	Dunka pit	6	2*	22	110	36.80	18	21	28	2*	14
OSL 16630	OTC	Dunka pit	12	2*	250	230	30.80	34	33	68	3	16
OSL 16631	OTC	Dunka pit	26	2*	280	240	28.70	24	27	62	2	12
OSL 16632	OTC	Dunka pit	12	2*	92	210	25.10	6	16	120	4	20
OSL 16633	OTC	Dunka pit	48	2	230	1100	32.30	46	34	220	7	20
OSL 16634	OTC	Dunka pit	48	4	180	600	23.30	4	56	130	4	24
OSL 16635	OTC	Dunka pit	6	2*	30	250	17.80	8	11	32	2*	8
OSL 16636	OTC	Dunka pit	6	2*	24	160	0.70	2*	4	18	2*	16
OSL 16640	OTC	Dunka pit	6	2*	42	220	12.70	2*	5	30	2	12
OSL 16364	OTC	Dunka road	8	2*	24	70	92.50	24	4	56	2	16

* denotes the figure is less than the detection limit

TABLE II

Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
OC 11695	OTC	Gunflint L.Quad	1	37	10*	2*	0.20*	2*	10*	10*	5*	5*
OC 11172	OTC	Unit G	1*	5*	10*	2*	0.30	2*	10*	10*	5*	5*
OC 11176	OTC	Unit T	1	5*	10*	2*	0.20*	2*	10*	10*	5*	13
OC 19480	OTC	Gunflint L.Quad	1	9*	10*	2*	0.20*	2*	10*	10*	5*	5*
FSL 14168	OTC	L. Nose Creek	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	9
FSL 14169	OTC	L. Nose Creek	1	12*	10*	2*	0.30*	2*	10*	10*	5*	9
FSL 14170	OTC	L. Nose Creek	2	10*	10*	2*	0.30	2*	10*	10*	5*	5*
OSL 16623	OTC	Dunka pit	2	7*	10*	2*	0.20*	2*	10*	10*	5*	99
OSL 16624	OTC	Dunka pit	1*	5*	10*	2*	0.40	2*	10*	10*	5*	5*
OSL 16625	OTC	Dunka pit	1*	6*	10*	2	0.30	2*	10*	10*	5*	22
OSL 16626	OTC	Dunka pit	1*	6*	10*	7	0.20*	6	21	10*	5*	42
OSL 16627	OTC	Dunka pit	1*	4*	10*	10	0.20*	2*	10*	10*	5*	17
OSL 16628	OTC	Dunka pit	1	7*	10*	4	0.20*	2*	10*	10*	5*	23
OSL 16629	OTC	Dunka pit	1*	8*	10*	2*	0.20*	2*	10*	10*	5*	53
OSL 16630	OTC	Dunka pit	1	7*	10*	2*	0.20*	2*	10*	10*	5*	76
OSL 16631	OTC	Dunka pit	1*	6*	10*	22	1.00	2	10*	10*	5*	64
OSL 16632	OTC	Dunka pit	1*	7*	10*	2*	0.20*	2*	10*	10*	5*	41
OSL 16633	OTC	Dunka pit	2	7*	10*	16	0.50	2*	10*	10*	5*	77
OSL 16634	OTC	Dunka pit	1*	7*	10*	130	0.60	2*	10*	10*	5*	104
OSL 16635	OTC	Dunka pit	1*	7*	10*	8	0.30	2*	29	10*	5*	26
OSL 16636	OTC	Dunka pit	1*	10	10*	2*	0.20*	2*	10*	10*	5*	9
OSL 16640	OTC	Dunka pit	1*	8*	10*	2*	0.20*	2*	27	10*	5*	10
OSL 16364	OTC	Dunka road	2	12*	10*	2*	0.20*	2*	10*	10*	5*	18

* denotes the figure is less than the detection limit

TABLE II

Chemical Analyses for Outcrop Samples

Sample #	Out Crop	Location	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
OC 11695	OTC	Gunflint L.Quad	10*	0.90	0.50*	0.50*	0.20*	0.80	0.70*		
OC 11172	OTC	Unit G	10*	0.50*	0.50	0.50*	0.20*	0.50*	0.70*		
OC 11176	OTC	Unit T	10*	1.30	0.80	0.50	0.20*	0.50*	1.00*		
OC 19480	OTC	Gunflint L.Quad	10*	0.50	0.50*	0.50*	0.20*	0.50*	1.30*		
FSL 14168	OTC	L. Nose Creek	10*	2.20	0.70	0.50	0.20*	0.50*	0.90*		
FSL 14169	OTC	L. Nose Creek	10*	3.50	0.70	1.30	0.20	0.50	0.90*		
FSL 14170	OTC	L. Nose Creek	10*	2.50	0.80	1.20	0.20	0.50*	0.90*		
OSL 16623	OTC	Dunka pit	50	18.10	3.70	4.70	0.70	1.30	1.20		
OSL 16624	OTC	Dunka pit	10*	0.50	0.50*	0.50*	0.20*	0.50*	0.50*		
OSL 16625	OTC	Dunka pit	10	3.90	0.90	1.40	0.20	1.10	0.90*		
OSL 16626	OTC	Dunka pit	20	6.90	1.00	1.60	0.30	0.50*	0.70*		
OSL 16627	OTC	Dunka pit	10	2.70	0.70	1.20	0.20	0.50*	0.50*		
OSL 16628	OTC	Dunka pit	10	3.90	0.50*	1.00	0.20*	0.50*	0.70*		
OSL 16629	OTC	Dunka pit	30	8.90	1.00	1.90	0.30	0.50*	0.70*		
OSL 16630	OTC	Dunka pit	40	12.00	2.20	3.10	0.50	2.20	0.70*		
OSL 16631	OTC	Dunka pit	30	9.00	1.80	3.10	0.40	2.50	2.30		
OSL 16632	OTC	Dunka pit	20	6.60	1.50	2.30	0.40	0.80	0.70*		
OSL 16633	OTC	Dunka pit	30	13.10	2.30	4.30	0.70	5.90	2.00		
OSL 16634	OTC	Dunka pit	40	10.50	2.40	1.20	0.20	13.00	4.70		
OSL 16635	OTC	Dunka pit	20	5.20	0.60	1.60	0.20	2.10	0.70*		
OSL 16636	OTC	Dunka pit	10*	1.20	0.50*	0.90	0.20*	0.50*	0.70*		
OSL 16640	OTC	Dunka pit	10*	2.00	0.70	0.60	0.20*	0.60	0.90*		
OSL 16364	OTC	Dunka road	10	6.70	0.90	3.40	0.50	0.50*	0.90*		

* denotes the figure is less than the detection limit

TABLE III
Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
CL 17165	34872	1182-1187.6	38.10	9.30	27.80		15.10	4.69	1.39		0.20	3.33
CL 17169 (17166-68)	34872	1187.6-1192	26.00	11.30	41.30		6.97	3.83	1.42		0.16	9.98
CL 17166	34872	1187.6-1189.2	--	--	--		--	--	--		--	--
CL 17167	34872	1189.2-1190.8	--	--	--		--	--	--		--	--
CL 17168	34872	1190.8-1192	--	--	--		--	--	--		--	--
CL 17173 (17170-72)	34872	1192-1199.7	17.80	6.73	50.80		7.83	2.33	0.73		0.09	14.00
CL 17170	34872	1192-1193.5	--	--	--		--	--	--		--	--
CL 17171	34872	1193.5-1194.2	--	--	--		--	--	--		--	--
CL 17172	34872	1194.2-1199.7	--	--	--		--	--	--		--	--
CL 17174	34872	1199.7-1204.7	41.50	15.60	20.80		10.20	7.07	2.26		0.26	2.12
CL 17175	34872	1220.8-1223	34.20	10.40	31.80		7.38	7.53	1.48		0.31	6.79
CL 17178 (17176-77)	34872	1223-1227.9	15.50	8.00	60.00		6.02	1.69	0.69		0.10	7.47
CL 17176	34872	1223-1226.4	--	--	--		--	--	--		--	--
CL 17177	34872	1226.4-1227.9	--	--	--		--	--	--		--	--
CL 17182 (17179-81)	34872	1227.9-1239.4	41.00	11.70	21.40		16.00	5.33	1.57		0.27	0.83
CL 17179	34872	1227.9-1232.6	--	--	--		--	--	--		--	--
CL 17180	34872	1232.6-1233.9	--	--	--		--	--	--		--	--
CL 17181	34872	1233.9-1239.4	--	--	--		--	--	--		--	--
CL 17183	34872	1239.4-1241	24.00	8.01	50.60		9.75	2.62	0.81		0.10	4.28
CL 17186 (17184-85)	34872	1241-1250	40.20	10.80	21.50		17.30	4.58	1.32		0.30	0.76
CL 17184	34872	1241-1245	--	--	--		--	--	--		--	--
CL 17185	34872	1245-1250	--	--	--		--	--	--		--	--
CL 17189 (17187-88)	34872	1250-1261	41.60	13.70	19.40		13.80	5.95	1.92		0.40	0.94
CL 17187	34872	1250-1256.1	--	--	--		--	--	--		--	--
CL 17188	34872	1256.1-1261	--	--	--		--	--	--		--	--
CL 17193 (17190-92)	34872	1261-1271.2	43.80	17.20	17.40		8.52	8.01	2.43		0.40	1.78
CL 17190	34872	1261-1264.7	--	--	--		--	--	--		--	--
CL 17191	34872	1264.7-1267.5	--	--	--		--	--	--		--	--
CL 17192	34872	1267.5-1271.2	--	--	--		--	--	--		--	--
CL 17194	34872	1295-1298.7	42.40	15.20	20.20		9.59	7.76	2.25		0.33	2.21
CL 17199 (17195-98)	34872	1298.7-1305.7	25.30	11.80	44.20		7.76	4.12	1.28		0.22	5.34
CL 17195	34872	1298.7-1301.2	--	--	--		--	--	--		--	--
CL 17196	34872	1301.2-1302.7	--	--	--		--	--	--		--	--
CL 17197	34872	1302.7-1303.5	--	--	--		--	--	--		--	--
CL 17198	34872	1303.5-1305.7	--	--	--		--	--	--		--	--
CL 17200	34872	1305.7-1310.5	38.30	15.40	22.80		11.10	6.20	1.79		0.34	2.42
CL 17201	34872	1310.5-1315	8.11	10.70	62.20		5.76	1.08	0.43		0.07	11.70
CL 17202	34872	1315-1319	8.96	9.59	67.40		5.48	1.12	0.52		0.09	7.27
CL 17203	34872	1319-1324.8	7.16	7.31	74.10		4.84	0.80	0.33		0.05	5.64
CL 17204	34872	1324.8-1328.5	9.99	5.92	70.50		5.96	1.06	0.38		0.06	5.95
CL 17205	34872	1331-1333.2	39.20	9.56	22.40		17.30	4.86	1.29		0.18	1.09
CL 17206	34872	1351-1356	33.30	13.20	31.40		9.94	5.47	1.61		0.25	4.58
CSL 17254	64046	50.0-60	45.40	15.40	15.80		6.87	7.97	2.51		0.97	2.23
CSL 17255	64046	70-80	53.40	14.80	11.40		3.70	7.15	1.79		2.02	0.88
CSL 17223	64048	100-105	46.90	12.80	17.70		4.53	3.46	1.19		3.60	0.92
CSL 17267	64048	100-105	13.10	3.89	62.10		0.89	0.58	1.05		0.20	0.41
CSL 17270	64048	105-110	38.70	12.00	27.80		4.99	3.80	1.37		1.13	2.48
CSL 17269	64048	105-110	10.80	2.82	67.00		0.71	0.28	0.77		0.48	0.40
CSL 17224	64048	135-140	50.90	16.10	14.80		3.89	2.41	1.56		3.25	0.91
CSL 17265	64048	135-140	14.10	4.03	57.30		0.73	0.24	0.82		0.78	0.29
CSL 17266	64048	140-145	53.50	14.00	13.00		2.53	0.41	1.30		3.91	0.61

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
CSL 17225	64048	200-205	44.30	10.90	12.00		16.00	7.35	1.17		1.15	1.00
CSL 17264	64048	205-210	NSS	NSS	NSS		NSS	NSS	NSS		NSS	NSS
CSL 17226	64048	220-230	56.80	0.67	28.20		4.71	9.82	0.17		0.11	0.05
CSL 17227	64048	240-245	46.30	11.40	22.30		4.33	7.40	2.42		0.69	4.05
CSL 17228	64048	285-290	60.20	1.60	32.60		2.79	2.39	0.23		0.12	0.14
CSL 17249	66010	20-30	43.00	14.00	18.70		9.41	7.00	2.01		0.80	1.71
CSL 17250	66010	40-45	43.00	13.70	18.90		8.76	6.53	1.93		0.89	1.73
CSL 17262	66012	11-20	49.00	14.70	15.60		5.36	6.46	2.04		1.71	1.63
CSL 17238	66014	80-90	43.40	16.20	17.20		7.03	7.43	2.42		0.66	1.18
CSL 17239	66014	105-115	43.40	15.90	17.20		7.95	7.29	2.24		0.74	1.12
CSL 17240	66014	145-150	46.20	18.30	11.50		8.17	8.72	2.44		0.71	1.21
CSL 17241	66014	265-270	41.10	13.60	17.00		9.60	5.03	1.97		1.22	1.81
CSL 17242	66014	300-310	43.90	15.70	16.70		7.26	7.74	2.22		0.88	1.82
CSL 17243	66014	335-345	43.10	15.40	17.20		7.19	7.75	2.22		0.91	1.98
CSL 17244	66014	360-370	43.10	13.30	17.60		11.60	8.00	1.82		0.45	1.22
CSL 17245	66014	380-390	40.00	14.30	22.90		6.46	7.27	1.96		0.63	1.78
CSL 17246	66014	445-455	64.50	1.62	16.90		4.16	11.10	0.28		0.47	0.08
CSL 17247	66014	545-550	48.30	0.44	46.20		2.65	2.75	0.14		0.03	0.07
CSL 17248	66014	605-615	49.20	0.87	46.50		3.58	0.92	0.20		0.04	0.09
CSL 17229	66017	24.8-30	46.30	16.50	15.60		6.35	6.71	2.51		1.14	1.57
CSL 17230	66017	155-165	42.60	13.80	19.30		7.33	7.13	2.04		0.89	2.29
CSL 17231	66017	190-195	44.60	14.80	17.50		7.12	6.35	1.79		0.58	1.80
CSL 17232	66017	240-245	43.40	14.60	18.80		7.87	7.36	2.16		0.88	2.05
CSL 17233	66017	260-270	47.60	16.10	14.40		7.81	7.26	2.13		0.94	1.24
CSL 17234	66017	280-290	44.00	13.40	18.40		5.76	7.57	1.67		1.09	1.86
CSL 17235	66017	350-360	56.30	0.84	16.10		6.95	19.40	0.24		0.20	0.06
CSL 17236	66017	380-390	42.90	1.21	46.90		4.26	4.04	0.26		0.05	0.29
CSL 17237	66017	490-495	51.10	0.71	42.90		4.31	1.63	0.23		0.12	0.08
CSL 18565	BA-1	509.6-518	48.60	26.90	4.34		2.43	12.20	3.07		0.34	0.59
CSL 18566	BA-1	518-527	47.80	26.70	5.19		2.61	12.10	3.10		0.33	0.46
CSL 18568	BA-1	1097.1-1106	40.50	9.07	19.60		10.80	12.90	0.73		0.23	5.85
CSL 18570	BA-1	1937-1947	40.90	14.50	17.90		7.36	11.20	1.45		0.19	5.25
CSL 18572	BA-1	1947-1956.9	43.50	14.80	15.10		6.94	11.70	1.86		0.25	4.12
CSL 18573	BA-1	1956.9-1961.3	37.30	12.40	22.20		7.60	10.20	1.24		0.14	8.30
CSL 18574	BA-1	1961.3-1968	46.70	21.00	9.76		6.91	11.10	2.27		0.24	1.06
CSL 18575	BA-1	1968-1974	39.30	10.00	20.50		8.69	11.70	1.00		0.14	8.21
CSL 18576	BA-1	1974-1979.2	40.30	10.90	18.60		7.64	12.00	1.24		0.19	8.45
CSL 18578	BA-1	1979.2-1987.4	41.00	13.00	17.40		6.87	12.10	1.58		0.18	7.71
CSL 18579	BA-1	2005.1-2011	48.10	15.90	10.40		9.38	12.70	2.10		0.19	0.96
CSL 18580	BA-1	2017.8-2019.8	42.60	13.50	18.40		13.30	8.26	1.52		0.21	1.65
CSL 18582	BA-1	2635-2643	45.30	19.40	12.10		9.63	9.01	2.00		0.53	0.91
CSL 18583	BA-1	2643-2653	54.70	14.40	12.20		8.14	4.82	2.91		0.84	0.57
CSL 18585	BA-1	2653-2663	47.30	17.60	12.90		8.86	8.58	2.12		0.57	1.11
CSL 18586	BA-1	2663-2673	46.60	18.50	12.70		8.40	8.95	2.36		0.46	1.50
CSL 18587	BA-1	2673-2680	44.80	19.50	13.30		9.03	8.78	2.21		0.31	0.66
CSL 18588	BA-1	2680-2690	44.90	17.90	14.90		8.10	8.78	2.30		0.43	1.65
CSL 18590	BA-1	2690-2700	45.00	18.70	14.60		9.14	8.79	2.21		0.36	1.08
CSL 18591	BA-1	2700-2710	45.10	19.30	14.70		8.60	8.75	2.30		0.34	0.85
CSL 18592	BA-1	2710-2718	45.40	18.40	15.40		8.87	8.42	2.30		0.40	0.95
CSL 18593	BA-1	2718-2726.4	43.60	15.80	19.20		10.20	7.46	2.00		0.39	1.37
CSL 18594	BA-1	3009.3-3019.5	47.30	16.40	15.80		6.56	8.02	2.45		0.87	2.71

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
CSL 19381	BA-2	894-900	42.50	10.90	22.20		14.20	5.73	1.58		0.35	2.54
CSL 19382	BA-2	900-905	47.00	21.30	9.34		7.15	9.57	2.64		0.59	0.47
CSL 19385	BA-2	1608-1609.5	62.80	15.80	8.84		0.70	3.64	5.66		0.90	1.02
CSL 19387	BA-2	1665.6-1666.3	60.30	12.20	4.41		2.62	9.76	4.58		0.97	0.38
CSL 19388	BA-2	1678.5-1679	54.60	13.90	8.93		4.12	9.68	3.78		0.58	1.28
CSL 19390	BA-2	1793-1797.7	43.10	12.80	18.70		16.10	6.30	1.42		0.25	1.15
CSL 19392	BA-2	1797.7-1805.5	45.70	19.90	10.70		8.20	10.20	2.19		0.32	1.05
CSL 19393	BA-2	1865.5-1875	43.50	17.50	13.10		10.90	8.59	1.68		0.24	0.70
CSL 18453	BA-2	1875-1884	45.50	21.10	9.88		8.63	9.60	2.17		0.29	0.67
CSL 18454	BA-2	1884-1888	44.40	17.50	13.40		12.50	7.96	1.90		0.24	0.59
CSL 18455	BA-2	1891.7-1897.1	45.40	21.80	8.24		6.57	11.60	2.24		0.32	0.90
CSL 18458	BA-2	2009-2010.4	49.00	18.00	8.77		5.57	12.10	2.95		0.42	2.61
CSL 18460	BA-2	2369.5-2376.9	45.10	17.90	14.30		8.32	8.63	2.36		0.41	2.66
CSL 18462	BA-2	2438.4-2438.8	40.50	17.10	21.60		7.69	4.37	2.31		0.75	1.47
CSL 18464	BA-2	2516.5-2522	46.80	20.40	11.10		6.35	9.53	2.70		0.54	1.40
CSL 18534	BA-2	2579-2582	50.40	18.70	11.20		4.34	8.17	3.40		0.66	1.06
CSL 18536	BA-2	2582-2588	47.40	19.30	11.90		8.47	8.63	2.85		0.32	0.75
CSL 18540	BA-2	2746-2756	46.50	18.20	12.70		6.20	9.22	2.94		0.62	2.47
CSL 18542	BA-2	2756-2766	45.40	16.50	15.70		7.83	7.82	2.56		0.47	2.77
CSL 18543	BA-2	2766-2776	44.00	15.10	18.40		8.88	7.02	2.49		0.38	3.86
CSL 18537	BA-2	2776-2781	45.70	14.40	17.40		8.80	8.11	2.40		0.37	3.07
CSL 18539	BA-2	2781-2785	43.30	16.80	15.50		10.30	7.18	1.85		0.27	0.70
CSL 18544	BA-2	2954-2964	46.50	20.20	12.30		8.49	8.82	2.70		0.32	0.66
CSL 18546	BA-2	3074-3084	46.50	20.40	11.80		7.92	8.68	2.73		0.29	0.51
CSL 18547	BA-2	3200.5-3210.5	44.30	17.10	14.40		11.80	8.21	2.07		0.36	1.17
CSL 18549	BA-2	3210.5-3220.5	47.00	20.70	10.40		6.52	10.30	2.58		0.47	1.65
CSL 18551	BA-2	3234.8-3240	46.20	19.30	12.20		8.06	9.14	2.42		0.63	1.44
CSL 18552	BA-2	3253-3256	61.00	12.80	8.98		4.61	4.34	3.34		1.27	1.47
CSL 18554	BA-2	3269.6-3273.1	47.50	2.69	21.90		14.30	6.88	0.93		0.40	4.53
CSL 18556	BA-2	3342-3352	33.10	10.00	30.90		14.70	3.97	1.34		0.19	4.70
CSL 18558	BA-2	3367-3373	32.20	7.61	33.70		15.70	3.28	0.82		0.23	4.89
CSL 18560	BA-2	3378-3388	40.00	9.70	23.30		14.20	5.11	1.21		0.40	3.02
CSL 18562	BA-2	3474-3684	56.60	17.10	6.88		5.67	2.93	5.56		1.62	0.34
CSL 18596	BA-5	120-127	44.30	22.60	11.60		5.99	11.00	2.19		0.22	1.85
CSL 18597	BA-5	127-129.8	33.90	2.24	31.20		10.60	12.00	0.44		0.03	7.76
CSL 18598	BA-5	129.8-139.8	47.50	22.40	9.64		4.59	10.60	2.81		0.27	1.99
CSL 18432	BI-128	1581& 1600	42.40	14.30	16.90		13.80	6.58	1.85		0.22	0.50
CSL 18433	BI-128	1835& 1842	38.90	14.40	23.00		8.01	6.57	2.01		0.31	5.08
CSL 18434	BI-128	1920& 1962	38.40	13.60	21.50		7.18	7.81	1.65		0.33	1.28
CSL 19395	BI-134	1156-1166	45.90	22.50	9.61	5.70	5.49	9.96	2.44	1.60	0.50	0.64
CSL 19397	BI-134	1216-1226	45.40	19.80	12.80	10.00	7.43	9.06	2.32	1.80	0.30	0.79
CSL 19400	BI-134	1256-1266	44.90	19.20	12.00	9.20	7.62	9.06	2.40	1.90	0.50	1.02
CSL 19401	BI-134	1696-1706	46.10	18.60	11.50	8.80	7.33	8.99	2.62	1.90	0.70	1.39
CSL 19402	BI-134	1706-1716	46.30	18.60	12.80	10.00	6.36	8.97	2.63	2.10	1.00	1.62
CSL 19403	BI-134	1716-1726	47.00	18.00	12.40	9.00	6.42	7.92	2.74	1.90	1.20	1.53
CSL 19410	BI-144	665-675	44.70	17.20	14.80	11.00	11.00	7.82	2.32	1.90	0.30	0.89
CSL 19412	BI-144	675-685	44.70	19.70	12.50	9.20	7.78	9.01	2.47	1.80	0.40	0.73
CSL 19413	BI-144	685-695	45.80	21.10	10.90	7.90	6.66	9.29	2.73	2.10	0.60	0.57
CSL 19405	BI-144	1412-1417	44.80	16.40	15.30	11.00	7.11	8.43	2.59	2.00	0.80	2.33
CSL 19407	BI-144	1435-1445	43.30	16.60	15.10	11.00	6.94	7.28	2.77	2.20	0.80	2.00
CSL 19409	BI-144	1462-1472	44.40	17.00	15.60	10.00	6.61	7.53	2.78	2.00	0.80	4.08

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL2O3 %	FE2O3 %	FE %	MGO %	CAO %	NA2O %	NA %	K2O %	TIO2 %
CSL 19415	BI-147	1485-1494	44.30	15.00	16.40	13.00	6.52	7.48	2.35	2.20	1.20	2.95
CSL 19417	BI-147	1556.3-1566.2	43.20	13.60	19.50	15.00	11.10	7.20	2.03	1.50	0.50	1.85
CSL 19419	BI-147	1566.2-1575.2	43.40	14.40	18.60	14.00	7.97	7.70	2.34	1.80	0.62	2.68
CSL 19421	BI-147	1592-1602	41.70	10.30	23.90	17.00	14.60	5.52	1.46	1.20	0.50	1.48
CSL 19422	BI-147	1602-1612	40.20	7.24	25.30	17.00	16.60	5.02	1.16	0.80	0.40	2.22
CSL 19424	BI-147	1928.8-1939.8	44.40	15.70	17.20	11.00	9.48	7.63	2.29	1.70	0.60	1.47
CSL 10952	CN-7	1151	13.10	7.96	36.10		7.13	2.17	0.27		0.01	23.30
CSL 17283	D-10	390- 395	40.90	12.80	19.10	13.60	13.40	5.97	1.48	1.20	0.41	1.02
CSL 17284	D-10	400- 416	43.40	17.30	14.80	10.10	9.76	7.59	2.03	1.60	0.47	0.84
CSL 17285	D-10	773- 782	46.70	17.00	13.90	9.80	6.96	8.24	2.41	1.90	0.51	3.01
CSL 17286	D-10	782- 789	45.60	19.80	11.20	8.40	8.32	9.24	2.26	1.80	0.57	0.77
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--	--	--	--
CSL 17289	D-10	782- 798	53.50	15.30	9.79	7.40	6.30	7.98	2.96	2.40	0.62	1.10
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--	--	--	--
CSL 17290	D-10	798- 805	47.60	15.60	13.50	9.50	8.09	7.69	2.25	1.70	0.77	1.62
CSL 17291	D-10	805- 814.1	40.6	11.9	21.4	14.50	13.8	5.70	1.29	1.10	0.38	0.86
CSL 17292	D-10	814.1- 818.3	40.2	10.6	22.8	15.30	14.7	5.09	1.26	1.00	0.37	0.91
CSL 17293	D-10	818.3- 821	44.0	17.3	14.5	10.10	9.18	8.07	2.14	1.70	0.36	0.89
CSL 17294	D-10	1167-1177	44.8	17.8	14.4	9.50	8.54	8.57	2.16	1.70	0.34	0.31
CSL 17295	D-10	1177-1187	44.1	14.5	14.8	9.80	6.00	9.27	2.21	1.60	0.52	5.68
CSL 17663	D-10	1475.8-1476.3	41.40	14.50	23.00	16.30	6.84	6.95	1.84	1.50	0.53	1.96
CSL 17664	D-10	1476.3-1479.2	13.60	4.69	71.00	44.70	4.41	1.45	0.22	0.24	0.17	4.31
CSL 17665	D-10	1479.2-1486.8	43.90	15.10	18.20	12.70	8.35	7.90	1.93	1.50	0.60	0.95
CSL 17666	D-10	1486.8-1491	22.20	6.03	58.60	37.10	6.05	2.23	0.52	0.49	0.28	4.10
CSL 17667	D-10	1491-1493.8	11.20	4.21	76.20	45.40	3.28	1.07	0.11	0.13	0.14	4.23
CSL 17668	D-10	1493.8-1501.3	22.80	5.51	60.80	34.50	5.35	2.18	0.46	0.74	0.30	3.58
CSL 17669	D-10	1501.3-1507.5	18.70	4.22	68.30	42.40	4.60	1.48	0.26	0.27	0.13	3.69
CSL 17670	D-10	1507.5-1513.8	50.60	3.94	28.10	19.20	11.00	3.06	0.63	0.50	0.24	0.78
CSL 17674	D-10	1581-1591	42.50	14.00	21.50	15.30	6.75	7.31	2.16	1.80	0.74	2.09
CSL 17675	D-10	1591-1601	36.40	12.00	29.60	19.40	5.81	5.73	1.78	1.30	0.82	1.70
CSL 17676	D-10	1601-1603.7	36.10	11.90	31.40	20.60	4.81	4.73	1.65	1.30	0.95	1.43
CSL 17677	D-10	1603.7-1605	5.64	1.66	73.10	43.20	0.78	0.43	0.15	0.16	0.16	0.73
CSL 17678	D-10	1605-1608	41.40	14.00	22.60	14.20	5.28	6.03	2.06	1.50	1.36	2.45
CSL 17679	D-10	1608-1614.7	46.50	14.90	15.10	10.50	5.85	7.54	2.46	1.80	1.45	2.89
CSL 17680	D-10	1614.7-1616.2	22.20	6.35	52.40	31.90	2.02	1.51	1.26	1.00	0.77	0.66
CSL 17681	D-10	1616.2-1620	55.00	17.00	8.97	5.80	3.27	3.50	4.99	3.30	2.10	0.44
CSL 18440	D-4	1276.4-1286.4	57.00	17.30	5.36	4.30	3.81	4.95	5.58	4.60	2.17	0.42
CSL 18441	D-4	1286.4-1294.6	49.60	16.00	8.61	6.90	2.53	2.71	5.37	4.80	1.61	0.31
CSL 18442	D-4	1294.6-1305.3	58.70	18.30	4.46	3.30	2.75	4.66	6.31	4.90	1.67	0.30
CSL 18443	D-4	1305.3-1309	59.40	17.80	4.84	3.80	3.51	4.07	5.96	4.80	1.57	0.36
CSL 17704	D-5	1321-1328.7	44.40	18.00	13.50	10.90	6.15	9.22	2.35	2.20	0.70	1.94
CSL 17706	D-5	1339-1344	31.00	8.70	28.90	23.30	7.80	5.98	0.89	0.92	0.20	4.47
CSL 17707	D-5	1613-1613.5	INF	INF	INF	50.40	INF	INF	INF	0.05*	INF	INF
CSL 17701	D-5	1615.5-1616	INF	INF	INF	39.10	INF	INF	INF	0.05*	INF	INF
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	44.50	16.10	16.30		8.95	8.25	2.50		0.65	2.59
CSL 16681	D-6A	1927.6-1929.8	--	--	--		--	--	--		--	--
CSL 16682	D-6A	1929.8-1931.8	--	--	--		--	--	--		--	--
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	39.90	11.30	24.00		13.90	5.63	1.70		0.47	2.84
CSL 16684	D-6A	1931.8-1934	--	--	--		--	--	--		--	--
CSL 16685	D-6A	1934-1937.8	--	--	--		--	--	--		--	--
CSL 16687	D-6A	1937.8-1938.8	17.30	10.10	55.10		6.54	2.39	0.76		0.18	8.64

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
CSL 16691 (16688-90)	D-6A	1938.8-1942.7	49.30	14.40	14.50		7.17	5.96	3.13		0.88	1.80
CSL 16688	D-6A	1938.8-1941	--	--	--		--	--	--		--	--
CSL 16689	D-6A	1941-1942	--	--	--		--	--	--		--	--
CSL 16690	D-6A	1942-1942.7	--	--	--		--	--	--		--	--
CSL 16692	D-6A	1942.7-1945.2	8.37	12.10	62.90		5.21	1.17	0.51		0.24	10.60
CSL 16693	D-6A	1945.2-1946.8	11.60	11.10	61.20		4.82	1.90	0.62		0.19	9.10
CSL 16694	D-6A	1946.8-1948.7	7.54	8.85	73.60		4.09	1.01	0.39		0.11	5.50
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	37.80	14.00	26.20		9.58	6.18	2.00		0.49	3.81
CSL 16695	D-6A	1948.7-1952.6	--	--	--		--	--	--		--	--
CSL 16696	D-6A	1952.6-1957.5	--	--	--		--	--	--		--	--
CSL 16697	D-6A	1957.5-1959	--	--	--		--	--	--		--	--
CSL 16698	D-6A	1959-1959.8	--	--	--		--	--	--		--	--
CSL 16699	D-6A	1959.8-1964.8	--	--	--		--	--	--		--	--
CSL 17155 (17151-54)	D-6A	1964.8-1981	39.20	12.60	24.80		11.50	6.02	1.88		0.52	3.32
CSL 17151	D-6A	1964.8-1969.7	--	--	--		--	--	--		--	--
CSL 17152	D-6A	1969.7-1972.7	--	--	--		--	--	--		--	--
CSL 17153	D-6A	1972.7-1978.8	--	--	--		--	--	--		--	--
CSL 17154	D-6A	1978.8-1981	--	--	--		--	--	--		--	--
CSL 17156	D-6A	1981-1982.2	10.70	8.89	68.40		4.25	1.65	0.57		0.12	5.83
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	42.60	13.40	21.30		10.40	7.10	2.16		0.58	2.88
CSL 17157	D-6A	1982.2-1983.9	--	--	--		--	--	--		--	--
CSL 17158	D-6A	1983.9-1989.2	--	--	--		--	--	--		--	--
CSL 16676	D-8	967.7-972.5	29.40	11.70	38.70		8.38	4.04	1.47		0.45	5.54
CSL 16677	D-8	972.5-976.8	25.80	11.00	43.00		8.51	3.42	1.19		0.39	5.94
CSL 16678	D-8	976.8-981	17.40	8.87	59.80		5.55	2.28	0.84		0.24	5.26
CSL 16679	D-8	981-986	15.70	9.67	60.80		5.07	2.31	0.85		0.20	6.23
CSL 16680	D-8	986-990.2	22.20	10.20	51.20		6.87	2.91	1.04		0.29	5.65
CSL 18446	D-9	1292.5-1299	46.00	12.50	22.30	16.10	5.52	3.58	3.30	2.80	1.12	0.24
CSL 18447	D-9	1299-1302	54.30	19.00	8.85	6.90	2.17	3.68	5.91	4.90	1.61	0.17
CSL 18448	D-9	1302-1305.8	48.90	16.50	15.60	11.70	2.77	4.33	4.74	4.10	1.19	0.39
CSL 18449	D-9	1305.8-1309	36.20	12.00	30.00	21.00	1.90	2.27	3.42	3.00	0.82	0.22
CSL 18450	D-9	1309-1319	49.70	17.10	15.20	10.40	3.76	5.02	4.16	3.20	1.16	0.90
CSL 18436	DU 15	2603-2613	60.20	16.50	5.46	4.50	4.20	3.05	5.25	4.40	2.21	0.21
CSL 18437	DU 15	2613-2622.5	60.70	17.90	4.45	3.50	2.86	3.56	5.82	4.70	2.07	0.23
CSL 18438	DU 15	2622.5-2631.5	55.40	13.00	8.29	6.20	5.52	7.75	4.06	3.30	1.72	0.76
CL 16660	DU-14	3897.6-3898.8	39.00	8.54	28.30		16.60	3.43	0.95		0.39	1.67
CL 16663 (16661-62)	DU-14	3898.8-3901.2	7.40	8.84	64.40		4.93	0.96	0.33		0.05	11.90
CL 16661	DU-14	3898.8-3900.6	--	--	--		--	--	--		--	--
CL 16662	DU-14	3900.8-3901.2	--	--	--		--	--	--		--	--
CL 16664	DU-14	3901.5-3904	33.90	9.49	31.80		16.50	3.84	1.12		0.11	3.07
CL 16665	DU-14	3904-3907.9	27.90	12.50	37.00		9.43	4.26	1.30		0.15	5.92
CSL 16642	DU-15	248-253	48.60	20.30	9.92		4.89	10.30	2.98		0.69	1.54
CSL 16643	DU-15	445-450	47.80	21.50	7.70		3.36	9.17	2.83		2.11	2.09
CSL 16644	DU-15	458-463	46.90	17.80	12.80		4.14	8.73	2.65		1.60	3.93
CSL 16645	DU-15	797-802	47.90	19.40	11.10		5.01	9.19	2.99		0.84	1.90
CSL 16646	DU-15	995.7-999.7	49.10	21.30	9.40		4.23	9.86	3.13		0.78	1.42
CSL 16647	DU-15	1464-1464.6	42.10	19.00	17.70		7.52	8.75	2.32		0.31	2.96
CSL 16648	DU-15	1705-1710	46.40	17.10	12.70		7.95	9.33	2.37		0.59	1.80
CSL 16649	DU-15	1899-1904	47.10	16.80	11.60		7.46	10.10	2.41		0.54	2.25
CSL 16650	DU-15	2140.6-2145	47.70	20.70	8.68		5.55	9.48	2.76		1.83	1.80
CSL 16651	DU-15	2172-2177	47.60	19.00	11.50		6.50	8.34	3.03		0.93	1.18

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA2O %	NA %	K2O %	TIO2 %
CSL 16652	DU-15	2283-2288	48.20	23.00	7.15		4.54	11.00	2.95		0.42	0.98
CSL 17268	DU-15	2364-236	36.80	6.40	24.20		20.80	2.35	0.79		0.18	0.72
CSL 16641	DU-15	2434-2438	31.60	11.00	32.70		12.30	4.20	1.56		0.26	5.29
CSL 16653(16658-59)	DU-15	2455-2465	55.20	18.90	6.20		4.61	5.58	4.74		2.32	0.29
CSL 16658	DU-15	2455-2460	--	--	--		--	--	--		--	--
CSL 16659	DU-15	2460-2465	--	--	--		--	--	--		--	--
CSL 19394	DU-15	2593-2603	60.00	18.20	4.18	3.50	2.81	3.63	5.80	4.80	2.19	0.18
CL 16668	DU-16	3355-3355.7	16.10	10.90	49.80		8.05	2.18	0.65		0.04	13.60
CL 16669	DU-16	3363-3364	51.30	14.50	12.70		7.05	7.60	3.10		0.50	1.01
CL 16670	DU-16	3371.5-3372.5	34.20	12.00	30.70		13.90	4.47	1.20		0.11	4.62
CL 16671	DU-16	3625-3627	40.00	9.35	24.20		16.70	5.14	1.34		0.24	2.03
CL 16674	DU-16	3628.7-3630.4	39.00	6.79	28.40		20.30	3.74	1.04		0.23	2.04
CSL 17709	DU-9	2585-2588	47.20	19.90	11.10	9.40	7.40	9.66	2.77	2.60	0.50	1.00
CSL 17710	DU-9	2588-2591.3	45.10	17.50	14.40	11.70	9.11	8.20	2.38	2.30	0.53	1.11
CSL 17711	DU-9	2591.3-2592.1	24.20	15.60	28.50	7.10	6.28	4.73	1.19	0.35	0.16	5.57
CSL 17712	DU-9	2592.1-2593.7	43.10	11.30	20.10	15.80	16.10	5.79	1.47	1.40	0.46	1.10
CSL 17713	DU-9	2593.7-2596.7	45.10	19.20	12.40	10.30	10.50	9.14	2.04	2.00	0.31	0.58
CSL 19459	II-1	195.7-205.7	46.40	19.70	12.40	8.40	7.30	9.86	2.59	1.80	0.30	0.75
CSL 19460	II-1	205.7-211	35.90	12.80	26.60	19.00	9.00	7.00	1.56	1.10	0.16	5.65
CSL 19461	II-1	211-221	23.10	2.24	41.40	33.00	12.70	3.27	0.28	0.33	0.10*	12.60
CSL 19462	II-1	221-223.3	23.40	1.39	45.50	34.00	12.50	3.58	0.21	0.23	0.10*	8.25
CSL 19463	II-1	223.3-233.3	37.30	10.60	23.50	18.00	11.80	8.01	1.13	0.88	0.10	6.25
CSL 19467	II-3	187-194.7	40.20	9.78	26.40	19.00	15.80	4.97	1.16	1.00	0.10	0.50
CSL 19468	II-3	200-203.3	41.30	13.30	20.80	18.00	12.30	6.48	1.56	1.30	0.40	0.70
CSL 19470	II-5	267.5-272.4	33.00	2.77	30.30	23.00	15.50	6.73	0.55	0.36	0.30	8.14
CSL 19472	II-6	218.6-223.3	38.20	11.00	31.40	23.00	8.70	4.39	1.68	0.81	1.00	0.94
CSL 19473	II-6	223.3-231.2	26.70	5.11	47.10	35.00	8.93	1.74	0.30	0.28	1.00	0.75
CSL 18428	NM-5	1815& 1820.5	38.30	13.00	23.10		10.80	6.35	1.44		0.47	1.99
CSL 18429	NM-5	1822& 1826.5	24.00	7.88	46.50		9.42	2.74	0.73		0.24	4.42
CSL 18430	NM-5	1859& 1864	27.80	6.59	47.30		4.52	1.31	1.49		0.34	0.30
CSL 18431	NM-9	1549.5& 1579	31.80	12.10	35.80		5.22	4.80	1.84		0.48	6.00
CSL 19433	W-14	424-433.7	46.00	21.50	10.20	7.90	7.14	10.50	2.19	1.70	0.40	0.93
CSL 19434	W-14	433.7-440.4	39.50	12.00	21.20	16.00	8.99	10.20	0.88	0.65	0.60	3.07
CSL 19435	W-14	440.4-450	44.10	18.80	14.80	12.00	8.58	9.32	1.50	1.40	0.60	1.40
CSL 19448	W-4	193.8-203	43.80	16.70	17.20	13.00	9.24	7.61	2.39	1.70	0.30	1.51
CSL 19449	W-4	203-213	44.10	18.60	15.80	14.00	7.32	8.66	2.61	1.90	0.40	0.79
CSL 19450	W-4	213-223	46.50	17.80	13.70	10.00	5.89	7.87	3.15	2.10	0.80	3.00
CSL 19453	W-4	2144-2154	44.60	16.80	16.60	11.00	9.69	7.47	2.42	1.70	0.60	1.08
CSL 19454	W-4	2154-2164	44.10	15.70	16.80	12.00	11.00	7.11	2.32	1.70	0.40	1.57
CSL 19456	W-4	2524-2534	43.70	16.80	17.10	13.00	7.66	7.81	2.66	2.10	0.20	1.37
CSL 19457	W-4	2534-2544	43.20	16.70	18.80	13.00	7.96	7.36	2.50	1.80	0.50	1.38
CSL 19443	W-8B	476-753.7	45.80	19.10	14.50	12.00	7.33	8.79	2.64	2.10	0.44	0.84
CSL 19437	W-8B	495-505	44.10	16.40	15.70	12.00	11.10	8.02	2.15	1.60	0.50	1.12
CSL 19438	W-8B	505-515	45.00	18.00	13.50	11.00	8.71	8.45	2.45	1.90	0.50	1.20
CSL 19439	W-8B	515-525	45.10	17.70	14.90	10.00	7.32	8.61	2.67	2.00	0.50	1.31
CSL 19440	W-8B	525-535	44.60	17.40	15.90	12.00	7.48	8.31	2.60	2.10	0.50	1.26
CSL 19478	W-8B	533-539	45.50	17.60	15.60	12.00	7.91	8.18	2.57	1.90	1.30	1.05
CSL 19441	W-8B	553.3-554.3	45.80	14.40	18.20	13.00	8.62	5.39	2.60	1.80	0.70	1.49
CSL 19444	W-8B	753.7-765	44.10	14.40	16.90	13.00	5.75	9.05	2.52	1.90	0.60	3.98
CSL 19445	W-8B	765-775	46.70	19.80	12.50	8.70	6.65	9.24	2.84	2.20	0.50	1.24
CSL 19425	W-9	359-369	40.60	11.40	19.40	11.00	8.36	8.26	1.72	1.00	0.50	4.78

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	SIO2 %	AL2O3 %	FE2O3 %	FE %	MGO %	CAO %	NA2O %	NA %	K2O %	TIO2 %
CSL 19426	W-9	369-379	47.20	22.90	7.36	5.90	4.30	10.00	2.62	1.80	1.40	0.82
CSL 19427	W-9	379-389	46.20	17.60	13.50	11.00	8.95	8.29	2.43	1.90	0.60	1.21
CSL 19429	W-9	925-935	47.50	16.70	14.40	11.00	6.52	7.47	2.45	1.90	0.90	1.56
CSL 19430	W-9	935-945	43.90	15.30	16.40	13.00	6.58	8.46	2.20	1.60	0.80	1.89
CSL 19431	W-9	945-955	45.60	15.80	16.00	12.00	6.60	7.68	2.56	2.00	1.20	2.28

* denotes the figure is less than the detection limit

TABLE III
Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CL 17165	34872	1182-1187.6	0.11	0.26	0.04	0.46*	1.19	350	40	7000	1600	1100
CL 17169 (17166-68)	34872	1187.6-1192	0.08	0.23	0.07	1.54*	0.68	150	20*	4000	1300	1300
CL 17166	34872	1187.6-1189.2	--	--	--	--	--	--		--	--	--
CL 17167	34872	1189.2-1190.8	--	--	--	--	--	--		--	--	--
CL 17168	34872	1190.8-1192	--	--	--	--	--	--		--	--	--
CL 17173 (17170-72)	34872	1192-1199.7	0.04	0.27	0.07	1.85*	0.70	150	20*	3200	1300	1100
CL 17170	34872	1192-1193.5	--	--	--	--	--	--		--	--	--
CL 17171	34872	1193.5-1194.2	--	--	--	--	--	--		--	--	--
CL 17172	34872	1194.2-1199.7	--	--	--	--	--	--		--	--	--
CL 17174	34872	1199.7-1204.7	0.05	0.19	0.05	0.15	1.23	50*	20*	6400	2000	500
CL 17175	34872	1220.8-1223	0.17	0.23	0.10	0.31*	0.74	50	60	3400	1300	600
CL 17178 (17176-77)	34872	1223-1227.9	0.05	0.22	0.14	0.00	0.58	100	20*	2700	1800	1700
CL 17176	34872	1223-1226.4	--	--	--	--	--	--		--	--	--
CL 17177	34872	1226.4-1227.9	--	--	--	--	--	--		--	--	--
CL 17182 (17179-81)	34872	1227.9-1239.4	0.07	0.23	0.14	1.69	1.34	300	70	6500	2800	300
CL 17179	34872	1227.9-1232.6	--	--	--	--	--	--		--	--	--
CL 17180	34872	1232.6-1233.9	--	--	--	--	--	--		--	--	--
CL 17181	34872	1233.9-1239.4	--	--	--	--	--	--		--	--	--
CL 17183	34872	1239.4-1241	0.05	0.24	0.12	0.31*	0.72	200	50	3200	1500	1300
CL 17186 (17184-85)	34872	1241-1250	0.08	0.22	0.14	2.92	1.30	350	60	6400	2300	930
CL 17184	34872	1241-1245	--	--	--	--	--	--		--	--	--
CL 17185	34872	1245-1250	--	--	--	--	--	--		--	--	--
CL 17189 (17187-88)	34872	1250-1261	0.08	0.20	0.14	2.00	1.63	150	70	8400	1800	450
CL 17187	34872	1250-1256.1	--	--	--	--	--	--		--	--	--
CL 17188	34872	1256.1-1261	--	--	--	--	--	--		--	--	--
CL 17193 (17190-92)	34872	1261-1271.2	0.10	0.18	0.05	0.31	0.92	50*	80	4300	1500	590
CL 17190	34872	1261-1264.7	--	--	--	--	--	--		--	--	--
CL 17191	34872	1264.7-1267.5	--	--	--	--	--	--		--	--	--
CL 17192	34872	1267.5-1271.2	--	--	--	--	--	--		--	--	--
CL 17194	34872	1295-1298.7	0.20	0.21	0.06	0.31*	1.23	50*	140	5500	1600	470
CL 17199 (17195-98)	34872	1298.7-1305.7	0.09	0.19	0.16	0.62*	0.54	100	60	1900	1500	1600
CL 17195	34872	1298.7-1301.2	--	--	--	--	--	--		--	--	--
CL 17196	34872	1301.2-1302.7	--	--	--	--	--	--		--	--	--
CL 17197	34872	1302.7-1303.5	--	--	--	--	--	--		--	--	--
CL 17198	34872	1303.5-1305.7	--	--	--	--	--	--		--	--	--
CL 17200	34872	1305.7-1310.5	0.10	0.18	0.08	1.08	1.80	150	70	10000	2600	2800
CL 17201	34872	1310.5-1315	0.05	0.19	0.20	1.08*	0.69	150	50	2700	2200	3100
CL 17202	34872	1315-1319	0.06	0.16	0.20	1.23*	0.94	100	60	2800	2900	3100
CL 17203	34872	1319-1324.8	0.05	0.16	0.17	1.38*	0.67	100	60	2400	2500	2000
CL 17204	34872	1324.8-1328.5	0.07	0.17	0.19	0.46*	0.60	200	60	2300	2200	2300
CL 17205	34872	1331-1333.2	0.12	0.23	0.06	4.31	1.39	750	80	6200	2200	490
CL 17206	34872	1351-1356	0.15	0.19	0.12	0.00	1.07	150	120	4300	1800	1500
CSL 17254	64046	50.0-60	0.34	0.17	0.08	0.54	1.26	300	410	2900	360	160
CSL 17255	64046	70-80	0.17	0.14	0.02	2.62	1.75	250	840	890	190*	210
CSL 17223	64048	100-105	0.14	0.14	0.05	6.62	5.93	250	520	4600	650	200
CSL 17267	64048	100-105	0.04	0.05	0.01*	13.40	42.60	150	20	13000	3100	160
CSL 17270	64048	105-110	0.32	0.14	0.05	6.39	7.02	400	290	4100	720	160
CSL 17269	64048	105-110	0.03	0.05	0.01*	13.40	45.00	200	30	11000	3400	260
CSL 17224	64048	135-140	0.12	0.08	0.03	4.00	4.94	250	1000	4500	550	280
CSL 17265	64048	135-140	0.03	0.06	0.01	11.40	40.40	300	110	17000	3100	80
CSL 17266	64048	140-145	0.10	0.05	0.09	8.54	6.65	300	830	3900	500	230

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 17225	64048	200-205	0.11	0.16	0.09	3.62	0.43	350	240	210	250	1700
CSL 17264	64048	205-210	NSS	NSS	NSS	NSS	NSS	NSS	NSS	NSS	150*	290
CSL 17226	64048	220-230	0.51	0.16	0.15	0.92*	0.32	450	560	73	120*	90
CSL 17227	64048	240-245	0.54	0.22	0.08	0.77*	0.07	1600	740	180	200*	100
CSL 17228	64048	285-290	0.05	0.22	0.07	0.77*	0.24	200	250	58	160*	240
CSL 17249	66010	20-30	0.25	0.18	0.06	1.16	2.98	300	200	5600	630	140
CSL 17250	66010	40-45	0.26	0.19	0.08	2.23	2.39	250	480	3600	680	130
CSL 17262	66012	11-20	0.25	0.13	0.04	2.08	3.50	250	720	2600	280	190
CSL 17238	66014	80-90	0.18	0.14	0.09	0.77	3.90	250	190	8600	1200	150
CSL 17239	66014	105-115	0.18	0.14	0.08	0.70	4.02	200	180	8700	1000	210
CSL 17240	66014	145-150	0.18	0.13	0.10	0.93	0.59	200	200	2200	480	120
CSL 17241	66014	265-270	0.23	0.18	0.04	6.39	2.04	300	260	4400	600	170
CSL 17242	66014	300-310	0.25	0.16	0.06	1.54	2.05	250	250	3400	340	150
CSL 17243	66014	335-345	0.27	0.16	0.07	1.16	2.92	250	250	5500	690	160
CSL 17244	66014	360-370	0.16	0.18	0.05	0.47	2.00	350	130	2900	420	420
CSL 17245	66014	380-390	0.21	0.16	0.03	1.54	6.12	300	220	7300	670	200
CSL 17246	66014	445-455	0.56	0.15	0.20	0.16	0.05	250	580	63	120*	210
CSL 17247	66014	545-550	0.10	0.83	0.03	1.53*	*	200	40	76	170*	110
CSL 17248	66014	605-615	0.08	0.99	0.02	3.30*	*	400	50	17	170*	60
CSL 17229	66017	24.8-30	0.22	0.14	0.04	1.38	3.33	300	300	2100	440	230
CSL 17230	66017	155-165	0.25	0.18	0.05	0.93	3.42	200	280	4000	460	170
CSL 17231	66017	190-195	0.16	0.14	0.02	3.08	3.72	150	180	4500	660	310
CSL 17232	66017	240-245	0.28	0.17	0.07	1.00	3.26	300	280	5800	730	180
CSL 17233	66017	260-270	0.15	0.14	0.05	0.70	1.43	200	270	2000	320	250
CSL 17234	66017	280-290	0.25	0.17	0.12	3.85	6.19	300	570	5400	700	220
CSL 17235	66017	350-360	0.46	0.16	0.08	0.23*	0.04	250	250	150	120*	110
CSL 17236	66017	380-390	0.69	0.28	0.01	1.69*	0.02	550	480	69	170*	70
CSL 17237	66017	490-495	0.13	0.42	0.01	1.69*	*	250	160	37	160*	120
CSL 18565	BA-1	509.6-518	0.04	0.06	0.13	1.38	0.07	150	20*	990	180*	240
CSL 18566	BA-1	518-527	0.04	0.06	0.08	1.69	0.40	50	20*	2100	260	170
CSL 18568	BA-1	1097.1-1106	0.62	0.26	0.17	0.15	0.16	50*	400	380	200*	260
CSL 18570	BA-1	1937-1947	0.97	0.21	0.09	0.15	0.11	350	610	530	190*	170
CSL 18572	BA-1	1947-1956.9	1.41	0.21	0.10	0.00	0.08	1100	760	290	250*	100
CSL 18573	BA-1	1956.9-1961.3	0.81	0.24	0.11	0.15*	0.45	350	360	2000	440	210
CSL 18574	BA-1	1961.3-1968	0.14	0.14	0.10	0.92	*	500	90	190	180*	360
CSL 18575	BA-1	1968-1974	0.42	0.26	0.12	0.31	0.11	300	300	630	360	230
CSL 18576	BA-1	1974-1979.2	0.33	0.24	0.12	0.15	0.10	300	220	550	250*	250
CSL 18578	BA-1	1979.2-1987.4	0.51	0.23	0.11	0.15*	0.10	150	440	690	250*	200
CSL 18579	BA-1	2005.1-2011	0.05	0.15	0.02	0.16	0.05	50	70	950	320*	970
CSL 18580	BA-1	2017.8-2019.8	0.05	0.22	0.07	0.15	0.17	50	160	1900	260	2400
CSL 18582	BA-1	2635-2643	0.12	0.15	0.07	1.08	0.76	900	260	5600	700	120
CSL 18583	BA-1	2643-2653	0.07	0.16	0.16	1.39	0.39	800	200	4000	280	170
CSL 18585	BA-1	2653-2663	0.13	0.15	0.17	0.85	0.67	800	170	6300	430	140
CSL 18586	BA-1	2663-2673	0.12	0.15	0.07	0.31	0.71	600	150	4200	240	150
CSL 18587	BA-1	2673-2680	0.09	0.14	0.15	0.77	0.94	550	120	5100	580	130
CSL 18588	BA-1	2680-2690	0.22	0.16	0.07	0.15	0.94	50*	220	4400	510	170
CSL 18590	BA-1	2690-2700	0.11	0.16	0.03	0.00	0.84	50*	160	4600	520	180
CSL 18591	BA-1	2700-2710	0.10	0.15	0.04	0.15*	1.04	50*	100	4700	900	220
CSL 18592	BA-1	2710-2718	0.12	0.16	0.03	0.31*	0.79	50*	120	4100	530	170
CSL 18593	BA-1	2718-2726.4	0.12	0.19	0.02	0.15*	1.41	50*	520	4600	860	190
CSL 18594	BA-1	3009.3-3019.5	0.27	0.18	0.02	0.15*	0.80	100	400	2600	290	220

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 19381	BA-2	894-900	0.17	0.26	0.15	0.62*	0.18	50	100	1700	410	240
CSL 19382	BA-2	900-905	0.05	0.12	0.12	1.54	0.13	50*	17	1800	310	90
CSL 19385	BA-2	1608-1609.5	0.15	0.11	0.05	0.54	28	550	20*	380	270*	100
CSL 19387	BA-2	1665.6-1666.3	0.09	0.08	3.46	4.15	0.15	400	20	190	240*	130
CSL 19388	BA-2	1678.5-1679	0.43	0.14	0.34	2.15	*	850	220	380	270*	110
CSL 19390	BA-2	1793-1797.7	0.05	0.23	0.19	0.31	0.15	50	220	1800	490	140
CSL 19392	BA-2	1797.7-1805.5	0.05	0.14	0.10	1.93	0.29	50*	20	3200	210*	120
CSL 19393	BA-2	1865.5-1875	0.05	0.16	0.08	3.85	0.27	250	30	3400	380	310
CSL 18453	BA-2	1875-1884	0.07	0.12	0.06	2.46	0.19	50	20*	2700	240	350
CSL 18454	BA-2	1884-1888	0.05	0.16	0.05	1.85	0.27	250	20	4100	550	360
CSL 18455	BA-2	1891.7-1897.1	0.06	0.11	0.06	2.47	0.23	250	20*	2800	360	220
CSL 18458	BA-2	2009-2010.4	0.17	0.13	0.05	0.31	0.25	50*	120	2300	300*	240
CSL 18460	BA-2	2369.5-2376.9	0.06	0.18	0.05	0.15	0.15	50*	20*	1000	200*	160
CSL 18462	BA-2	2438.4-2438.8	0.07	0.12	0.10	4.31	3.40	500	220	6000	650	620
CSL 18464	BA-2	2516.5-2522	0.08	0.14	0.06	0.77	0.27	50*	40	2200	210*	150
CSL 18534	BA-2	2579-2582	0.15	0.13	0.08	1.69	0.83	350	70	4100	340	80
CSL 18536	BA-2	2582-2588	0.05	0.14	0.03	0.15	0.20	50*	20*	2000	190*	240
CSL 18540	BA-2	2746-2756	0.17	0.15	0.08	0.62	0.06	450	260	860	200*	230
CSL 18542	BA-2	2756-2766	0.14	0.18	0.06	0.92	0.02	250	250	400	120*	290
CSL 18543	BA-2	2766-2776	0.16	0.21	0.04	0.15*	0.10	250	250	940	90*	380
CSL 18537	BA-2	2776-2781	0.28	0.21	0.05	0.31*	0.12	300	310	1100	280	290
CSL 18539	BA-2	2781-2785	0.07	0.17	0.05	3.85	0.62	500	120	6300	520	100
CSL 18544	BA-2	2954-2964	0.08	0.15	0.02	0.31*	0.15	50*	50	1400	170	240
CSL 18546	BA-2	3074-3084	0.08	0.13	0.06	0.77	0.67	100	30	4500	370	230
CSL 18547	BA-2	3200.5-3210.5	0.12	0.17	0.08	0.46	0.33	300	130	2300	370	630
CSL 18549	BA-2	3210.5-3220.5	0.18	0.13	0.06	0.00	0.03	150	120	370	230	260
CSL 18551	BA-2	3234.8-3240	0.15	0.15	0.04	0.15	*	100	150	200	180*	220
CSL 18552	BA-2	3253-3256	0.18	0.12	0.15	1.77	0.35	300	350	4600	370	210
CSL 18554	BA-2	3269.6-3273.1	0.72	0.33	0.09	0.47	0.49	1200	570	2100	290	410
CSL 18556	BA-2	3342-3352	0.09	0.21	0.03	1.39	0.49	3000	120	4900	290	530
CSL 18558	BA-2	3367-3373	0.08	0.25	0.13	0.92	0.48	950	160	4500	410	50*
CSL 18560	BA-2	3378-3388	0.14	0.26	0.17	3.23	0.25	850	200	2500	210	160
CSL 18562	BA-2	3474-3684	0.11	0.11	0.05	0.92	1.03	50*	210	9700	620	120
CSL 18596	BA-5	120-127	0.15	0.14	0.09	0.15	*	100	180	310	170*	220
CSL 18597	BA-5	127-129.8	0.54	0.31	0.17	0.92	3.20	50*	180	4100	720	810
CSL 18598	BA-5	129.8-139.8	0.15	0.12	0.05	0.00	*	100	200	210	170*	150
CSL 18432	BI-128	1581& 1600	0.07	0.18	0.03	1.93	0.66	650	60	1700	260	130
CSL 18433	BI-128	1835& 1842	0.12	0.22	0.08	0.30*	0.06	50*	230	7300	150*	700
CSL 18434	BI-128	1920& 1962	0.20	0.15	0.09	2.77	5.30	1300	110	86	910	190
CSL 19395	BI-134	1156-1166	0.20	0.10	0.03	1.60	0.92	110	140	5759	1500	83
CSL 19397	BI-134	1216-1226	0.26	0.13	0.02	0.40	1.33	220	150	7782	2160	130
CSL 19400	BI-134	1256-1266	0.20	0.13	0.19	1.80	0.79	220	235	5092	1200	270
CSL 19401	BI-134	1696-1706	0.41	0.13	0.11	1.70	0.28	150	230	1829	620	100
CSL 19402	BI-134	1706-1716	0.33	0.14	0.04	0.80	0.82	170	265	6128	1500	120
CSL 19403	BI-134	1716-1726	0.41	0.13	0.05	2.00	0.55	190	290	3618	1100	150
CSL 19410	BI-144	665-675	0.31	0.16	0.01*	0.20	0.46	150	165	3580	1200	250
CSL 19412	BI-144	675-685	0.32	0.12	0.08	1.40	1.28	180	130	9821	2490	100
CSL 19413	BI-144	685-695	0.24	0.10	0.02	1.00	1.03	140	135	7943	1800	68
CSL 19405	BI-144	1412-1417	0.39	0.16	0.04	0.01*	0.91	170	265	8832	1100	260
CSL 19407	BI-144	1435-1445	0.25	0.18	0.03	3.10	1.01	170	210	7787	1700	330
CSL 19409	BI-144	1462-1472	0.36	0.16	0.09	0.50	0.83	180	245	6593	1300	190

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 19415	BI-147	1485-1494	0.44	0.19	0.02	1.90	0.95	140	440	6813	1900	240
CSL 19417	BI-147	1556.3-1566.2	0.36	0.21	0.02	0.60	0.90	180	210	6675	1800	210
CSL 19419	BI-147	1566.2-1575.2	0.42	0.20	0.01*	0.01*	0.98	150	290	7414	1600	150
CSL 19421	BI-147	1592-1602	0.24	0.26	0.09	0.40	0.78	350	180	5853	2130	120
CSL 19422	BI-147	1602-1612	0.35	0.28	0.05	0.10	0.63	470	190	4682	1900	180
CSL 19424	BI-147	1928-1939.8	0.39	0.17	0.03	0.20	1.41	250	240	11170	2360	120
CSL 10952	CN-7	1151	0.02	0.22	0.02	2.00*	0.23	400	20*	330	1000	49000
CSL 17283	D-10	390- 395	0.13	0.19	0.13	2.54	1.05	400	200	5900	940	880
CSL 17284	D-10	400- 416	0.10	0.15	0.18	1.77	0.62	250	120	3800	500	650
CSL 17285	D-10	773- 782	0.13	0.17	0.09	0.62	0.47	500	60	1500	350	260
CSL 17286	D-10	782- 789	0.06	0.13	0.21	1.16	0.02	350	70	470	50*	170
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--	--	--	--
CSL 17289	D-10	789- 798	0.17	0.14	0.39	1.54	0.13	550	120	1200	310*	250
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--	--	--	--
CSL 17290	D-10	798- 805	0.16	0.16	0.11	1.47	0.43	800	140	2800	450	190
CSL 17291	D-10	805- 814.1	0.06	0.21	0.34	2.00	0.83	1100	60	4600	760	140
CSL 17292	D-10	814.1- 818.3	0.06	0.23	0.39	1.39	0.65	600	110	3800	650	140
CSL 17293	D-10	818.3- 821	0.05	0.15	0.23	1.82	0.36	800	60	2700	200*	130
CSL 17294	D-10	1167-1177	0.08	0.16	0.05	0.31	0.10	150	110	980	180*	280
CSL 17295	D-10	1177-1187	0.12	0.18	0.10	1.23	0.06	100	200	350	300	300
CSL 17663	D-10	1475.8-1476.3	0.16	0.17	0.16	1.31	1.43	150	200	1700	390	390
CSL 17664	D-10	1476.3-1479.2	0.10	0.23	0.10	1.46*	0.80	200	140	1600	280	450
CSL 17665	D-10	1479.2-1486.8	0.19	0.16	0.18	1.47	1.19	250	220	2700	240	290
CSL 17666	D-10	1486.8-1491	0.10	0.24	0.14	0.92*	0.87	300	140	2100	700	860
CSL 17667	D-10	1491-1493.8	0.09	0.22	0.26	0.46*	0.33	250	160	950	340	410
CSL 17668	D-10	1493.8-1501.3	0.09	0.24	0.12	1.15*	0.53	100	120	3100	170*	450
CSL 17669	D-10	1501.3-1507.5	0.10	0.25	0.10	2.00*	0.44	250	110	1400	340	480
CSL 17670	D-10	1507.5-1513.8	0.13	0.36	0.14	0.23*	0.72	200	130	2800	520	410
CSL 17674	D-10	1581-1591	0.26	0.18	0.01*	0.93	2.50	200	360	3200	940	180
CSL 17675	D-10	1591-1601	0.21	0.16	0.05	3.08	5.78	100	310	7400	1900	190
CSL 17676	D-10	1601-1603.7	0.15	0.17	0.02	3.93	6.18	300	210	8100	1800	200
CSL 17677	D-10	1603.7-1605	0.04	0.07	0.01	12.20	14.30	400	20	8500	6900	50
CSL 17678	D-10	1605-1608	0.19	0.16	0.04	2.70	2.80	200	260	3700	930	190
CSL 17679	D-10	1608-1614.7	0.38	0.18	0.05	1.62	0.19	450	650	350	220*	200
CSL 17680	D-10	1614.7-1616.2	0.14	0.12	0.03	7.47	11.40	50	150	16000	4500	80
CSL 17681	D-10	1616.2-1620	0.17	0.07	0.10	3.00	0.79	100	170	2000	340	130
CSL 18440	D-4	1276.4-1286.4	0.26	0.09	0.09	1.69	0.58	50*	600	3800	930	210
CSL 18441	D-4	1286.4-1294.6	0.15	0.08	0.15	3.54	3.94	50*	430	29000	4900	110
CSL 18442	D-4	1294.6-1305.3	0.19	0.10	0.21	1.77	0.31	50*	500	3000	650	140
CSL 18443	D-4	1305.3-1309	0.20	0.11	0.15	0.93	0.15	50*	520	1800	530	190
CSL 17704	D-5	1321-1328.7	0.19	0.14	0.10	1.70	1.32	50*	140	3800	1800	190
CSL 17706	D-5	1339-1344	0.23	0.22	0.08	4.62	6.28	50*	180	22000	9000	210
CSL 17707	D-5	1613-1613.5	INF	INF	0.04	INF	36.70	50*	40	38000	75000	50
CSL 17701	D-5	1615.5-1616	INF	INF	0.08	INF	42.80	50*	70	180000	45000	50*
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	0.24	0.17	0.09	0.15	0.36	150	100	2000	1000	580
CSL 16681	D-6A	1927.6-1929.8	--	--	--	--	--	--		--	--	--
CSL 16682	D-6A	1929.8-1931.8	--	--	--	--	--	--		--	--	--
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	0.17	0.22	0.07	0.15*	0.84	150	180	4300	2100	1300
CSL 16684	D-6A	1931.8-1934	--	--	--	--	--	--		--	--	--
CSL 16685	D-6A	1934-1937.8	--	--	--	--	--	--		--	--	--
CSL 16687	D-6A	1937.8-1938.8	0.12	0.20	0.07	1.38*	0.85	100	100	3000	1700	2000

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 16691 (16688-90)	D-6A	1938.8-1942.7	0.18	0.14	0.14	1.31	0.28	300	110	1100	800	590
CSL 16688	D-6A	1938.8-1941	--	--	--	--	--	--		--	--	--
CSL 16689	D-6A	1941-1942	--	--	--	--	--	--		--	--	--
CSL 16690	D-6A	1942-1942.7	--	--	--	--	--	--		--	--	--
CSL 16692	D-6A	1942.7-1945.2	0.06	0.19	0.12	1.38*	0.37	500	50	1300	1800	1400
CSL 16693	D-6A	1945.2-1946.8	0.08	0.18	0.14	0.92*	0.64	400	60	2300	2200	1200
CSL 16694	D-6A	1946.8-1948.7	0.07	0.15	0.15	1.54*	0.54	550	50	1800	2100	1500
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	0.19	0.19	0.09	0.62*	0.77	150	150	3500	1400	1000
CSL 16695	D-6A	1948.7-1952.6	--	--	--	--	--	--		--	--	--
CSL 16696	D-6A	1952.6-1957.5	--	--	--	--	--	--		--	--	--
CSL 16697	D-6A	1957.5-1959	--	--	--	--	--	--		--	--	--
CSL 16698	D-6A	1959-1959.8	--	--	--	--	--	--		--	--	--
CSL 16699	D-6A	1959.8-1964.8	--	--	--	--	--	--		--	--	--
CSL 17155 (17151-54)	D-6A	1964.8-1981	0.19	0.20	0.11	0.46*	0.70	150	200	3100	1400	1600
CSL 17151	D-6A	1964.8-1969.7	--	--	--	--	--	--		--	--	--
CSL 17152	D-6A	1969.7-1972.7	--	--	--	--	--	--		--	--	--
CSL 17153	D-6A	1972.7-1978.8	--	--	--	--	--	--		--	--	--
CSL 17154	D-6A	1978.8-1981	--	--	--	--	--	--		--	--	--
CSL 17156	D-6A	1981-1982.2	0.09	0.17	0.15	2.00*	0.67	50*	30	2900	1400	1100
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	0.22	0.20	0.08	0.46*	0.57	100	190	2800	1100	780
CSL 17157	D-6A	1982.2-1983.9	--	--	--	--	--	--		--	--	--
CSL 17158	D-6A	1983.9-1989.2	--	--	--	--	--	--		--	--	--
CSL 16676	D-8	967.7-972.5	0.16	0.20	0.09	0.62*	0.98	200	190	5200	2100	3900
CSL 16677	D-8	972.5-976.8	0.15	0.19	0.09	0.15*	0.91	300	190	4400	1800	3300
CSL 16678	D-8	976.8-981	0.13	0.18	0.19	0.77*	1.38	250	90	5400	2500	1800
CSL 16679	D-8	981-986	0.12	0.20	0.22	1.08*	0.72	250	110	2900	1300	1900
CSL 16680	D-8	986-990.2	0.13	0.21	0.11	0.77*	0.75	100	160	3000	1200	1400
CSL 18446	D-9	1292.5-1299	0.10	0.14	0.22	3.47	7.39	50*	60	3600	5400	300
CSL 18447	D-9	1299-1302	0.08	0.09	0.18	2.31	2.22	50*	60	3800	1900	80
CSL 18448	D-9	1302-1305.8	0.09	0.10	0.26	3.77	4.41	50	70	6000	3800	70
CSL 18449	D-9	1305.8-1309	0.04	0.09	0.16	6.16	14.50	50*	20*	23000	9400	60
CSL 18450	D-9	1309-1319	0.07	0.13	0.12	1.77	2.91	50*	20*	1900	2300	100
CSL 18436	DU 15	2603-2613	0.07	0.10	0.09	1.08	0.94	50*	160	6500	1200	160
CSL 18437	DU 15	2613-2622.5	0.18	0.08	0.17	1.16	0.75	50*	160	5500	1100	130
CSL 18438	DU 15	2622.5-2631.5	1.10	0.15	0.23	0.70	0.09	50*	960	1100	410	120
CL 16660	DU-14	3897.6-3898.8	0.06	0.27	0.02	0.85	0.22	550	80	2300	1100	700
CL 16663 (16661-62)	DU-14	3898.8-3901.2	0.03	0.21	0.09	0.00	0.04	3200	20*	280	900	2500
CL 16661	DU-14	3898.8-3900.6	--	--	--	--	--	--		--	--	--
CL 16662	DU-14	3900.8-3901.2	--	--	--	--	--	--		--	--	--
CL 16664	DU-14	3901.5-3904	0.05	0.27	0.10	0.00	0.34	400	50	3000	1200	2000
CL 16665	DU-14	3904-3907.9	0.04	0.22	0.10	0.00	0.19	650	40	1500	900	4200
CSL 16642	DU-15	248-253	0.18	0.12	0.02	0.00	0.03	150	230	100	200*	120
CSL 16643	DU-15	445-450	0.21	0.09	0.03	2.00	0.01	150	230	110	200*	130
CSL 16644	DU-15	458-463	0.45	0.15	0.07	0.47	0.08	300	510	250	200*	140
CSL 16645	DU-15	797-802	0.15	0.13	0.03	0.15*	0.03	200	300	120	200*	130
CSL 16646	DU-15	995.7-999.7	0.11	0.11	0.02	0.31	0.02	100	230	120	200*	250
CSL 16647	DU-15	1464-1464.6	0.09	0.16	0.03	0.62*	0.01	50*	170	94	200*	1800
CSL 16648	DU-15	1705-1710	0.19	0.15	0.02	0.23*	0.03	150	240	170	400	190
CSL 16649	DU-15	1899-1904	0.14	0.14	0.03	0.07*	0.03	100	160	120	200	250
CSL 16650	DU-15	2140.6-2145	0.20	0.11	0.06	1.47	0.04	100	260	120	200*	180
CSL 16651	DU-15	2172-2177	0.16	0.13	0.05	0.16	0.02	150	250	120	200	250

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 16652	DU-15	2283-2288	0.10	0.08	0.03	0.16	0.01	50	80	100	200*	140
CSL 17268	DU-15	2364-2369	0.05	0.25	0.08	6.08	0.93	1900	20	2300	870	940
CSL 16641	DU-15	2434-2438	0.06	0.23	0.11	1.08*	0.69	50	60	4300	1600	11000
CSL 16653(16658-59)	DU-15	2455-2465	0.16	0.09	0.21	1.31	0.73	100	250	1400	600	190
CSL 16658	DU-15	2455-2460	--	--	--	--	--	--		--	--	--
CSL 16659	DU-15	2460-2465	--	--	--	--	--	--		--	--	--
CSL 19394	DU-15	2593-2603	0.07	0.07	0.15	1.39	0.64	50*	40	4400	1100	140
CL 16668	DU-16	3355-3355.7	0.03	0.24	0.07	2.46*	0.65	700	20*	3700	2200	1800
CL 16669	DU-16	3363-3364	0.37	0.18	0.09	0.39	0.41	200	90	3500	800	450
CL 16670	DU-16	3371.5-3372.5	0.04	0.22	0.08	1.69*	0.57	200	20*	4400	1400	1500
CL 16671	DU-16	3625-3627	0.20	0.25	0.05	1.00*	0.60	300	140	4400	1400	1200
CL 16674	DU-16	3628.7-3630.4	0.14	0.28	0.17	1.85*	0.37	50*	110	2900	1500	630
CSL 17709	DU-9	2585-2588	0.17	0.13	0.04	0.30*	0.01	50*	140	130	400	280
CSL 17710	DU-9	2588-2591.3	0.14	0.17	0.04	0.00	0.01	50	230	140	360	170
CSL 17711	DU-9	2591.3-2592.1	0.04	0.20	0.04	0.31	*	50*	110	130	430	16000
CSL 17712	DU-9	2592.1-2593.7	0.18	0.23	0.06	0.16	*	200	420	170	900	270
CSL 17713	DU-9	2593.7-2596.7	0.08	0.13	0.03	0.16	0.23	100	40	1800	1600	420
CSL 19459	II-1	195.7-205.7	0.51	0.12	0.02	0.10	0.69	110	75	599	470	230
CSL 19460	II-1	205.7-211	0.27	0.19	0.04	1.10	3.90	110	75	812	620	640
CSL 19461	II-1	211-221	0.29	0.28	0.07	3.60	6.25	310	65	1349	1200	1700
CSL 19462	II-1	221-223.3	0.25	0.27	4.82	4.30	8.70	280	110	2477	1600	1500
CSL 19463	II-1	223.3-233.3	0.27	0.23	0.18	0.50	1.33	90	80	1302	610	1000
CSL 19467	II-3	187-194.7	0.26	0.25	0.07	0.10	0.95	90	75	2515	1100	250
CSL 19468	II-3	200-203.3	0.27	0.20	0.21	2.00	0.56	80	110	1860	900	300
CSL 19470	II-5	267.5-272.4	0.32	0.28	0.25	1.80	2.60	190	75	2227	1400	820
CSL 19472	II-6	218.6-223.3	0.23	0.16	0.28	2.60	6.47	240	260	4585	2000	810
CSL 19473	II-6	223.3-231.2	0.43	0.14	0.21	7.50	12.62	320	360	6235	3970	950
CSL 18428	NM-5	1815& 1820.5	0.23	0.17	0.24	2.47	1.15	50*	210	2100	490	570
CSL 18429	NM-5	1822& 1826.5	0.23	0.20	NSS	2.62	1.06	450	NSS	3900	700	1900
CSL 18430	NM-5	1859& 1864	0.03	0.18	NSS	6.23	18.70	50*	NSS	8500	3800	70
CSL 18431	NM-9	1549.5& 1579	0.19	0.19	NSS	0.30*	1.29	50*	NSS	3000	540	120
CSL 19433	W-14	424-433.7	0.33	0.13	0.05	0.20	0.05	80	130	268	330	340
CSL 19434	W-14	433.7-440.4	1.11	0.23	0.15	1.10	1.42	250	500	7991	2250	360
CSL 19435	W-14	440.4-450	0.42	0.17	0.04	0.01*	0.19	100	150	738	420	360
CSL 19448	W-4	193.8-203	0.29	0.17	0.03	0.01*	0.79	150	190	5146	1500	290
CSL 19449	W-4	203-213	0.57	0.18	0.05	0.01*	1.08	200	210	7448	1900	290
CSL 19450	W-4	213-223	0.41	0.15	0.07	0.01*	0.07	80	320	296	180	230
CSL 19453	W-4	2144-2154	0.32	0.16	0.15	0.50	1.21	160	210	4758	1200	270
CSL 19454	W-4	2154-2164	0.34	0.17	0.13	0.01*	0.55	150	200	1637	730	190
CSL 19456	W-4	2524-2534	0.60	0.21	0.27	0.10	1.46	150	190	5539	1500	170
CSL 19457	W-4	2534-2544	0.25	0.16	0.21	0.30	1.98	90	160	8179	1900	350
CSL 19443	W-8B	476-753.7	0.37	0.14	0.02	0.30	1.26	50*	230	3545	1800	260
CSL 19437	W-8B	495-505	0.31	0.16	0.12	0.20	0.63	150	165	2113	1100	320
CSL 19438	W-8B	505-515	0.33	0.14	0.09	0.80	0.70	120	245	2035	1300	160
CSL 19439	W-8B	515-525	0.38	0.14	0.05	0.60	1.34	180	265	3821	1500	160
CSL 19440	W-8B	525-535	0.43	0.15	0.07	0.50	0.64	100	235	4490	1800	360
CSL 19478	W-8B	533-539	0.35	0.14	0.14	0.40	1.30	110	240	3341	1300	190
CSL 19441	W-8B	553.3-554.3	0.50	0.17	0.02	1.00	1.35	300	230	4053	1400	150
CSL 19444	W-8B	753.7-765	0.53	0.20	0.19	0.20	1.00	180	340	2771	1200	230
CSL 19445	W-8B	765-775	0.34	0.14	0.04	0.01*	0.47	150	245	1510	720	240
CSL 19425	W-9	359-369	0.46	0.22	0.05	3.40	1.87	310	280	16069	4370	140

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
CSL 19426	W-9	369-379	0.32	0.08	0.09	2.20	0.31	110	135	1468	820	120
CSL 19427	W-9	379-389	0.43	0.15	0.04	0.10	0.18	90	210	803	690	200
CSL 19429	W-9	925-935	0.49	0.14	0.05	1.40	1.00	150	300	5193	1800	170
CSL 19430	W-9	935-945	0.47	0.15	0.10	3.00	1.65	150	370	8997	3030	130
CSL 19431	W-9	945-955	0.52	0.17	0.01*	1.00	1.05	150	430	4585	1800	160

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	CO PPM	V PPM	ZN PPM	PB PPM	MO PPM	PT PPB	PD PPB	IR PPB	AU PPB	AG PPM
CL 17165	34872	1182-1187.6	160	660	300	10	5*	40	130	100*	28	5*
CL 17169 (17166-68)	34872	1187.6-1192	160	2200	420	6	5*	30	72	100*	16	5*
CL 17166	34872	1187.6-1189.2	--	--	--	--	--	--	--	--	--	--
CL 17167	34872	1189.2-1190.8	--	--	--	--	--	--	--	--	--	--
CL 17168	34872	1190.8-1192	--	--	--	--	--	--	--	--	--	--
CL 17173 (17170-72)	34872	1192-1199.7	210	2600	520	6	5*	20	67	100*	16	5*
CL 17170	34872	1192-1193.5	--	--	--	--	--	--	--	--	--	--
CL 17171	34872	1193.5-1194.2	--	--	--	--	--	--	--	--	--	--
CL 17172	34872	1194.2-1199.7	--	--	--	--	--	--	--	--	--	--
CL 17174	34872	1199.7-1204.7	110	220	210	8	5*	20	100	100*	22	5*
CL 17175	34872	1220.8-1223	130	940	370	8	5*	10	62	100*	15	5*
CL 17178 (17176-77)	34872	1223-1227.9	190	970	370	8	5*	20	96	100*	70	5*
CL 17176	34872	1223-1226.4	--	--	--	--	--	--	--	--	--	--
CL 17177	34872	1226.4-1227.9	--	--	--	--	--	--	--	--	--	--
CL 17182 (17179-81)	34872	1227.9-1239.4	160	120	210	9	5*	40	140	100*	28	5*
CL 17179	34872	1227.9-1232.6	--	--	--	--	--	--	--	--	--	--
CL 17180	34872	1232.6-1233.9	--	--	--	--	--	--	--	--	--	--
CL 17181	34872	1233.9-1239.4	--	--	--	--	--	--	--	--	--	--
CL 17183	34872	1239.4-1241	170	700	370	8	5*	20	67	100*	13	5*
CL 17186 (17184-85)	34872	1241-1250	180	140	240	10	5*	30	110	100*	80	5*
CL 17184	34872	1241-1245	--	--	--	--	--	--	--	--	--	--
CL 17185	34872	1245-1250	--	--	--	--	--	--	--	--	--	--
CL 17189 (17187-88)	34872	1250-1261	140	130	200*	8	5*	30	130	100*	75	5*
CL 17187	34872	1250-1256.1	--	--	--	--	--	--	--	--	--	--
CL 17188	34872	1256.1-1261	--	--	--	--	--	--	--	--	--	--
CL 17193 (17190-92)	34872	1261-1271.2	100	280	200*	7	5*	20	86	100*	15	5*
CL 17190	34872	1261-1264.7	--	--	--	--	--	--	--	--	--	--
CL 17191	34872	1264.7-1267.5	--	--	--	--	--	--	--	--	--	--
CL 17192	34872	1267.5-1271.2	--	--	--	--	--	--	--	--	--	--
CL 17194	34872	1295-1298.7	120	330	270	10	5*	30	86	100*	20	5*
CL 17199 (17195-98)	34872	1298.7-1305.7	160	940	350	7	5*	20	41	100*	12	5*
CL 17195	34872	1298.7-1301.2	--	--	--	--	--	--	--	--	--	--
CL 17196	34872	1301.2-1302.7	--	--	--	--	--	--	--	--	--	--
CL 17197	34872	1302.7-1303.5	--	--	--	--	--	--	--	--	--	--
CL 17198	34872	1303.5-1305.7	--	--	--	--	--	--	--	--	--	--
CL 17200	34872	1305.7-1310.5	160	660	240	10	5*	30	120	100*	34	5*
CL 17201	34872	1310.5-1315	250	1000	560	5*	5*	10	44	100*	11	5*
CL 17202	34872	1315-1319	240	940	370	10	5*	10	64	100*	17	5*
CL 17203	34872	1319-1324.8	240	830	320	5*	5*	10	40	100*	10	5*
CL 17204	34872	1324.8-1328.5	210	780	310	6	5*	20	47	100*	14	5*
CL 17205	34872	1331-1333.2	170	110	260	9	5*	30	110	100*	26	5*
CL 17206	34872	1351-1356	160	780	340	8	5*	20	76	100*	19	5*
CSL 17254	64046	50.0-60	72	180	200	13	2*	20	34	100*	10	5*
CSL 17255	64046	70-80	26	170	400	12	10	10*	5	100*	1*	5*
CSL 17223	64048	100-105	170	200	400	11	13	40	12	100*	12	5*
CSL 17267	64048	100-105	870	120	400	5*	26	10*	31	100*	20	5*
CSL 17270	64048	105-110	240	190	300	78	3	10*	73	100*	32	5*
CSL 17269	64048	105-110	960	130	400	5*	23	10*	27	100*	21	5*
CSL 17224	64048	135-140	100	210	400	5*	10	10	58	100*	26	5*
CSL 17265	64048	135-140	650	73	700	5*	21	10*	74	100*	11	6
CSL 17266	64048	140-145	85	190	700	38	18	10	17	100*	3	5*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 17225	64048	200-205	83	200	200	6	2*	10*	7	100*	2	5*
CSL 17264	64048	205-210	27	NSS	200	NSS	2*	10*	2	100*	6	5*
CSL 17226	64048	220-230	10*	22	200*	5*	2*	10*	2*	100*	1*	5*
CSL 17227	64048	240-245	42	430	200*	5*	2*	10*	11	100*	12	5*
CSL 17228	64048	285-290	17	28	200*	5*	2*	10*	2*	100*	1*	5*
CSL 17249	66010	20-30	120	150	200	13	2	10	55	100*	20	5*
CSL 17250	66010	40-45	120	150	200	13	8	10	56	100*	17	5*
CSL 17262	66012	11-20	91	240	200	13	6	10*	22	100*	5	5*
CSL 17238	66014	80-90	150	98	200	16	2*	80	110	100*	50	5*
CSL 17239	66014	105-115	160	110	200*	18	6	50	140	100*	64	5*
CSL 17240	66014	145-150	70	100	200*	6	2*	10*	27	100*	5	5*
CSL 17241	66014	265-270	120	190	200*	10	3*	10	80	100*	23	5*
CSL 17242	66014	300-310	100	190	200	10	2*	10*	44	100*	13	5*
CSL 17243	66014	335-345	120	170	200	15	3*	10	67	100*	22	5*
CSL 17244	66014	360-370	120	170	200	10	2*	10	43	100*	27	5*
CSL 17245	66014	380-390	180	180	300	22	2*	10*	250	100*	97	5*
CSL 17246	66014	445-455	10*	24	200*	5	2*	10*	3	100*	1*	5*
CSL 17247	66014	545-550	10*	29	200*	5*	3	10*	2*	100*	1*	5*
CSL 17248	66014	605-615	14	47	200*	5*	2*	10*	2*	100*	1*	5*
CSL 17229	66017	24.8-30	99	200	200*	13	6	10*	27	100*	5	5*
CSL 17230	66017	155-165	130	180	200	9	3	60	34	100*	9	5*
CSL 17231	66017	190-195	140	260	300	9	2*	10*	35	100*	6	5*
CSL 17232	66017	240-245	130	170	200	14	2*	10	64	100*	27	5*
CSL 17233	66017	260-270	92	160	300	11	2*	10*	31	100*	8	5*
CSL 17234	66017	280-290	190	220	300	6	2*	10*	24	100*	6	5*
CSL 17235	66017	350-360	10*	27	200*	5*	3	10*	2*	100*	1*	5*
CSL 17236	66017	380-390	10*	41	200*	5*	2*	10*	2*	100*	1*	5*
CSL 17237	66017	490-495	10*	33	200*	5*	2*	10*	2*	100*	1*	5*
CSL 18565	BA-1	509.6-518	20	78	200*	7	2*	10*	4	100*	5*	5*
CSL 18566	BA-1	518-527	40	59	200*	8	2*	10	12	100*	5*	5*
CSL 18568	BA-1	1097.1-1106	80	360	300	6	2*	10*	11	100*	5*	5*
CSL 18570	BA-1	1937-1947	60	440	200	7	3	10	12	100*	16	5*
CSL 18572	BA-1	1947-1956.9	50	310	200	9	3	10*	7	100*	7*	5*
CSL 18573	BA-1	1956.9-1961.3	80	500	300	12	5	20	66	100*	19	5*
CSL 18574	BA-1	1961.3-1968	50	180	200*	10	2*	10*	3	100*	5*	5*
CSL 18575	BA-1	1968-1974	70	550	200	9	3*	10*	2	100*	7*	5*
CSL 18576	BA-1	1974-1979.2	60	620	300	8	3*	10*	2	100*	8*	5*
CSL 18578	BA-1	1979.2-1987.4	50	480	200	9	3*	10*	7	100*	7*	5*
CSL 18579	BA-1	2005.1-2011	60	360	200	6	3*	30	75	100*	14	5*
CSL 18580	BA-1	2017.8-2019.8	100	460	200	7	2*	100	150	100*	63	5*
CSL 18582	BA-1	2635-2643	100	93	200*	22	2*	130	640	100*	76	5*
CSL 18583	BA-1	2643-2653	70	93	200*	26	2*	100	480	100*	52	5*
CSL 18585	BA-1	2653-2663	90	140	200*	18	2	90	430	100*	52	5*
CSL 18586	BA-1	2663-2673	80	190	200*	17	2*	100	350	100*	48	5*
CSL 18587	BA-1	2673-2680	100	85	200*	13	2*	120	430	100*	72	5*
CSL 18588	BA-1	2680-2690	100	190	200*	13	2*	80	350	100*	38	5*
CSL 18590	BA-1	2690-2700	90	150	200*	11	2*	80	760	100*	49	5*
CSL 18591	BA-1	2700-2710	100	130	200*	14	2*	170	750	100*	83	5*
CSL 18592	BA-1	2710-2718	100	140	200*	13	2*	70	330	100*	22	5*
CSL 18593	BA-1	2718-2726.4	140	200	200	14	2	100	460	100*	42	5
CSL 18594	BA-1	3009.3-3019.5	70	320	300	17	3	30	140	100*	11	5*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19381	BA-2	894-900	110	210	200	9	2*	40	40	100*	87	5*
CSL 19382	BA-2	900-905	60	65	200*	8	2*	100	93	100*	56	5*
CSL 19385	BA-2	1608-1609.5	20	140	200*	11	2*	10	3	100*	7*	5*
CSL 19387	BA-2	1665.6-1666.3	30	99	200*	13	3*	10*	5	100*	7*	5*
CSL 19388	BA-2	1678.5-1679	30	200	200*	15	2*	10*	46	100*	8*	5*
CSL 19390	BA-2	1793-1797.7	110	140	200*	7	2*	80	280	100*	71	5*
CSL 19392	BA-2	1797.7-1805.5	60	130	200*	9	2*	70	200	100*	52	5*
CSL 19393	BA-2	1865.5-1875	80	110	200*	8	2*	190	330	100*	61	5*
CSL 18453	BA-2	1875-1884	60	93	200*	7	2*	230	380	100*	71	5*
CSL 18454	BA-2	1884-1888	90	83	200*	8	2*	120	210	100*	53	5*
CSL 18455	BA-2	1891.7-1897.1	60	95	200*	7	2*	170	440	100*	75	5*
CSL 18458	BA-2	2009-2010.4	40	420	200*	11	4*	40	110	100*	13	5*
CSL 18460	BA-2	2369.5-2376.9	70	290	200*	10	2*	20	44	100*	14	5*
CSL 18462	BA-2	2438.4-2438.8	190	470	300	13	38	10	130	100*	26	5*
CSL 18464	BA-2	2516.5-2522	60	190	200*	9	2	30	86	100*	21	5*
CSL 18534	BA-2	2579-2582	70	130	200*	16	2*	40	540	100*	110	5*
CSL 18536	BA-2	2582-2588	80	87	200*	9	2*	40	120	100*	37	5*
CSL 18540	BA-2	2746-2756	50	350	200*	11	2*	10*	21	100*	20	5*
CSL 18542	BA-2	2756-2766	60	460	200*	8	2*	10*	5	100*	5*	5*
CSL 18543	BA-2	2766-2776	80	430	200*	8	2*	10	12	100*	7	5*
CSL 18537	BA-2	2776-2781	80	380	200*	10	2*	10*	30	100*	7	5*
CSL 18539	BA-2	2781-2785	110	91	200*	10	2*	290	740	100*	230	5*
CSL 18544	BA-2	2954-2964	60	93	200*	7	2	20	88	100*	24	5*
CSL 18546	BA-2	3074-3084	70	77	200*	18	2	110	320	100*	100	5*
CSL 18547	BA-2	3200.5-3210.5	80	160	200*	9	2*	40	68	100*	14	5*
CSL 18549	BA-2	3210.5-3220.5	40	220	200*	8	2	10	24	100*	5*	5*
CSL 18551	BA-2	3234.8-3240	60	190	200*	9	3	10	2*	100*	5*	5*
CSL 18552	BA-2	3253-3256	60	130	200*	33	2*	100	410	100*	72	5*
CSL 18554	BA-2	3269.6-3273.1	100	460	200	14	2*	50	40	100*	19	5*
CSL 18556	BA-2	3342-3352	140	970	200	8	2*	50	150	100*	47	5*
CSL 18558	BA-2	3367-3373	150	1000	300	8	2*	50	200	100*	34	5*
CSL 18560	BA-2	3378-3388	110	340	200	10	2	20	43	100*	10	5*
CSL 18562	BA-2	3474-3684	30	85	200*	39	3*	150	370	100*	90	5*
CSL 18596	BA-5	120-127	50	310	200*	8	2*	10*	3	100*	5*	5*
CSL 18597	BA-5	127-129.8	180	540	300	5	2*	30	18	100*	8	5*
CSL 18598	BA-5	129.8-139.8	30	240	200*	171	2*	80	2*	100*	5*	5*
CSL 18432	BI-128	1581& 1600	100	26	200*	8	2*	90	250	100*	60	5*
CSL 18433	BI-128	1835& 1842	60	110	200	13	2*	10*	3	100*	5*	5*
CSL 18434	BI-128	1920& 1962	200	280	400	6	2*	120	310	100*	73	5*
CSL 19395	BI-134	1156-1166	74	57	200*	22	2*	100	360	100*	53	5*
CSL 19397	BI-134	1216-1226	130	75	200*	20	2*	100	480	100*	110	7
CSL 19400	BI-134	1256-1266	93	92	200*	25	2*	60	320	100*	49	5*
CSL 19401	BI-134	1696-1706	76	115	200*	22	2*	80	220	100*	39	5*
CSL 19402	BI-134	1706-1716	87	123	200*	16	2*	140	500	100*	71	5*
CSL 19403	BI-134	1716-1726	71	119	200*	15	2*	40	160	100*	38	5*
CSL 19410	BI-144	665-675	120	69	200*	19	2*	100	360	100*	67	5*
CSL 19412	BI-144	675-685	130	52	200*	14	2*	440	800	100*	180	5*
CSL 19413	BI-144	685-695	110	39	200*	17	2*	130	740	100*	150	5*
CSL 19405	BI-144	1412-1417	96	180	200*	22	2*	130	130	100*	64	13
CSL 19407	BI-144	1435-1445	120	174	200*	23	2*	100	220	100*	51	5*
CSL 19409	BI-144	1462-1472	100	240	200*	21	2*	50	180	100*	62	5*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19415	BI-147	1485-1494	88	222	290	23	2*	60	380	100*	94	5*
CSL 19417	BI-147	1556.3-1566.2	130	154	200*	23	2*	100	220	100*	120	5*
CSL 19419	BI-147	1566.2-1575.2	120	190	270	22	2*	80	180	100*	68	5*
CSL 19421	BI-147	1592-1602	160	144	200*	17	2*	90	320	100*	110	5*
CSL 19422	BI-147	1602-1612	180	164	200*	19	2*	140	190	100*	120	5*
CSL 19424	BI-147	1928-1939.8	130	103	200*	21	2*	150	440	100*	100	5*
CSL 10952	CN-7	1151	190	7600	840	12	5*	20	9	100*	5	5*
CSL 17283	D-10	390- 395	150	200	200*	10	3	90	150	100*	55	5*
CSL 17284	D-10	400- 416	100	210	200*	10	2	50	100	100*	36	5*
CSL 17285	D-10	773- 782	80	300	200*	9	2*	20	61	100*	16	5*
CSL 17286	D-10	782- 789	70	90	200*	9	2*	10*	11	100*	5*	5*
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--	--	--	--
CSL 17289	D-10	789- 798	60	190	200*	14	6	50	61	100*	18	5*
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--	--	--	--
CSL 17290	D-10	798- 805	80	190	200	18	2*	30	140	100*	51	5*
CSL 17291	D-10	805- 814.1	140	130	200	11	3	70	110	100*	44	5*
CSL 17292	D-10	814.1- 818.3	140	140	200	11	2*	50	99	100*	55	5*
CSL 17293	D-10	818.3- 821	80	140	200*	10	2*	20	60	100*	17	5*
CSL 17294	D-10	1167-1177	70	180	200*	5*	2	10	56	100*	9	5*
CSL 17295	D-10	1177-1187	50	600	200	5*	3	10*	3	100*	6*	5*
CSL 17663	D-10	1475.8-1476.3	150	230	200*	13	4	10*	11	100*	6*	5*
CSL 17664	D-10	1476.3-1479.2	120	550	200*	10	2*	10	21	100*	7	5*
CSL 17665	D-10	1479.2-1486.8	110	130	200*	11	5	20	39	100*	13	5*
CSL 17666	D-10	1486.8-1491	120	550	200*	8	2*	10	45	100*	14	5*
CSL 17667	D-10	1491-1493.8	80	530	200*	6	2*	10	13	100*	5	5*
CSL 17668	D-10	1493.8-1501.3	80	490	200*	6	2*	10	60	100*	5*	5*
CSL 17669	D-10	1501.3-1507.5	80	500	200	5	2*	10	22	100*	9	5*
CSL 17670	D-10	1507.5-1513.8	100	130	200*	6	2*	20	42	100*	17	5*
CSL 17674	D-10	1581-1591	210	190	200*	14	2*	20	39	100*	9	5*
CSL 17675	D-10	1591-1601	360	160	200	14	6	10*	80	100*	21	5*
CSL 17676	D-10	1601-1603.7	360	180	200*	14	2*	180	97	100*	25	5*
CSL 17677	D-10	1603.7-1605	1000	88	200	5*	2*	110	190	100*	6*	5*
CSL 17678	D-10	1605-1608	190	240	200*	11	5	110	51	100*	11	5*
CSL 17679	D-10	1608-1614.7	50	260	200	10	6	10	5	100*	6*	5*
CSL 17680	D-10	1614.7-1616.2	710	83	200*	5	6	50	170	100*	27	5*
CSL 17681	D-10	1616.2-1620	60	80	200*	20	18	10*	18	100*	7*	5*
CSL 18440	D-4	1276.4-1286.4	30	95	200*	34	3*	60	20	100*	34	5*
CSL 18441	D-4	1286.4-1294.6	90	59	200*	58	5	20	270	100*	350	5*
CSL 18442	D-4	1294.6-1305.3	20	62	200*	40	3*	10*	27	100*	31	5*
CSL 18443	D-4	1305.3-1309	20	58	200*	27	3*	10*	13	100*	15	5*
CSL 17704	D-5	1321-1328.7	100	160	200*	10	2*	30	120	100*	49	5*
CSL 17706	D-5	1339-1344	310	340	200	16	6	10	310	100*	160	5*
CSL 17707	D-5	1613-1613.5	2100	45	700	5*	12	470	410	100*	160	5*
CSL 17701	D-5	1615.5-1616	1300	11	600	5*	8	10	360	100*	170	26
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	84	310	260	5	5*	10*	40	100*	30	5*
CSL 16681	D-6A	1927.6-1929.8	--	--	--	--	--	--	--	--	--	--
CSL 16682	D-6A	1929.8-1931.8	--	--	--	--	--	--	--	--	--	--
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	150	410	300	8	5*	20	70	100*	30	5*
CSL 16684	D-6A	1931.8-1934	--	--	--	--	--	--	--	--	--	--
CSL 16685	D-6A	1934-1937.8	--	--	--	--	--	--	--	--	--	--
CSL 16687	D-6A	1937.8-1938.8	170	1200	410	6	5*	10	37	100*	10	5*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16691 (16688-90)	D-6A	1938.8-1942.7	75	290	200*	9	5*	10	21	100*	11	5*
CSL 16688	D-6A	1938.8-1941	--	--	--	--	--	--	--	--	--	--
CSL 16689	D-6A	1941-1942	--	--	--	--	--	--	--	--	--	--
CSL 16690	D-6A	1942-1942.7	--	--	--	--	--	--	--	--	--	--
CSL 16692	D-6A	1942.7-1945.2	220	940	490	5*	5*	10	28	100*	8	5*
CSL 16693	D-6A	1945.2-1946.8	200	770	450	5*	5*	10	32	100*	11	5*
CSL 16694	D-6A	1946.8-1948.7	170	790	310	5*	5*	10	24	100*	10	5*
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	120	620	250	7	5*	30	45	100*	16	5*
CSL 16695	D-6A	1948.7-1952.6	--	--	--	--	--	--	--	--	--	--
CSL 16696	D-6A	1952.6-1957.5	--	--	--	--	--	--	--	--	--	--
CSL 16697	D-6A	1957.5-1959	--	--	--	--	--	--	--	--	--	--
CSL 16698	D-6A	1959-1959.8	--	--	--	--	--	--	--	--	--	--
CSL 16699	D-6A	1959.8-1964.8	--	--	--	--	--	--	--	--	--	--
CSL 17155 (17151-54)	D-6A	1964.8-1981	140	480	270	6	5*	50	37	100*	20	5*
CSL 17151	D-6A	1964.8-1969.7	--	--	--	--	--	--	--	--	--	--
CSL 17152	D-6A	1969.7-1972.7	--	--	--	--	--	--	--	--	--	--
CSL 17153	D-6A	1972.7-1978.8	--	--	--	--	--	--	--	--	--	--
CSL 17154	D-6A	1978.8-1981	--	--	--	--	--	--	--	--	--	--
CSL 17156	D-6A	1981-1982.2	130	660	280	7	5*	40	27	100*	14	5*
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	100	350	260	7	5*	80	45	100*	15	5*
CSL 17157	D-6A	1982.2-1983.9	--	--	--	--	--	--	--	--	--	--
CSL 17158	D-6A	1983.9-1989.2	--	--	--	--	--	--	--	--	--	--
CSL 16676	D-8	967.7-972.5	170	840	340	8	5*	20	52	100*	13	5*
CSL 16677	D-8	972.5-976.8	150	830	320	10	5*	10	43	100*	15	5*
CSL 16678	D-8	976.8-981	160	840	320	7	5*	10	76	100*	26	5*
CSL 16679	D-8	981-986	130	770	390	6	5*	30	49	100*	10	5*
CSL 16680	D-8	986-990.2	130	620	300	5	5*	10	43	100*	15	5*
CSL 18446	D-9	1292.5-1299	310	71	200*	18	8	10*	41	100*	12	5*
CSL 18447	D-9	1299-1302	110	33	200*	29	2*	10*	23	100*	8	5*
CSL 18448	D-9	1302-1305.8	220	60	200*	20	2*	10	41	100*	7*	5*
CSL 18449	D-9	1305.8-1309	540	53	200	12	4	10	99	100*	29	5*
CSL 18450	D-9	1309-1319	130	170	200	11	3	40	21	100*	7*	5*
CSL 18436	DU 15	2603-2613	30	42	200*	57	3*	110	210	100*	73	5*
CSL 18437	DU 15	2613-2622.5	20	44	200*	46	3*	80	180	100*	52	5*
CSL 18438	DU 15	2622.5-2631.5	30	170	200*	16	4*	10	20	100*	10*	5*
CL 16660	DU-14	3897.6-3898.8	140	290	260	8	5*	30	73	100*	140	5*
CL 16663 (16661-62)	DU-14	3898.8-3901.2	200	1600	540	5*	5*	10	50	100*	80	5*
CL 16661	DU-14	3898.8-3900.6	--	--	--	--	--	--	--	--	--	--
CL 16662	DU-14	3900.8-3901.2	--	--	--	--	--	--	--	--	--	--
CL 16664	DU-14	3901.5-3904	150	420	300	6	5*	50	94	100*	26	5*
CL 16665	DU-14	3904-3907.9	140	800	310	5*	5*	20	47	100*	13	5*
CSL 16642	DU-15	248-253	46	190	200*	5*	5*	10*	3	100*	2	5*
CSL 16643	DU-15	445-450	28	170	200*	6	5*	10*	3	100*	1*	5*
CSL 16644	DU-15	458-463	44	280	200*	6	5*	10*	2*	100*	1*	5*
CSL 16645	DU-15	797-802	47	190	200	6	5	10*	2*	100*	1*	5*
CSL 16646	DU-15	995.7-999.7	41	170	200*	9	5*	10*	2*	100*	3	5*
CSL 16647	DU-15	1464-1464.6	92	700	200	18	5*	10*	6	100*	1*	5*
CSL 16648	DU-15	1705-1710	65	260	200	5*	5*	10*	2*	100*	1*	5*
CSL 16649	DU-15	1899-1904	62	300	200	6	5*	10*	2*	100*	2	5*
CSL 16650	DU-15	2140.6-2145	36	230	200*	5*	5*	10*	2*	100*	1*	5*
CSL 16651	DU-15	2172-2177	53	180	200*	5*	5*	10*	2*	100*	1*	5*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16652	DU-15	2283-2288	36	120	200*	5*	5*	10*	2*	100*	1*	5*
CSL 17268	DU-15	2364-2369	140	120	200	6	3*	40	140	100*	41	5*
CSL 16641	DU-15	2434-2438	160	610	360	7	5*	760	890	100*	86	5*
CSL 16653(16658-59)	DU-15	2455-2465	48	65	200*	18	5*	40	80	100*	15	5*
CSL 16658	DU-15	2455-2460	--	--	--	--	--	--	--	--	--	--
CSL 16659	DU-15	2460-2465	--	--	--	--	--	--	--	--	--	--
CSL 19394	DU-15	2593-2603	20	34	200*	47	3*	70	140	100*	47	5*
CL 16668	DU-16	3355-3355.7	240	2100	600	6	5*	20	34	100*	20	5*
CL 16669	DU-16	3363-3364	67	210	210	13	5*	10	46	100*	22	5*
CL 16670	DU-16	3371.5-3372.5	180	850	280	6	5*	30	86	100*	25	5*
CL 16671	DU-16	3625-3627	150	270	310	11	5*	60	140	100*	26	35
CL 16674	DU-16	3628.7-3630.4	160	230	210	13	5*	80	210	100*	67	5*
CSL 17709	DU-9	2585-2588	60	94	200	7	2*	10*	2*	100*	6*	5*
CSL 17710	DU-9	2588-2591.3	80	85	200*	5*	3	10*	5	100*	6*	5*
CSL 17711	DU-9	2591.3-2592.1	50	1670	200*	5*	2*	2800	550	100*	5*	5*
CSL 17712	DU-9	2592.1-2593.7	130	97	200	5	2*	10	24	100*	6*	5*
CSL 17713	DU-9	2593.7-2596.7	90	73	200*	5*	2*	350	1300	100*	230	5*
CSL 19459	II-1	195.7-205.7	100	121	200*	17	2*	15*	2*	100*	5*	5*
CSL 19460	II-1	205.7-211	280	621	200*	14	15	15	2*	100*	10*	5*
CSL 19461	II-1	211-221	510	1346	200*	11	37	15*	2*	100*	16*	12*
CSL 19462	II-1	221-223.3	660	1027	200*	11	67	15*	2*	100*	14*	13*
CSL 19463	II-1	223.3-233.3	220	987	200*	20	4	15	2*	100*	12*	5*
CSL 19467	II-3	187-194.7	230	130	200*	29	2*	15*	2*	100*	37	5*
CSL 19468	II-3	200-203.3	180	139	200*	27	2*	15*	2*	100*	5*	5*
CSL 19470	II-5	267.5-272.4	330	960	200*	17	7	25	2*	100*	12	10*
CSL 19472	II-6	218.6-223.3	380	141	200*	24	38	15*	2*	100*	44	9
CSL 19473	II-6	223.3-231.2	670	150	200*	26	88	15*	2*	100*	64	10*
CSL 18428	NM-5	1815& 1820.5	100	120	200	13	2*	40	92	100*	20	5*
CSL 18429	NM-5	1822& 1826.5	110	500	200	13	3*	100*	110	100*	37	5*
CSL 18430	NM-5	1859& 1864	490	57	200	8	2*	10*	460	100*	22	5*
CSL 18431	NM-9	1549.5& 1579	110	590	200	25	2*	40	93	100*	22	5*
CSL 19433	W-14	424-433.7	67	88	210	10	2*	15*	2*	100*	5*	5*
CSL 19434	W-14	433.7-440.4	170	320	330	22	2*	25	150	100*	71	5*
CSL 19435	W-14	440.4-450	99	133	200*	20	2*	15*	6	100*	22	5*
CSL 19448	W-4	193.8-203	130	138	200*	20	2*	30	40	100*	58	5*
CSL 19449	W-4	203-213	150	169	200*	28	2*	50	70	100*	83	5*
CSL 19450	W-4	213-223	58	197	200*	23	2*	15*	2*	100*	5*	5*
CSL 19453	W-4	2144-2154	140	108	200*	31	2*	20	2*	100*	17	5*
CSL 19454	W-4	2154-2164	120	145	200*	23	2*	15*	2*	100*	17	5*
CSL 19456	W-4	2524-2534	140	138	200*	26	2*	25	2*	100*	21	5*
CSL 19457	W-4	2534-2544	190	178	200*	30	2*	50	2*	100*	41	10
CSL 19443	W-8B	476-753.7	140	79	200*	15	2*	15	40	100*	26	5*
CSL 19437	W-8B	495-505	140	98	210	11	2*	15*	30	100*	10*	5*
CSL 19438	W-8B	505-515	130	90	340	16	2*	15*	20	100*	11	5*
CSL 19439	W-8B	515-525	150	87	200*	23	2*	15*	45	100*	43	5*
CSL 19440	W-8B	525-535	180	110	200*	24	2*	25	55	100*	31	12
CSL 19478	W-8B	533-539	170	88	200*	25	2*	15*	2*	100*	30	5*
CSL 19441	W-8B	553.3-554.3	160	148	200*	27	2*	15*	55	100*	26	5*
CSL 19444	W-8B	753.7-765	100	280	200*	22	2*	15*	30	100*	20	5*
CSL 19445	W-8B	765-775	90	106	200*	14	2*	15*	15	100*	5*	5*
CSL 19425	W-9	359-369	120	292	200*	16	2*	150	220	100*	49	21

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19426	W-9	369-379	56	62	200*	21	2*	15*	20	100*	42	5*
CSL 19427	W-9	379-389	92	97	200*	11	2*	15*	8	100*	10*	5*
CSL 19429	W-9	925-935	130	132	200*	22	2*	15*	95	100*	52	5*
CSL 19430	W-9	935-945	150	146	200*	22	2*	15*	130	100*	58	5*
CSL 19431	W-9	945-955	110	166	200*	28	2*	15*	80	100*	33	19

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
CL 17165	34872	1182-1187.6	8	2*	110	210	17.90	2*	5	46	2	12
CL 17169 (17166-68)	34872	1187.6-1192	6	2*	90	160	20.60	2*	3	46	2	14
CL 17166	34872	1187.6-1189.2	--	--	--	--	--	--	--	--	--	--
CL 17167	34872	1189.2-1190.8	--	--	--	--	--	--	--	--	--	--
CL 17168	34872	1190.8-1192	--	--	--	--	--	--	--	--	--	--
CL 17173 (17170-72)	34872	1192-1199.7	6	2*	40	130	27.90	2*	2	44	2	16
CL 17170	34872	1192-1193.5	--	--	--	--	--	--	--	--	--	--
CL 17171	34872	1193.5-1194.2	--	--	--	--	--	--	--	--	--	--
CL 17172	34872	1194.2-1199.7	--	--	--	--	--	--	--	--	--	--
CL 17174	34872	1199.7-1204.7	8	2*	210	180	13.80	2*	3	32	2	8
CL 17175	34872	1220.8-1223	12	2*	150	150	42.10	12	7	60	3	12
CL 17178 (17176-77)	34872	1223-1227.9	4	2*	48	160	22.10	2*	2	44	2	16
CL 17176	34872	1223-1226.4	--	--	--	--	--	--	--	--	--	--
CL 17177	34872	1226.4-1227.9	--	--	--	--	--	--	--	--	--	--
CL 17182 (17179-81)	34872	1227.9-1239.4	10	2*	140	190	9.70	2*	4	36	2*	8
CL 17179	34872	1227.9-1232.6	--	--	--	--	--	--	--	--	--	--
CL 17180	34872	1232.6-1233.9	--	--	--	--	--	--	--	--	--	--
CL 17181	34872	1233.9-1239.4	--	--	--	--	--	--	--	--	--	--
CL 17183	34872	1239.4-1241	6	2*	62	160	17.30	2*	2	32	2	12
CL 17186 (17184-85)	34872	1241-1250	14	2*	140	200	9.10	2*	5	50	2	8
CL 17184	34872	1241-1245	--	--	--	--	--	--	--	--	--	--
CL 17185	34872	1245-1250	--	--	--	--	--	--	--	--	--	--
CL 17189 (17187-88)	34872	1250-1261	14	2*	180	190	9.80	2*	6	44	2	10
CL 17187	34872	1250-1256.1	--	--	--	--	--	--	--	--	--	--
CL 17188	34872	1256.1-1261	--	--	--	--	--	--	--	--	--	--
CL 17193 (17190-92)	34872	1261-1271.2	12	2*	250	170	15.20	4	7	50	2	8
CL 17190	34872	1261-1264.7	--	--	--	--	--	--	--	--	--	--
CL 17191	34872	1264.7-1267.5	--	--	--	--	--	--	--	--	--	--
CL 17192	34872	1267.5-1271.2	--	--	--	--	--	--	--	--	--	--
CL 17194	34872	1295-1298.7	8	2*	210	200	18.00	10	10	56	2	12
CL 17199 (17195-98)	34872	1298.7-1305.7	8	2*	90	160	20.10	2*	5	40	2	10
CL 17195	34872	1298.7-1301.2	--	--	--	--	--	--	--	--	--	--
CL 17196	34872	1301.2-1302.7	--	--	--	--	--	--	--	--	--	--
CL 17197	34872	1302.7-1303.5	--	--	--	--	--	--	--	--	--	--
CL 17198	34872	1303.5-1305.7	--	--	--	--	--	--	--	--	--	--
CL 17200	34872	1305.7-1310.5	14	2	180	190	9.80	2*	6	42	2*	8
CL 17201	34872	1310.5-1315	4	2*	26	170	22.60	2*	3	46	2	14
CL 17202	34872	1315-1319	6	2*	26	180	21.60	2*	3	40	2	14
CL 17203	34872	1319-1324.8	6	2*	18	190	22.50	2*	2	38	2*	16
CL 17204	34872	1324.8-1328.5	6	2*	20	170	21.80	2*	4	42	2	16
CL 17205	34872	1331-1333.2	8	2*	120	200	12.80	4	6	38	2*	8
CL 17206	34872	1351-1356	8	2*	140	10*	18.50	2*	8	52	2	10
CSL 17254	64046	50.0-60	30	2*	230	310	18.90	34	22	160	3	20
CSL 17255	64046	70-80	60	2	190	450	20.50	42	35	130	3	14
CSL 17223	64048	100-105	90	2	150	1000	18.80	26	33	120	3	12
CSL 17267	64048	100-105	8	2*	24	50	7.50	2*	7	32	2*	12
CSL 17270	64048	105-110	26	2*	110	360	22.30	26	23	150	4	18
CSL 17269	64048	105-110	12	2*	16	90	5.40	2*	5	26	2*	12
CSL 17224	64048	135-140	100	6	150	610	27.50	26	45	150	4	16
CSL 17265	64048	135-140	16	2*	22	140	7.70	2*	6	34	2*	14
CSL 17266	64048	140-145	120	7	96	590	19.00	24	34	130	3	12

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 17225	64048	200-205	48	3	170	420	28.70	14	10	78	2*	10
CSL 17264	64048	205-210	NSS	3	NSS	NSS	11.40	NSS	21	NSS	3	NSS
CSL 17226	64048	220-230	8	2*	64	60	0.80	4	6	18	2*	8
CSL 17227	64048	240-245	14	2*	480	450	26.40	52	35	230	7	30
CSL 17228	64048	285-290	10	2*	90	110	4.40	2*	5*	30	2*	10
CSL 17249	66010	20-30	26	2*	230	250	15.50	22	16	120	2	16
CSL 17250	66010	40-45	28	2*	210	260	16.10	24	17	130	3	14
CSL 17262	66012	11-20	54	2	200	430	23.20	26	23	120	3	14
CSL 17238	66014	80-90	22	2*	230	250	12.00	16	15	90	2	14
CSL 17239	66014	105-115	24	2*	220	240	12.00	12	14	88	2	12
CSL 17240	66014	145-150	24	2*	300	240	11.90	14	14	94	2	10
CSL 17241	66014	265-270	34	2*	190	290	18.50	22	15	110	3	14
CSL 17242	66014	300-310	26	3	260	260	18.60	24	18	120	2	14
CSL 17243	66014	335-345	30	2*	250	270	18.30	26	19	130	3	14
CSL 17244	66014	360-370	14	2*	200	170	18.90	12	10	76	2*	10
CSL 17245	66014	380-390	20	2*	190	220	15.50	14	15	110	3	14
CSL 17246	66014	445-455	16	2*	82	110	1.70	6	8	22	2*	6
CSL 17247	66014	545-550	6	2*	34	30	1.00	2*	5*	18	2*	10
CSL 17248	66014	605-615	4	2*	62	40	2.20	2*	5*	24	2*	12
CSL 17229	66017	24.8-30	36	2*	220	300	19.50	22	20	120	3	14
CSL 17230	66017	155-165	26	2*	190	280	23.20	22	18	110	3	16
CSL 17231	66017	190-195	18	2*	210	240	23.10	12	13	62	2*	10
CSL 17232	66017	240-245	26	2*	210	270	18.90	26	20	140	4	16
CSL 17233	66017	260-270	26	2*	240	270	21.00	16	16	76	2	10
CSL 17234	66017	280-290	32	2*	180	300	22.30	30	27	120	3	16
CSL 17235	66017	350-360	10	2*	74	80	1.40	4	8	20	2*	6
CSL 17236	66017	380-390	6	2*	70	50	2.50	2*	10	28	2*	10
CSL 17237	66017	490-495	10	2*	70	90	1.80	2*	5	20	2*	12
CSL 18565	BA-1	509.6-518	13	2*	328	92	4.80	1	5*	1	2*	10
CSL 18566	BA-1	518-527	12	2*	325	75	3.90	3*	5*	2	2*	10
CSL 18568	BA-1	1097.1-1106	17	2*	148	18	52.50	43	12	97	2	25
CSL 18570	BA-1	1937-1947	14	2*	294	47	33.50	30	16	46	2*	20
CSL 18572	BA-1	1947-1956.9	13	2*	300	94	33.00	46	26	60	2*	21
CSL 18573	BA-1	1956.9-1961.3	11	2*	239	33	38.80	29	13	73	2	32
CSL 18574	BA-1	1961.3-1968	13	2*	293	96	17.00	1	5*	15	2*	10
CSL 18575	BA-1	1968-1974	10	2*	196	21	60.10	31	8	63	2	28
CSL 18576	BA-1	1974-1979.2	11	2*	218	35	62.00	35	8	70	2*	34
CSL 18578	BA-1	1979.2-1987.4	9	2*	265	43	51.80	25	9	58	2	33
CSL 18579	BA-1	2005.1-2011	8	2*	210	40	56.60	8	5*	15	2*	9
CSL 18580	BA-1	2017.8-2019.8	10	2*	187	49	24.00	1*	5*	24	2*	9
CSL 18582	BA-1	2635-2643	26	2	254	148	9.80	8	8	54	2	13
CSL 18583	BA-1	2643-2653	43	3	201	174	10.50	8	14	71	2*	14
CSL 18585	BA-1	2653-2663	27	2	243	153	14.50	14	11	72	2	12
CSL 18586	BA-1	2663-2673	21	2	264	119	17.20	13	9	57	2*	14
CSL 18587	BA-1	2673-2680	16	2*	262	88	8.20	5	6	39	2*	10
CSL 18588	BA-1	2680-2690	16	2*	249	120	16.00	24	12	58	2*	14
CSL 18590	BA-1	2690-2700	13	2*	243	101	11.70	7	7	40	2*	14
CSL 18591	BA-1	2700-2710	16	2*	248	103	9.50	6	7	45	2*	12
CSL 18592	BA-1	2710-2718	16	2*	235	116	10.40	12	8	55	2*	12
CSL 18593	BA-1	2718-2726.4	18	2*	207	105	12.70	7	7	55	2*	14
CSL 18594	BA-1	3009.3-3019.5	29	2*	225	291	25.40	32	20	146	3	18

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19381	BA-2	894-900	17	2*	211	109	17.50	9	9	77	2*	17
CSL 19382	BA-2	900-905	19	2*	344	133	7.00	5	5*	8	2*	8
CSL 19385	BA-2	1608-1609.5	38	4	402	279	4.20	9	19	40	2*	13
CSL 19387	BA-2	1665.6-1666.3	31	2*	248	160	10.10	9	12	56	2*	9
CSL 19388	BA-2	1678.5-1679	27	2*	336	181	31.00	73	51	299	10	16
CSL 19390	BA-2	1793-1797.7	11	2*	249	55	14.30	3	5*	19	2*	9
CSL 19392	BA-2	1797.7-1805.5	12	2*	327	88	11.00	3	5*	11	2*	9
CSL 19393	BA-2	1865.5-1875	11	2	269	51	8.90	2	5*	14	2*	10
CSL 18453	BA-2	1875-1884	15	2	345	100	6.60	3	5*	12	2*	10
CSL 18454	BA-2	1884-1888	9	2*	272	52	7.70	1	5*	9	2*	9
CSL 18455	BA-2	1891.7-1897.1	12	2*	347	85	8.00	2	5	9	2*	10
CSL 18458	BA-2	2009-2010.4	13	2*	292	130	41.40	24	13	72	2	14
CSL 18460	BA-2	2369.5-2376.9	13	2*	289	138	16.70	1	7	25	2*	14
CSL 18462	BA-2	2438.4-2438.8	23	5	285	149	31.00	6	10	32	2*	13
CSL 18464	BA-2	2516.5-2522	18	2*	345	152	14.60	4	8	23	2*	10
CSL 18534	BA-2	2579-2582	25	2*	356	254	19.50	38	39	147	5	16
CSL 18536	BA-2	2582-2588	13	2*	323	102	6.90	2*	5	3	2*	11
CSL 18540	BA-2	2746-2756	22	2*	377	199	16.80	10	12	88	2	13
CSL 18542	BA-2	2756-2766	18	2*	327	157	17.30	10	9	66	2	14
CSL 18543	BA-2	2766-2776	16	2*	292	149	17.40	12	11	70	2*	15
CSL 18537	BA-2	2776-2781	14	2	271	139	27.10	31	19	116	2	16
CSL 18539	BA-2	2781-2785	9	2*	278	87	8.80	1*	6	21	2*	11
CSL 18544	BA-2	2954-2964	15	2*	302	122	5.70	1*	6	22	2*	9
CSL 18546	BA-2	3074-3084	13	2*	301	114	5.40	1*	5	24	2*	9
CSL 18547	BA-2	3200.5-3210.5	16	2*	272	107	9.70	5	7	50	2*	10
CSL 18549	BA-2	3210.5-3220.5	20	2*	320	141	14.50	13	11	63	2*	14
CSL 18551	BA-2	3234.8-3240	23	2	346	160	12.40	6	9	62	2*	13
CSL 18552	BA-2	3253-3256	64	2*	214	111	9.50	19	34	280	10	24
CSL 18554	BA-2	3269.6-3273.1	25	2*	54	7	45.30	74	30	86	2	25
CSL 18556	BA-2	3342-3352	11	2*	167	30	11.90	4	5*	41	2*	12
CSL 18558	BA-2	3367-3373	133	2*	1389	20	11.80	36	5*	506	2*	101
CSL 18560	BA-2	3378-3388	18	2	173	100	20.50	12	8	72	2*	14
CSL 18562	BA-2	3474-3684	21	2*	1413	2670	7.70	3	29	0*	2*	8
CSL 18596	BA-5	120-127	13	2*	429	80	9.30	6	6	16	2*	11
CSL 18597	BA-5	127-129.8	6	2*	42	40*	58.60	95	12	148	3	33
CSL 18598	BA-5	129.8-139.8	12	2*	408	120	11.20	7	9	42	2*	18
CSL 18432	BI-128	1581& 1600	8	2*	160	200	6.90	2	5*	33	2*	8
CSL 18433	BI-128	1835& 1842	12	2*	210	100	13.40	2	6	81	2	16
CSL 18434	BI-128	1920& 1962	8	2*	130	100*	13.90	12	10	66	2*	10
CSL 19395	BI-134	1156-1166	11	3	265	90	6.70	5*	5*	48	2*	7
CSL 19397	BI-134	1216-1226	5*	1*	215	20	12.00	5*	7	67	2*	9
CSL 19400	BI-134	1256-1266	11	1	225	40	13.00	5*	9	78	2*	11
CSL 19401	BI-134	1696-1706	22	2	270	210	15.00	5*	10	105	3	14
CSL 19402	BI-134	1706-1716	26	3	260	140	18.00	5*	16	110	3	9
CSL 19403	BI-134	1716-1726	33	1	265	490	18.00	5*	15	110	4	15
CSL 19410	BI-144	665-675	5*	1*	220	50	11.00	5*	8	70	2*	5*
CSL 19412	BI-144	675-685	6	1*	235	50	8.90	5*	8	71	2*	7
CSL 19413	BI-144	685-695	5*	1*	255	70	6.20	5*	6	61	2*	6
CSL 19405	BI-144	1412-1417	21	2	210	120	23.00	5*	14	120	2*	14
CSL 19407	BI-144	1435-1445	11	7	270	270	19.00	5*	12	93	3	12
CSL 19409	BI-144	1462-1472	15	2	235	140	20.00	5*	9	100	3	11

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19415	BI-147	1485-1494	27	2	215	460	29.00	17	19	160	3	14
CSL 19417	BI-147	1556.3-1566.2	6	1*	175	80	20.00	5*	10	110	3	11
CSL 19419	BI-147	1566.2-1575.2	14	2	205	120	26.00	6	12	130	2*	9
CSL 19421	BI-147	1592-1602	13	4	125	50	19.00	5*	9	97	4	5*
CSL 19422	BI-147	1602-1612	5*	1*	82	30	25.00	5*	8	97	2*	6
CSL 19424	BI-147	1928-1939.8	5*	3	200	90	15.00	5*	11	125	2*	7
CSL 10952	CN-7	1151	4	2*	40	80	50.20	2*	1	56	6	28
CSL 17283	D-10	390- 395	14	2*	170	150	11.20	6	8	64	2*	10
CSL 17284	D-10	400- 416	16	2	230	170	10.10	6	7	52	2*	8
CSL 17285	D-10	773- 782	14	2*	290	180	19.90	4	9	44	2*	10
CSL 17286	D-10	782- 789	20	2	310	180	8.80	4	7	38	2*	8
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--	--	--	--
CSL 17289	D-10	789- 798	22	2*	230	150	18.50	16	17	110	4	10
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--	--	--	--
CSL 17290	D-10	798- 805	32	3	240	230	15.30	10	12	48	2*	14
CSL 17291	D-10	805- 814.1	12	2	150	120	11.30	2*	5*	30	2*	10
CSL 17292	D-10	814.1- 818.3	12	2*	140	120	12.00	2*	5*	34	2*	10
CSL 17293	D-10	818.3- 821	12	2*	240	140	10.60	2*	5	32	2*	8
CSL 17294	D-10	1167-1177	10	2*	240	160	11.50	2*	6	38	2*	8
CSL 17295	D-10	1177-1187	16	2*	200	200	37.30	10	9	70	2*	12
CSL 17663	D-10	1475.8-1476.3	18	2*	190	210	16.80	12	12	74	2	12
CSL 17664	D-10	1476.3-1479.2	6	2*	20	80	13.50	2*	5	58	2*	18
CSL 17665	D-10	1479.2-1486.8	22	2*	210	210	12.00	14	13	72	2*	10
CSL 17666	D-10	1486.8-1491	12	2*	52	80	14.60	2*	5	54	2*	14
CSL 17667	D-10	1491-1493.8	8	2*	26	50	10.90	2*	5*	50	2*	18
CSL 17668	D-10	1493.8-1501.3	12	2*	48	90	10.20	2*	5	44	2*	14
CSL 17669	D-10	1501.3-1507.5	2*	2*	26	70	11.40	2*	5*	46	2*	16
CSL 17670	D-10	1507.5-1513.8	12	2	50	120	15.40	4	8	58	2*	10
CSL 17674	D-10	1581-1591	22	2*	190	300	20.10	24	18	120	3	16
CSL 17675	D-10	1591-1601	22	2*	150	330	15.40	10	14	88	2	14
CSL 17676	D-10	1601-1603.7	24	2*	160	340	11.10	2*	13	64	2	14
CSL 17677	D-10	1603.7-1605	6	2*	20	40	1.90	2*	5*	18	2*	12
CSL 17678	D-10	1605-1608	36	2	230	470	17.70	14	16	90	3	14
CSL 17679	D-10	1608-1614.7	46	2*	260	580	24.80	36	27	170	5	20
CSL 17680	D-10	1614.7-1616.2	12	2*	150	470	3.90	2*	17	36	2*	12
CSL 17681	D-10	1616.2-1620	30	2*	810	2000	6.70	6	52	120	3	8
CSL 18440	D-4	1276.4-1286.4	40	2*	1100	1600	11.60	10	41	120	3	4
CSL 18441	D-4	1286.4-1294.6	24	2*	900	1500	6.00	4	28	120	3	4
CSL 18442	D-4	1294.6-1305.3	38	2*	1100	1200	7.10	12	26	98	2*	6
CSL 18443	D-4	1305.3-1309	48	2	1200	1100	7.20	10	32	88	2*	6
CSL 17704	D-5	1321-1328.7	22	2*	310	160	19.70	12	19	96	3	12
CSL 17706	D-5	1339-1344	6	2*	130	50	36.70	4	9	72	2	18
CSL 17707	D-5	1613-1613.5	2	2*	34	10*	4.70	2*	5*	26	2*	16
CSL 17701	D-5	1615.5-1616	2	2*	32	10*	0.50*	2*	5*	20	2*	6
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	24	2*	220	180	20.50	20	19	100	4	16
CSL 16681	D-6A	1927.6-1929.8	--	--	--	--	--	--	--	--	--	--
CSL 16682	D-6A	1929.8-1931.8	--	--	--	--	--	--	--	--	--	--
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	16	2*	130	200	20.00	12	13	90	3	14
CSL 16684	D-6A	1931.8-1934	--	--	--	--	--	--	--	--	--	--
CSL 16685	D-6A	1934-1937.8	--	--	--	--	--	--	--	--	--	--
CSL 16687	D-6A	1937.8-1938.8	8	2*	52	160	23.90	2*	9	70	3	16

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16691 (16688-90)	D-6A	1938.8-1942.7	30	2	190	260	15.30	14	14	100	3	12
CSL 16688	D-6A	1938.8-1941	--	--	--	--	--	--	--	--	--	--
CSL 16689	D-6A	1941-1942	--	--	--	--	--	--	--	--	--	--
CSL 16690	D-6A	1942-1942.7	--	--	--	--	--	--	--	--	--	--
CSL 16692	D-6A	1942.7-1945.2	12	2*	30	170	21.80	2*	4	50	2*	10
CSL 16693	D-6A	1945.2-1946.8	10	2*	42	150	23.70	2*	6	56	3	16
CSL 16694	D-6A	1946.8-1948.7	8	2*	24	190	20.70	2*	5	58	2	16
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	16	2*	160	230	18.90	12	13	98	3	14
CSL 16695	D-6A	1948.7-1952.6	--	--	--	--	--	--	--	--	--	--
CSL 16696	D-6A	1952.6-1957.5	--	--	--	--	--	--	--	--	--	--
CSL 16697	D-6A	1957.5-1959	--	--	--	--	--	--	--	--	--	--
CSL 16698	D-6A	1959-1959.8	--	--	--	--	--	--	--	--	--	--
CSL 16699	D-6A	1959.8-1964.8	--	--	--	--	--	--	--	--	--	--
CSL 17155 (17151-54)	D-6A	1964.8-1981	20	2*	150	200	20.70	12	14	94	3	14
CSL 17151	D-6A	1964.8-1969.7	--	--	--	--	--	--	--	--	--	--
CSL 17152	D-6A	1969.7-1972.7	--	--	--	--	--	--	--	--	--	--
CSL 17153	D-6A	1972.7-1978.8	--	--	--	--	--	--	--	--	--	--
CSL 17154	D-6A	1978.8-1981	--	--	--	--	--	--	--	--	--	--
CSL 17156	D-6A	1981-1982.2	8	2*	34	200	21.90	2*	6	54	2	18
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	20	2*	170	250	21.90	16	16	98	3	14
CSL 17157	D-6A	1982.2-1983.9	--	--	--	--	--	--	--	--	--	--
CSL 17158	D-6A	1983.9-1989.2	--	--	--	--	--	--	--	--	--	--
CSL 16676	D-8	967.7-972.5	18	2*	90	250	22.40	2*	14	82	3	14
CSL 16677	D-8	972.5-976.8	16	2*	72	220	20.40	2*	12	80	3	14
CSL 16678	D-8	976.8-981	12	2*	44	220	20.70	2*	9	66	3	16
CSL 16679	D-8	981-986	10	2*	44	160	20.90	2*	9	68	3	16
CSL 16680	D-8	986-990.2	14	2*	68	150	18.10	2*	9	68	3	18
CSL 18446	D-9	1292.5-1299	14	2	880	1100	11.30	2	18	50	2*	6
CSL 18447	D-9	1299-1302	42	2*	1600	1300	4.30	2	25	58	2*	2
CSL 18448	D-9	1302-1305.8	32	2*	930	780	5.40	2*	19	38	2*	2
CSL 18449	D-9	1305.8-1309	12	2*	830	780	2.10	2*	12	36	2*	6
CSL 18450	D-9	1309-1319	20	2	1200	1300	9.90	4	16	50	2*	2
CSL 18436	DU 15	2603-2613	42	2	970	1700	7.90	6	35	76	2*	4
CSL 18437	DU 15	2613-2622.5	42	2*	1100	1700	5.60	8	34	78	2*	2
CSL 18438	DU 15	2622.5-2631.5	38	2*	960	1600	19.80	30	100	150	4	6
CL 16660	DU-14	3897.6-3898.8	24	2	110	140	10.60	2*	8	46	2	10
CL 16663 (16661-62)	DU-14	3898.8-3901.2	4	2*	38	160	22.70	2*	1	44	4	16
CL 16661	DU-14	3898.8-3900.6	--	--	--	--	--	--	--	--	--	--
CL 16662	DU-14	3900.8-3901.2	--	--	--	--	--	--	--	--	--	--
CL 16664	DU-14	3901.5-3904	6	2*	120	170	14.50	2*	2	28	2	6
CL 16665	DU-14	3904-3907.9	6	2*	140	150	17.30	2*	2	34	2*	10
CSL 16642	DU-15	248-253	22	2*	310	180	20.60	16	16	94	4	10
CSL 16643	DU-15	445-450	66	2	480	700	16.40	14	18	100	3	12
CSL 16644	DU-15	458-463	64	2*	360	290	26.50	36	31	190	6	24
CSL 16645	DU-15	797-802	30	2*	290	190	17.20	16	18	140	5	14
CSL 16646	DU-15	995.7-999.7	26	2*	330	210	16.10	12	14	92	4	12
CSL 16647	DU-15	1464-1464.6	10	2*	240	90	9.80	2*	7	44	2	6
CSL 16648	DU-15	1705-1710	20	2*	250	130	24.60	14	14	90	3	12
CSL 16649	DU-15	1899-1904	18	2*	240	130	34.80	14	14	90	4	10
CSL 16650	DU-15	2140.6-2145	62	2	500	810	22.70	18	12	98	4	12
CSL 16651	DU-15	2172-2177	32	2*	360	170	11.70	12	12	94	3	10

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16652	DU-15	2283-2288	14	2*	360	100	11.20	6	8	62	2	8
CSL 17268	DU-15	2364-2369	10	2	78	80	6.40	2*	5*	36	2*	6
CSL 16641	DU-15	2434-2438	10	2*	200	210	19.80	2*	6	38	2	10
CSL 16653(16658-59)	DU-15	2455-2465	48	2*	1900	1400	4.80	6	40	110	2	8
CSL 16658	DU-15	2455-2460	--	--	--	--	--	--	--	--	--	--
CSL 16659	DU-15	2460-2465	--	--	--	--	--	--	--	--	--	--
CSL 19394	DU-15	2593-2603	50	2*	1200	1700	5.10	4	29	78	2*	2
CL 16668	DU-16	3355-3355.7	4	2*	46	100	25.40	2*	1	34	2	12
CL 16669	DU-16	3363-3364	24	2*	330	180	22.20	14	19	46	2	10
CL 16670	DU-16	3371.5-3372.5	6	2*	120	150	12.00	2*	1	24	2*	8
CL 16671	DU-16	3625-3627	8	2*	140	190	17.10	6	8	48	2	12
CL 16674	DU-16	3628.7-3630.4	12	2*	90	180	16.40	2	6	56	2*	14
CSL 17709	DU-9	2585-2588	16	2*	320	160	13.20	12	13	72	2	8
CSL 17710	DU-9	2588-2591.3	18	2	290	170	12.40	6	14	100	3	6
CSL 17711	DU-9	2591.3-2592.1	4	2*	170	40	3.80	2*	5*	30	2*	4
CSL 17712	DU-9	2592.1-2593.7	14	2*	200	160	16.50	10	14	88	2	8
CSL 17713	DU-9	2593.7-2596.7	12	2*	300	120	7.80	4	6	52	2*	6
CSL 19459	II-1	195.7-205.7	5*	1*	245	20*	13.00	5*	5*	40	2*	7
CSL 19460	II-1	205.7-211	5*	1*	170	20*	26.00	5*	5*	52	3	5*
CSL 19461	II-1	211-221	5*	2	16	20*	59.10	5*	5*	74	2*	5*
CSL 19462	II-1	221-223.3	5*	3	14	20*	45.00	5*	5*	68	2*	5*
CSL 19463	II-1	223.3-233.3	6	1*	125	20*	40.00	5*	5*	65	2*	6
CSL 19467	II-3	187-194.7	5*	1*	125	20*	12.00	5*	5*	51	2*	5*
CSL 19468	II-3	200-203.3	5*	1	170	20*	12.00	5*	5	52	2*	5*
CSL 19470	II-5	267.5-272.4	5*	1*	29	20*	60.30	5*	5*	95	2*	5*
CSL 19472	II-6	218.6-223.3	11	4	150	120	8.80	5*	5*	46	3	5*
CSL 19473	II-6	223.3-231.2	19	3	44	110	7.60	5*	6	63	2*	5*
CSL 18428	NM-5	1815& 1820.5	12	2*	140	100	15.00	22	12	69	2	8
CSL 18429	NM-5	1822& 1826.5	8	2*	58	100	12.60	2*	9	57	2*	14
CSL 18430	NM-5	1859& 1864	6	2*	340	500	5.60	2*	7	24	2*	8
CSL 18431	NM-9	1549.5& 1579	12	2*	150	200	15.50	2*	9	57	2*	12
CSL 19433	W-14	424-433.7	5*	1*	235	20*	11.00	5*	5	57	2*	10
CSL 19434	W-14	433.7-440.4	9	3	155	20*	42.00	8	13	67	2*	13
CSL 19435	W-14	440.4-450	6	4	220	20*	20.00	5*	6	47	2*	9
CSL 19448	W-4	193.8-203	13	1*	205	50	13.00	5*	7	76	2*	8
CSL 19449	W-4	203-213	6	5	200	60	15.00	5*	9	81	2*	8
CSL 19450	W-4	213-223	20	1*	250	150	18.00	5*	14	130	4	9
CSL 19453	W-4	2144-2154	5	1*	215	50	10.00	5*	10	87	2*	8
CSL 19454	W-4	2154-2164	10	1*	216	50	12.00	5*	9	88	2*	10
CSL 19456	W-4	2524-2534	5*	1*	220	60	13.00	5*	8	77	2*	5*
CSL 19457	W-4	2534-2544	10	1*	205	70	12.00	5*	7	70	2*	5*
CSL 19443	W-8B	476-753.7	16	1*	245	20	9.20	5*	7	66	2*	8
CSL 19437	W-8B	495-505	9	1*	215	20	13.00	5*	8	81	3	5*
CSL 19438	W-8B	505-515	10	1*	235	70	12.00	5*	13	115	2*	5
CSL 19439	W-8B	515-525	5	1*	235	110	12.00	5*	14	110	4	9
CSL 19440	W-8B	525-535	5*	1*	235	90	14.00	5*	13	110	2*	8
CSL 19478	W-8B	533-539	5*	1*	240	70	12.00	5*	12	93	2	6
CSL 19441	W-8B	553.3-554.3	15	3	205	250	22.00	5*	21	125	2*	10
CSL 19444	W-8B	753.7-765	23	2	205	130	38.00	17	20	150	3	18
CSL 19445	W-8B	765-775	12	1*	250	80	12.00	5*	10	83	2*	11
CSL 19425	W-9	359-369	14	1*	155	20*	32.00	9	11	130	2*	19

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TABLE III

Chemical Analyses for Drill Hole Samples

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 19426	W-9	369-379	43	3	380	140	7.10	5*	6	61	3	9
CSL 19427	W-9	379-389	8	1*	245	80	14.00	5*	15	87	2*	11
CSL 19429	W-9	925-935	24	1*	260	150	16.00	5*	16	115	2*	13
CSL 19430	W-9	935-945	10	3	210	100	20.00	5*	16	130	6	12
CSL 19431	W-9	945-955	29	3	230	160	24.00	10	21	150	4	14

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TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
CL 17165	34872	1182-1187.6	1*	4*	10*	2*	0.20	2*	10*	10*	5*	12
CL 17169 (17166-68)	34872	1187.6-1192	1	5*	10*	2*	0.20*	2*	10*	10*	5*	12
CL 17166	34872	1187.6-1189.2	--	--	--	--	--	--	--	--	--	--
CL 17167	34872	1189.2-1190.8	--	--	--	--	--	--	--	--	--	--
CL 17168	34872	1190.8-1192	--	--	--	--	--	--	--	--	--	--
CL 17173 (17170-72)	34872	1192-1199.7	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	6
CL 17170	34872	1192-1193.5	--	--	--	--	--	--	--	--	--	--
CL 17171	34872	1193.5-1194.2	--	--	--	--	--	--	--	--	--	--
CL 17172	34872	1194.2-1199.7	--	--	--	--	--	--	--	--	--	--
CL 17174	34872	1199.7-1204.7	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	7
CL 17175	34872	1220.8-1223	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	21
CL 17178 (17176-77)	34872	1223-1227.9	1	6*	10*	2*	0.20*	2*	10*	10*	5*	5*
CL 17176	34872	1223-1226.4	--	--	--	--	--	--	--	--	--	--
CL 17177	34872	1226.4-1227.9	--	--	--	--	--	--	--	--	--	--
CL 17182 (17179-81)	34872	1227.9-1239.4	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	10
CL 17179	34872	1227.9-1232.6	--	--	--	--	--	--	--	--	--	--
CL 17180	34872	1232.6-1233.9	--	--	--	--	--	--	--	--	--	--
CL 17181	34872	1233.9-1239.4	--	--	--	--	--	--	--	--	--	--
CL 17183	34872	1239.4-1241	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	5*
CL 17186 (17184-85)	34872	1241-1250	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	14
CL 17184	34872	1241-1245	--	--	--	--	--	--	--	--	--	--
CL 17185	34872	1245-1250	--	--	--	--	--	--	--	--	--	--
CL 17189 (17187-88)	34872	1250-1261	1*	6	10*	2*	0.20	2*	10*	10*	5*	12
CL 17187	34872	1250-1256.1	--	--	--	--	--	--	--	--	--	--
CL 17188	34872	1256.1-1261	--	--	--	--	--	--	--	--	--	--
CL 17193 (17190-92)	34872	1261-1271.2	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	16
CL 17190	34872	1261-1264.7	--	--	--	--	--	--	--	--	--	--
CL 17191	34872	1264.7-1267.5	--	--	--	--	--	--	--	--	--	--
CL 17192	34872	1267.5-1271.2	--	--	--	--	--	--	--	--	--	--
CL 17194	34872	1295-1298.7	1	5*	10*	2*	0.20*	2*	10*	10*	5*	24
CL 17199 (17195-98)	34872	1298.7-1305.7	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	14
CL 17195	34872	1298.7-1301.2	--	--	--	--	--	--	--	--	--	--
CL 17196	34872	1301.2-1302.7	--	--	--	--	--	--	--	--	--	--
CL 17197	34872	1302.7-1303.5	--	--	--	--	--	--	--	--	--	--
CL 17198	34872	1303.5-1305.7	--	--	--	--	--	--	--	--	--	--
CL 17200	34872	1305.7-1310.5	1*	4*	10*	2*	0.20	2*	10*	10*	5*	17
CL 17201	34872	1310.5-1315	1	6*	10*	2*	0.20*	2*	10*	10*	5*	8
CL 17202	34872	1315-1319	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	5*
CL 17203	34872	1319-1324.8	1*	7*	10*	2*	0.20*	2*	10*	10*	5*	5*
CL 17204	34872	1324.8-1328.5	1*	7*	10*	2*	0.20*	2*	10*	10*	5*	11
CL 17205	34872	1331-1333.2	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	16
CL 17206	34872	1351-1356	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	19
CSL 17254	64046	50.0-60	1	4*	10*	5	0.20*	2*	10*	10*	5*	43
CSL 17255	64046	70-80	1*	4*	10*	19	0.60	2*	10*	10*	5*	60
CSL 17223	64048	100-105	1*	4*	10*	32	1.80	2*	10*	10*	5*	50
CSL 17267	64048	100-105	1*	4*	10*	22	0.30	2*	29	10*	5*	7
CSL 17270	64048	105-110	1	4*	10*	7	0.20	2*	12	10*	5*	43
CSL 17269	64048	105-110	1*	4*	10*	26	0.40	2*	31	10*	5*	5
CSL 17224	64048	135-140	1*	4*	10*	43	2.00	2*	10*	10*	5*	66
CSL 17265	64048	135-140	1*	4*	10*	67	2.10	2*	30	10*	5*	11
CSL 17266	64048	140-145	1*	4*	10*	47	1.90	2*	10*	10*	5*	49

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TABLE III

Chemical Analyses for Drill Hole Samples

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 17225	64048	200-205	1*	4*	10*	1*	0.20*	2*	10*	10*	5*	23
CSL 17264	64048	205-210	1*	3*	NSS	5	0.30	NSS	10*	NSS	5*	30
CSL 17226	64048	220-230	1*	2*	10*	7	0.20*	2*	10*	10*	5*	8
CSL 17227	64048	240-245	2	4*	10*	15	0.20*	2*	10*	10*	5*	65
CSL 17228	64048	285-290	1*	3*	10*	5	0.20*	2*	10*	10*	5*	9
CSL 17249	66010	20-30	1*	4*	10*	6	0.30	2*	10*	10*	5*	30
CSL 17250	66010	40-45	1*	4*	10*	12	0.30	2*	10*	10*	5*	36
CSL 17262	66012	11-20	1*	5*	10*	8	0.70	2*	10*	10*	5*	39
CSL 17238	66014	80-90	1	3*	10*	1	0.20	2	10*	10*	5*	28
CSL 17239	66014	105-115	1	3*	10*	1*	0.30	2	10*	10*	5*	29
CSL 17240	66014	145-150	1	3*	10*	1*	0.20*	2*	10*	10*	5*	23
CSL 17241	66014	265-270	1*	4*	10*	1*	0.20*	2*	10*	10*	5*	25
CSL 17242	66014	300-310	1*	5	10*	3	0.20*	2*	10*	10*	5*	35
CSL 17243	66014	335-345	1*	4*	10*	4	0.20	2*	10*	10*	5*	38
CSL 17244	66014	360-370	1*	4*	10*	5	0.20	2*	10*	10*	5*	21
CSL 17245	66014	380-390	1	4	10*	10	0.40	3	10*	10*	5*	32
CSL 17246	66014	445-455	1*	2*	10*	4	0.20*	2*	10*	10*	5*	9
CSL 17247	66014	545-550	1*	3*	10*	1	0.20*	2*	10*	10*	5*	6
CSL 17248	66014	605-615	1*	3*	10*	1*	0.20*	2*	10*	10*	5*	5*
CSL 17229	66017	24.8-30	1*	4*	10*	28	0.40	2*	10*	10*	5*	39
CSL 17230	66017	155-165	1	4*	10*	4	0.20	2*	10*	10*	5*	36
CSL 17231	66017	190-195	1*	4*	10*	7	0.20	2*	10*	10*	5*	22
CSL 17232	66017	240-245	1	4*	10*	4	0.30	2*	10*	10*	5*	38
CSL 17233	66017	260-270	1*	4*	10*	5	0.20*	2*	10*	10*	5*	27
CSL 17234	66017	280-290	1	4*	10*	18	1.00	2*	10*	10*	5*	47
CSL 17235	66017	350-360	1*	2*	10*	3	0.20*	2*	10*	10*	5*	17
CSL 17236	66017	380-390	1*	3*	10*	10	0.20*	2*	10*	10*	5*	21
CSL 17237	66017	490-495	1*	5	10*	18	0.20*	2*	10*	10*	5*	6
CSL 18565	BA-1	509.6-518	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	5*
CSL 18566	BA-1	518-527	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	5*
CSL 18568	BA-1	1097.1-1106	3	2*	10*	1*	0.20*	2*	10*	10*	5*	28
CSL 18570	BA-1	1937-1947	2	2*	10*	1*	0.20*	2*	10*	10*	5*	36
CSL 18572	BA-1	1947-1956.9	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	54
CSL 18573	BA-1	1956.9-1961.3	2	2*	10*	1*	0.20*	2*	10*	10*	5*	27
CSL 18574	BA-1	1961.3-1968	1*	2	10*	1*	0.20*	2*	10*	10*	5	7
CSL 18575	BA-1	1968-1974	2	2*	10*	1*	0.20*	2*	10*	10*	5*	18
CSL 18576	BA-1	1974-1979.2	1	3*	10*	1*	0.20*	2*	10	10*	5*	22
CSL 18578	BA-1	1979.2-1987.4	3	2*	10*	1*	0.20*	2*	10*	10*	5*	19
CSL 18579	BA-1	2005.1-2011	2*	3*	10*	1*	0.20*	2*	10*	10*	5*	18
CSL 18580	BA-1	2017.8-2019.8	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	8
CSL 18582	BA-1	2635-2643	1*	2*	10*	1	0.20	2*	10*	10*	5*	19
CSL 18583	BA-1	2643-2653	1*	2*	10*	4	0.40	2*	10*	10*	6	27
CSL 18585	BA-1	2653-2663	1*	2*	10*	3	0.20	2*	10*	10*	9	26
CSL 18586	BA-1	2663-2673	1*	2*	10*	3	0.20	2*	10*	10*	5*	17
CSL 18587	BA-1	2673-2680	1*	2*	10*	3	0.20*	2*	10*	10*	5*	12
CSL 18588	BA-1	2680-2690	1*	2*	10*	5	0.20*	2*	10*	10*	5*	23
CSL 18590	BA-1	2690-2700	1*	2*	10*	9	0.20*	2*	10*	10*	5*	15
CSL 18591	BA-1	2700-2710	1*	2*	10*	2	0.20*	2*	10*	10*	5*	14
CSL 18592	BA-1	2710-2718	1*	2	10*	5	0.20*	2*	10*	10*	5*	16
CSL 18593	BA-1	2718-2726.4	1*	2*	10*	9	0.20	2*	10*	10*	5*	14
CSL 18594	BA-1	3009.3-3019.5	1*	2*	10*	4	0.30	2*	10*	10*	5*	42

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19381	BA-2	894-900	1*	2*	10*	1	0.20*	2*	10*	10*	5*	17
CSL 19382	BA-2	900-905	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	12
CSL 19385	BA-2	1608-1609.5	2*	2*	10*	1*	0.20*	2*	10*	10*	6	30
CSL 19387	BA-2	1665.6-1666.3	2*	4	10*	1*	0.20*	4	10*	10*	5	15
CSL 19388	BA-2	1678.5-1679	2	2*	10*	1*	0.40	2*	10*	10*	5*	87
CSL 19390	BA-2	1793-1797.7	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	9
CSL 19392	BA-2	1797.7-1805.5	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	9
CSL 19393	BA-2	1865.5-1875	1*	2*	10*	1*	0.20	2*	10*	10*	5*	8
CSL 18453	BA-2	1875-1884	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	11
CSL 18454	BA-2	1884-1888	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	8
CSL 18455	BA-2	1891.7-1897.1	1*	2*	10*	1*	0.20*	2*	10*	10*	5	10
CSL 18458	BA-2	2009-2010.4	2	4	10*	2	0.20*	2*	10*	10*	5*	26
CSL 18460	BA-2	2369.5-2376.9	1*	2*	10*	2	0.20*	2*	10*	10*	5*	12
CSL 18462	BA-2	2438.4-2438.8	1*	3	10*	1*	0.20*	2*	10	10*	5*	15
CSL 18464	BA-2	2516.5-2522	1*	2*	10*	1	0.20*	2*	10*	10*	5*	19
CSL 18534	BA-2	2579-2582	2	2*	10*	1	0.20*	2	10*	10*	5	70
CSL 18536	BA-2	2582-2588	1*	2*	10*	1	0.20*	2*	10*	10*	5*	8
CSL 18540	BA-2	2746-2756	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	23
CSL 18542	BA-2	2756-2766	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	17
CSL 18543	BA-2	2766-2776	1*	2*	10*	1	0.20*	2*	10*	10*	5*	18
CSL 18537	BA-2	2776-2781	1*	2*	10*	1	0.20*	2*	10*	10*	5*	37
CSL 18539	BA-2	2781-2785	1*	2*	10*	1	0.20*	2*	10*	10*	7	13
CSL 18544	BA-2	2954-2964	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	13
CSL 18546	BA-2	3074-3084	1*	2*	10*	1	0.20*	2*	10*	10*	5*	9
CSL 18547	BA-2	3200.5-3210.5	1*	2*	10*	1*	0.20*	2*	10*	10*	5	13
CSL 18549	BA-2	3210.5-3220.5	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	20
CSL 18551	BA-2	3234.8-3240	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	18
CSL 18552	BA-2	3253-3256	2	2*	10*	1	0.20*	2*	10*	10*	11	60
CSL 18554	BA-2	3269.6-3273.1	1	3	10*	1	0.20*	3	10*	10*	5*	64
CSL 18556	BA-2	3342-3352	1*	2*	10*	1	0.20*	2*	10*	10*	11	10
CSL 18558	BA-2	3367-3373	1	2*	10*	1*	0.20*	2*	10*	10*	11	5*
CSL 18560	BA-2	3378-3388	1	2*	10*	1*	0.20*	2*	10*	10*	9	16
CSL 18562	BA-2	3474-3684	2*	2*	10*	1*	0.20*	3	10*	10*	5*	38
CSL 18596	BA-5	120-127	1*	2*	10*	1	0.20*	2*	10*	10*	5*	12
CSL 18597	BA-5	127-129.8	2	2*	10*	1*	0.20*	2*	10	10*	5*	32
CSL 18598	BA-5	129.8-139.8	1*	2*	20	1*	0.20*	2*	10*	14	5*	16
CSL 18432	BI-128	1581& 1600	4	2*	10*	1*	0.20*	2*	10*	10*	5*	8
CSL 18433	BI-128	1835& 1842	4	2*	10*	1*	0.20*	2*	10*	10*	5*	11
CSL 18434	BI-128	1920& 1962	6	2*	10*	2	0.20*	2*	10*	10*	5*	18
CSL 19395	BI-134	1156-1166	1*	2*	10*	2*	0.30	2*	10*	10*	5*	10*
CSL 19397	BI-134	1216-1226	1*	5*	10*	3*	0.20*	2*	10*	13	5*	10*
CSL 19400	BI-134	1256-1266	1*	4*	10*	2*	0.30	2*	10*	10*	5*	10*
CSL 19401	BI-134	1696-1706	1*	2*	10*	1*	0.20*	2*	10*	15	5*	36
CSL 19402	BI-134	1706-1716	1	5*	10*	7	0.30	21	10*	10*	5*	34
CSL 19403	BI-134	1716-1726	1	4*	10*	2*	0.30	2*	10*	10*	5*	50
CSL 19410	BI-144	665-675	1*	4*	10*	1*	0.20*	2*	10*	17	5*	10*
CSL 19412	BI-144	675-685	1*	5*	10*	2*	0.20	2*	10*	10*	5*	10*
CSL 19413	BI-144	685-695	1*	2*	13	5	0.20*	2*	10*	10	5*	10*
CSL 19405	BI-144	1412-1417	1*	5*	10*	2*	1.30	2*	10*	10*	5*	47
CSL 19407	BI-144	1435-1445	1	5*	10*	3*	0.30	8	10*	10*	5*	22
CSL 19409	BI-144	1462-1472	1	5*	10*	3*	0.30	2*	10*	10*	5*	20*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19415	BI-147	1485-1494	1*	6*	10*	3*	0.50	2*	10*	10*	5*	60
CSL 19417	BI-147	1556.3-1566.2	1	5*	10*	3*	0.20*	2*	10*	13	5*	34
CSL 19419	BI-147	1566.2-1575.2	1*	5	10*	3*	2.30	2*	10*	17	5*	27
CSL 19421	BI-147	1592-1602	1*	6*	10*	5	1.90	2*	10*	19	5	20*
CSL 19422	BI-147	1602-1612	1*	6*	10	3*	0.20*	2*	10*	13	6	22*
CSL 19424	BI-147	1928-1939.8	1*	8	10*	3*	0.50	2*	10*	10*	5*	41
CSL 10952	CN-7	1151	2	58	10*	14	0.30	2*	40	10*	5*	5*
CSL 17283	D-10	390- 395	1*	2*	10*	6	0.20	2*	10*	10*	5*	18
CSL 17284	D-10	400- 416	1*	2*	10*	7	0.20	2*	10*	10*	5*	14
CSL 17285	D-10	773- 782	1*	2*	10*	2	0.20*	2*	10	10*	5*	15
CSL 17286	D-10	782- 789	1*	2*	10*	1	0.20*	2*	10*	10*	5*	13
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--	--	--	--
CSL 17289	D-10	789- 798	2*	2*	10*	1	0.20*	2*	10*	10*	5*	38
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--	--	--	--
CSL 17290	D-10	798- 805	1*	2*	10*	6	0.30	2*	10*	10*	5*	21
CSL 17291	D-10	805- 814.1	1*	2*	10*	11	0.20*	2	10*	10*	5*	9
CSL 17292	D-10	814.1- 818.3	1*	2*	10*	12	0.30	2*	10*	10*	5*	6
CSL 17293	D-10	818.3- 821	1*	2*	10*	6	0.20	2*	10*	10*	5*	9
CSL 17294	D-10	1167-1177	1*	2*	10*	1*	0.20	2*	10*	10*	5*	12
CSL 17295	D-10	1177-1187	1*	2*	10*	1	0.30	2*	10*	10*	5*	19
CSL 17663	D-10	1475.8-1476.3	1*	2*	10*	2	0.20*	2*	10*	10*	5*	24
CSL 17664	D-10	1476.3-1479.2	1*	2*	10*	1	1.20	2*	10*	10*	5*	11
CSL 17665	D-10	1479.2-1486.8	1*	2	10*	3	0.20*	2*	10*	10*	5*	28
CSL 17666	D-10	1486.8-1491	1	2*	10*	1*	0.20*	2*	10*	10*	5*	9
CSL 17667	D-10	1491-1493.8	1	2*	10*	1*	0.40	2*	10*	10*	5*	7
CSL 17668	D-10	1493.8-1501.3	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	7
CSL 17669	D-10	1501.3-1507.5	1*	2*	10*	1	0.20	2*	10*	10*	5*	5
CSL 17670	D-10	1507.5-1513.8	1*	2*	10*	2	0.20*	2*	10*	10*	5*	15
CSL 17674	D-10	1581-1591	1*	2*	10*	2	0.20	2*	10*	10*	5*	32
CSL 17675	D-10	1591-1601	1*	2*	10*	2	0.20	2*	10*	10*	5*	28
CSL 17676	D-10	1601-1603.7	1*	2*	10*	2	0.30	2*	10*	10*	5*	19
CSL 17677	D-10	1603.7-1605	1*	2*	10*	2	0.20	2*	30	10*	5*	5*
CSL 17678	D-10	1605-1608	1*	2*	10*	1	0.20*	2*	10*	10*	5*	31
CSL 17679	D-10	1608-1614.7	1*	2*	10*	1	0.20	2*	10*	10*	5*	50
CSL 17680	D-10	1614.7-1616.2	1*	2*	10*	1*	0.20*	2*	10	10*	5*	25
CSL 17681	D-10	1616.2-1620	2*	2*	10*	1*	0.20*	2*	10*	10*	5*	66
CSL 18440	D-4	1276.4-1286.4	2*	2*	10*	1*	0.20*	2*	10*	10*	5*	77
CSL 18441	D-4	1286.4-1294.6	3*	3*	10*	1*	0.20*	7	10	10*	5*	47
CSL 18442	D-4	1294.6-1305.3	2*	2*	10*	1*	0.20	2*	10*	10*	5*	41
CSL 18443	D-4	1305.3-1309	2*	2*	10*	1	0.20*	2*	10*	10*	5*	48
CSL 17704	D-5	1321-1328.7	1*	2*	10*	5	0.20*	2*	10	10*	5*	40
CSL 17706	D-5	1339-1344	1*	2*	10*	10	0.20*	2	10	10*	5*	19
CSL 17707	D-5	1613-1613.5	1*	3*	10*	2	0.20*	5	80	10*	5*	5
CSL 17701	D-5	1615.5-1616	1*	2*	10*	1*	0.20*	8	70	10*	5*	5*
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	1	5*	10*	3	0.30	2*	10*	10*	5*	41
CSL 16681	D-6A	1927.6-1929.8	--	--	--	--	--	--	--	--	--	--
CSL 16682	D-6A	1929.8-1931.8	--	--	--	--	--	--	--	--	--	--
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	1	5*	10*	2*	0.20*	2*	10*	10*	5*	31
CSL 16684	D-6A	1931.8-1934	--	--	--	--	--	--	--	--	--	--
CSL 16685	D-6A	1934-1937.8	--	--	--	--	--	--	--	--	--	--
CSL 16687	D-6A	1937.8-1938.8	1	6*	10*	2*	0.20*	2*	10*	10*	5*	22

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16691 (16688-90)	D-6A	1938.8-1942.7	1	4*	10*	2*	0.20*	2*	10*	10*	5*	31
CSL 16688	D-6A	1938.8-1941	--	--	--	--	--	--	--	--	--	--
CSL 16689	D-6A	1941-1942	--	--	--	--	--	--	--	--	--	--
CSL 16690	D-6A	1942-1942.7	--	--	--	--	--	--	--	--	--	--
CSL 16692	D-6A	1942.7-1945.2	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	10
CSL 16693	D-6A	1945.2-1946.8	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	16
CSL 16694	D-6A	1946.8-1948.7	1	7*	10*	2*	0.20*	2*	10*	10*	5*	14
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	1	5*	10*	2*	0.20	2*	10*	10*	5*	31
CSL 16695	D-6A	1948.7-1952.6	--	--	--	--	--	--	--	--	--	--
CSL 16696	D-6A	1952.6-1957.5	--	--	--	--	--	--	--	--	--	--
CSL 16697	D-6A	1957.5-1959	--	--	--	--	--	--	--	--	--	--
CSL 16698	D-6A	1959-1959.8	--	--	--	--	--	--	--	--	--	--
CSL 16699	D-6A	1959.8-1964.8	--	--	--	--	--	--	--	--	--	--
CSL 17155 (17151-54)	D-6A	1964.8-1981	1	6*	10*	2*	0.20*	2*	10*	10*	5*	36
CSL 17151	D-6A	1964.8-1969.7	--	--	--	--	--	--	--	--	--	--
CSL 17152	D-6A	1969.7-1972.7	--	--	--	--	--	--	--	--	--	--
CSL 17153	D-6A	1972.7-1978.8	--	--	--	--	--	--	--	--	--	--
CSL 17154	D-6A	1978.8-1981	--	--	--	--	--	--	--	--	--	--
CSL 17156	D-6A	1981-1982.2	1	7*	10*	2*	0.20*	2	10*	10*	5*	19
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	1	5*	10*	2*	0.20*	2*	10*	10*	5*	38
CSL 17157	D-6A	1982.2-1983.9	--	--	--	--	--	--	--	--	--	--
CSL 17158	D-6A	1983.9-1989.2	--	--	--	--	--	--	--	--	--	--
CSL 16676	D-8	967.7-972.5	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	36
CSL 16677	D-8	972.5-976.8	1	5*	10*	2*	0.20*	2*	10*	10*	5*	28
CSL 16678	D-8	976.8-981	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	25
CSL 16679	D-8	981-986	1	6*	10*	2*	0.20*	2*	10*	10*	5*	22
CSL 16680	D-8	986-990.2	1*	6*	10*	2*	0.20*	2*	10*	10*	5*	20
CSL 18446	D-9	1292.5-1299	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	29
CSL 18447	D-9	1299-1302	2*	2*	10*	1*	0.20*	2*	10	10*	5*	35
CSL 18448	D-9	1302-1305.8	2*	2*	10*	1*	0.20*	2*	10	10*	5*	28
CSL 18449	D-9	1305.8-1309	1*	2*	10*	1*	0.20*	2*	10	10*	5*	16
CSL 18450	D-9	1309-1319	2*	2*	10*	1*	0.20*	2*	10*	10*	5*	23
CSL 18436	DU 15	2603-2613	2*	2*	10*	1*	0.20*	2	10*	10*	5*	41
CSL 18437	DU 15	2613-2622.5	2*	2*	10*	1*	0.20*	2*	10*	10*	5*	44
CSL 18438	DU 15	2622.5-2631.5	2*	3*	10*	1*	0.20*	2*	10*	10*	5*	177
CL 16660	DU-14	3897.6-3898.8	1	4*	10*	3	0.20*	2*	10*	10*	5*	18
CL 16663 (16661-62)	DU-14	3898.8-3901.2	1*	5*	10*	2*	0.20*	2*	10*	10*	23	5*
CL 16661	DU-14	3898.8-3900.6	--	--	--	--	--	--	--	--	--	--
CL 16662	DU-14	3900.8-3901.2	--	--	--	--	--	--	--	--	--	--
CL 16664	DU-14	3901.5-3904	1*	4*	10*	2*	0.20*	2*	10*	10*	5	5*
CL 16665	DU-14	3904-3907.9	1*	4*	10*	2*	0.20*	2*	10*	10*	6	9
CSL 16642	DU-15	248-253	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	39
CSL 16643	DU-15	445-450	1*	5	10*	2*	0.20*	2*	10*	10*	5*	41
CSL 16644	DU-15	458-463	1	6*	10*	2*	0.20	2*	10*	10*	5*	77
CSL 16645	DU-15	797-802	1	5*	10*	2*	0.20*	2*	10*	10*	5*	42
CSL 16646	DU-15	995.7-999.7	1	5*	10*	2*	0.20*	2*	10*	10*	5*	32
CSL 16647	DU-15	1464-1464.6	1	5*	10*	2	0.20*	2*	10*	10*	5*	19
CSL 16648	DU-15	1705-1710	1*	6*	10*	2*	0.30	2*	10*	10*	5*	41
CSL 16649	DU-15	1899-1904	1*	6*	10*	2*	0.20	2*	10*	10*	5*	32
CSL 16650	DU-15	2140.6-2145	1*	8*	10*	2*	0.20*	2*	10*	10*	5*	41
CSL 16651	DU-15	2172-2177	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	30

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 16652	DU-15	2283-2288	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	18
CSL 17268	DU-15	2364-2369	1*	3*	10*	1*	0.20*	2*	10*	10*	8	5*
CSL 16641	DU-15	2434-2438	1	6*	10*	2*	0.20*	2*	10*	10*	5*	25
CSL 16653(16658-59)	DU-15	2455-2465	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	77
CSL 16658	DU-15	2455-2460	--	--	--	--	--	--	--	--	--	--
CSL 16659	DU-15	2460-2465	--	--	--	--	--	--	--	--	--	--
CSL 19394	DU-15	2593-2603	2*	2*	10*	1	0.20*	2*	10*	10*	5*	36
CL 16668	DU-16	3355-3355.7	1	5*	10*	2*	0.20*	2*	10*	10*	11	5*
CL 16669	DU-16	3363-3364	1*	4*	10*	2*	0.20*	2	10*	10*	5	46
CL 16670	DU-16	3371.5-3372.5	1*	4*	10*	2*	0.20*	2*	10*	10*	5*	5*
CL 16671	DU-16	3625-3627	1*	4*	10*	2*	0.20*	2*	10*	10*	5	22
CL 16674	DU-16	3628.7-3630.4	1	4*	10*	2*	0.20*	2*	10*	10*	5*	19
CSL 17709	DU-9	2585-2588	1*	2*	10*	1	0.20*	2*	10*	10*	5*	22
CSL 17710	DU-9	2588-2591.3	1*	2*	10*	1	0.20*	2*	10*	10*	5*	30
CSL 17711	DU-9	2591.3-2592.1	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	5*
CSL 17712	DU-9	2592.1-2593.7	1*	2*	10*	1	0.20*	2*	10*	10*	5*	29
CSL 17713	DU-9	2593.7-2596.7	1*	2*	10*	1*	0.20*	2*	10*	10*	5*	14
CSL 19459	II-1	195.7-205.7	1*	4*	10*	5	0.20*	2*	10*	10*	5*	10*
CSL 19460	II-1	205.7-211	1*	6*	10*	11	0.20*	2*	10*	10*	5*	26*
CSL 19461	II-1	211-221	1*	9*	10*	29	0.20*	2*	10*	16	5*	39*
CSL 19462	II-1	221-223.3	1	8*	13	21	0.20*	2*	10*	20	5*	37*
CSL 19463	II-1	223.3-233.3	1*	6*	10*	12	0.20*	2*	10*	22	5*	22*
CSL 19467	II-3	187-194.7	1*	5*	15	54	1.80	2*	10*	10*	5*	10*
CSL 19468	II-3	200-203.3	1*	5*	10*	23	0.90	2*	10*	10*	5*	10*
CSL 19470	II-5	267.5-272.4	1*	7*	14	21	0.40	2*	10*	24	5*	26*
CSL 19472	II-6	218.6-223.3	1*	5*	10*	31	0.50	2*	10*	10*	5*	28*
CSL 19473	II-6	223.3-231.2	1*	7*	10	52	1.00	2*	10*	32	5*	40*
CSL 18428	NM-5	1815& 1820.5	4	2*	10*	1*	0.20*	2*	10*	10*	5*	23
CSL 18429	NM-5	1822& 1826.5	4	2*	10*	2	0.20*	2*	10*	10*	5*	16
CSL 18430	NM-5	1859& 1864	8	2*	10*	1*	0.20*	2	10	10*	5*	6
CSL 18431	NM-9	1549.5& 1579	2*	2*	10*	1*	0.20*	2*	10*	10*	5*	17
CSL 19433	W-14	424-433.7	1*	2*	10*	1*	0.20*	5	10*	17	5*	10*
CSL 19434	W-14	433.7-440.4	1*	7*	10*	12	0.40	2*	10*	10*	5*	44
CSL 19435	W-14	440.4-450	1*	5*	10*	2*	0.20*	17	10*	11	5*	10*
CSL 19448	W-4	193.8-203	1*	7	26	2*	0.20*	2*	10*	10*	5*	23
CSL 19449	W-4	203-213	1*	5*	10*	2*	1.00	2*	15	10*	5*	21*
CSL 19450	W-4	213-223	1	5*	10*	2*	0.20*	2*	10*	10*	5*	47
CSL 19453	W-4	2144-2154	1*	5*	10*	3*	0.20*	2*	10*	19	5*	22
CSL 19454	W-4	2154-2164	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	10*
CSL 19456	W-4	2524-2534	1*	5*	15	3*	0.20*	2*	10*	10*	5*	36
CSL 19457	W-4	2534-2544	1*	5*	10*	5	0.20*	2*	10*	10*	5*	41
CSL 19443	W-8B	476-753.7	1*	4*	10*	1*	0.20*	9	10	10*	5*	25
CSL 19437	W-8B	495-505	1*	5*	10*	2*	1.50	13	10*	10*	5*	10*
CSL 19438	W-8B	505-515	1*	4*	10*	3*	0.20*	2*	10*	10*	5*	34
CSL 19439	W-8B	515-525	1	5*	10*	5	0.20*	2*	10*	10	5*	21*
CSL 19440	W-8B	525-535	1*	5*	10*	2*	0.20*	2*	10*	10*	5*	10*
CSL 19478	W-8B	533-539	1*	5*	10*	3*	0.20*	2*	10*	16	5*	10*
CSL 19441	W-8B	553.3-554.3	1	7	10*	16	0.40	8	10*	10*	5*	45
CSL 19444	W-8B	753.7-765	1*	6*	10*	2*	0.20*	18	10*	20	5*	31
CSL 19445	W-8B	765-775	1*	2*	10*	2*	0.30	2*	10*	10*	5*	10*
CSL 19425	W-9	359-369	2	7*	10*	4*	0.40	2*	10*	19	5*	28*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

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 19426	W-9	369-379	1*	4*	10*	2*	0.20*	6	10*	10*	5*	10*
CSL 19427	W-9	379-389	1*	6*	10*	2*	0.20*	3	10*	10*	5*	21*
CSL 19429	W-9	925-935	1*	6*	10*	5	0.20*	2*	10*	10*	5*	45
CSL 19430	W-9	935-945	1*	6*	10*	6	0.20*	2*	10*	10*	5*	33
CSL 19431	W-9	945-955	1*	6*	10*	3*	0.20*	2*	10*	10*	5*	49

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TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CL 17165	34872	1182-1187.6	10*	1.90	0.90	1.20	0.20*	0.50*	0.60*		
CL 17169 (17166-68)	34872	1187.6-1192	10*	1.00	0.60	0.50	0.20*	0.50	0.90		
CL 17166	34872	1187.6-1189.2	--	--	--	--	--	--	--		
CL 17167	34872	1189.2-1190.8	--	--	--	--	--	--	--		
CL 17168	34872	1190.8-1192	--	--	--	--	--	--	--		
CL 17173 (17170-72)	34872	1192-1199.7	10*	0.80	0.50	0.50	0.20*	0.50*	0.70*		
CL 17170	34872	1192-1193.5	--	--	--	--	--	--	--		
CL 17171	34872	1193.5-1194.2	--	--	--	--	--	--	--		
CL 17172	34872	1194.2-1199.7	--	--	--	--	--	--	--		
CL 17174	34872	1199.7-1204.7	10*	1.10	1.00	0.50	0.20*	0.50*	0.50*		
CL 17175	34872	1220.8-1223	10	4.80	1.60	1.90	0.30	0.50*	0.70*		
CL 17178 (17176-77)	34872	1223-1227.9	10*	0.70	0.50*	0.50*	0.20*	0.50*	0.70*		
CL 17176	34872	1223-1226.4	--	--	--	--	--	--	--		
CL 17177	34872	1226.4-1227.9	--	--	--	--	--	--	--		
CL 17182 (17179-81)	34872	1227.9-1239.4	10*	1.30	0.50	0.50	0.20*	0.50*	0.50*		
CL 17179	34872	1227.9-1232.6	--	--	--	--	--	--	--		
CL 17180	34872	1232.6-1233.9	--	--	--	--	--	--	--		
CL 17181	34872	1233.9-1239.4	--	--	--	--	--	--	--		
CL 17183	34872	1239.4-1241	10*	0.90	0.70	0.50*	0.20*	0.50*	0.90*		
CL 17186 (17184-85)	34872	1241-1250	10*	1.50	0.70	0.80	0.20*	0.60	0.80*		
CL 17184	34872	1241-1245	--	--	--	--	--	--	--		
CL 17185	34872	1245-1250	--	--	--	--	--	--	--		
CL 17189 (17187-88)	34872	1250-1261	10*	1.90	1.20	0.70	0.20*	0.50*	0.80*		
CL 17187	34872	1250-1256.1	--	--	--	--	--	--	--		
CL 17188	34872	1256.1-1261	--	--	--	--	--	--	--		
CL 17193 (17190-92)	34872	1261-1271.2	10	2.50	1.30	1.10	0.20	0.60	0.50*		
CL 17190	34872	1261-1264.7	--	--	--	--	--	--	--		
CL 17191	34872	1264.7-1267.5	--	--	--	--	--	--	--		
CL 17192	34872	1267.5-1271.2	--	--	--	--	--	--	--		
CL 17194	34872	1295-1298.7	10	3.90	1.30	1.50	0.20	0.50	0.90*		
CL 17199 (17195-98)	34872	1298.7-1305.7	10*	2.00	0.90	0.90	0.20*	0.50*	0.60*		
CL 17195	34872	1298.7-1301.2	--	--	--	--	--	--	--		
CL 17196	34872	1301.2-1302.7	--	--	--	--	--	--	--		
CL 17197	34872	1302.7-1303.5	--	--	--	--	--	--	--		
CL 17198	34872	1303.5-1305.7	--	--	--	--	--	--	--		
CL 17200	34872	1305.7-1310.5	10*	1.90	0.80	0.60	0.20*	0.50*	0.60*		
CL 17201	34872	1310.5-1315	10*	1.20	0.50	0.50	0.20*	0.50*	0.70*		
CL 17202	34872	1315-1319	10*	1.10	0.50*	0.70	0.20*	0.50*	1.60		
CL 17203	34872	1319-1324.8	10*	1.10	0.50*	0.60	0.20*	0.50*	0.80*		
CL 17204	34872	1324.8-1328.5	10*	1.90	0.50*	0.80	0.20*	0.50*	0.80*		
CL 17205	34872	1331-1333.2	10*	2.50	0.70	1.10	0.20*	0.50*	0.60*		
CL 17206	34872	1351-1356	10	3.20	0.90	1.40	0.20	0.50	1.00*		
CSL 17254	64046	50.0-60	19	5.90	2.10	2.40	0.40	2.10	1.20		
CSL 17255	64046	70-80	19	6.50	1.70	2.50	0.40	7.10	4.20		
CSL 17223	64048	100-105	15	5.30	1.10	2.30	0.40	7.20	6.30		
CSL 17267	64048	100-105	10*	0.90	0.50*	0.50*	0.20*	1.90	0.80*		
CSL 17270	64048	105-110	18	5.90	1.60	2.30	0.40	4.60	1.80		
CSL 17269	64048	105-110	10*	0.70	0.50	0.50*	0.20*	1.10	1.10		
CSL 17224	64048	135-140	22	7.40	0.90	2.80	0.50	10.00	7.00		
CSL 17265	64048	135-140	10*	0.90	0.50*	0.60	0.20*	0.50*	0.70*		
CSL 17266	64048	140-145	18	6.00	1.40	2.90	0.60	7.40	14.20		

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 17225	64048	200-205	10	2.90	1.00	1.50	0.20	0.80	1.00*		
CSL 17264	64048	205-210	16	4.80	1.20	2.30	0.40	2.80	3.00		
CSL 17226	64048	220-230	10*	0.80	0.50*	0.50*	0.20*	0.50*	1.00		
CSL 17227	64048	240-245	37	9.80	3.20	3.50	0.50	1.60	1.10		
CSL 17228	64048	285-290	10*	0.60	0.50*	0.50*	0.20*	1.10	0.50*		
CSL 17249	66010	20-30	14	4.00	1.40	1.90	0.30	1.80	1.00		
CSL 17250	66010	40-45	21	4.30	1.60	2.10	0.30	2.20	1.30		
CSL 17262	66012	11-20	12	5.10	1.50	2.00	0.30	4.80	1.70		
CSL 17238	66014	80-90	13	3.50	1.60	1.60	0.20	1.90	0.70		
CSL 17239	66014	105-115	11	3.30	1.40	1.40	0.20	2.50	0.60*		
CSL 17240	66014	145-150	10*	3.30	1.40	1.40	0.20	1.80	1.00		
CSL 17241	66014	265-270	13	4.00	1.30	1.80	0.30	1.80	1.20		
CSL 17242	66014	300-310	10	4.70	2.10	2.00	0.30	2.10	0.60*		
CSL 17243	66014	335-345	15	4.80	1.50	2.20	0.30	2.40	0.60*		
CSL 17244	66014	360-370	10*	2.70	0.90	1.30	0.20*	1.10	0.60*		
CSL 17245	66014	380-390	10*	3.60	1.50	1.60	0.30	2.10	0.60*		
CSL 17246	66014	445-455	10*	1.10	0.50*	0.50*	0.20*	0.90	1.40		
CSL 17247	66014	545-550	10*	0.60	0.50*	0.50*	0.20*	0.50*	0.50*		
CSL 17248	66014	605-615	10*	0.50	0.50*	0.50*	0.20*	0.50*	0.50*		
CSL 17229	66017	24.8-30	13	4.60	2.10	2.00	0.30	2.90	1.90		
CSL 17230	66017	155-165	17	4.90	1.80	2.20	0.30	2.20	1.10		
CSL 17231	66017	190-195	10*	2.90	1.70	1.30	0.20	1.80	1.50		
CSL 17232	66017	240-245	21	5.30	1.80	2.20	0.40	2.90	0.60*		
CSL 17233	66017	260-270	13	3.40	1.60	1.60	0.20	2.00	0.90		
CSL 17234	66017	280-290	31	0.50*	2.00	2.50	0.50	4.40	2.80		
CSL 17235	66017	350-360	10*	1.40	0.50*	0.70	0.20*	0.70	2.30		
CSL 17236	66017	380-390	10*	1.90	0.50*	1.00	0.20*	0.50*	0.50*		
CSL 17237	66017	490-495	10*	0.80	0.50*	0.50*	0.20*	0.50	0.70*		
CSL 18565	BA-1	509.6-518	10*	0.60	1.30	0.50*	0.20*	0.50*	0.50*		
CSL 18566	BA-1	518-527	10*	0.60	2.00	0.50*	0.20*	0.50*	0.50*		
CSL 18568	BA-1	1097.1-1106	10	5.90	1.50	2.80	0.30	0.70	1.10		
CSL 18570	BA-1	1937-1947	20	6.00	1.90	1.70	0.30	0.50*	0.60*		
CSL 18572	BA-1	1947-1956.9	20	9.00	2.30	2.50	0.40	1.10	1.00		
CSL 18573	BA-1	1956.9-1961.3	10	4.90	1.10	2.00	0.30	0.80	0.80*		
CSL 18574	BA-1	1961.3-1968	10*	1.40	1.70	0.50	0.20*	0.50*	0.70		
CSL 18575	BA-1	1968-1974	10	4.50	2.00	2.20	0.30	0.60*	0.80*		
CSL 18576	BA-1	1974-1979.2	10	4.40	2.00	2.10	0.30	0.80	0.90*		
CSL 18578	BA-1	1979.2-1987.4	10	4.50	1.10	1.80	0.20	0.50*	0.80*		
CSL 18579	BA-1	2005.1-2011	10*	1.50	1.20	0.80	0.20*	0.70*	1.10*		
CSL 18580	BA-1	2017.8-2019.8	10*	0.90	0.50*	0.60	0.20*	0.50*	0.60*		
CSL 18582	BA-1	2635-2643	10	2.00	1.30	1.10	0.20	0.90	1.10		
CSL 18583	BA-1	2643-2653	10*	2.20	1.20	1.40	0.20	3.80	1.20		
CSL 18585	BA-1	2653-2663	10	2.80	1.20	1.40	0.20	1.30	0.70		
CSL 18586	BA-1	2663-2673	10*	2.20	1.60	1.00	0.20	0.50	0.60		
CSL 18587	BA-1	2673-2680	10*	1.50	1.30	0.80	0.20*	0.60	0.60*		
CSL 18588	BA-1	2680-2690	10	3.30	1.60	1.60	0.30	0.70	0.80		
CSL 18590	BA-1	2690-2700	10*	1.80	1.30	1.00	0.20	0.90	0.50*		
CSL 18591	BA-1	2700-2710	10	1.70	1.90	0.80	0.20*	0.50*	0.60*		
CSL 18592	BA-1	2710-2718	10*	1.90	1.30	0.80	0.20*	0.60	0.70		
CSL 18593	BA-1	2718-2726.4	10*	1.90	1.50	0.90	0.20	1.00	0.50*		
CSL 18594	BA-1	3009.3-3019.5	20	4.70	1.60	2.80	0.40	2.70	1.00		

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 19381	BA-2	894-900	10	2.30	0.80	1.10	0.20	1.10	0.80		
CSL 19382	BA-2	900-905	10*	0.70	1.30	0.50*	0.20*	0.50*	0.60*		
CSL 19385	BA-2	1608-1609.5	10	2.30	1.90	0.60	0.20*	4.00	1.90		
CSL 19387	BA-2	1665.6-1666.3	10*	1.80	0.90	1.70	0.30	4.90	3.60		
CSL 19388	BA-2	1678.5-1679	40	13.10	2.70	5.40	0.80	6.10	1.70		
CSL 19390	BA-2	1793-1797.7	10*	0.90	0.90	0.70	0.20*	0.50*	0.70*		
CSL 19392	BA-2	1797.7-1805.5	10*	1.00	1.40	0.50	0.20*	0.50*	0.70*		
CSL 19393	BA-2	1865.5-1875	10*	0.80	0.50	0.50*	0.20*	0.50*	0.60*		
CSL 18453	BA-2	1875-1884	10*	0.90	0.70	0.50	0.20*	0.50*	0.60*		
CSL 18454	BA-2	1884-1888	10*	0.70	0.50*	0.50	0.20*	0.50*	0.60*		
CSL 18455	BA-2	1891.7-1897.1	10*	1.10	1.50	0.50*	0.20*	0.50*	0.50*		
CSL 18458	BA-2	2009-2010.4	10*	4.50	1.70	2.40	0.30	1.90	1.60		
CSL 18460	BA-2	2369.5-2376.9	10*	1.40	1.50	0.60	0.20*	0.50*	0.60*		
CSL 18462	BA-2	2438.4-2438.8	10*	1.50	1.40	1.40	0.20	0.70	0.70*		
CSL 18464	BA-2	2516.5-2522	10*	1.60	1.20	0.60	0.20*	0.80	0.80		
CSL 18534	BA-2	2579-2582	20	7.90	2.30	3.50	0.50	4.00	1.80		
CSL 18536	BA-2	2582-2588	10*	0.70	1.20	0.50*	0.20*	0.50	0.50*		
CSL 18540	BA-2	2746-2756	10	3.00	1.20	1.30	0.20	0.50	0.80		
CSL 18542	BA-2	2756-2766	10	2.50	1.10	1.40	0.20	0.90	1.00		
CSL 18543	BA-2	2766-2776	10	2.50	1.20	1.20	0.20	0.70	0.70		
CSL 18537	BA-2	2776-2781	10	5.00	1.60	2.30	0.30	1.70	0.60*		
CSL 18539	BA-2	2781-2785	10	0.80	0.70	0.50*	0.20*	0.50*	0.60*		
CSL 18544	BA-2	2954-2964	10*	1.10	1.20	0.50*	0.20*	0.50*	0.60		
CSL 18546	BA-2	3074-3084	10*	1.10	0.80	0.50	0.20*	0.50*	0.60*		
CSL 18547	BA-2	3200.5-3210.5	10*	1.70	0.70	0.80	0.20*	0.90	0.50*		
CSL 18549	BA-2	3210.5-3220.5	10*	2.80	1.20	1.30	0.20	0.70	0.50*		
CSL 18551	BA-2	3234.8-3240	10*	2.20	0.50*	1.10	0.20	0.80	0.70		
CSL 18552	BA-2	3253-3256	20	4.50	0.90	1.80	0.30	10.00	3.30		
CSL 18554	BA-2	3269.6-3273.1	30	9.40	0.90	4.00	0.60	2.10	1.00		
CSL 18556	BA-2	3342-3352	10*	1.00	0.60	0.50*	0.20*	0.50*	0.50*		
CSL 18558	BA-2	3367-3373	10*	0.80	0.50*	0.50	0.20*	0.50*	0.60		
CSL 18560	BA-2	3378-3388	10*	2.10	0.70	1.00	0.20*	0.80	0.50*		
CSL 18562	BA-2	3474-3684	10	2.00	2.10	0.50*	0.20*	0.90	0.70*		
CSL 18596	BA-5	120-127	10	1.70	1.70	0.80	0.20*	0.60	0.80		
CSL 18597	BA-5	127-129.8	30	8.70	1.30	4.80	0.70	0.50*	0.80*		
CSL 18598	BA-5	129.8-139.8	10*	2.10	1.30	1.00	0.20*	0.50*	0.50*		
CSL 18432	BI-128	1581& 1600	10*	0.80	0.60	0.50*	0.20*	0.50*	0.50*		
CSL 18433	BI-128	1835& 1842	10*	1.40	0.80	0.80	0.20	0.50	0.50*		
CSL 18434	BI-128	1920& 1962	10*	2.60	1.30	1.20	0.20	1.10	0.60*		
CSL 19395	BI-134	1156-1166		1.60	2*	5*	0.50*	0.70	0.50*	10*	1*
CSL 19397	BI-134	1216-1226		2.30	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19400	BI-134	1256-1266		2.80	2*	5*	0.50*	0.60	0.50*	10*	1*
CSL 19401	BI-134	1696-1706		4.10	2*	5*	0.50*	1.90	1.00	10*	1*
CSL 19402	BI-134	1706-1716		5.10	3	5*	0.50*	2.50	0.50*	10*	1*
CSL 19403	BI-134	1716-1726		4.50	2*	5*	0.50*	1.90	0.80	10*	1
CSL 19410	BI-144	665-675		2.30	2*	5*	0.50*	1.30	0.50*	10*	1*
CSL 19412	BI-144	675-685		2.20	2*	5*	0.50*	0.90	0.50*	10*	1*
CSL 19413	BI-144	685-695		2.20	3	5*	0.50*	1.20	0.50*	10*	1*
CSL 19405	BI-144	1412-1417		5.40	2*	5*	0.50*	1.90	0.50*	10*	1
CSL 19407	BI-144	1435-1445		3.40	2*	5*	0.50*	1.60	0.50*	10*	1*
CSL 19409	BI-144	1462-1472		3.80	2*	5*	0.50	1.80	0.50*	10*	1*

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 19415	BI-147	1485-1494		7.00	2	5	0.50	2.90	1.30	10*	1*
CSL 19417	BI-147	1556.3-1566.2		3.50	2*	5*	0.50*	1.00	0.50*	10*	1*
CSL 19419	BI-147	1566.2-1575.2		4.60	2*	5*	0.50*	1.10	0.70	10*	1*
CSL 19421	BI-147	1592-1602		3.10	2*	5*	0.50*	1.00	0.50*	10*	1*
CSL 19422	BI-147	1602-1612		3.10	3	5*	0.50*	0.90	0.50*	10*	1*
CSL 19424	BI-147	1928-1939.8		4.20	2*	5*	0.50*	1.30	0.50*	10*	1*
CSL 10952	CN-7	1151	10*	0.50*	0.50*	0.50	0.20*	0.80*	1.50		
CSL 17283	D-10	390- 395	10*	2.20	1.80	1.00	0.20	0.70	0.60*		
CSL 17284	D-10	400- 416	10*	1.40	1.50	0.60	0.20*	0.50*	1.00		
CSL 17285	D-10	773- 782	10*	1.80	1.50	0.80	0.20*	0.80	0.70*		
CSL 17286	D-10	782- 789	10*	1.20	0.80	0.50	0.20*	0.50*	0.80		
CSL 17287	D-10	789- 793	--	--	--	--	--	--	--		
CSL 17289	D-10	789- 798	20	4.50	1.40	1.40	0.30	5.90	2.50		
CSL 17288	D-10	793- 798	--	--	--	--	--	--	--		
CSL 17290	D-10	798- 805	10	3.00	1.80	1.10	0.20*	2.10	0.70*		
CSL 17291	D-10	805- 814.1	10*	0.90	0.90	0.60	0.20*	0.50*	0.60*		
CSL 17292	D-10	814.1- 818.3	10*	0.80	1.40	0.50	0.20*	0.50*	0.50*		
CSL 17293	D-10	818.3- 821	10*	1.00	2.00	0.50*	0.20*	0.50*	0.60*		
CSL 17294	D-10	1167-1177	10*	1.30	1.10	0.50*	0.20*	0.50*	0.80		
CSL 17295	D-10	1177-1187	10	2.40	1.70	1.30	0.20	0.80	0.70*		
CSL 17663	D-10	1475.8-1476.3	10	3.00	1.50	1.30	0.20	1.20	0.70		
CSL 17664	D-10	1476.3-1479.2	10*	1.40	0.50	0.80	0.20*	0.50*	0.60*		
CSL 17665	D-10	1479.2-1486.8	10	3.10	0.90	1.40	0.20	1.60	0.80		
CSL 17666	D-10	1486.8-1491	10*	1.30	0.50*	0.90	0.20*	0.50*	0.50*		
CSL 17667	D-10	1491-1493.8	10*	0.90	0.50*	0.60	0.20*	0.50	0.50*		
CSL 17668	D-10	1493.8-1501.3	10*	1.00	0.50	0.50*	0.20*	0.50*	0.50*		
CSL 17669	D-10	1501.3-1507.5	10*	1.00	0.50*	0.60	0.20*	0.50*	0.70		
CSL 17670	D-10	1507.5-1513.8	10*	2.00	0.50	1.10	0.20	1.00	0.50*		
CSL 17674	D-10	1581-1591	10	4.90	1.00	2.30	0.30	2.10	0.70*		
CSL 17675	D-10	1591-1601	10	3.50	1.10	1.60	0.20	1.80	0.80		
CSL 17676	D-10	1601-1603.7	10	2.50	0.90	1.10	0.20*	1.90	1.10		
CSL 17677	D-10	1603.7-1605	10*	0.50*	0.50*	0.50*	0.20*	0.50*	0.70*		
CSL 17678	D-10	1605-1608	10	3.30	1.30	1.20	0.20	2.80	0.70*		
CSL 17679	D-10	1608-1614.7	20	6.80	2.20	3.00	0.50	2.70	1.20		
CSL 17680	D-10	1614.7-1616.2	10	1.70	0.90	0.50*	0.20*	1.20	0.70*		
CSL 17681	D-10	1616.2-1620	20	4.10	1.30	0.50*	0.20*	5.50	0.90*		
CSL 18440	D-4	1276.4-1286.4	20	6.80	2.20	0.80	0.20	3.10	1.50		
CSL 18441	D-4	1286.4-1294.6	20	3.40	2.20	0.80	0.20*	2.80	2.60		
CSL 18442	D-4	1294.6-1305.3	20	4.10	1.80	0.60	0.20*	2.10	1.60		
CSL 18443	D-4	1305.3-1309	10	4.60	1.50	0.60	0.20	5.30	1.30		
CSL 17704	D-5	1321-1328.7	10	4.20	1.80	1.60	0.30	2.30	0.90*		
CSL 17706	D-5	1339-1344	10	2.90	1.30	1.30	0.30	0.60*	0.80*		
CSL 17707	D-5	1613-1613.5	10*	0.80	0.50*	0.50*	0.20*	1.00*	1.40*		
CSL 17701	D-5	1615.5-1616	10*	0.50*	0.50*	0.90*	0.20*	1.20*	1.50*		
CSL 16683 (16681-82)	D-6A	1927.6-1931.8	30	6.60	1.70	2.30	0.40	2.30	0.50*		
CSL 16681	D-6A	1927.6-1929.8	--	--	--	--	--	--	--		
CSL 16682	D-6A	1929.8-1931.8	--	--	--	--	--	--	--		
CSL 16686 (16684-85)	D-6A	1931.8-1937.8	20	5.00	1.20	1.90	0.40	1.70	0.90*		
CSL 16684	D-6A	1931.8-1934	--	--	--	--	--	--	--		
CSL 16685	D-6A	1934-1937.8	--	--	--	--	--	--	--		
CSL 16687	D-6A	1937.8-1938.8	10*	3.20	0.80	1.20	0.20	1.00	1.00*		

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 16691 (16688-90)	D-6A	1938.8-1942.7	10	5.00	1.30	1.80	0.30	3.40	2.60		
CSL 16688	D-6A	1938.8-1941	--	--	--	--	--	--	--		
CSL 16689	D-6A	1941-1942	--	--	--	--	--	--	--		
CSL 16690	D-6A	1942-1942.7	--	--	--	--	--	--	--		
CSL 16692	D-6A	1942.7-1945.2	10*	1.40	0.50*	0.90	0.20*	0.50*	0.70		
CSL 16693	D-6A	1945.2-1946.8	10*	1.90	0.50*	0.80	0.20*	1.30	0.70*		
CSL 16694	D-6A	1946.8-1948.7	10*	1.80	0.50*	0.70	0.20*	0.90	0.70*		
CSL 16700 (16695-99)	D-6A	1948.7-1964.8	10	4.80	1.00	1.80	0.30	1.70	0.60		
CSL 16695	D-6A	1948.7-1952.6	--	--	--	--	--	--	--		
CSL 16696	D-6A	1952.6-1957.5	--	--	--	--	--	--	--		
CSL 16697	D-6A	1957.5-1959	--	--	--	--	--	--	--		
CSL 16698	D-6A	1959-1959.8	--	--	--	--	--	--	--		
CSL 16699	D-6A	1959.8-1964.8	--	--	--	--	--	--	--		
CSL 17155 (17151-54)	D-6A	1964.8-1981	10	5.30	1.20	1.90	0.30	2.20	0.60		
CSL 17151	D-6A	1964.8-1969.7	--	--	--	--	--	--	--		
CSL 17152	D-6A	1969.7-1972.7	--	--	--	--	--	--	--		
CSL 17153	D-6A	1972.7-1978.8	--	--	--	--	--	--	--		
CSL 17154	D-6A	1978.8-1981	--	--	--	--	--	--	--		
CSL 17156	D-6A	1981-1982.2	10*	2.40	0.80	0.60	0.20*	1.00	0.70*		
CSL 17159 (17157-58)	D-6A	1982.2-1989.2	20	5.70	1.50	1.90	0.30	1.90	0.60*		
CSL 17157	D-6A	1982.2-1983.9	--	--	--	--	--	--	--		
CSL 17158	D-6A	1983.9-1989.2	--	--	--	--	--	--	--		
CSL 16676	D-8	967.7-972.5	10	4.30	0.50*	1.50	0.20	2.00	0.50		
CSL 16677	D-8	972.5-976.8	10	4.10	1.00	1.50	0.20*	2.30	0.70*		
CSL 16678	D-8	976.8-981	10	3.60	0.50	1.40	0.20	1.70	0.70*		
CSL 16679	D-8	981-986	10	3.20	0.80	1.00	0.20	1.50	0.70*		
CSL 16680	D-8	986-990.2	10	3.10	0.80	1.30	0.20	0.90	1.00		
CSL 18446	D-9	1292.5-1299	10	2.20	1.20	0.50*	0.20*	1.50	1.00		
CSL 18447	D-9	1299-1302	10	1.70	2.00	0.50*	0.20*	0.60*	0.90*		
CSL 18448	D-9	1302-1305.8	10*	1.80	1.20	0.50*	0.20*	1.10	0.90		
CSL 18449	D-9	1305.8-1309	10*	0.80	0.70	0.50*	0.20*	1.60	0.80*		
CSL 18450	D-9	1309-1319	10*	1.70	1.60	0.50*	0.20*	0.50*	0.60*		
CSL 18436	DU 15	2603-2613	10*	2.40	1.40	0.50*	0.20*	3.60	1.30		
CSL 18437	DU 15	2613-2622.5	20	3.70	1.80	0.50	0.20*	2.30	1.10		
CSL 18438	DU 15	2622.5-2631.5	90	24.70	5.80	2.10	0.40	7.30	1.10*		
CL 16660	DU-14	3897.6-3898.8	10*	1.70	0.50	0.90	0.20*	4.90	1.20		
CL 16663 (16661-62)	DU-14	3898.8-3901.2	10*	0.50*	0.50*	0.50*	0.20*	0.50*	0.70*		
CL 16661	DU-14	3898.8-3900.6	--	--	--	--	--	--	--		
CL 16662	DU-14	3900.8-3901.2	--	--	--	--	--	--	--		
CL 16664	DU-14	3901.5-3904	10*	0.60	0.60	0.50*	0.20*	0.50*	0.50*		
CL 16665	DU-14	3904-3907.9	10*	0.50	0.80	0.50*	0.20*	0.50*	0.60*		
CSL 16642	DU-15	248-253	10	5.50	2.10	2.00	0.30	2.10	1.10		
CSL 16643	DU-15	445-450	20	5.90	1.90	2.40	0.40	2.40	1.00		
CSL 16644	DU-15	458-463	40	11.80	2.00	4.20	0.70	4.80	1.80		
CSL 16645	DU-15	797-802	20	5.60	2.00	2.30	0.40	3.00	1.00		
CSL 16646	DU-15	995.7-999.7	10	4.50	2.20	1.90	0.30	2.00	0.60		
CSL 16647	DU-15	1464-1464.6	10*	2.00	1.10	0.90	0.20*	0.80	0.60*		
CSL 16648	DU-15	1705-1710	10	5.30	1.90	2.20	0.30	2.00	0.50		
CSL 16649	DU-15	1899-1904	20	5.30	1.70	2.10	0.30	1.80	0.50		
CSL 16650	DU-15	2140.6-2145	10	5.20	1.50	2.00	0.40	1.20	1.30		
CSL 16651	DU-15	2172-2177	10	4.10	1.70	1.50	0.30	1.70	1.10		

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 16652	DU-15	2283-2288	10	2.60	1.00	0.90	0.20*	1.20	0.50*		
CSL 17268	DU-15	2364-2369	10*	0.50	0.50*	0.50	0.20*	1.30	1.70		
CSL 16641	DU-15	2434-2438	10*	1.80	0.80	0.40	0.20*	0.50*	0.80*		
CSL 16653(16658-59)	DU-15	2455-2465	30	8.50	2.40	0.70	0.20*	1.90	0.50		
CSL 16658	DU-15	2455-2460	--	--	--	--	--	--	--		
CSL 16659	DU-15	2460-2465	--	--	--	--	--	--	--		
CSL 19394	DU-15	2593-2603	10	1.80	0.90*	0.60	0.20*	1.70	2.40		
CL 16668	DU-16	3355-3355.7	10*	0.50*	0.50*	0.50*	0.20*	0.50*	0.70*		
CL 16669	DU-16	3363-3364	10	6.20	2.30	1.80	0.30	3.40	1.80		
CL 16670	DU-16	3371.5-3372.5	10*	0.50*	0.50*	0.50*	0.20*	0.50*	0.50*		
CL 16671	DU-16	3625-3627	10	3.40	1.30	1.30	0.20*	0.50*	0.60*		
CL 16674	DU-16	3628.7-3630.4	10*	2.80	0.70	1.50	0.20	0.50*	0.80*		
CSL 17709	DU-9	2585-2588	10	3.30	1.90	1.40	0.20	1.40	0.80		
CSL 17710	DU-9	2588-2591.3	10	3.10	2.00	1.80	0.30	1.50	1.10		
CSL 17711	DU-9	2591.3-2592.1	10*	0.50*	0.50*	0.50*	0.20*	0.50*	0.70*		
CSL 17712	DU-9	2592.1-2593.7	10	3.40	1.30	1.60	0.30	1.60	1.40		
CSL 17713	DU-9	2593.7-2596.7	10*	1.50	0.90	0.60	0.20*	0.60	0.60*		
CSL 19459	II-1	195.7-205.7		0.80	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19460	II-1	205.7-211		1.00	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19461	II-1	211-221		1.00	2*	5*	0.50*	0.50*	0.50*	23*	2
CSL 19462	II-1	221-223.3		1.10	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19463	II-1	223.3-233.3		1.40	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19467	II-3	187-194.7		1.10	2*	5*	0.50*	0.70	0.50*	10*	1*
CSL 19468	II-3	200-203.3		1.60	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19470	II-5	267.5-272.4		1.70	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19472	II-6	218.6-223.3		0.90	2*	5*	0.50*	0.90	0.50*	10*	1
CSL 19473	II-6	223.3-231.2		2.30	2*	5*	0.60	1.00	0.50*	10*	1*
CSL 18428	NM-5	1815& 1820.5	10	3.30	0.90	1.40	0.20	1.20	0.60*		
CSL 18429	NM-5	1822& 1826.5	10	2.40	0.70	0.90	0.20	1.40	0.80		
CSL 18430	NM-5	1859& 1864	10*	0.50*	0.70	0.50*	0.20*	0.50*	0.80		
CSL 18431	NM-9	1549.5& 1579	10	1.90	0.70	0.90	0.20*	0.70	0.60*		
CSL 19433	W-14	424-433.7		2.00	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19434	W-14	433.7-440.4		6.30	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19435	W-14	440.4-450		1.90	2*	5*	0.50*	0.50*	0.50	10*	1*
CSL 19448	W-4	193.8-203		2.40	2*	5*	0.50*	1.10	0.50*	10*	1*
CSL 19449	W-4	203-213		2.90	2*	5*	0.50*	1.40	0.80	10*	1*
CSL 19450	W-4	213-223		4.90	2*	5*	0.50*	2.40	0.50*	10*	1
CSL 19453	W-4	2144-2154		3.10	2*	5*	0.50*	0.90	0.50*	10*	1*
CSL 19454	W-4	2154-2164		3.20	2*	5*	0.50*	1.50	0.50*	10*	1*
CSL 19456	W-4	2524-2534		2.60	2*	5*	0.50*	0.80	0.50*	10*	1*
CSL 19457	W-4	2534-2544		2.30	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19443	W-8B	476-753.7		2.40	2*	5*	0.50*	1.00	0.50*	10*	1*
CSL 19437	W-8B	495-505		2.50	2*	5*	0.50*	1.00	0.70	10*	1*
CSL 19438	W-8B	505-515		3.90	2*	5*	0.50*	1.10	0.50*	10*	1
CSL 19439	W-8B	515-525		4.60	2*	5*	0.50*	1.50	0.50*	10*	2
CSL 19440	W-8B	525-535		3.80	2*	5*	0.50*	1.80	0.50*	10*	1*
CSL 19478	W-8B	533-539		3.20	2*	5*	0.50*	0.50*	0.50*	10*	1*
CSL 19441	W-8B	553.3-554.3		4.90	2*	5*	0.50*	3.00	1.00	10*	1
CSL 19444	W-8B	753.7-765		6.90	2*	5*	0.50*	2.80	0.50*	10*	1
CSL 19445	W-8B	765-775		3.00	2*	5*	0.50*	1.30	0.50*	10*	1
CSL 19425	W-9	359-369		5.40	2*	5*	0.50*	2.20	0.50*	10*	1

* denotes the figure is less than the detection limit

TABLE III

Chemical Analyses for Drill Hole Samples

Sample #	Drill Hole #	Depth	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
CSL 19426	W-9	369-379		2.80	3	5*	0.50*	1.30	0.50*	10*	1*
CSL 19427	W-9	379-389		4.30	2*	5*	0.50*	1.50	0.50*	10*	2
CSL 19429	W-9	925-935		4.70	2*	5*	0.50*	3.00	1.80	10*	1
CSL 19430	W-9	935-945		5.30	2*	5*	0.50*	3.10	1.60	10*	1*
CSL 19431	W-9	945-955		6.70	2	5*	0.50*	2.80	0.50*	10*	2

NSS Not sufficient sample

* denotes the figure is less than the detection limit

TABLE IV
Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	SIO2 %	AL203 %	FE203 %	FE %	MGO %	CAO %	NA20 %	NA %	K20 %	TIO2 %
16637	43.9	15.5	9.16		14.6	9.55	0.75		0.15	0.13
16638				2500						
16639				170						
19479	44.80	16.00	9.17	5.90	14.00	9.54	0.87	0.88	0.40	0.13

* denotes the figure is less than the detection limit

TABLE IV

Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	P2O5 %	MNO %	CO2 %	LOI %	S %	CL PPM	F PPM	CU PPM	NI PPM	CR PPM
16637	0.02	0.13	0.37	5.00	0.17	300	20*	340	900	4420
16638							20*	1.5	5	230
16639							40	0.5	1	2
19479	0.22	0.13	IS	4.40	0.16	70	IS	346	1300	4500

* denotes the figure is less than the detection limit

TABLE IV

Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	CO PPM	V PPM	ZN PPM	PB PPM	MO PPM	PT PPB	PD PPB	IR PPB	AU PPB	AG PPM
16637	80	81	200*		2*	6800	)10000	100*	400	
16638	1*	2	2	2*	1					5*
16639	1*	1*	2	2*	1*					5*
19479	91	73	200*	19	2*	3600	10200	100*	380	5*

* denotes the figure is less than the detection limit

TABLE IV

Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	RB PPM	CS PPM	SR PPM	BA PPM	SC PPM	Y PPM	LA PPM	ZR PPM	HF PPM	NB PPM
16637	20	2*	82	70	18.00	12	5*	8	2*	2*
16638										
16639										
19479	6	1*	70	20*	15.00	5*	5*	49	2*	5*

* denotes the figure is less than the detection limit

TABLE IV

Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	TA PPM	W PPM	SN PPM	AS PPM	SB PPM	BI PPM	SE PPM	TE PPM	BR PPM	CE PPM
16637	1*	2*	10	1*	0.20*	2*	10*	10*	5*	5*
16638			10*		5*	2*	5*	10*		
16639			10		5*	2*	5*	10*		
19479	1*	2*	10*	1*	0.20*	3	10*	10*	5*	10*

* denotes the figure is less than the detection limit

TABLE IV

Reference Analyses - St. Peter's Sandstone and USGS PGE Standard

Sample #	ND PPM	SM PPM	EU PPM	YB PPM	LU PPM	TH PPM	U PPM	CD PPM	TB PPM
16637	10*	0.50*	0.5*	0.5*	0.20*	0.50		2	
16638							0.50*	1*	
16639							0.50*	1*	
19479		0.50*	2*	5*	0.50*	0.50*	0.50*	10*	1*

Remarks:

) = larger than

* denotes the figure is less than the detection limit

Sample nos. 16637 & 19479 are U. S. G. S. standards analysed by X-ray Assay Labs. & Bondar - Clegg respectively

TABLE VI
Analyses X-Ray Laboratores Samples Table V

SAMPLE #	DDH #	DEPTH	AU PPB	H2O+ %	H2O- %	LI PPM	BE PPM
K19475	RR-1	1304.0-1304.1	35	4.6	0.2	12	4
K19476	RR-1	1304.2	80	5.5	0.2	NSS	2
K19477	RR-1	1304.2-1304.4	28	5.4	0.1	17	3

SAMPLE #	B PPM	CO2 %	F PPM	NA2O %	MGO %
K19475	10	0.05	1200	0.33	16.2
K19476	10	1.77	300	<0.01	9.63
K19477	60	0.02	290	<0.01	9.80

SAMPLE #	AL2O3 %	SIO2 %	P2O5 %	S %	CL PPM
K19475	10.0	39.2	0.13	1.65	200
K19476	10.5	54.9	0.04	2.20	50
K19477	10.9	56.9	0.08	0.83	50

SAMPLE #	K2O %	IR PPB	CAO %	TIO2 %	V PPM
K19475	0.06	<50	6.92	1.80	350
K19476	0.02	<50	2.79	0.90	190
K19477	0.02	<50	0.14	0.76	210

SAMPLE #	CR PPM	MNO %	FEO %	FE2O3 %	CO PPM
K19475	1700	0.28	12.8	19.2	93
K19476	810	0.13	5.0	14.9	39
K19477	400	0.12	11.5	14.5	38

SAMPLE #	NI PPM	CU PPM	ZN PPM	GA PPM	AS PPM
K19475	630	1100	100	15	<0.7
K19476	210	NSS	200	NSS	1.8
K19477	110	2300	<100	13	<1.2

SAMPLE #	SE PPM	RB PPM	SR PPM	Y PPM	ZR PPM
K19475	<5	8	39	24	96
K19476	<5	8	36	10	108
K19477	<5	9	20	10	123

SAMPLE #	NB PPM	MO PPM	AG PPM	CD PPM	SN PPM
K19475	11	<2	<2	3	3
K19476	13	<1	<2	NSS	NSS
K19477	10	<1	<2	2	<10

SAMPLE	SB PPM	BA PPM	LA PPM	HF PPM	TA PPM
K19475	0.6	<10	<2	1	<0.5
K19476	0.2	<10	7	1	<0.5
K19477	<0.1	<10	10	2	<0.5

SAMPLE	W PPM	PB PPM	BI PPM	TH PPM	U PPM
K19475	<1	9	2	<0.4	<0.3
K19476	3	NSS	NSS	0.7	<0.2
K19477	3	<5	<2	1.6	<0.4

SAMPLE	LOI %
K19475	5.77
K19476	5.85
K19477	5.70

NSS - NOT SUFFICIENT SAMPLE

TABLE VII
Description of Samples with Locations (TRS)

Sample No	Drill Hole # /DTC	Depth /Location	Remarks	PTS/TS	T R S
CL 17165	34872	1182-1187.6	picrite		62/11/25
CL 17166	34872	1187.6-1189.2	mixture dunite & oxidite & cgr plag.		
CL 17167	34872	1189.2-1190.8	mixture troct.-picrite-oxidite		
CL 17168	34872	1190.8-1192	cgr ol.-brg. troc. anorth. w/ mgt. oiks		
CL 17169	34872	1187.6-1192	mixture troct. to picrite to oxidite & troc. anorth.		
CL 17170	34872	1192-1193.5	picrite-oxidite		
CL 17171	34872	1193.5-1194.2	oxidite		
CL 17172	34872	1194.2-1199.7	ox. troct.-picrite		
CL 17173	34872	1192.0-1199.7	picrite-troct.-oxidite		
CL 17174	34872	1199.7-1204.7	fgr ol.-brg. gabb. to picrite & troct.		
CL 17175	34872	1220.8-1223	ox.-rich pegmtdl. gabb. & plag.-ol.-ox. rock		
CL 17176	34872	1223-1226.4	plag.-ol.-pyx rock & oxidite		
CL 17177	34872	1226.4-1227.9	oxidite		
CL 17178	34872	1223-1227.9	ox. (50-75%) rock + oxidite		
CL 17179	34872	1227.9-1232.6	serpent. picrite		
CL 17180	34872	1232.6-1233.9	partly serpent. pegmtdl. gabb.		
CL 17181	34872	1233.9-1239.4	partly serpent. picrite w/ partly serpent. troct.		
CL 17182	34872	1227.9-1239.4	serpent. picrite, pegmtdl. gabb.		
CL 17183	34872	1239.4-1241	oxidite & picrite w/ pegmtdl. intrcals.		
CL 17184	34872	1241-1245	picrite & pegmtdl. plag.		
CL 17185	34872	1245-1250	mixture cgr plag. & serpent. picrite		
CL 17186	34872	1241-1250	serpent. picrite & pegmtdl. plag.		
CL 17187	34872	1250-1256.1	ultrmaf. rock & cgr plag.		
CL 17188	34872	1256.1-1261	pegmtdl. anort. gabb. to ol.-gabb. (mixed)		
CL 17189	34872	1250-1261	ultrmaf. rock & pegmtdl. anort. gabb. & ol.-brg. gabb.		
CL 17190	34872	1261-1264.7	mixture picrite & troct.		
CL 17191	34872	1264.7-1267.5	anorth.		
CL 17192	34872	1267.5-1271.2	mixed pegmtdl. plag. & fgr to mgr gabb. & troct., & ox.-brg. peridotite & oxidite		
CL 17193	34872	1261-1271.2	mixed mafic to ultrmaf. rock, anorth., troct. to gabb.		
CL 17194	34872	1295-1298.7	fgr layered (?) troct. & norite		
CL 17195	34872	1298.7-1301.2	oxidite		
CL 17196	34872	1301.2-1302.7	oxidite w/ cgr plag. intrcals.		
CL 17197	34872	1302.7-1303.5	fgr to mgr troct. w/ serpent. & oxidite incls.		
CL 17198	34872	1303.5-1305.7	oxidite		
CL 17199	34872	1298.7-1305.7	oxidite w/ pegmtdl. plag., troct.		
CL 17200	34872	1305.7-1310.5	mixed partly serpent. picrite & pegmtdl. anorth.		
CL 17201	34872	1310.5-1315	oxidite		
CL 17202	34872	1315-1319	oxidite		
CL 17203	34872	1319-1324.8	oxidite w/ ox.-rich picrite intrcals.		
CL 17204	34872	1324.8-1328.5	mixture oxidite w/ peridotite & cgr plag.		
CL 17205	34872	1331-1333.2	serpent. picrite		
CL 17206	34872	1351-1356	fgr troct. + serpent. picrite + oxidite		
CL 17207	34872	1193.8	oxidite w/ plag. & ol.	p	
CL 17208	34872	1227.7	oxidite w/ plag. & ol.	p	
CL 17209	34872	1250	serpent. peridotite (?) w/ milky plag.	p	
CL 17210	34872	1322	cgr oxidite w/ fgr peridotite	p	
CL 17211	34872	1296	fgr troct.	T	
CSL 17254	64046	50-60	troct. + norite, 0-5% sul. w/ apatite needles		60/12/16
CSL 17255	64046	70-80	norite + hfls. + picrite 0-10% sul., biot.-rich		
CSL 17223	64048	100-105	micro gabb. + hfls. w/ 10% diss'd. sul.		
CSL 17224	64048	135-140	hfls. + micro gabb., diss'd. 5-10% sul.		60/12/16
CSL 17225	64048	200-205	troct. & dunite		
CSL 17226	64048	220-230	calc-sil. + BIF		
CSL 17227	64048	240-245	micro gabb. (= sill ?)		

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 17228	64048	285-290	BIF		
CSL 17264	64048	205-210	calc-silicate		
CSL 17265	64048	135-140	hfls. + micro gabb. semi-mass. sul.		
CSL 17266	64048	140-145	hfls. + micro gabb. 1-2% diss'd. sul.		
CSL 17267	64048	100-105	micro gabb. + hfls. w/ semi-mass. sul.		
CSL 17269	64048	105-110	micro gabb. & semi-mass. sul.		
CSL 17270	64048	105-110	micro gabb. diss.'d sul. 10-15%		
CSL 17281	65223	185-190	micro gabb.	T	60/12/16
CSL 17249	66010	20-30	gabb. + troct., 0-25% sul., partly pegmtdl.		
CSL 17250	66010	40-45	gabb. & troct., pegmtdl, tr.-10% sul., tr. of native Cu		60/12/16
CSL 17282	66010	9.7-15	hflsic. (?) gabb.	P	60/12/16
CSL 17262	66012	11-20	hfls. + troct. + gabb., 0%-mass. sul., biot.-rich		60/12/16
CSL 17238	66014	80-90	troct. 3-7% sul., apatite needles		
CSL 17239	66014	105-115	ol.-brg. gabb. + troct. w/ 3-7% sul.		60/12/16
CSL 17240	66014	145-150	troct.		
CSL 17241	66014	265-270	troct. + picrite		
CSL 17242	66014	300-310	troct. + orthopyroxenite, tr.-3% sul. loc. pegmtdl.		
CSL 17243	66014	335-345	troct., tr.-25% sul., apatite needles		
CSL 17244	66014	360-370	troct. + gabb. + calc-sil., tr.-20% sul.		
CSL 17245	66014	380-390	troct. + hfls., 3-7% sul.		
CSL 17246	66014	445-455	calc-sil. + BIF + granite, tr. of sul.		
CSL 17247	66014	545-550	BIF + cgr norite		
CSL 17248	66014	605-615	BIF + troctolized BIF, tr. of sul.		
CSL 17229	66017	24.8-30	troct., tr.-2% sul.		
CSL 17230	66017	155-165	troct. + gabb., 1-6% sul., apatite needles		60/12/16
CSL 17231	66017	190-195	troct. + hfls., tr. to semi-mass. sul.		
CSL 17232	66017	240-245	gabb., tr.-3% sul., apatite needles		
CSL 17233	66017	260-270	gabb. + ultramaf. rock, tr.-30% sul.		
CSL 17234	66017	280-290	gabb. + hfls., tr.-80% sul., apatite needles		
CSL 17235	66017	350-360	calc-sil. w/ pegmtdl. pyx		
CSL 17236	66017	380-390	BIF underlying calc-silic.		
CSL 17237	66017	490-495	BIF + norite (=sill?)		
CSL 17272	66017	350-355	amorph. secndry. mineral, (XRD). (stoich. MgO:8.61, Al203:1.01,SiO2:46.85,CAO:2.45,FEO:41.10 SEM/EDS)		60/12/16
CSL 18564	BA-1	354	contact cataclastic anorth. & fgr to mgr troct.	T	59/12/4
CSL 18565	BA-1	509.6-518	anorth. & gab. anorth., cp + po + Cu-sul.-brg.		
CSL 18566	BA-1	518-527	anorth. & gab. anorth., cp + po + Cu-sul.-brg.		
CSL 18567	BA-1	511.6	anorth. & gab. anorth., cp + po + Cu-sul.-brg.	P	
CSL 18568	BA-1	1097.1-1106	cgr to pegmtdl., locly. mgt.-rich ol. gabb. to troct.:specks of po + cp		
CSL 18569	BA-1	1098	pegmtdl. to cgr, locly. mgt.-rich ol. gabb. to troct.: specks of po + cp	P	
CSL 18570	BA-1	1937-1947	cgr to pegmtdl. ol. gabb. to troct. w/ cp & mgt.		
CSL 18571	BA-1	1937	cgr to pegmtdl. ol. gabb. to troct. w/ cp & mgt.	P	
CSL 18572	BA-1	1947-1956.9	cgr to pegmtdl. ol. gabb. to troct. w/ cp & mgt.		
CSL 18573	BA-1	1956.9-1961.3	cgr to pegmtdl. ol. gabb. to troct. w/ cp & mgt., up to 20% mgt + ilm.		
CSL 18574	BA-1	1961.3-1968	mainly cgr gabb.		
CSL 18575	BA-1	1968-1974	cgr locly. ox.-rich ol.-brg. gabb., cp + po		
CSL 18576	BA-1	1974-1979.2	cgr locly. ox.-rich ol.-brg. gabb., cp + po		
CSL 18577	BA-1	1978	cgr locly. ox.-rich ol.-brg. gabb., cp + po	P	
CSL 18578	BA-1	1979.2-1987.4	cgr locly. ox.-rich ol.-brg. gabb., cp + po		
CSL 18579	BA-1	2005.1-2011	fgr & mgr troct. & gab. anorth., locly. cp-brg.		
CSL 18580	BA-1	2017.8-2019.8	fgr to mgr ol.-brg. gabb. w/ Cu-sul.		

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /DTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 18581	BA-1	2018.3	fgr to mgr ol.-brg. gabb. w/ Cu-sul.	p	
CSL 18582	BA-1	2635-2643	partly serpent. ol. gabb. & norite w/ Cu-sul.		
CSL 18583	BA-1	2643-2653	partly serpent. ol. gabb. & norite w/ Cu-sul., pegmtdl. w/ intrcals. of graphic alb. + qtz		
CSL 18584	BA-1	2647	noritic pegmtd. w/ Cu-sul.	p	
CSL 18585	BA-1	2653-2663	ol.-brg. norite w/ pegmtdl. intrcals. w/ Cu-sul.		
CSL 18586	BA-1	2663-2673	ol.-brg. norite w/ pegmtdl. intrcals. w/ Cu-sul.		
CSL 18587	BA-1	2673-2680	ol.-brg. norite w/ pegmtdl. intrcals. w/ Cu-sul.		
CSL 18588	BA-1	2680-2690	troct. grading into ol. gabb. w/ cu-sul.		
CSL 18590	BA-1	2690-2700	ol. gabb. w/ Cu-sul.		
CSL 18591	BA-1	2700-2710	partly serpent. troct. w/ sul.		
CSL 18592	BA-1	2710-2718	partly serpent. troct. w/ sul.		
CSL 18593	BA-1	2718-2726.4	partly serpent. troct. w/ sul.		
CSL 18594	BA-1	3009.3-3019.5	ol. gabb. w/ troct. spots, po clots		
CSL 18595	BA-1	3018	ol. gabb. w/ troct. spots & po + cp + Cu-sul.	p	
CSL 18453	BA-2	1875-1884	mainly troc. anorth. w/ cp + bo		60/12/34
CSL 18454	BA-2	1884-1888	picrite, troct. & troc. anorth. w/ cp		
CSL 18455	BA-2	1891.7-1897.1	troct. & anort. troct., w/ cp + po		
CSL 18456	BA-2	1884.4	serpent. picrite w/ anort. spots, cp-brg.	p	
CSL 18457	BA-2	1854.9	hflsic. (?) micro gabb. dike (?)	T	
CSL 18458	BA-2	2009-2010.4	(pegmtdl.) anorth. to norite, cp + po-brg.		
CSL 18459	BA-2	2009.6	pegmtdl. anorth to norite, cp + po-brg.	p	
CSL 18460	BA-2	2369.5-2376.9	(pegmtdl.) troct. w/ anort. portions		
CSL 18461	BA-2	2370	(pegmtdl.) troct. w/ anort. portions	p	
CSL 18462	BA-2	2438.4-2438.8	sul.-brg. (cp + po) biot. schist		
CSL 18463	BA-2	2438.5	sul.-brg. (cp + po) biot. schist	p	
CSL 18464	BA-2	2516.5-2522	pyrox.-brg. pegmtdl. troct., po + cp		
CSL 18533	BA-2	2521.7	pyrox.-brg pegmtdl. troct., po + cp	p	
CSL 18534	BA-2	2579-2582	pegmtdl. norite w/ cp + po		
CSL 18535	BA-2	2581.3	pegmtdl. norite w/ cp + po, sul. clots w/ apatite	p	
CSL 18536	BA-2	2582-2588	mgr pegmtdl. troct. w/ diss'd. po + cp		
CSL 18537	BA-2	2776-2781	pegmtdl. troct. to anorth. w/ cp up to 5%		
CSL 18538	BA-2	2780	pegmtdl. troct. to anorth. w/ cp up to 5%	p	
CSL 18539	BA-2	2781-2785	partly serpent. picrite, up to 5% Cu-sul.		
CSL 18540	BA-2	2746-2756	anort. pegm.		
CSL 18541	BA-2	2752.6	anort. pegm. w/ cp & diseased plag.	p	
CSL 18542	BA-2	2756-2766	anort. pegm. w/ picritic spots		
CSL 18543	BA-2	2766-2776	anort. pegm. w/ picritic spots		
CSL 18544	BA-2	2954-2964	mgr troct. w/ diss'd. Cu-sul. w/ pegmtdl. intrcals.		
CSL 18545	BA-2	2954	mgr troct. w/ diss'd. Cu-sul. w/ pegmtdl. intrcals.	p	
CSL 18546	BA-2	3074-3084	troct. anorth. w/ pegmtdl. intrcals., sul.-brg.		
CSL 18547	BA-2	3200.5-3210.5	pegmtdl. troct. & picrite		
CSL 18548	BA-2	3210.5	picrite, slightly serpent. & schistose	p	
CSL 18549	BA-2	3210.5-3220.5	cgr pegmtdl. ol.-brg. gabb.		
CSL 18550	BA-2	3220.5	cgr pegmtdl. ol.-brg. gabb.	p	
CSL 18551	BA-2	3234.8-3240	cgr pegmtdl. ol.-brg. gabb. w/ sul.		
CSL 18552	BA-2	3253-3256	altered pegmtdl. gabb.-dior. w/ cp clots		
CSL 18553	BA-2	3256	altered pegmtdl. gabb.-dior. w/ cp clots	p	
CSL 18554	BA-2	3269.6-3273.1	fgr to mgr pyroxenite w/ diss'd. cp + Cu-sul., ilm.-rich intrcals.		
CSL 18555	BA-2	3272.8	fgr to mgr pyroxenite w/ diss'd. cp + Cu-sul., ilm.-rich intrcals.	p	
CSL 18556	BA-2	3342-3352	serpent. maf.-ultrmaf. rock w/ rusty colors & fluid drops		
CSL 18557	BA-2	3352	serpent. maf.-ultrmaf. rock w/ rusty colors & fluid drops	p	

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 18558	BA-2	3367-3373	pyroxenite, feldspathic w/ Cu-sul.		
CSL 18559	BA-2	3367	pyroxenite, feldspathic w/ Cu-sul.	p	
CSL 18560	BA-2	3378-3388	mixed pyroxenite & troct. to picrite w/ pegmtdl. intrcals., sul.-brg., cataclastic		
CSL 18561	BA-2	3382	mixed pyroxenite & troct. to picrite w/ pegmtdl. intrcals., sul.-brg., cataclastic	p	
CSL 18562	BA-2	3474-3684	enderbitic gneiss w Cu-sul. conc.		
CSL 18563	BA-2	3477.8	enderbitic gneiss w/ Cu-sul. conc.	p	
CSL 19377	BA-2	476.4	cgr pyroxenite-mgt. segregations in fgr gabb.-norite (hflsic. ?) mgt. along margins	p	
CSL 19378	BA-2	440	heterogeneous anorth. + troct. to picrite	T	
CSL 19379	BA-2	174	autoclastic (gabb.)-anorth., cp-brg.	p	
CSL 19380	BA-2	895	pegmtdl. troct.; cp-brg.	p	
CSL 19381	BA-2	894-900	pegmtdl. troct. ilm. & cp-brg.		
CSL 19382	BA-2	900-905	heterogeneous troct.		
CSL 19383	BA-2	923.5	anorth.; partly diseased	p	
CSL 19384	BA-2	1091.4	ol.-brg. noritic hfls. w/ zoned plag.-pyroxoxenite spots; vesicles?	T	
CSL 19385	BA-2	1608-1609.5	pegmtdl. anort. to dioritic dike. Po-brg. ultrmaf. incls.		
CSL 19386	BA-2	1608	pegmtdl. anort. to dioritic dike. Po-brg. ultrmaf. incls.	p	
CSL 19387	BA-2	1665.6-1666.3	pegmtdl. anort. to dioritic dike. Po-brg. ultrmaf. incls. w/ cp, ox. & carbonate		
CSL 19388	BA-2	1678.5-1679	altered gab. pegmtd. w/ cp + po + ox. clots		
CSL 19389	BA-2	16787	altered gab. pegmtd. w/ cp + po + ox.+ clots	p	
CSL 19390	BA-2	1793-1797.7	mgr picrite w/ cp + bo. Bright greenish and purple tarnishing of sul.		
CSL 19391	BA-2	1793.2	mgr picrite w/ cp + bo. Bright greenish and purple tarnishing of sul.	p	
CSL 19392	BA-2	1797.7-1805.5	troct. & anort. troct. w/ cp + bo		
CSL 19393	BA-2	1865.5-1875	troct. anorth. & picrite, w/ cp + bo, 1-2%		
CSL 18596	BA-5	120-127	mixed anorth. & troct. to picrite		59/12/7
CSL 18597	BA-5	127-129.8	pyroxenite, sul.-brg.; po + cp & ox.-rich		
CSL 18598	BA-5	129.8-139.8	ol. gabb., troct. & pegmtdl. troc. anorth.		
CSL 18599	BA-5	129.8	sul.-rich oxidite	p	
CSL 18600	BA-5	120	mixed troct. & anorth.	p	
CSL 18432	BI-128	1581 & 1600	sul.-brg. serpent. troct.		
CSL 18433	BI-128	1835 & 1842	troc. anorth. to anort. troct. w/ cp & po clots & diss's., cgr pyroxenite, 20% cp + bo clots		
CSL 18434	BI-128	1920 & 1962	sul.-brg. & ol.-brg. gabb., & cgr graphic intergr. of mgt. + ol. in ox. (0-60%)-ol. rock, sul.-brg.		60/12/33
CSL 19395	BI-134	1156-1166	cgr gabb. & pegmtdl. anorth. w/ Cu.-sul. + po		60/12/33
CSL 19396	BI-134	1160.7	cgr sul.-brg. gabb., Cu-sul. + po	p	
CSL 19397	BI-134	1216-1226	ol.-brg. gabb., Cu-sul. + po		
CSL 19398	BI-134	1226	ol.-brg. gabb., Cu-sul. + po	p	
CSL 19399	BI-134	1208.3	ilm.-brg. pegmtdl. anorth. w/ Cu.-sul. clots	p	
CSL 19400	BI-134	1256-1266	ol.-brg. gabb. w/ Cu-sul. + po		
CSL 19401	BI-134	1696-1706	cgr ol.-brg. gabb. w/ Cu-sul. + po-brg. pegmtdl. intrcals.		
CSL 19402	BI-134	1706-1716	cgr ol.-brg. gabb. w/ Cu-sul. + po-brg. pegmtdl. intrcals.		
CSL 19403	BI-134	1716-1726	cgr ol.-brg. gabb. w/ Cu-sul. + po-brg. pegmtdl. intrcals.		
CSL 19404	BI-134	1715	cgr ol.-brg. gabb. w/ Cu-sul. + po-brg. pegmtdl. intrcals., amph.-brg.	p	
CSL 19405	BI-144	1412-1417	gab. pegmtd. w/ Cu.-sul. + mgt. clots alternating w/ ol. gabb.		60/12/32

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /DTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 19406	BI-144	1412	gab. pegmtd. w/ Cu-sul.	p	
CSL 19407	BI-144	1435-1445	fgr to cgr ol.-brg. gabb. w/ Cu-sul. specks		
CSL 19408	BI-144	1445	fgr ol. gabb. w/ diss'd. Cu-sul.	p	
CSL 19409	BI-144	1462-1472	pegmtdl. gabb. w/ Cu-sul.		
CSL 19410	BI-144	665-675	ol. gabb. & troct. w/ Cu-sul.		
CSL 19411	BI-144	665	troct. w/ Cu-sul.	p	
CSL 19412	BI-144	675-685	pegmtdl. gab. anorth. w/ Cu-sul. clots w/ ilm. incls.		
CSL 19413	BI-144	685-695	pegmtdl. gab. anorth. w/ Cu-sul. clots w/ ilm. incls.		
CSL 19414	BI-144	693.7	pegmtdl. gab. anorth. w/ Cu-sul. clots w/ ilm. incls.	p	
CSL 19415	BI-147	1485-1494	cgr gabb. or norite w/ po + Cu-sul. (5-10%)		60/12/32
CSL 19416	BI-147	1487	cgr gabb. or norite w/ po + Cu-sul. (5-10%)	p	
CSL 19417	BI-147	1556.3-1566.2	ol. gabb. to mela gabb. w/ Cu-sul.		
CSL 19418	BI-147	1551	cgr anorth. w/ diseased plag. + problematic mineral	p	
CSL 19419	BI-147	1566.2-1575.2	cgr ol.-brg. gabb. w/ Cu-sul. + po clots		
CSL 19420	BI-147	1575.2	cgr ol.-brg. gabb. w/ Cu-sul. + po clots, w/ diseased plag.	p	
CSL 19421	BI-147	1592-1602	partly serpent. pyroxenite w/ 5-10% Cu-sul. + po & troct. to anorth.		
CSL 19422	BI-147	1602-1612	partly serpent. pyroxenite w/ 5-10% Cu-sul. + po & troct. to anorth., less troct. than CSL 19421.		
CSL 19423	BI-147	1597	Cu-sul.-brg. serpent. pyroxenite	p	
CSL 19424	BI-147	1928-1939.8	ol. gabb. w/ clots of Cu-sul. + po		
FL 16449	Boulder	Birch lake	Pd-brg. troct.	p	60/11/8
CSL 10952	CN-7	1151	ox.-rich sample		57/14/28
CSL 17283	D-10	390 - 395	pegmtdl. gabb. to ultrmaf. rock, graphite & apatite-brg.		60/12/2
CSL 17284	D-10	400 - 416	fgr & cgr troct.		
CSL 17285	D-10	773 - 782	cgr ol.-brg. gabb.		
CSL 17286	D-10	782 - 789	troct. to troc. anorth.		
CSL 17287	D-10	789 - 793	pegmtdl. gab. anorth.		
CSL 17288	D-10	793 - 798	pegmtdl. gab. anorth., altered, hornblende & biot. diseased plag.		
CSL 17289	D-10	789 - 798	pegmtdl. gab. anorth.		
CSL 17290	D-10	798 - 805	gabb.		
CSL 17291	D-10	805 - 814.1	gabb. w/ peridotite incls.		
CSL 17292	D-10	814.1- 818.3	gabb. to peridotite to troct., ultrmaf. rock appears to be assimilated		
CSL 17293	D-10	818.3- 821	pegmtdl. gabb. to anorth.		
CSL 17294	D-10	1167 -1177	fgr ol. gabb. to troct.		
CSL 17295	D-10	1177 -1187	cgr ilm.-brg. gabb.		
CSL 17296	D-10	392.7	graph.-rich pegmtdl. gabb.	p	
CSL 17297	D-10	407	mgr troct.	p	
CSL 17298	D-10	774	cgr ol.-brg. gabb.	p	
CSL 17299	D-10	789	troc. anorth.	T	
CSL 17300	D-10	795	altered pegmtdl. anorth.	p	
CSL 17660	D-10	805	ol.-brg. gabb.	p	
CSL 17661	D-10	1173	fgr troct.	T	
CSL 17662	D-10	1187	cgr ilm.-brg. gabb.	p	
CSL 17663	D-10	1475.8-1476.3	fgr granular ol.-brg. gabb.		
CSL 17664	D-10	1476.3-1479.2	oxidite & plag.-ol.-ox. rock		
CSL 17665	D-10	1479.2-1486.8	fgr troct. to picrite		
CSL 17666	D-10	1486.8-1491	layered oxidite-plag.-pyx-ox. rock		
CSL 17667	D-10	1491 -1493.8	oxidite		
CSL 17668	D-10	1493.8-1501.3	mixed zone of oxidite, pegmtd. & fgr norite		
CSL 17669	D-10	1501.3-1507.5	layered oxidite & ox. norite		

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 17670	D-10	1507.5-1513.8	layered quartzite, pyroxenite & peridotite		
CSL 17671	D-10	1483	fgr troct.	p	
CSL 17672	D-10	1491	oxidite	p	
CSL 17673	D-10	1508.1	cgr pyroxenite & fgr peridotite	p	
CSL 17674	D-10	1581 -1591	ol.-brg. gabb. & troct.		
CSL 17675	D-10	1591 -1601	ol.-brg. gabb. & gabb.		
CSL 17676	D-10	1601 -1603.7	fgr to mgr gabb.		
CSL 17677	D-10	1603.7-1605	mass. sul. & mainly po, minor cp		
CSL 17678	D-10	1605 -1608	fgr gabb., 2-10% sul.		
CSL 17679	D-10	1608 -1614.7	fgr gabb., barren		
CSL 17680	D-10	1614.7-1616.2	mass. sul. & fgr gabb., mainly po		
CSL 17681	D-10	1616.2-1620	chilled? gabb. & pyx tonalite, (footwall)		
CSL 17682	D-10	1581	ol.-brg. gabb.	p	
CSL 17683	D-10	1598	gabb.	p	
CSL 17684	D-10	1603.7	mass. sul., po + cp	p	
CSL 18440	D-4	1276.4-1286.4	gab. anorth. or diorite w/ intrcals. of hflsic. micro gabb., tr. to 10% (locly.) cp + bo		60/12/10
CSL 18441	D-4	1286.4-1294.6	brecciated gab. diorite w/ 5-15% cp + bo		
CSL 18442	D-4	1294.6-1305.3	diorite, monzonite & micro gabb. 0-3% diss'd. cp + bo		
CSL 18443	D-4	1305.3-1309	dior., assim. micro gabb. & gabb., 2-10% sul.		
CSL 18444	D-4	1288.5	cp + bo-brg. dior.	p	
CSL 18445	D-4	1308	assim. micro gabb. to dior., cp + po + bo up to 20%	p	
CSL 17701	D-5	1615.5-1616	mass. cubanite or cp w/ po + pn + py, (?) probl. amorphous mineral		60/12/11
CSL 17702	D-5	1615.5	mass. cubanite or cp w/ po + pn + py (?) probl. amorphous mineral	p	
CSL 17703	D-5	1341.5	serpent. ultrmaf. rock w/ mass. cp + pn + bo + apatite + ilmenite	T	
CSL 17704	D-5	1321 -1328.7	anort. troct. to troct. w/ graphite-brg. diseased anorth. veins, loc. sul.-brg.		
CSL 17705	D-5	1327.3	anorth. vein, graphite + sul.-brg.	p	
CSL 17706	D-5	1339 -1344	troct. & serpent. picrite		
CSL 17707	D-5	1613 -1613.5	pn + (bo?)-rich mass. po		
CSL 17708	D-5	1613	pn + (bo?)-rich mass. po	p	
CSL 16681	D-6A	1927.6-1929.8	pegmtdl. troct. w/ pegmtdl. intrcals.		60/12/11
CSL 16682	D-6A	1929.8-1931.8	troct. w/ pegmtdl. intrcals.		
CSL 16683	D-6A	1927.6-1931.8	troct. w/ pegmtdl. intrcals.		
CSL 16684	D-6A	1931.8-1934	picrite w/ oxidite incls.		
CSL 16685	D-6A	1934-1937.8	troct. w/ oxidite incls.		
CSL 16686	D-6A	1931.8-1937.8	picrite & troct. w/ oxidite incls.		
CSL 16687	D-6A	1937.8-1938.8	plag.-ol.-ox. rock		
CSL 16688	D-6A	1938.8-1941	troct.		
CSL 16689	D-6A	1941-1942	altered cgr picrite w/ oxidite incls.		
CSL 16690	D-6A	1942-1942.7	graphic plag.-qtz. w/ Fe-Mg hydrosil.		
CSL 16691	D-6A	1938.8-1942.7	altered picrite w/ oxidite incls. & graphic plag.-qtz.		
CSL 16692	D-6A	1942.7-1945.2	oxidite		
CSL 16693	D-6A	1945.2-1946.8	plag.-pyx-ol. ox. rock		
CSL 16694	D-6A	1946.8-1948.7	oxidite		
CSL 16695	D-6A	1948.7-1952.6	cgr ol. gabb. to troct.		
CSL 16696	D-6A	1952.6-1957.5	ol.-brg. gabb. to troct. w/ oxidite incls.		
CSL 16697	D-6A	1957.5-1959	ol.-brg. gabb. to troct. w/ pegmtdl. intrcals.		
CSL 16698	D-6A	1959-1959.8	oxidite w/ pegmtdl. anorth. w/ sul. clots		
CSL 16699	D-6A	1959.8-1964.8	fgr to mgr ol.-brg. gabb.		
CSL 16700	D-6A	1948.7-1964.8	ol.-brg. gabb. to troct. w/ oxidite & pegmatite		
CSL 17151	D-6A	1964.8-1969.7	cgr biot.-brg. gabb. & fgr troct. to picrite		

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /DTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 17152	D-6A	1969.7-1972.7	cgr biot.-brg.-gabb. & fgr troct. to picrite, increase of picrite		
CSL 17153	D-6A	1972.7-1978.8	fgr ol.-brg. gabb. w/ oxidite incls.		
CSL 17154	D-6A	1978.8-1981	mixture plag.-ox. rock-oxidite & cgr pegmtdl. gabb.		
CSL 17155	D-6A	1964.8-1981	cgr biot.-brg. gabb. & troct. to picrite w/ pegmtd.		
CSL 17156	D-6A	1981.0-1982.2	oxidite		
CSL 17157	D-6A	1982.2-1983.9	fgr mela troct. & pegmtd. w/ oxidite incls.		
CSL 17158	D-6A	1983.9-1989.2	troct. + ox.-rich mela troct. to picrite		
CSL 17159	D-6A	1982.2-1989.2	mela troct. to picrite w/ pegmatite & oxidite		
CSL 17160	D-6A	1927.6	pegmtdl. troct. w/ pegmatite intrcals.	p	
CSL 17161	D-6A	1933.2	picrite w/ oxidite incls.	p	
CSL 17162	D-6A	1945.7	plag.-pyrox.-ol. ox. rock	p	
CSL 17163	D-6A	1982.2	oxidite	p	
CSL 16676	D-8	967.7-972.5	ol.-brg.-(mela) gabb. to pyroxenite w/ oxidite wisps		61/12/36
CSL 16677	D-8	972.5-976.8	ox. ol.-brg. gabb.		
CSL 16678	D-8	976.8-981	plag.-pyx-ol.-brg. ox. rock		
CSL 16679	D-8	981-986	plag.-pyx-ol.-brg. ox. rock		
CSL 16680	D-8	986-990.2	plag.-pyx-ol.-brg. ox. rock		
CSL 17164	D-8	969.5	oxidite	p	
CSL 18446	D-9	1292.5-1299	fgr to mgr norite & dior., semi-mass. cp + bo patches, ilm.-brg.		
CSL 18447	D-9	1299-1302	cgr dior., cp + (po)-brg.		60/12/2
CSL 18448	D-9	1302-1305.8	dior. w/ biot. booklets, up to 15% diss'd. cp + (po)		
CSL 18449	D-9	1305.8-1309	fgr dior. w/ diss'd. & network cp + po, locly. cp + bo spots & veins.		
CSL 18450	D-9	1309-1319	mgr to cgr. gabb., fgr to mgr hflsic. gabb. & gneissic diorite, po + cp patches & veinlets, up to 50% sul.		
CSL 18451	D-9	1307.8	fgr dior. w/ network cp + po & cp + bo spots	p	
CSL 18452	D-9	1318	gneissic dior. w/ fgr or hflsic. micro gabb.	T	
CL 16660	DU-14	3897.6-3898.8	fgr troct. + ultrmaf. rock w/ oxidite incl. in bottom section		61/11/20
CL 16661	DU-14	3898.8-3900.6	oxidite		
CL 16662	DU-14	3900.8-3901.2	oxidite		
CL 16663	DU-14	3898.8-3901.2	oxidite		
CL 16664	DU-14	3901.5-3904	fgr troct. w/ oxidite incls.		
CL 16665	DU-14	3904-3907.9	ox.-rich troct. w/ oxidite incls.		
CL 16666	DU-14	3898	ultrmaf.-troct. contact	p	
CL 16667	DU-14	3899	oxidite	p	
CSL 16600	DU-15	251.90	homogeneous gab. anorth.	p	61/12/25
CSL 16601	DU-15	448.30	layered anorth.	p	
CSL 16602	DU-15	461.7	pegmtdl. ox.-rich gabb.	p	
CSL 16603	DU-15	624.75	ol. gabb.	T	
CSL 16604	DU-15	1029.30	mixture anorth. & gabb.	T	
CSL 16605	DU-15	1209.10	ol. gabb. to mela gabb.	T	
CSL 16606	DU-15	1266	cgr pegmtdl. gabb.	T	
CSL 16607	DU-15	1464.4	hflsic. (?) pyx-ox.-cumul.	p	
CSL 16608	DU-15	1661	ol.-brg. gabb.	p	
CSL 16609	DU-15	1903.2	cgr to pegmtdl. gabb.	T	
CSL 16610	DU-15	2140.8	mixture ol. gabb. & anorth.	T	
CSL 16611	DU-15	2164.2	fgr gabb.	T	
CSL 16612	DU-15	2177	pegmtdl. anorth.	p	
CSL 16613	DU-15	2287.6	fgr to mgr homogeneous gab. anorth.	T	
CSL 16614	DU-15	2323.3	serpent. picrite	T	
CSL 16615	DU-15	2339.4	cgr pegmtdl. gabb.	p	
CSL 16616	DU-15	2341.4	plag.-brg. oxidite to ultrmaf. rock	p	

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 16617	DU-15	2353.8	oxidite	p	
CSL 16618	DU-15	2367	sul.-brg. serpent. picrite	p	
CSL 16619	DU-15	2494.3	diorite gneiss	p	
CSL 16620	DU-15	2505	sul.-brg. pyx monzonite	p	
CSL 16621	DU-15	2555	fgr pink granite-gneiss	T	
CSL 16622	DU-15	2761.7	fgr to mgr gab.-dior.	T	
CSL 16641	DU-15	2434-2438	fgr ox.-rich ol.-gabb. to picrite		
CSL 16642	DU-15	248-253	suboph. mixed ol.-brg. gabb. & anorth.		
CSL 16643	DU-15	445-450	layered (?) anort. oik. gabb.		
CSL 16644	DU-15	458-463	gabb. & anort. pegmtd.		
CSL 16645	DU-15	797-802	pegmtdl. gabb. & anorth.		
CSL 16646	DU-15	995.7-999.7	ol.-brg. gabb.		
CSL 16647	DU-15	1464.0-1464.6	layered fgr to vfgr troct. w/ ox. laminae wisps w/ troct. & picrite		
CSL 16648	DU-15	1705-1710	layered ol.-brg. gabb.		
CSL 16649	DU-15	1899-1904	cgr to pegmtdl. gabb. & anorth.		
CSL 16650	DU-15	2140.6-2145	fgr to hflsic. micro gabb.		
CSL 16651	DU-15	2172-2177	pegmtdl. anorth.		
CSL 16652	DU-15	2283-2288	suboph. gabb.		
CSL 16653	DU-15	2455-2465	ol.-brg. dioritic gneiss w/ picrite		
CSL 16654	DU-15	798.3	cgr to pegmtdl. gabb.	p	
CSL 16655	DU-15	998.8	ol.-brg. gabb.	p	
CSL 16656	DU-15	1709	layered ol.-brg. gabb.	p	
CSL 16657	DU-15	2459.15	fgr picrite in dioritic gneiss	p	
CSL 16658	DU-15	2455-2460	ol.-brg. dioritic gneiss w/ picrite		
CSL 16659	DU-15	2460-2465	ol.-brg. dioritic gneiss w/ picrite		
CSL 17268	DU-15	2364-2369	serpent. ultrmaf. rock		
CSL 18435	DU-15	2593-2603	fgr to mgr charnockite w/ fgr norite & gabb. incls., partly digested, tr. of sul.		
CSL 18436	DU-15	2603-2613	fgr to mgr charnockite w/ higher content mgr norite & gabb. incls., partly digested, 2-15% cp + bo		
CSL 18437	DU-15	2613-2622.5	fgr to mgr charnockite w/ fgr norite & gabb. incls., partly digested, higher cont. of incls., tr.-15% cp+bo		
CSL 18438	DU-15	2622.5-2631.5	mainly fgr gab. norite w/ subordinate pyx granite, tr.-5% cp +po		
CSL 18439	DU-15	2603.7	fgr charnockite w/ pyroxenite & norite patches w/ loc. cp + bo network	p	
CSL 19394	DU-15	2593-2603	fgr to mgr charnockite w/ fgr norite & gabb. incls., partly digested, tr. of sul.		
CL 16668	DU-16	3355-3355.7	oxidite & cgr plag. w/ ox.-rich dunite incls.		61/11/31
CL 16669	DU-16	3363-3364	pegmtdl. plag. w/ ultrmaf. incls.		
CL 16670	DU-16	3371.5-3372.5	ol.-brg gabb. to troct. w/ oxidite incls.		
CL 16671	DU-16	3625-3627	troct. & picrite w/ oxidite incls.		
CL 16672	DU-16	3355	oxidite	p	
CL 16673	DU-16	3364	pegmtdl. plag. & troct. w/ ox. segregation	p	
CL 16674	DU-16	3628.7-3630.4	picrite w/ sul. & biot.-brg. pegmtdl. pockets		
CL 16675	DU-16	3343	fgr norite w/ ox. staining (?)	p	
CSL 17709	DU-9	2585 -2588	anort. troct. to troc. anorth. w/ anort. intrcals.		60/12/36
CSL 17710	DU-9	2588 -2591.3	cgr pegmtdl. anorth.		
CSL 17711	DU-9	2591.3-2592.1	mgt. ol. cumulate		
CSL 17712	DU-9	2592.1-2593.7	mgt.-brg. picrite		
CSL 17713	DU-9	2593.7-2596.7	mgr troct. w/ pegmtdl. patches		
CSL 17714	DU-9	2585	anort. troct. to troc. anorth.	T	
CSL 17715	DU-9	2591	cgr pegmtdl. anorth.	T	
CSL 17716	DU-9	2591.3	mgt. ol. cumulate	p	

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 17717	DU-9	2592.1	mgt.-brg. picrite	p	
CSL 19459	II-1	195.7-205.7	heterogeneous mixt. troc. anorth. to anorth. & picrite w/ diss'd. po + cp		57/14/16
CSL 19460	II-1	205.7-211	pegmatite w/ ox.-rich peridotite intrcals., up to 20% po + cp		
CSL 19461	II-1	211-221	pyroxenite-ol.-ox. cumulate w/ intergr. po + cp up to 90%		
CSL 19462	II-1	221-223.3	pyroxenite-ol.-ox. cumulate w/ intergr. po + cp up to 90%		
CSL 19463	II-1	223.3-233.3	mixed picrite to serpent. dunite & cgr plag. w/ po + Cu-sul. + ilm. + graphite		
CSL 19464	II-1	205.7	mixed anort. to serpent. picrite (?) w/ po	p	
CSL 19465	II-1	221	po-ol.-ox. (?)-graphite ore	p	
CSL 19466	II-1	229.4	ol.-ilm.-serpentine-graphite-pyx cumulate w/ po + cp + Cu-sul.	p	
CSL 19467	II-3	187-194.7	anort. troct. w/ serpent. ultrmaf. incls. w/ po clots + graphite + cp		57/14/16
CSL 19468	II-3	200-203.3	mixed anorth. & picrite & serpent. ultrmaf. rock w/ po + cp + Cu-sul. clots & graphite		
CSL 19469	II-3	194.7	mixed anorth. & picrite & serpent. ultrmaf. rock w/ po + cp + Cu-sul. clots & graphite	p	
CSL 19470	II-5	267.5-272.4	partly serpent. pyroxenite-ol.-ox. cumulate w/ cp + po clots, diss'd. graphite		57/14/16
CSL 19471	II-5	269	partly serpent. pyroxenite-ol.-ox. cumulate w/ cp + po clots, diss'd. graphite	p	
CSL 19472	II-6	218.6-223.3	cataclastic serpent. troct. to semi-mass. sul., po + cp		57/14/16
CSL 19473	II-6	223.3-231.2	cataclastic serpent. troct. to semi-mass. sul., po + cp w/ sheared pegmtdl. intrcals. w/ Cu-sul.		
CSL 19474	II-6	225.6	cataclastic mixt. semi-mass. po + plag. + partly serpent. ol. cumulate	p	
CSL 18428	NM-5	1815 & 1820.5	ox. & sul.-brg. mela troct. to picrite & cgr to pegmtdl. biot.-brg. gabb.		60/12/2
CSL 18429	NM-5	1822 & 1826.5	fgr oxidite w/ plag., poikilobl. & pegmtdl. serpent. troct.		
CSL 18430	NM-5	1859 & 1864	semi-mass. po + cp + bo + ox. (partly mgt.), in contact w/ norite		
CSL 18431	NM-9	1549.5 & 1579	plag. & sul.-brg. oxidite		60/12/2
16637	OTC		PGE standard USGS STC-1 troct. cumulate		
16638	OTC		St. Peters sandstone, cone crushed & pulverized		
16639	OTC		St. Peters sandstone agate mill prep.		
19479	OTC		PGE - standard USGS STC-1 Split-62, troct. cumulate		
FSL 14168	OTC	L. Nose Creek	ophitic anort. troct.	p	59/14/30
FSL 14169	OTC	L. Nose Creek	cgr ox.-brg. pyroxenite	p	59/14/30
FSL 14170	OTC	L. Nose Creek	ox. pyroxenite	p	59/14/30
OC 11172	OTC	Unit G	Nathan's layered series ox.-rich rock		65/3/65
OC 11176	OTC	Unit T	Nathan's layered series ox.-rich rock		64/2/1
OC 11695	OTC	Gunflint L.Quad	Ox.-rich sample		36/3/36
OC 19480	OTC	Gunflint L.Quad	Nathan's layered series, ox.-rich rock		
OL 17219	OTC	Stop 8	ol.-brg.-gabb. (Unit AGO)	T	62/10/19
OL 17220	OTC	Stop 10	gabb. near BIF xenolith	T	62/10/30
OL 17221	OTC	Stop 11	gabb. near BIF xenolith mineralized	p	62/10/30
OL 17222	OTC	Stop 11	laminated troct.	T	61/10/18
OL 17275	OTC	Stop 8A	gab. anorth (AGO)	T	62/11/33
OL 17276	OTC	Stop 10	"gabbroized" BIF (?)	p	62/10/30

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
OL 17277	OTC	Stop 10	BIF xenolith w/ cp + bo	P	62/10/30
OL 17278	OTC	Stop 7	layered hfls.	T	62/11/24
OL 17279	OTC	Stop 7	micro gabb.	T	62/11/24
OL 17280	OTC	Stop 7	meta granite	T	62/11/24
OL 17685	OTC	Stop 7	charnockite (?)	T	62/11/24
OSL 16364	OTC	Dunka road	cgr to pegmtdl. ol. & ox.-brg. pyroxenite dike or incl.	P	60/12/33
OSL 16623	OTC	Dunka pit	fgr laminated gab.norite	P	60/12/3
OSL 16624	OTC	Dunka pit	layered opx-cpx-ox. quartzite	P	61/12/35
OSL 16625	OTC	Dunka pit	layered ox. gabb.	P	61/12/35
OSL 16626	OTC	Dunka pit	cp-ox. sil. ore	P	61/12/35
OSL 16627	OTC	Dunka pit	pyx quartzite	P	61/12/35
OSL 16628	OTC	Dunka pit	granular ox.-rich ultrmaf. rock	P	61/12/35
OSL 16629	OTC	Dunka pit	layered ox. pyroxenite	P	61/12/35
OSL 16630	OTC	Dunka pit	ox.-rich clinopyroxenite	P	61/12/35
OSL 16631	OTC	Dunka pit	layered calc-sil. hfls.	P	61/12/35
OSL 16632	OTC	Dunka pit	layered gabb. & oxidite	P	61/12/35
OSL 16633	OTC	Dunka pit	cgr to pegmtdl. gabb.	P	61/12/35
OSL 16634	OTC	Dunka pit	graphitic plag.-cord.-hfls.	P	61/12/35
OSL 16635	OTC	Dunka pit	sul.-brg. picrite	P	61/12/35
OSL 16636	OTC	Dunka pit	metamorphosed BIF	P	61/12/35
OSL 16640	OTC	Dunka pit	massive sul.-brg pyroxenite		
OSL 17212	OTC	Dunka pit	marble & calc-sil.	T	60/12/3
OSL 17213	OTC	Dunka pit	Virginia formation hfls.	T	60/12/3
OSL 17214	OTC	Dunka pit	plag.-biot.-pegmtd. & cgr gabb.	T	60/12/2
OSL 17215	OTC	Dunka pit	graph. schist w/ po veins	P	60/12/2
OSL 17216	OTC	Dunka pit	mass. po + cp in sil. rock	P	61/12/35
OSL 17217	OTC	Stop 3	sul.-brg., cgr to pegmtdl. pyroxenite	P	60/12/33
OSL 17218	OTC	Stop 3	ol. & sul.-brg. cgr pyroxenite	P	60/12/33
OSL 17273	OTC	Dunka pit	mineralized gabb.	P	60/12/2
OSL 17274	OTC	Dunka pit	mineralized Virginia Formation	P	60/12/2
K 19475	RR-1	1304.0-1304.1	chlorite-biot. schist w/ sul.		71/23/31
K 19476	RR-1	1304.2	chlorite-biot. schist w/ sul.		
K 19477	RR-1	1304.2-1304.4	chlorite-biot. schist w/ sul. & qtz vein		
CSL 19433	W-14	424-433.7	mgr troc. anorth.-ol. gabb., barren		
CSL 19434	W-14	433.7-440.4	pegmtdl. gabb., Cu-sul.-rich		
CSL 19435	W-14	440.4-450	mgr troct. to troc. anorth., loc. Cu-sul.-brg.		
CSL 19436	W-14	438.7	Cu-sul-rich pegmtd.	P	59/13/17
CSL 19448	W-4	193.8-203	fgr ol. gabb. to anorth. w/ 5-10% Cu-sul. + po		58/14/4
CSL 19449	W-4	203-213	fgr ol. gabb. to anorth. w/ 5-10% Cu-sul. + po		
CSL 19450	W-4	213-223	pegmtdl. gab. anorth.		
CSL 19451	W-4	203	fgr ol. gabb. to anorth., locly. biot.-rich, 5-10% Cu-sul. + po	P	
CSL 19452	W-4	213	contact fgr ol. gabb. & pegmtd.	P	
CSL 19453	W-4	2144-2154	fgr ol.-brg. gabb. w/ diss'd. Cu-sul. + po		
CSL 19454	W-4	2154-2164	fgr ol.-brg. gabb. w/ diss'd. Cu-sul. + po		
CSL 19455	W-4	2154	mgr ol.-brg. gabb. w/ diss'd. Cu-sul. + po	P	
CSL 19456	W-4	2524-2534	fgr to mgr sul.-brg. (cp + po) troct.		
CSL 19457	W-4	2534-2544	fgr to mgr sul.-brg. (cp + po) troct.		
CSL 19458	W-4	2527	fgr to mgr sul.-brg. (cp + po) troct. w/ cgr mesocr. segregations?	P	
CSL 19437	W-8B	495-505	Cu + po-brg. troct. w/ picrite incls.		59/13/17
CSL 19438	W-8B	505-515	Cu + po-brg. troct. w/ picrite incls.		
CSL 19439	W-8B	515-525	Cu + po-brg. troct. w/ picrite incls.		
CSL 19440	W-8B	525-535	Cu + po-brg. troct. w/ picrite incls.		
CSL 19441	W-8B	553.3-554.3	ox.-ol.-pyrox. cumulate?		

TABLE VII

Description of Samples with Locations (TRS)

Sample No	Drill Hole # /OTC	Depth /Location	Remarks	PTS/TS	T R S
CSL 19442	W-8B	554.3	ox.-ol.-pyrox. cumulate?	p	
CSL 19443	W-8B	476-753.7	fgr to mgr ol.-brg. gabb. w/ po + Cu -sul.		
CSL 19444	W-8B	753.7-765	cgr to pegmtdl. gabb. w/ po + Cu-sul.		
CSL 19445	W-8B	765-775	biot. & ol.-brg. gabb. w/ po + Cu specks		
CSL 19446	W-8B	755	pegmtdl. gabb. w/ Cu-sul. + po + ilm.	p	
CSL 19447	W-8B	525	troct., Cu-sul. + po	p	
CSL 19478	W-8B	533-539	cp + po-brg. troct. & picrite		59/13/17
CSL 19425	W-9	359-369	cataclastic gabb. & serpent. ultramf. rock w/ Cu-sul.		59/13/17
CSL 19426	W-9	369-379	cataclastic cgr anorth. w/ Cu-sul.		
CSL 19427	W-9	379-389	fgr to mgr ol. gabb. to anorth.		
CSL 19428	W-9	362.3	Cu-sul.-rich cataclastic gab. anorth.	p	
CSL 19429	W-9	925-935	fgr to mgr ol. gabb., cp + po, clots & specks		
CSL 19430	W-9	935-945	fgr to mgr ol. gabb., cp + po, sul. clots, partly cataclastic		
CSL 19431	W-9	945-955	fgr to mgr ol. gabb., cp + po, partly cataclastic po + cp specks		
CSL 19432	W-9	941.8	fgr to mgr gabb. w/ po + Cu-sul. clots	p	

Remarks:

Samples sorted by drill hole and outcrop in ascending numerical sequence followed by alphabetical sequence.

PTS = Polished thin sections

TS = Thin sections

All other samples are assays or special mineralogical studies

T R S = Township Range Section

"Stop #" refers to field excursion locations summer 1986 (locations on open file at DNR Minerals - Hibbing)