# Deerhorn (Rand) Project, Report of Enzyme Leach Survey and Related Work



Cariboo Mining Division

NTS 93A-3W, 93A-6W
Lat. 52° 16' 3" Long. 121° 21'

Owned by:
Herb Wahl
Jack Brown-John
Rudy C. Riepe
Operated by Performance Minerals Canada Ltd.

Prepared by:

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RR#10, 1416 Ocean Beach Esplanade,
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July, 1999

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## SUMMARY

Access improvements vis a vis recent logging activity has greatly enhanced the mineral potential within the Deerhorn/ Rand Project area near Horsefly, B.C. A definite shear zone-type gold-copper target has been identified by independent data sources collected at varying time intervals. The target zone measures some 2.5 x1.0 kms as defined by airborne resistivity, magnetic, and ground I.P. survey indicators. This zone lies just north of a known drill indicated gold-copper deposit associated with fault controlled alteration and mineralization (Megabucks). Renewed exploration including drilling is currently underway at this prospect by Wild Rose Resources/Phelps Dodge Corporation Canada.

This report and Enzyme Leach (EZL) supplementary report, details the results of a 1-week field program which completed 5,850 meters of cut line and the collection of 83 soils at 50 meter intervals over the subject grid lines. EZL oxidation anomalies show close linkage with the ground/airborne data stack, confirming the presence of sub surface sulphides. Further enhancement is provided by high EZL and base metal values contained in silts draining the anomalous zones.

Onward exploration by way of a Phase I drilling program (1000 meters/ $144,000) is recommended. Costs for the current project are $10,563.79.

## INTRODUCTION (Fig.1)

The Deerhorn Project area is located some 10 km southeast of Horsefly, B.C., a small ranching/ logging community located in the Central Fraser Plateau area of interior B.C.

Since 1995, new logging road construction and related activity has improved access to this formerly remote area, with high mineral potential. As a result of the foregoing, the writer has made two brand new mineral finds: Megaton (1996), (native Cu, Smithsonite, Au) and Rodeo/ Luky Jack (1998), (CuZn). These are both large tonnage, open pit projects located within the northern granodioritic rim of the Takomkane Batholith.

As follow-up, a detailed review of all assessment information was completed in 1995 (Fig. A) generating the Deerhorn Project, which has been refined by more recent study. The principal target areas are now covered by the Rand 1, 2, & 3 mineral claims and the Epcity 2-post claims.

In early 1999, Phelps Dodge Corporation of Canada Ltd., acquired claims over the Megabucks prospect and staked over 6,000 acres of additional ground which surrounds the Rand claims on three sides. Drilling is planned for late summer 1999.

This report documents the results of preliminary Enzyme Leach soils survey conducted over the research–identified target zones. The work was performed during the period 07-13 May 1999.

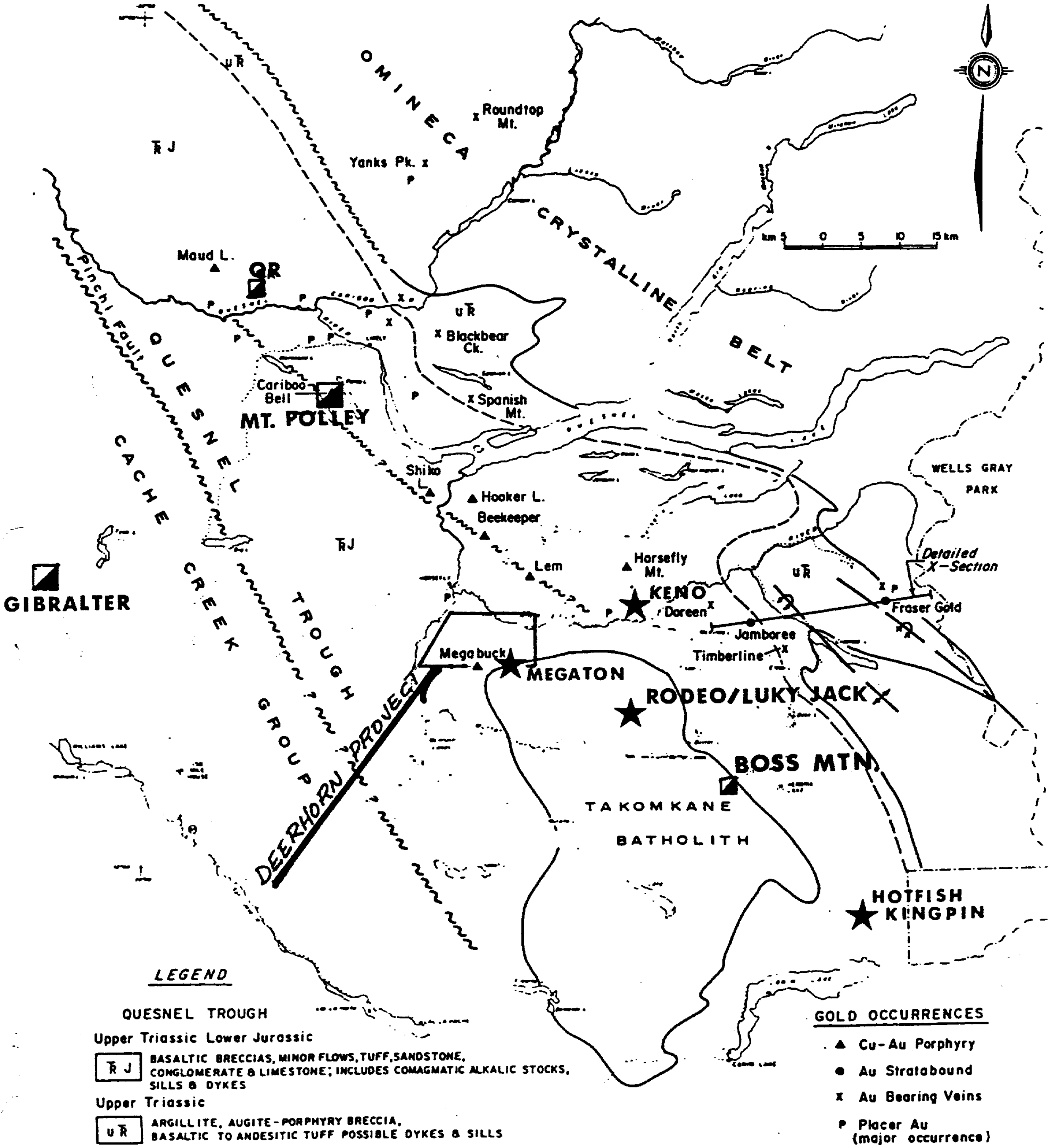
to fault movement has occurred.

## GOLD MINERALIZATION AND ASSOCIATED DEPOSIT

Lode gold mineralization was reported from the area as early as 1902, when placer miners drove tunnels on pyrite bearing

**Fig. 1**
**Performance Minerals Canada Ltd.**
**Deerhorn (Rand) Gold-Copper Project**
**General Location Map**

*Figure 1. Location map showing major tectonic features and gold occurrences*



## LOCATION AND ACCESS (Figs. 1, & A)

The property lies 7 km southeast of Horsefly, just south of the Horsefly River. Access is south from Horsefly on the 108 Road to Woodjam Road, then east to the bridge spanning Deerhorn Creek. A network of secondary logging trails provides access to most interior areas of the claims.

## PROPERTY (Fig. 1A)

The property is constituted as follows:

| Claim | Record No. | Units | Record Date |
|---|---|---|---|
| Rand-1 | 362837 | 20 | 13 May 1998 |
| Rand-2 | 367381 | 20 | 27 Nov.1998 |
| Rand-3 | 368561 | 18 | 14 April 1999 |
| EPCity-1 | 368450 | 1 | 12 April 1999 |
| EPCity-2 | 368451 | 1 | 12 April 1999 |
| EPCity-3 | 368452 | 1 | 12 April 1999 |
| EPCity-4 | 368453 | 1 | 12 April 1999 |
| EPCity-5 | 368454 | 1 | 12 April 1999 |
| EPCity-6 | 368455 | 1 | 12 April 1999 |
| | | 64 units | |

The claims are all situated in the Cariboo Mining Division. Annual assessment expenditure per claim unit is $100 in the first three years of tenure, increasing to $200/unit thereafter. The above are all in good standing until the next anniversary date.

## TERRAIN/ TOPOGRAPHY

The rand mineral claims lie within the Quesnel Highland division of the Central B.C. Fraser Plateau. Elevations in the claimed area range from 2,800 feet ASL in the Horsefly River Valley, to some 330 feet ASL in the southern claim area. Terrain is generally flattish to rolling, principal stream drainage is northerly into the Horsefly River. About 40% of the area is regenerating cut blocks, with the usual spruce-pine-fir-aspen timber present in un-logged areas. Glacial overburden is extensive and thick, with glacial outwash more abundant towards the Horsefly River. The only outcrop observed was syenitic intrusive, present as a substantial stock west of Deerhorn Creek.

## HISTORY

Initial mineral activity dates back to the mid 1800s with placer gold the object, being present in 'white channel' Paleo gravel deposits. Serious hard rock exploration began in the 1960-72 mineral boom, and again in the 1977-1990 gold-base metals

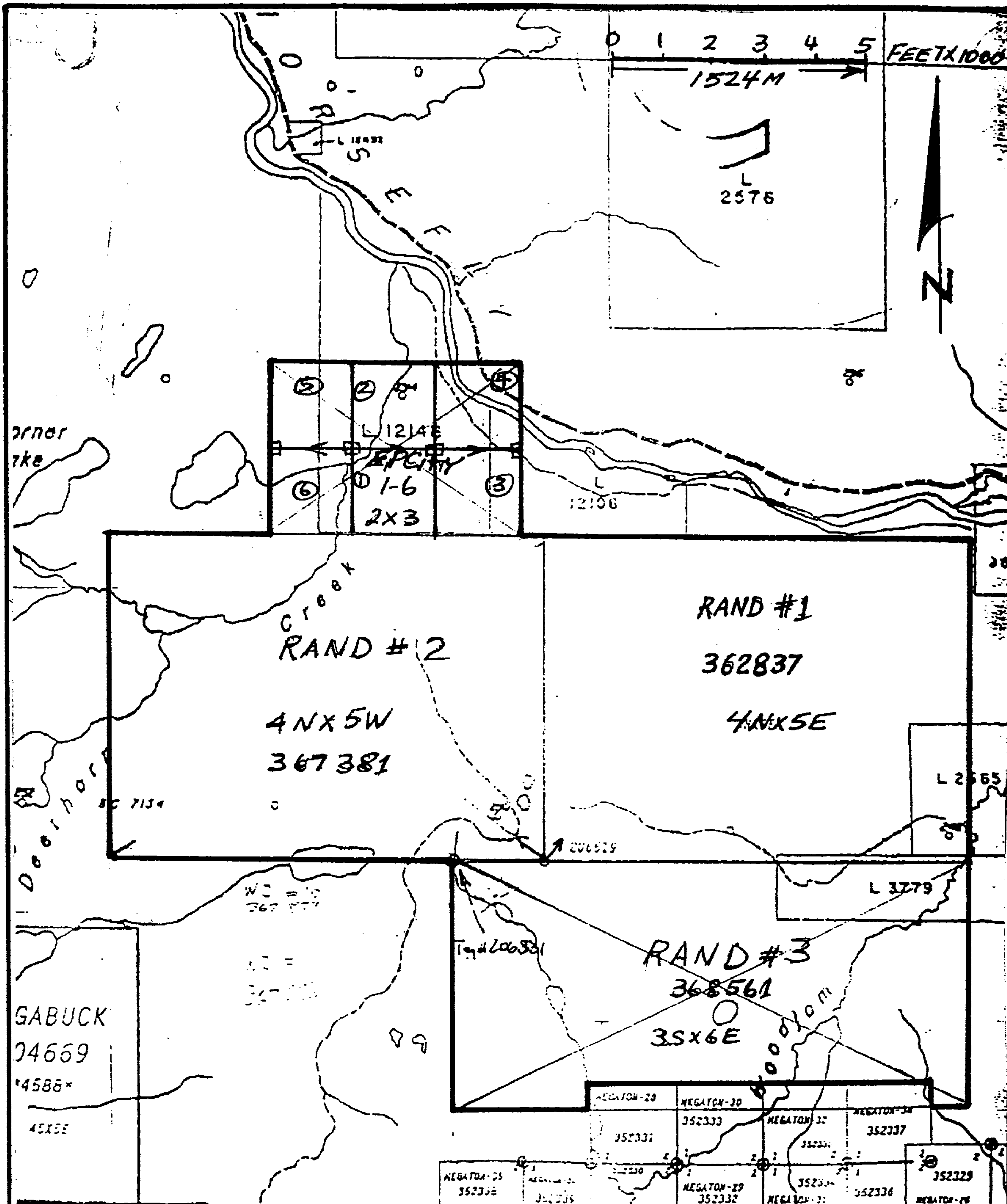



**FIG. 1A**
**Performance Minerals Canada Ltd.**
CLAIM LOCATION MAP
Scale 1:31,680
NTS 93A-6W Cariboo M.D.

boom of recent years. These two episodes produced the Mt. Polley CuAu mine and the QR gold mine. The last significant exploration in the Deerhorn area dates to 1992 when Noranda completed a substantial helicopter Aerodat survey, with no recorded follow-up.

It is the public record of work performed during the last two intervals that forms the basis of this study, plus the author's personal work in the subject area over the past 4 years.

## WORK PERFORMED

During the period 07-13 May the undernoted was accomplished:

- Line cutting (power saw) 5,850 meters
- Soil Sampling: 83 each for Enzyme Leach analysis
- Silt Sampling: 9 ea
- Rock Samples: 2 ea
- Prospecting and geology

## GEOLOGY

The area south of the Horsefly River between Moffat and Woodjam Creeks and north of the Deerhorn Mainline, is one of extensive and locally thick glacial drift with low outcrop incidence. Generally, the drift is of a silty, clayey nature with variable cobble and boulder content. Compact basal till is variably present (Megaton Trenching), while crudely stratified sands and gravels occupy valley bottoms.

The terrain is rolling to flattish, with maximum elevations to 1240 m ASL. The local drainage system is not well developed and numerous pot hole swamps and sloughs abound.

Beneath the overburden, the older Triassic and Jurassic rocks are overlain by Miocene plateau basalts and/ or Eocene volcanic and sedimentary units as flat-lying cap rock cover. The basal Eocene (personal observations) is either a sharpstone or boulder conglomerate incorporating subjacent lithologies or an olive to buff-colored sandstone/ arkosic unit that is poorly consolidated.

Previous trenching at the Megaton and Rodeo/ Luky Jack prospects has **proven conclusively that the pre-Eocene surface was one of intense and prolonged weathering.**

At Megaton, on the edge of the Eocene, over 24 feet of saprolite was excavated with no bottom.

The oldest bedrock units are the Triassic Nicola Volcanics. These consist of mafic to andesitic breccias, massive augite-rich flows, crystal and lithic tuffs, and volcanic-derived sediments. At the new borrow pit 2 km west of Woodjam Creek on the Deerhorn Mainline, buff-colored tuffs show extensive alterations of K-spar, epidote, tourmaline, carbonate, and sericite. A grab sample collected in 1995 of buff-colored tuff showed minute grains of native gold under the binocular microscope. This sample returned an assay of 0.034 opt Au. The odd narrow shear zone in this pit showed some interesting splashes of bornite, which gave a low assay of Cu 489, Pb168, Ag 1.7 (ppm). Other exposures 500 m NW of the foregoing showed epidotized andesitic volcanics and scattered Cpy which ran Mo 31, Cu 502, Ag 0.3 (ppm).

**This area lies 5 km south of the Rand claims and is discussed to show that widespread alteration affects the Nicola Volcanics in this district as opposed to their usual, more mundane appearance.**

The Nicola Volcanics are intruded by the Jurassic-age Takomkane Batholith, which consists dominantly of light to medium grey-colored, fine to medium-grained, biotite, hornblende, quartz, monzonite. The batholith measures some 30x20 miles in size. Current work shows that the north rim, extending from Woodjam Creek, eastwards to Tisdall Lake consists of a K spar-rich, biotite, hornblende granodiorite with 1-5% magnetite. Mineral potential of the north rim is considered far superior to the remainder of the batholith due to the granodioritic phase change and broad cross-cutting nature with the Nicola Volcanic belt which trends northerly.

The above comments relate to the aereal geology. Given that the Rand claim area is entirely covered, bedrock composition in this locale is unknown. Mapping by Archer Cathro in 1984 shows that Nicola Volcanics are present west of Deerhorn Creek and at the south east corner of Green Lake (Ar 12,268).

Current work did not locate volcanics west of Deerhorn Creek, rather a fair size body of syenite occupies this area, forming a northerly trending ridge. A grab sample from outcrop west of the road that is some 500 meters west of sta.500W--L15SW returned nil base metal values (680789). This was a very dry, pinkish, magnetic syenitic intrusive. A second sample from the east side of the intrusive near the above station had the following characteristics:

RD-1R L15SW-500NW Syenite, Pinkish, olive grey. K-spar porphyritic, in fine grained siliceous matrix, mafic deficient, scattered fairly abundant clots of epidote. Rock is more altered than syenite on road to west. Very weakly magnetic due to scattered micro clots of Mt. Odd speck of Py. A grab sample of syenite from this location returned anomalous Cu Pb values of 234 and 147 ppm respectively.

The syenitic intrusive body is definitively indicated on the Noranda Aerodat survey by a magnetic feature 2.5 k long x 0.6 km wide. A potassium high is also present.

The preponderance of float east of the base line was Miocene volcanic material.

## GEOCHEMISTRY (Appendix I)

Soil and silt samples were collected using standard procedures along the three wing lines. Collected samples were shipped to Acme Laboratories for air drying and preparation. On completion the prepared samples were forwarded to activation Laboratories Ltd., Ancaster, Ontario for analysis.

The Enzyme Leach (EZL) system is a proprietary technique, the details of which plus an analysis of the data are covered in the accompanying report by consultant Greg Hill of Reno, Nevada. (Appendix I)

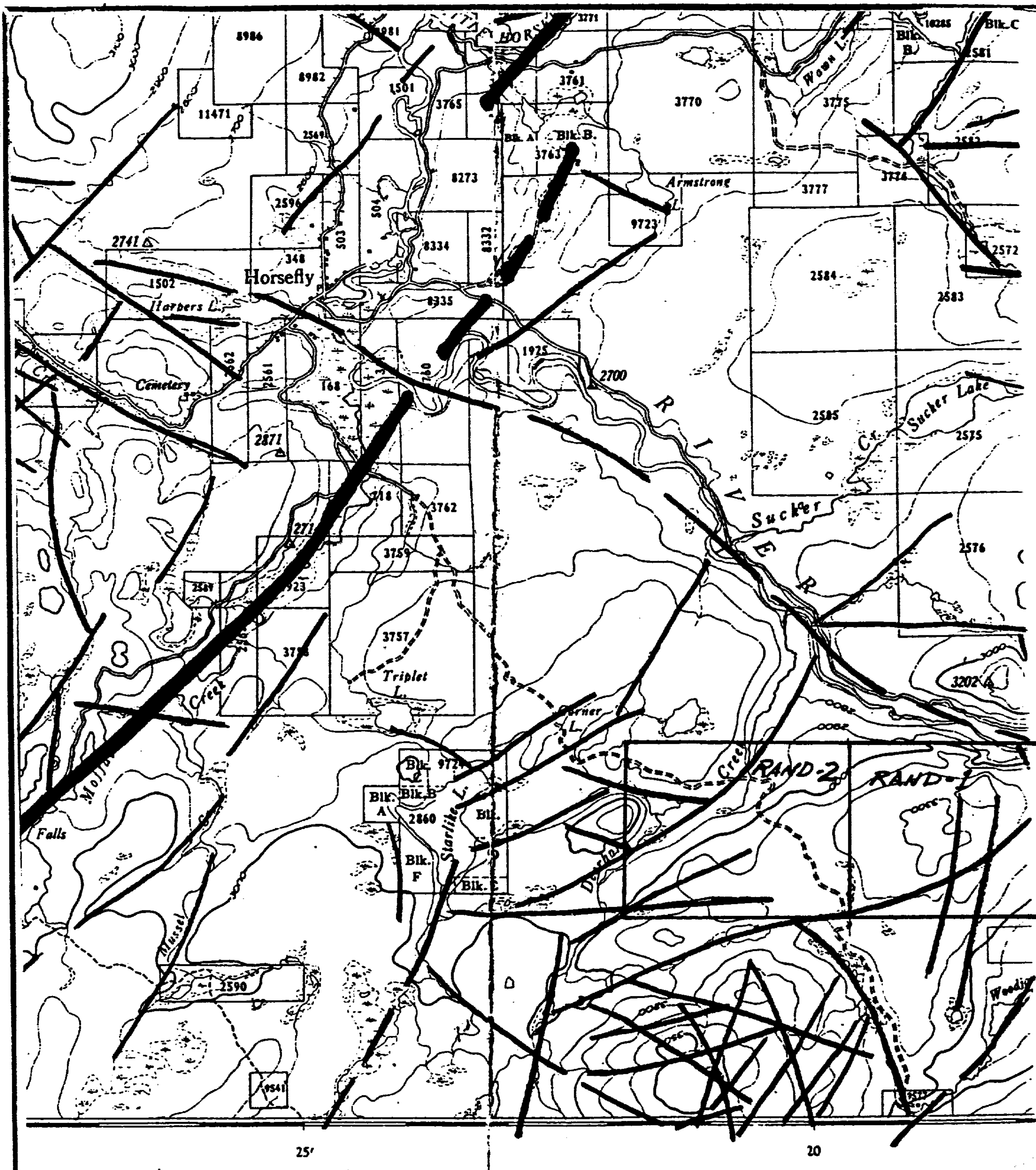



**Fig. 2**
Performance Minerals Canada Ltd.
Deerhorn (Rand) Gold-Copper Project
Photogeology (1971)
Scale: 1" = 1 mile


**Fig. 3**
Performance Minerals Canada Ltd.
Deerhorn (Rand) Gold-Copper Project
Regional Aeromagnetics (1967)
Scale: 1" = 1 mile

Of potentially significant interest are the EZL results for silt sample series RDST 1-5. These are all small seeps that drain EZL oxidation anomalous areas, and all show elevated base metal values. Sample number RDST-4 is of particular interest being a spring emanating at the base of slope on L5SW. This site reflects drainage from under a probable skiff of Miocene basalt, overlying one of the better data targets.

## THE EXPLORATION TARGET

The exploration target is a fault/shear zone controlled, alteration dependent, gold-copper deposit. The Megabucks prospect, 2km to the south is a partial model, containing a geological reserve of 2 mt @ 0.9 g/t plus some 0.15% Cu. This deposit was tested by some 20 DDH by Placer Dome in 1983-84. Mineralization and alteration is fault controlled forming a tabular, pipe-like zone, dipping opposite to the regional trend. Extensions to the zone under Mica Lake have never been tested.

The Rand-Deerhorn Target is based upon the under noted features which are mutually supportive.

1. Photogeology : (Fig.2) shows the results of a photo linear study performed in 1971. A prominent linear coincides with the trend of Deerhorn Creek.

2. Regional Magnetics: (Fig.3) GSC survey flown in 1967 shows prominent magnetic linear (shadowed by the 3500 $\gamma$ contour) coinciding with 1.

3. Exploram IP Survey: (Fig. A, B.*)

I.P Survey on the Ray claims shows 11 Msec anomaly coincident with 1. & 2. There are no records this zone was ever drill tested. Anomaly measures 800 x 150 meters.

4. Noranda 1992 Aerodat Survey ( Fig. A & B)

This survey shows a 2.5 km low resistivity zone (935 Hz channel) coincident with 1-3, plus wrap-around magnetic feature from Aerodat compilaton map. (Fig. 3, AR 22.670).

5. Gold-in –Soils Anomaly (Fig. A& B)

A broad field (900 X 500 meters) embracing scattered gold geochem values to 455 ppb is situated adjacent the north end of 1 - 4. High values are not continuous, but represent the only clustering effect from a substantial survey area.

* Figs. A & B are proprietary, unpublished compilation maps and are available for viewing by request only.

## CONCLUSIONS:

The local geology, general situation and 'stacking of data' throughout a wide time interval and by varying interests, strongly recommend the Deerhorn/ Rand Project as a prime target to develop shearzone-hosted gold mineralization, with ample room for tonnage development. The current EZL soil survey has detected oxidation anomalies over all the data targets indicative of sub surface sulphide zones.

## RECOMMENDATIONS

Percussion and/or core drilling of the EZL-airborne-ground data stack is strongly recommended.

## BUDGET

| | |
|---|---|
| **Phase I Drilling** | |
| Drilling, 1,000 meters @ $90/m contract coring charges. | $90,000.00 |
| Road and site preparation plus rehab. | 15,000.00 |
| Assay allowance | 7,000.00 |
| Supervision and reporting | 15,000.00 |
| Permits, Fees and Bonds | 5,000.00 |
| **Subtotal** | 132,000.00 |
| Contingency and/or follow-up allowance | 12,000.00 |
| **Total Phase I** | $144,000.00 |
| | |
| **Phase II Expanded Drilling 3000 m** | $432,000.00 |

**Recapitulation**

| | |
|---|---|
| Phase I Drilling | $144,000.00 |
| Phase II Drilling | 432,000.00 |
| **Grand Total Project Cost** | $576,000.00 |

H Wahl

Prepared by
H. Wahl P.Eng. B.C.
July 1999

**STATEMENT OF COSTS**

Work on the Rand-2 mineral claim was performed by:

Herb Wahl, P.Eng. B.C.
RR # 10, 1416 Ocean Beach Esplanade
Gibsons, B.C. VON 1V3
and
Jack Brown-John, experienced prospector,
Ste. 204, 383 Oliver St.,
Williams Lake, B.C. V2G 1M4

| | |
|---|---|
| H.J. Wahl – logistics, administration and pre-field preparations, 2 days @ $300/day | $ 600.00 |
| Field work, grid lay-out, line cutting, soil sampling and geology, 7 days @$500/day | 3,500.00 |
| Reporting, 4 days @$300/day | 1,200.00 |
| Jack Brown-John, power saw line cutting soil sampling and Prospecting, 7 days @ $300/day | 2,100.00 |
| **Sub Total:** | $7,400.00 |

| | |
|---|---|
| Field Vehicle, 1996 Cummins Dodge 4x4, Lic.No.4086PP 7 days@$110/day | 770.00 |
| Assaying, enzyme leach on soils and silts plus 2 rocks Acme #9901502 | 2,615.70 |
| Travel Expense | 300.02 |
| Maps, Prints and Xerox | 35.75 |
| Field Supplies | 112.32 |
| Secretarial | 100.00 |
| **Sub Total:** | $3,163.79 |

**Recap**

| | |
|---|---|
| Professional time, wages and salaries | $7,400.00 |
| Field Expense | 3,163.79 |
| **Grand Total:** | $10,563.79 |

**Certified True and Correct**

**H.J. Wahl, P.Eng., B.C.**

## REFERENCES


(1) Bull 97, BCDM, Geology and Mineral Deposits of the Quesnel River. Horsefly Area, 1996.

(2) O.F. 574, GSC, Geology of the Quesnel Lake Area, 1964.

(3) A.R. 5299, Exploram 1974. Ray Claims.

(4) A.R. 5411, Exploram 1973, WL Claims.

(5) A.R. 6315, Exploram 1977, Drill Logs

(6) A.R. 11,379, Placer Dome 1983, Megabuck.

(7) A.R. 12,301, Placer Dome 1984, DDH Report.

(8) A.R. 12,479, Placer Dome 1984, Wood Claims

(9) A.R. 12,522, Placer Dome 1983, DDH report

(10) A.R. 12,268, Rockridge Mining (Archer Cathro) 1983

(11) A.R. 13,741, Rockridge Mining Corp 1984, expanded sampling.

(12) A.R. 16,717, Archer Cathro 1987, Takom Zone

(13) A.R. 21221, Auspex Gold Ltd 1991, Takom Zone

(14) A.R. 22,670, Noranda, 1992, Aerodat Survey

# Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218


To: PERFORMANCE MINERALS OF CANADA LTD. ##
ATTN: RUDY RIEPE
BOX 69
SECHELT, BC
V0N 3A0

Project : RAND
Comments: ATTN: RUDY RIEPE CC: H. WAHL

Page Number : 1-A
Total Pages : 1
Certificate Date: 26-APR-1999
Invoice No. : I9915903
P.O. Number : ZINC
Account : BPE

## CERTIFICATE OF ANALYSIS A9915903

| SAMPLE | PREP CODE | | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Hg ppm | K % | Mg % | Mn ppm | Mo ppm | Na % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~680788 (ZINC)~~ | ~~205~~ | ~~226~~ | | ~~2~~ | ~~0.04~~ | ~~400~~ | ~~< 10~~ | ~~< 5~~ | ~~< 10~~ | ~~4.15~~ | ~~30~~ | ~~5~~ | ~~40~~ | ~~720~~ | ~~20.0~~ | ~~< 10~~ | ~~0.01~~ | ~~0.04~~ | ~~550~~ | ~~5~~ | ~~0.08~~ |
| 680789 (RAND) | 205 | 226 | < 5 | < 1 | 1.50 | < 10 | 60 | < 5 | < 10 | 0.82 | < 5 | 10 | 30 | 10 | 2.83 | < 10 | 0.08 | 1.46 | 850 | < 5 | 0.14 |

GRAB FROM SYENITE OUTCROP ON N-S FORESTRY ROAD 500 M WEST FROM L15SW - 500NW

CERTIFICATION: [signature]

# Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
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Pa 'umber :1-B
Tot.. ages :1
Certificate Date: 26-APR-1999
Invoice No. : I9915903
P.O. Number : ZINC
Account : BPE

## CERTIFICATE OF ANALYSIS A9915903

| SAMPLE | PREP CODE | | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ~~680788 (ZINC)~~ | ~~205~~ | ~~226~~ | ~~265~~ | ~~3600~~ | ~~20~~ | ~~50~~ | ~~< 5~~ | ~~5~~ | ~~0.18~~ | ~~< 20~~ | ~~< 20~~ | ~~100~~ | ~~20~~ | ~~2710~~ |
| 680789 (RAND) | 205 | 226 | 5 | 900 | 5 | 10 | < 5 | 55 | 0.03 | < 20 | < 20 | 80 | 20 | 95 |

CERTIFICATION: [signature]

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

# GEOCHEMICAL ANALYSIS CERTIFICATE

## Performance Minerals of Canada Ltd. PROJECT DEERHORN File # 9901522

P.O. box 69, Sechelt BC V0N 3A0 Submitted by: RUDY RIEPE

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppm | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppm | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RD-1R | <1 | 234 | 147 | 58 | .8 | 5 | 13 | 1221 | 3.86 | 26 | <8 | <2 | 2 | 59 | 1.3 | 3 | <3 | 87 |

| SAMPLE# | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppm | Au* ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RD-1R | 1.43 | .098 | 8 | 6 | 1.50 | 119 | .01 | 10 | 2.35 | .06 | .12 | <2 | <5 | <1 | 2 |

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND MASSIVE SULFIDE AND LIMITED FOR NA K AND AL.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* - IGNITED, AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. (10 gm)

**DATE RECEIVED:** MAY 25 1999 **DATE REPORT MAILED:** Jun 8/99 **SIGNED BY** ........D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

 Dat.___ FA ___

Invoice No.: 17593
Work Order: 17788
Invoice Date: 15-JUN-99
Date Submitted: 02-JUN-99
Your Reference: [redacted]
Account Number: 477

ACME ANALYTICAL LABORATORIES LTD
852 EAST HASTINGS
VANCOUVER, B.C.
V6A 1R6
ATT: CLARENCE LEONG

## CERTIFICATE OF ANALYSIS

91 PULPS were submitted for analysis.

The following analytical packages were requested. Please see our current fee schedule for elements and detection limits.

REPORT 17593 RPT.XLS CODE 7-ENZYME LEACH ICP/MS(ENZYME.REV1)

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

CERTIFIED BY :

DR E.HOFFMAN/GENERAL MANAGER

**Enzyme Leach Job #:** 17788 **Report#:** 17593 **Customer:** Performanc Geologist: **Customer's Job #:**9901502

Trace Element Values Are in Parts Per Billion. Negative Values Equal Not Detected at That Lower Limit.

Values = 999999 are greater than working range of instrument. S.Q.=That element is determined SEMIQUANTITATIVELY.

| Sample ID: | S.Q.Li | S.Q.Be | S.Q.Cl | S.Q.Sc | S.Q.Ti | V | Mn | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Rb | Sr | Y | Zr | Nb | Mo | Ru | Pd | Ag | Cd | In |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L3NE 500NW | 18 | -20 | 11460 | -100 | 457 | 58 | 2261 | 45 | 31 | 17 | 255 | 2 | -1 | 6 | -30 | 125 | 22 | 733 | 2 | 9 | 1 | 11 | -1 | -1 | -0.2 | 3.5 | -0.2 |
| L3NE 450NW | 12 | -20 | 5673 | -100 | 427 | 50 | 3305 | 49 | 21 | 18 | 87 | 1 | -1 | 6 | -30 | 106 | 29 | 516 | 4 | 16 | 1 | 5 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L3NE 400NW | 11 | -20 | 12290 | -100 | 651 | 70 | 3032 | 42 | 30 | 16 | 122 | 2 | -1 | 9 | -30 | 178 | 20 | 623 | 4 | 18 | 1 | 7 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L3NE 350NW | 25 | -20 | 8529 | -100 | 756 | 51 | 8628 | 67 | 63 | 21 | 113 | 1 | -1 | 7 | -30 | 73 | 18 | 536 | 6 | 17 | 1 | 7 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L3NE 300NW | 15 | -20 | 13715 | -100 | 810 | 64 | 1542 | 35 | 25 | 20 | 147 | 4 | -1 | 10 | -30 | 73 | 33 | 787 | 2 | 13 | 1 | 6 | -1 | -1 | -0.2 | 1.7 | -0.2 |
| L3NE 250NW | 18 | -20 | 11797 | -100 | 421 | 40 | 4472 | 46 | 42 | 14 | 205 | 1 | -1 | -5 | -30 | 203 | 31 | 589 | 2 | 8 | -1 | 3 | -1 | -1 | -0.2 | 1.6 | -0.2 |
| L3NE 200NW | -10 | -20 | 6254 | -100 | 378 | 82 | 221 | 11 | 12 | 15 | 85 | -1 | -1 | 8 | -30 | 157 | 27 | 1160 | 4 | 14 | -1 | 2 | -1 | -1 | -0.2 | 0.3 | -0.2 |
| L3NE 150NW | 24 | -20 | 12501 | -100 | 177 | 167 | 4408 | 87 | 200 | 108 | 88 | -1 | -1 | 35 | -30 | 176 | 35 | 570 | 58 | 67 | 1 | 9 | -1 | -1 | -0.2 | 2.7 | -0.2 |
| L3NE 100NW | 18 | -20 | 11890 | -100 | 1868 | 148 | 1043 | 44 | 30 | 25 | 94 | 4 | -1 | 7 | -30 | 131 | 14 | 770 | 4 | 15 | 2 | 3 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L3NE 050NW | 176 | -20 | 28407 | -100 | 243 | 200 | 338754 | 118 | 600 | 106 | 157 | 5 | -1 | 170 | 79 | 1788 | 19 | 5155 | 5 | 12 | 1 | 1790 | -1 | -1 | 0.2 | 7.4 | -0.2 |
| L3NE 000 | 35 | -20 | 18546 | -100 | 102 | 336 | 12802 | 46 | 259 | 47 | 59 | 3 | -1 | 123 | -30 | 190 | 8 | 1170 | 6 | 6 | -1 | 245 | -1 | -1 | -0.2 | 1.5 | -0.2 |
| L3NE 50SE | 61 | -20 | 37730 | -100 | -100 | 236 | 142751 | 158 | 167 | 64 | 116 | 2 | -1 | 182 | 45 | 1302 | 49 | 5257 | 1 | 5 | -1 | 494 | -1 | -1 | -0.2 | 2.7 | -0.2 |
| L3NE 100SE | 18 | -20 | 32225 | -100 | -100 | 14221 | 2068 | 11 | 312 | 110 | 131 | 1 | 2 | 969 | 1064 | 461 | 15 | 2570 | -1 | 2 | -1 | 1623 | -1 | -1 | -0.2 | 7.0 | -0.2 |
| L3NE 150SE | 19 | -20 | 51738 | -100 | -100 | 6609 | 1528 | 26 | 104 | 49 | 199 | 2 | -1 | 437 | 120 | 459 | 30 | 2778 | -1 | 2 | -1 | 181 | -1 | -1 | -0.2 | 2.9 | -0.2 |
| L3NE 200SE | 11 | -20 | 9467 | -100 | 260 | 55 | 462 | 17 | 19 | 11 | 85 | 3 | -1 | 9 | -30 | 54 | 17 | 354 | 5 | 14 | -1 | 9 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L3NE 250SE | -10 | -20 | 6407 | -100 | 421 | 61 | 680 | 36 | 12 | 13 | 87 | -1 | -1 | 9 | -30 | 35 | 13 | 837 | 2 | 8 | -1 | 8 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L3NE 300SE | -10 | -20 | 11276 | -100 | 527 | 75 | 1277 | 16 | 18 | 18 | 121 | -1 | -1 | 17 | -30 | 139 | 24 | 809 | 2 | 19 | 1 | 7 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L3NE 350SE | 28 | -20 | 9807 | -100 | 666 | 60 | 1166 | 35 | 19 | 23 | 144 | 3 | -1 | 14 | -30 | 94 | 22 | 672 | 1 | 11 | -1 | 6 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L3NE 400SE | 12 | -20 | 18038 | -100 | 681 | 128 | 1081 | 31 | 45 | 31 | 137 | 2 | -1 | 55 | -30 | 115 | 36 | 1490 | 5 | 35 | 1 | 9 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L3NE 450SE | 16 | -20 | 9161 | -100 | 940 | 62 | 1343 | 26 | 25 | 13 | 159 | 4 | -1 | 12 | -30 | 75 | 20 | 1088 | 2 | 14 | 2 | 7 | -1 | -1 | -0.2 | 0.4 | -0.2 |
| L3NE 500SE | 10 | -20 | 17661 | -100 | 1039 | 112 | 1466 | 69 | 31 | 31 | 116 | 2 | -1 | 25 | -30 | 100 | 29 | 926 | 3 | 32 | 2 | 7 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L3NE 550SE | -10 | -20 | 13933 | -100 | 1012 | 215 | 10629 | 84 | 53 | 48 | 407 | -1 | -1 | 31 | -30 | 96 | 16 | 1396 | 8 | 42 | 2 | 22 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L3NE 650SE | 21 | -20 | 19070 | -100 | 1255 | 70 | 6009 | 44 | 28 | 18 | 123 | 3 | -1 | 11 | -30 | 52 | 27 | 1445 | 2 | 12 | 2 | 20 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| L3NE 700SE | -10 | -20 | 13277 | -100 | 781 | 51 | 4080 | 31 | 21 | 17 | 99 | 3 | -1 | 10 | -30 | 91 | 26 | 933 | 1 | 11 | 2 | 11 | -1 | -1 | -0.2 | 1.3 | -0.2 |
| L3NE 750SE | 15 | -20 | 14897 | -100 | 1066 | 55 | 1552 | 26 | 27 | 19 | 122 | 1 | -1 | 13 | -30 | 142 | 35 | 869 | 2 | 17 | 2 | 9 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L3NE 800SE | 10 | -20 | 12838 | -100 | 800 | 73 | 2529 | 29 | 30 | 26 | 101 | -1 | -1 | 18 | -30 | 90 | 30 | 923 | 8 | 22 | 1 | 8 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L3NE 850SE | 20 | -20 | 17970 | -100 | 1298 | 94 | 1361 | 32 | 40 | 27 | 130 | 3 | -1 | 17 | -30 | 172 | 40 | 1575 | 5 | 27 | 2 | 9 | -1 | -1 | -0.2 | 0.4 | -0.2 |
| L3NE 900SE | 13 | -20 | 18328 | -100 | 720 | 77 | 9511 | 31 | 24 | 29 | 221 | 2 | -1 | 14 | -30 | 95 | 19 | 949 | 4 | 18 | 1 | 15 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L3NE 950SE | 25 | -20 | 15217 | -100 | 1077 | 52 | 4507 | 77 | 26 | 26 | 203 | 3 | -1 | 13 | -30 | 144 | 20 | 983 | 1 | 13 | 1 | 10 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L5SW 500NW | -10 | -20 | 11619 | -100 | 713 | 77 | 1526 | 41 | 16 | 20 | 79 | 2 | -1 | 5 | -30 | 105 | 32 | 751 | 2 | 15 | 2 | 5 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L5SW 450NW | -10 | -20 | 11335 | -100 | 788 | 56 | 4632 | 91 | 20 | 13 | 114 | 2 | -1 | 8 | -30 | 110 | 16 | 868 | 1 | 24 | 2 | 10 | -1 | -1 | -0.2 | 1.4 | -0.2 |
| L5SW 400NW | -10 | -20 | 15784 | -100 | 781 | 87 | 2188 | 33 | 26 | 23 | 119 | 4 | -1 | 12 | -30 | 113 | 22 | 745 | 5 | 15 | 1 | 10 | -1 | -1 | -0.2 | 1.4 | -0.2 |
| L5SW 350NW | 17 | -20 | 9764 | -100 | 874 | 49 | 19736 | 64 | 34 | 18 | 98 | 2 | -1 | -5 | -30 | 81 | 9 | 692 | 5 | 19 | 2 | 12 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 300NW | -10 | -20 | 6509 | -100 | 696 | 70 | 625 | 24 | 20 | 11 | 83 | 1 | -1 | 9 | -30 | 124 | 55 | 1097 | 3 | 17 | 1 | 3 | -1 | -1 | -0.2 | 0.7 | -0.2 |
| L5SW 200NW | 24 | -20 | 16898 | -100 | 128 | 398 | 4608 | 48 | 194 | 61 | 69 | -1 | -1 | 50 | -30 | 243 | 8 | 1350 | 8 | 20 | -1 | 46 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 150NW | -10 | -20 | 9801 | -100 | 631 | 119 | 522 | 14 | 14 | 17 | 96 | 2 | -1 | 12 | -30 | 124 | 31 | 883 | 3 | 21 | 1 | 4 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 100NW | 30 | -20 | 6364 | -100 | 785 | 83 | 187 | 18 | 24 | 12 | 83 | 2 | -1 | 8 | -30 | 114 | 31 | 1206 | 2 | 13 | 1 | 6 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L5SW 50NW | -10 | -20 | 10200 | -100 | 550 | 92 | 1014 | 71 | 19 | 14 | 94 | -1 | -1 | -5 | -30 | 324 | 51 | 1356 | 6 | 33 | 1 | 6 | -1 | -1 | -0.2 | 1.4 | -0.2 |
| L5SW 000 | -10 | -20 | 6768 | -100 | 823 | 127 | 1840 | 41 | 19 | 19 | 73 | -1 | -1 | 6 | -30 | 64 | 27 | 1019 | 5 | 30 | 2 | 4 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L5SW 50SE | -10 | -20 | 22515 | -100 | 542 | 57 | 735 | 25 | 17 | 18 | 70 | 2 | -1 | 6 | -30 | 97 | 18 | 872 | 2 | 11 | -1 | 7 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L5SW 100SE | 14 | -20 | 10662 | -100 | 1487 | 67 | 2045 | 51 | 26 | 15 | 98 | 3 | -1 | 9 | -30 | 124 | 27 | 1214 | 2 | 20 | 2 | 7 | -1 | -1 | -0.2 | 0.6 | -0.2 |

**Enzyme Leach Job #:** 17788 **Report#:** 17593 **Customer:** Performanc Geologist: **Customer's Job #:**9901502

Trace Element Values Are in Parts Per Billion. Negative Values Equal Not Detected at That Lower Limit.

Values = 999999 are greater than working range of instrument. S.Q.=That element is determined SEMIQUANTITATIVELY.

| Sample ID: | S.Q.Li | S.Q.Be | S.Q.Cl | S.Q.Sc | S.Q.Ti | V | Mn | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Rb | Sr | Y | Zr | Nb | Mo | Ru | Pd | Ag | Cd | In |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L5SW 150SE | 20 | -20 | 15472 | -100 | 1484 | 84 | 13241 | 115 | 25 | 25 | 219 | 1 | -1 | 9 | -30 | 195 | 39 | 1116 | 2 | 22 | 2 | 15 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L5SW 200SE | 13 | -20 | 9812 | -100 | 1196 | 93 | 782 | 23 | 20 | 24 | 113 | 5 | -1 | 10 | -30 | 107 | 39 | 1323 | 3 | 28 | 2 | 6 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 250SE | -10 | -20 | 9935 | -100 | 1185 | 261 | 1574 | 62 | 29 | 29 | 73 | 2 | -1 | 18 | -30 | 60 | 41 | 1220 | 9 | 68 | 2 | 8 | -1 | -1 | -0.2 | 0.3 | -0.2 |
| L5SW 300SE | -10 | -20 | 10439 | -100 | 1286 | 106 | 13720 | 60 | 22 | 16 | 245 | 2 | -1 | 11 | -30 | 141 | 16 | 1109 | 2 | 19 | 2 | 19 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 350SE | 17 | -20 | 16261 | -100 | 1666 | 112 | 3939 | 82 | 28 | 27 | 136 | 2 | -1 | 9 | -30 | 155 | 49 | 928 | 4 | 38 | 2 | 11 | -1 | -1 | -0.2 | -0.2 | -0.2 |
| L5SW 400SE | -10 | -20 | 9672 | -100 | 968 | 331 | 2155 | 42 | 28 | 39 | 64 | -1 | -1 | 9 | -30 | 179 | 46 | 1326 | 14 | 57 | 3 | 11 | -1 | -1 | -0.2 | 0.4 | -0.2 |
| L5SW 450SE | -10 | -20 | 3369 | -100 | 963 | 86 | 1208 | 25 | 17 | 16 | 125 | -1 | -1 | 9 | -30 | 58 | 21 | 900 | 4 | 25 | 2 | 8 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| L5SW 500SE | -10 | -20 | 4745 | -100 | 969 | 175 | 426 | 18 | 17 | 23 | 55 | 1 | -1 | 11 | -30 | 51 | 23 | 895 | 10 | 62 | 2 | 7 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| L5SW 550SE | -10 | -20 | 8750 | -100 | 628 | 111 | 1042 | 45 | 15 | 18 | 58 | 1 | -1 | 9 | -30 | 71 | 45 | 1099 | 3 | 37 | 2 | 10 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L5SW 600SE | -10 | -20 | 8479 | -100 | 642 | 109 | 3005 | 38 | 19 | 20 | 77 | -1 | -1 | 11 | -30 | 126 | 25 | 1199 | 4 | 31 | 1 | 7 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L5SW 650SE | -10 | -20 | 4621 | -100 | 559 | 58 | 1241 | 14 | 14 | 16 | 64 | -1 | -1 | 6 | -30 | 136 | 26 | 753 | 3 | 17 | 1 | 4 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L5SW 700SE | -10 | -20 | 11698 | -100 | 468 | 52 | 836 | 14 | 19 | 12 | 64 | 1 | -1 | 8 | -30 | 182 | 27 | 738 | 3 | 15 | -1 | 4 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L5SW 750SE | 17 | -20 | 15214 | -100 | 504 | 65 | 835 | 45 | 23 | 25 | 167 | 2 | -1 | 6 | -30 | 271 | 26 | 773 | 3 | 16 | -1 | 5 | -1 | -1 | -0.2 | 1.6 | -0.2 |
| L5SW 800SE | 54 | -20 | 28941 | -100 | 471 | 1091 | 9403 | 61 | 235 | 89 | 66 | -1 | 1 | 109 | -30 | 435 | 15 | 1615 | 23 | 15 | 3 | 107 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L5SW 850SE | -10 | -20 | 12730 | -100 | 953 | 91 | 1113 | 25 | 25 | 18 | 63 | -1 | -1 | 8 | -30 | 151 | 35 | 824 | 3 | 25 | 2 | 6 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L5SW 900SE | -10 | -20 | 20816 | -100 | 719 | 52 | 768 | 24 | 19 | 12 | 62 | 2 | -1 | 7 | -30 | 254 | 34 | 1495 | 3 | 16 | 1 | 5 | -1 | -1 | -0.2 | 1.3 | -0.2 |
| L15SW 500NW | -10 | -20 | 8568 | -100 | 369 | 147 | 585 | 24 | 12 | 37 | 62 | 1 | -1 | 12 | -30 | 229 | 17 | 716 | 3 | 11 | 1 | 5 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L15SW 450NW | -10 | -20 | 6589 | -100 | 441 | 175 | 1195 | 43 | 22 | 31 | 43 | 1 | -1 | 24 | -30 | 97 | 24 | 792 | 4 | 44 | 1 | 6 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L15SW 400NW | 14 | -20 | -3000 | -100 | 579 | 76 | 1613 | 42 | 19 | 13 | 82 | -1 | -1 | 7 | -30 | 113 | 30 | 777 | 1 | 11 | 1 | 4 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L15SW 350NW | -10 | -20 | 3971 | -100 | 337 | 97 | 1810 | 31 | 27 | 36 | 55 | -1 | -1 | 7 | -30 | 108 | 6 | 776 | 3 | 18 | 1 | 8 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L15SW 300NW | -10 | -20 | -3000 | -100 | 631 | 153 | 9646 | 80 | 22 | 31 | 67 | -1 | -1 | 11 | -30 | 36 | 15 | 708 | 5 | 18 | 2 | 10 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L15SW 250NW | 22 | -20 | 12891 | -100 | 315 | 97 | 11533 | 29 | 72 | 43 | 58 | 2 | -1 | 10 | -30 | 127 | 29 | 620 | 13 | 46 | 1 | 23 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L15SW 200NW | 18 | -20 | 17806 | -100 | 235 | 393 | 931 | 13 | 128 | 47 | 60 | 2 | -1 | 46 | -30 | 480 | 21 | 1599 | 11 | 19 | 1 | 52 | -1 | -1 | -0.2 | 1.8 | -0.2 |
| L15SW 150NW | 27 | -20 | 16098 | -100 | 191 | 228 | 1194 | 14 | 110 | 42 | 63 | -1 | -1 | 15 | -30 | 281 | 2 | 1314 | 13 | 13 | -1 | 65 | -1 | -1 | -0.2 | 2.9 | -0.2 |
| L15SW 100NW | 20 | -20 | 6352 | -100 | 636 | 69 | 606 | 21 | 23 | 26 | 92 | 1 | -1 | 5 | -30 | 69 | 11 | 649 | 7 | 21 | 1 | 6 | -1 | -1 | -0.2 | 2.5 | -0.2 |
| L15SW 50NW | 52 | -20 | 21106 | -100 | 204 | 1134 | 13141 | 33 | 527 | 443 | 83 | 2 | 1 | 59 | -30 | 353 | 19 | 1927 | 108 | 30 | 2 | 103 | -1 | -1 | -0.2 | 1.7 | -0.2 |
| L15SW 000 | 21 | -20 | 19731 | -100 | 639 | 228 | 873 | 33 | 41 | 40 | 70 | -1 | -1 | 15 | -30 | 275 | 9 | 1473 | 9 | 15 | 2 | 19 | -1 | -1 | -0.2 | 1.2 | -0.2 |
| L15SW 50SE | -10 | -20 | 22387 | -100 | 1234 | 181 | 1046 | 29 | 39 | 28 | 60 | 3 | -1 | 11 | -30 | 332 | 23 | 1161 | 5 | 31 | 2 | 16 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| L15SW 100SE | 39 | -20 | 16132 | -100 | 461 | 1052 | 2504 | 57 | 96 | 43 | 69 | 2 | -1 | 37 | -30 | 210 | 20 | 1184 | 7 | 9 | 3 | 26 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L15SW 150SE | 17 | -20 | 10042 | -100 | 898 | 156 | 3412 | 30 | 25 | 20 | 79 | 2 | -1 | 10 | -30 | 59 | 27 | 985 | 4 | 24 | 2 | 12 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| L15SW 200SE | 16 | -20 | 7448 | -100 | 868 | 57 | 2408 | 59 | 20 | 12 | 96 | -1 | -1 | 10 | -30 | 32 | 15 | 871 | 2 | 12 | 2 | 11 | -1 | -1 | -0.2 | 0.3 | -0.2 |
| L15SW 250SE | -10 | -20 | 6900 | -100 | 1323 | 99 | 3197 | 41 | 22 | 20 | 79 | 1 | -1 | 13 | -30 | 96 | 24 | 1008 | 2 | 21 | 2 | 19 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| L15SW 300SE | 14 | -20 | 4584 | -100 | 994 | 87 | 1225 | 19 | 22 | 20 | 113 | 2 | -1 | 8 | -30 | 57 | 24 | 1024 | 2 | 30 | 3 | 13 | -1 | -1 | -0.2 | 0.7 | -0.2 |
| L15SW 350SE | -10 | -20 | 9039 | -100 | 1044 | 207 | 1702 | 74 | 26 | 29 | 59 | 2 | -1 | 11 | -30 | 54 | 25 | 1097 | 7 | 69 | 3 | 12 | -1 | -1 | -0.2 | 0.4 | -0.2 |
| L15SW 400SE | -10 | -20 | -3000 | -100 | 1102 | 122 | 1654 | 29 | 22 | 22 | 59 | 3 | -1 | 11 | -30 | 82 | 15 | 851 | 4 | 45 | 3 | 7 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| L15SW 450SE | -10 | -20 | -3000 | -100 | 766 | 299 | 1382 | 34 | 30 | 63 | 74 | -1 | -1 | 15 | -30 | 112 | 18 | 860 | 43 | 57 | 2 | 5 | -1 | -1 | -0.2 | 0.4 | -0.2 |
| L15SW 500SE | -10 | -20 | 15062 | -100 | 953 | 111 | 1174 | 27 | 27 | 32 | 69 | 2 | -1 | 18 | -30 | 167 | 30 | 1180 | 11 | 48 | 2 | 6 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L15SW 550SE | 13 | -20 | 20321 | -100 | 739 | 390 | 1152 | 33 | 52 | 72 | 53 | 3 | -1 | 30 | -30 | 308 | 31 | 890 | 47 | 66 | 3 | 6 | -1 | -1 | -0.2 | 0.3 | -0.2 |
| L15SW 600SE | -10 | -20 | 10613 | -100 | 635 | 69 | 778 | 22 | 20 | 10 | 55 | 1 | -1 | 9 | -30 | 142 | 28 | 739 | 6 | 26 | 1 | 5 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L15SW 650SE | 58 | -20 | 10992 | -100 | 534 | 319 | 6109 | 37 | 106 | 58 | 84 | 2 | -1 | 20 | -30 | 161 | 21 | 648 | 44 | 34 | 2 | 12 | -1 | -1 | -0.2 | 1.1 | -0.2 |
| L15SW 700SE | -10 | -20 | -3000 | -100 | 955 | 71 | 3461 | 57 | 20 | 12 | 84 | -1 | -1 | 10 | -30 | 76 | 25 | 759 | 3 | 14 | 2 | 8 | -1 | -1 | -0.2 | 0.9 | -0.2 |

**Enzyme Leach Job #:** 17788 **Report#: 17593** **Customer: Performanc Geologist:** **Customer's Job #:9901502**

Trace Element Values Are in Parts Per Billion. Negative Values Equal Not Detected at That Lower Limit.

Values = 999999 are greater than working range of instrument. S.Q.=That element is determined SEMIQUANTITATIVELY.

| Sample ID: | S.Q.Li | S.Q.Be | S.Q.Cl | S.Q.Sc | S.Q.Ti | V | Mn | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Rb | Sr | Y | Zr | Nb | Mo | Ru | Pd | Ag | Cd | In |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L15SW 750SE | 14 | -20 | 11087 | -100 | 939 | 323 | 5541 | 87 | 77 | 38 | 72 | 2 | -1 | 16 | -30 | 260 | 74 | 1601 | 27 | 168 | 3 | 16 | -1 | -1 | -0.2 | 0.6 | -0.2 |
| RD-1ST | 51 | -20 | 48929 | -100 | 176 | 826 | 74845 | 138 | 612 | 101 | 122 | 4 | 3 | 197 | 56 | 463 | 27 | 2770 | 5 | 11 | 1 | 1235 | -1 | -1 | -0.2 | 4.5 | -0.2 |
| RD-2ST | -10 | -20 | 7788 | -100 | -100 | 3514 | 2409 | 23 | 100 | 335 | 93 | -1 | 2 | 422 | 109 | 114 | 7 | 2447 | 4 | 10 | 1 | 323 | -1 | -1 | -0.2 | 14.9 | -0.2 |
| RD-3ST | -10 | -20 | 3404 | -100 | -100 | 201 | 21762 | 48 | 36 | 52 | 182 | -1 | -1 | 63 | -30 | 142 | 40 | 805 | 3 | 5 | -1 | 58 | -1 | -1 | -0.2 | 1.0 | -0.2 |
| RD-4ST | 33 | -20 | 84088 | -100 | 369 | 2408 | 1275 | 15 | 201 | 489 | 69 | 2 | 3 | 156 | 47 | 977 | 80 | 1678 | 13 | 17 | 2 | 156 | -1 | -1 | -0.2 | 0.8 | -0.2 |
| RD-5ST | 30 | -20 | 9375 | -100 | 227 | 708 | 9983 | 61 | 144 | 95 | 53 | -1 | -1 | 106 | -30 | 233 | 58 | 708 | 10 | 22 | 1 | 65 | -1 | -1 | -0.2 | 0.5 | -0.2 |
| L3NE 190NW ST | 14 | -20 | 11599 | -100 | -100 | 142 | 64290 | 95 | 99 | 56 | 150 | 2 | -1 | 56 | -30 | 435 | 32 | 1064 | 5 | 6 | -1 | 125 | -1 | -1 | -0.2 | 1.3 | -0.2 |
| L5SW 185NW ST | 14 | -20 | 16543 | -100 | 356 | 205 | 97059 | 93 | 97 | 55 | 87 | 3 | -1 | 84 | -30 | 497 | 14 | 3029 | 6 | 10 | -1 | 95 | -1 | -1 | -0.2 | 0.9 | -0.2 |
| L15SW 270NW ST | 14 | -20 | 25267 | -100 | 222 | 271 | 57000 | 46 | 85 | 107 | 116 | 5 | -1 | 51 | -30 | 439 | 22 | 1528 | 7 | 5 | 1 | 239 | -1 | -1 | -0.2 | 2.7 | -0.2 |

Certified By: David D'Anna

D. D'Anna, Dipl. T.
ICPMS Technical Manager, Activation Laboratories Ltd.

Date Received: 8 June 99 Date Reported: 14-June 99

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Unless otherwise instructed, samples will be disposed of 90 days from the date of this report.

Enzyme Leach Job
Trace Element Values
Values = 999999 are

| Sample ID: | Sn | Sb | Te | I | Cs | Ba | La | Ce | Pr | Nd | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W | Re | Os | Pt | Au | S.Q.Hg | Tl | Pb | Bi | Th | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L3NE 500NW | -1 | -1 | -1 | 28 | -1 | 1844 | 2 | 4 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | -1 | -1 |
| L3NE 450NW | -1 | -1 | -1 | 29 | -1 | 1492 | 4 | 14 | 1 | 5 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 7 | -1 | 1 | -1 |
| L3NE 400NW | -1 | -1 | -1 | 43 | -1 | 1332 | 3 | 10 | 1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 1 | -1 |
| L3NE 350NW | -1 | -1 | -1 | 29 | -1 | 1854 | 5 | 14 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | -1 |
| L3NE 300NW | -1 | -1 | -1 | 36 | -1 | 1588 | 2 | 7 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 1 |
| L3NE 250NW | -1 | -1 | -1 | 33 | -1 | 1835 | 2 | 5 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | -1 | -1 |
| L3NE 200NW | -1 | -1 | -1 | 39 | -1 | 972 | 3 | 9 | 1 | 5 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 3 | -1 | 1 | -1 |
| L3NE 150NW | -1 | 3 | -1 | 43 | -1 | 378 | 38 | 68 | 14 | 65 | 13 | 3 | 15 | 2 | 11 | 3 | 8 | 1 | 7 | 1 | 1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 3 | -1 | 5 | 2 |
| L3NE 100NW | -1 | -1 | -1 | 27 | -1 | 191 | 3 | 7 | 1 | 5 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 3 | -1 | 2 | -1 |
| L3NE 050NW | -1 | 13 | -1 | 970 | -1 | 5926 | 3 | 5 | -1 | 4 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0.7 | -1 | -1 | -0.1 | -1 | 2 | 1 | -1 | 2 | 2 |
| L3NE 000 | -1 | 6 | -1 | 248 | -1 | 385 | 4 | 8 | 1 | 6 | 1 | -1 | -1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | 0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | -1 |
| L3NE 50SE | -1 | 8 | -1 | 674 | -1 | 2383 | 2 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | 0.8 | -1 | -1 | -0.1 | 1 | -1 | -1 | -1 | 1 | 3 |
| L3NE 100SE | -1 | 216 | -1 | 103 | -1 | 502 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 4.5 | -1 | -1 | -0.1 | -1 | 2 | -1 | -1 | -1 | 8 |
| L3NE 150SE | -1 | 67 | -1 | 112 | -1 | 408 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0.7 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | 2 |
| L3NE 200SE | -1 | -1 | -1 | 29 | -1 | 255 | 5 | 35 | 2 | 8 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 3 | 2 |
| L3NE 250SE | -1 | -1 | -1 | 28 | -1 | 649 | 2 | 7 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | -1 |
| L3NE 300SE | -1 | -1 | -1 | 25 | -1 | 2005 | 3 | 8 | -1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | -1 |
| L3NE 350SE | -1 | -1 | -1 | 21 | -1 | 1255 | 2 | 4 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | -1 |
| L3NE 400SE | -1 | -1 | -1 | 36 | -1 | 997 | 6 | 19 | 1 | 6 | 1 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | 1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 3 | 1 |
| L3NE 450SE | -1 | -1 | -1 | 27 | -1 | 1574 | 2 | 5 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | -1 |
| L3NE 500SE | -1 | -1 | -1 | 34 | -1 | 1125 | 4 | 14 | 1 | 5 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 1 |
| L3NE 550SE | -1 | 2 | -1 | 24 | -1 | 1058 | 6 | 20 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 1 | -1 |
| L3NE 650SE | -1 | 1 | -1 | 20 | -1 | 1339 | 2 | 5 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | -1 |
| L3NE 700SE | -1 | 1 | -1 | 21 | -1 | 955 | 1 | 3 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | -1 | -1 |
| L3NE 750SE | -1 | -1 | -1 | 34 | -1 | 940 | 2 | 4 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 1 | -1 |
| L3NE 800SE | -1 | -1 | -1 | 40 | -1 | 1941 | 11 | 30 | 3 | 15 | 3 | -1 | 3 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 1 |
| L3NE 850SE | -1 | -1 | -1 | 37 | -1 | 1812 | 5 | 14 | 2 | 7 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 1 |
| L3NE 900SE | -1 | -1 | -1 | 25 | -1 | 683 | 3 | 7 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 43 | -1 | -1 | -1 |
| L3NE 950SE | -1 | -1 | -1 | 31 | -1 | 1362 | 2 | 5 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 4 | -1 | -1 | -1 |
| L5SW 500NW | -1 | -1 | -1 | 20 | -1 | 882 | 2 | 6 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | -1 | -1 |
| L5SW 450NW | -1 | -1 | -1 | 19 | -1 | 1218 | 2 | 8 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | 1 |
| L5SW 400NW | -1 | -1 | -1 | 26 | -1 | 1358 | 4 | 12 | 2 | 5 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 1 |
| L5SW 350NW | -1 | -1 | -1 | 26 | -1 | 2681 | 5 | 15 | 2 | 7 | 1 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | -1 |
| L5SW 300NW | -1 | -1 | -1 | 35 | -1 | 1385 | 3 | 8 | -1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | -1 |
| L5SW 200NW | -1 | 3 | -1 | 265 | -1 | 458 | 7 | 16 | 2 | 10 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 150NW | -1 | -1 | -1 | 39 | -1 | 1418 | 3 | 8 | -1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 100NW | -1 | -1 | -1 | 31 | -1 | 2181 | 2 | 5 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | -1 |
| L5SW 50NW | -1 | -1 | -1 | 89 | -1 | 2641 | 5 | 18 | 2 | 9 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 2 |
| L5SW 000 | -1 | -1 | -1 | 34 | -1 | 1178 | 5 | 16 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 1 |
| L5SW 50SE | -1 | -1 | -1 | 29 | -1 | 931 | 2 | 6 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | 1 |
| L5SW 100SE | -1 | -1 | -1 | 26 | -1 | 3050 | 2 | 5 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 1 |

Enzyme Leach Job #
Trace Element Values
Values = 999999 are

| Sample ID: | Sn | Sb | Te | I | Cs | Ba | La | Ce | Pr | Nd | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W | Re | Os | Pt | Au | S.Q.Hg | Tl | Pb | Bi | Th | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L5SW 150SE | -1 | -1 | -1 | 33 | -1 | 1539 | 3 | 14 | 1 | 4 | -1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 200SE | -1 | -1 | -1 | 27 | -1 | 3321 | 5 | 14 | 1 | 5 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 2 |
| L5SW 250SE | -1 | -1 | -1 | 36 | -1 | 3878 | 11 | 20 | 3 | 16 | 3 | 1 | 3 | -1 | 2 | -1 | 1 | -1 | 1 | -1 | 2 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 2 |
| L5SW 300SE | -1 | -1 | -1 | 26 | -1 | 1160 | 1 | 7 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 3 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | -1 |
| L5SW 350SE | -1 | -1 | -1 | 20 | -1 | 2167 | 6 | 20 | 2 | 8 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 3 | 2 |
| L5SW 400SE | -1 | 1 | -1 | 44 | -1 | 2248 | 16 | 33 | 6 | 24 | 5 | 2 | 5 | -1 | 4 | -1 | 2 | -1 | 2 | -1 | 1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | 2 |
| L5SW 450SE | -1 | -1 | -1 | 30 | -1 | 3056 | 5 | 13 | 2 | 7 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 500SE | -1 | -1 | -1 | 40 | -1 | 3488 | 13 | 26 | 4 | 18 | 4 | 2 | 4 | -1 | 3 | -1 | 1 | -1 | 1 | -1 | 2 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 3 | 2 |
| L5SW 550SE | -1 | -1 | -1 | 35 | -1 | 2557 | 5 | 16 | 2 | 6 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 2 |
| L5SW 600SE | -1 | -1 | -1 | 34 | -1 | 2386 | 5 | 13 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | 1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | 1 |
| L5SW 650SE | -1 | -1 | -1 | 37 | -1 | 2777 | 3 | 8 | 1 | 5 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 700SE | -1 | -1 | -1 | 35 | -1 | 1738 | 3 | 8 | 1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L5SW 750SE | -1 | -1 | -1 | 38 | -1 | 1426 | 4 | 9 | 1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 1 |
| L5SW 800SE | -1 | 5 | -1 | 285 | -1 | 698 | 15 | 41 | 5 | 23 | 5 | 1 | 5 | -1 | 3 | -1 | 2 | -1 | 2 | -1 | -1 | -1 | 3 | 0.2 | -1 | -1 | -0.1 | -1 | 1 | -1 | -1 | 1 | 1 |
| L5SW 850SE | -1 | -1 | -1 | 31 | -1 | 1917 | 4 | 14 | 2 | 6 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 1 |
| L5SW 900SE | -1 | -1 | -1 | 41 | -1 | 3442 | 4 | 9 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | -1 | 1 |
| L15SW 500NW | -1 | -1 | -1 | 35 | -1 | 484 | 3 | 11 | 1 | 5 | -1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | -1 | 1 |
| L15SW 450NW | -1 | -1 | -1 | 39 | -1 | 1072 | 5 | 25 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | 1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 3 | 2 |
| L15SW 400NW | -1 | -1 | -1 | 18 | -1 | 1235 | 2 | 7 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 1 | 1 |
| L15SW 350NW | -1 | -1 | -1 | 30 | -1 | 573 | 4 | 15 | 1 | 6 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 2 |
| L15SW 300NW | -1 | -1 | -1 | 16 | -1 | 1217 | 5 | 15 | 2 | 7 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 1 |
| L15SW 250NW | -1 | 1 | -1 | 117 | -1 | 470 | 8 | 17 | 3 | 11 | 3 | -1 | 2 | -1 | 3 | -1 | 1 | -1 | 2 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 3 | 3 |
| L15SW 200NW | -1 | 2 | -1 | 277 | -1 | 394 | 7 | 9 | 2 | 12 | 3 | -1 | 2 | -1 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | 2 | 0.2 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 2 |
| L15SW 150NW | -1 | -1 | -1 | 112 | -1 | 315 | 9 | 9 | 3 | 12 | 3 | -1 | 2 | -1 | 3 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | 2 | 2 |
| L15SW 100NW | -1 | -1 | -1 | 37 | -1 | 2247 | 8 | 26 | 3 | 12 | 3 | 1 | 2 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 2 |
| L15SW 50NW | -1 | 4 | -1 | 404 | -1 | 1079 | 63 | 51 | 18 | 96 | 25 | 6 | 20 | 3 | 17 | 3 | 9 | 1 | 10 | 1 | -1 | -1 | 3 | 0.2 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 1 | 6 |
| L15SW 000 | -1 | -1 | -1 | 50 | -1 | 885 | 9 | 17 | 3 | 12 | 3 | -1 | 3 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 2 |
| L15SW 50SE | -1 | -1 | -1 | 45 | -1 | 1143 | 6 | 14 | 2 | 8 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 2 |
| L15SW 100SE | -1 | 2 | -1 | 62 | -1 | 859 | 6 | 20 | 2 | 9 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | 1 |
| L15SW 150SE | -1 | -1 | -1 | 21 | -1 | 1398 | 4 | 14 | 1 | 5 | 2 | -1 | -1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 2 |
| L15SW 200SE | -1 | -1 | -1 | 17 | -1 | 2676 | 3 | 7 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | 1 |
| L15SW 250SE | -1 | -1 | -1 | 35 | -1 | 1441 | 2 | 9 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 1 | 1 |
| L15SW 300SE | -1 | -1 | -1 | 24 | -1 | 2358 | 3 | 13 | 1 | 4 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 1 |
| L15SW 350SE | -1 | -1 | -1 | 32 | -1 | 1920 | 8 | 30 | 3 | 10 | 3 | 1 | 2 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | 1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 3 | 2 |
| L15SW 400SE | -1 | -1 | -1 | 26 | -1 | 1088 | 5 | 12 | 1 | 4 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 3 | 1 |
| L15SW 450SE | -1 | 1 | -1 | 35 | -1 | 1473 | 29 | 35 | 12 | 56 | 11 | 3 | 12 | 2 | 9 | 2 | 6 | -1 | 6 | -1 | 1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 3 | -1 | 3 | 3 |
| L15SW 500SE | -1 | -1 | -1 | 50 | -1 | 2434 | 11 | 27 | 3 | 15 | 4 | 1 | 3 | -1 | 3 | -1 | 1 | -1 | 1 | -1 | 1 | -1 | 2 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 3 | -1 | 3 | 3 |
| L15SW 550SE | -1 | 1 | -1 | 69 | -1 | 1430 | 26 | 50 | 11 | 51 | 15 | 4 | 10 | 2 | 11 | 2 | 5 | -1 | 6 | -1 | 1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | 3 |
| L15SW 600SE | -1 | -1 | -1 | 27 | -1 | 2538 | 7 | 21 | 2 | 9 | 2 | 1 | 2 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | 2 | 2 |
| L15SW 650SE | -1 | 3 | -1 | 58 | -1 | 982 | 25 | 75 | 10 | 44 | 9 | 3 | 10 | 1 | 9 | 2 | 5 | -1 | 5 | -1 | -1 | -1 | 3 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 3 | 5 |
| L15SW 700SE | -1 | -1 | -1 | 18 | -1 | 2117 | 3 | 8 | -1 | 4 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 1 | 1 |

**Enzyme Leach Job f**
**Trace Element Value:**
**Values = 999999 are**

| Sample ID: | Sn | Sb | Te | I | Cs | Ba | La | Ce | Pr | Nd | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W | Re | Os | Pt | Au | S.Q.Hg | Tl | Pb | Bi | Th | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L15SW 750SE | -1 | -1 | -1 | 43 | 1 | 3611 | 32 | 100 | 12 | 48 | 11 | 4 | 11 | 1 | 7 | 1 | 3 | -1 | 3 | -1 | 4 | -1 | 1 | -0.1 | -1 | -1 | -0.1 | -1 | 2 | 3 | -1 | 5 | 4 |
| RD-1ST | -1 | 37 | -1 | 124 | -1 | 3052 | 3 | 8 | 1 | 4 | 1 | -1 | -1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 3 | 0.5 | -1 | -1 | -0.1 | -1 | 5 | -1 | -1 | 1 | 1 |
| RD-2ST | -1 | 29 | -1 | 10 | -1 | 559 | 2 | 3 | -1 | 2 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | 0.5 | -1 | -1 | -0.1 | -1 | 1 | -1 | -1 | -1 | 7 |
| RD-3ST | -1 | -1 | -1 | 124 | -1 | 947 | 2 | 6 | -1 | 3 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 3 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | -1 | -1 | -1 | 1 |
| RD-4ST | -1 | 13 | -1 | 288 | -1 | 467 | 4 | 4 | 1 | 6 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | 1 | -1 | -1 | -1 | 6 | 1.5 | -1 | -1 | -0.1 | -1 | 2 | -1 | -1 | -1 | 3 |
| RD-5ST | -1 | 3 | -1 | 97 | -1 | 478 | 8 | 22 | 3 | 13 | 3 | -1 | 3 | -1 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | 8 | -0.1 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | 2 | 1 |
| L3NE 190NW ST | -1 | 2 | -1 | 103 | -1 | 1740 | 5 | 13 | 2 | 8 | 2 | -1 | 1 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 2 | 0.4 | -1 | -1 | -0.1 | -1 | -1 | 1 | -1 | -1 | -1 |
| L5SW 185NW ST | -1 | 3 | -1 | 174 | -1 | 1718 | 5 | 12 | 2 | 7 | 2 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 3 | 0.1 | -1 | -1 | -0.1 | -1 | 1 | 2 | -1 | 2 | 2 |
| L15SW 270NW ST | -1 | 4 | -1 | 129 | -1 | 1183 | 5 | 12 | 2 | 6 | 1 | -1 | 2 | -1 | 1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | 3 | 0.5 | -1 | -1 | -0.1 | -1 | -1 | 2 | -1 | -1 | -1 |

9 July 1999

Gregory T. Hill
Consulting Geologist
Enzyme-ACTLABS, LLC
785 Andrew Lane
Reno, NV 89511

Rudy Reipe
Performance Minerals of Canada, Ltd.
Box 69
Sechelt, B.C., Canada
VON 3A0

Dear Rudy;

Enclosed is the report you requested on the Enzyme Leach data from your Cariboo Rand property. There are some very interesting anomalies that I believe are worthy of drill testing. Because of the scale and level of precision of geologic data that I have for this project, only a brief comparison of this data with geologic or other information was done. I recommend utilizing the geology and other project data to help judge the importance of the anomalies outlined in this report. Perhaps this would be better accomplished through telephone conversations with the accompanying report in your hands. I would be happy to discuss this project further with you. Please be in touch if there is any further assistance we can provide.

Sincerely,

Gregory T. Hill

775-849-2970
HillGregT@aol.com

## Enzyme Laboratories, Inc.

**Performance Minerals of Canada Ltd. - Cariboo Rand Project**
**Enzyme Leach℠ Data**
**Oxidation Suite Profiles**

Drawn by: Greg Hill    Date: July 6, 1999

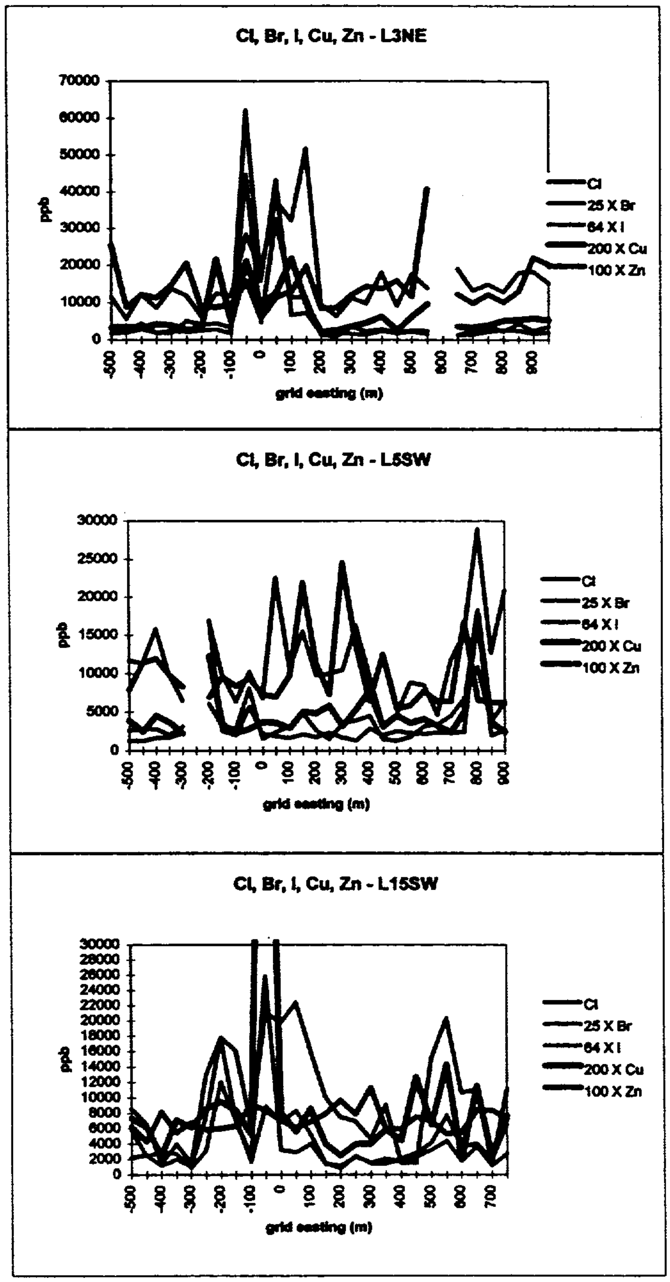


Figure 2. Cl, Br, I, Cu, Zn profiles.

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**Performance Minerals of Canada Ltd. - Cariboo Rand Project**
**Enzyme Leach[SM] Data**
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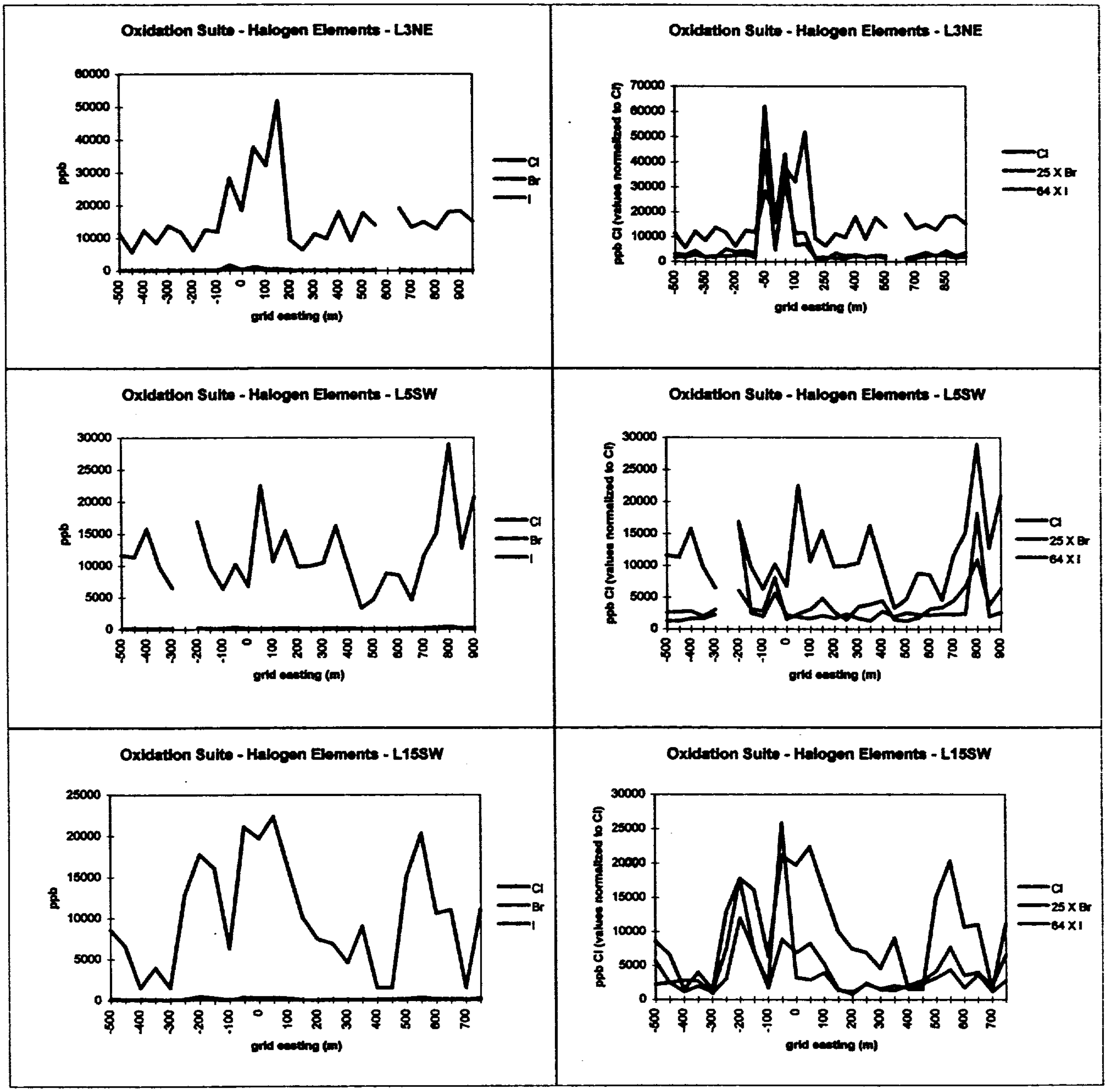


Figure 1. Raw and normalized Cl, Br, I profiles.

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Drawn by: Greg Hill Date: July 6, 1999

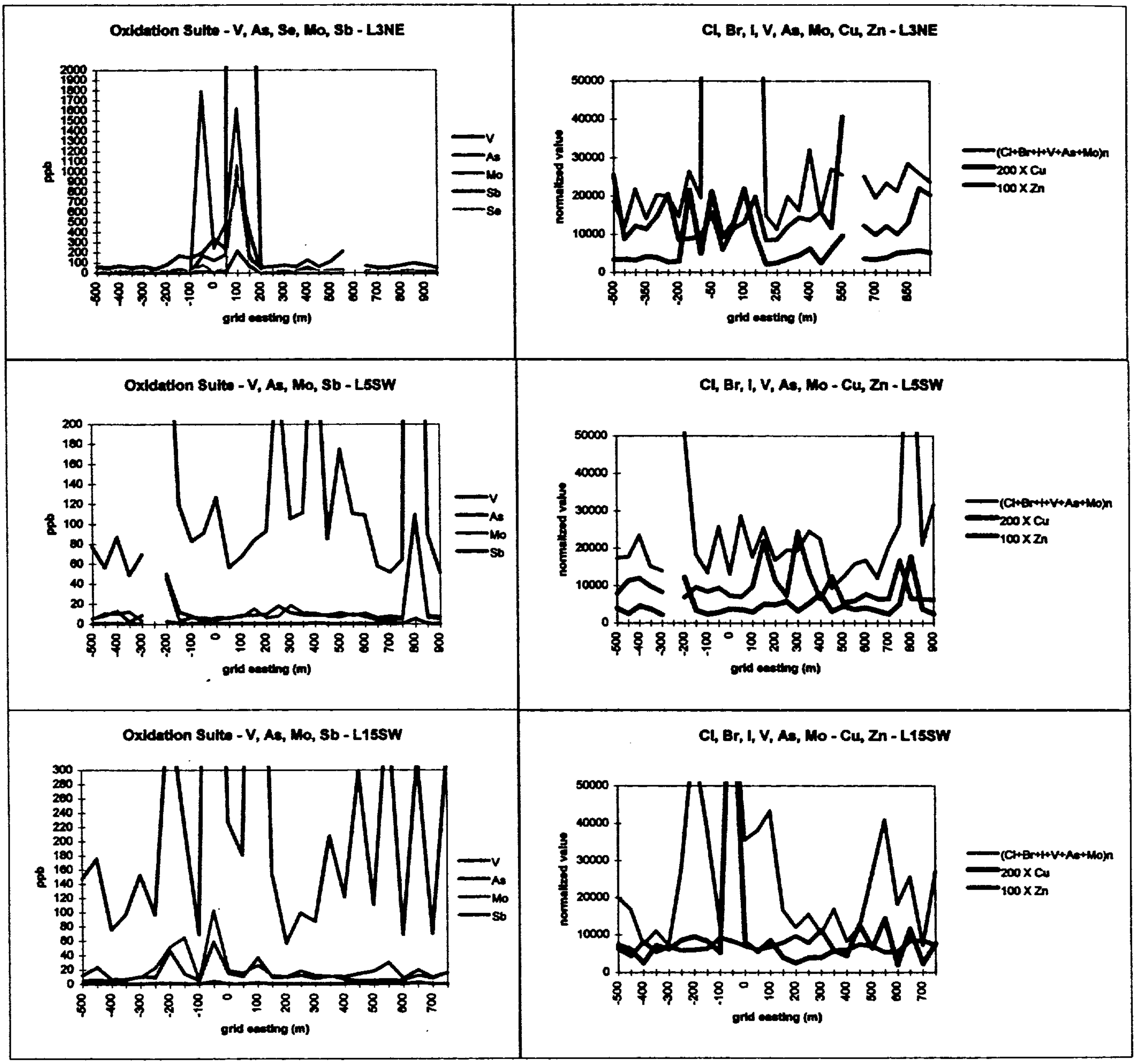



Figure 3. Normalized oxidation suite and Cu, Zn profiles.

# Enzyme Leach℠ Interpretation for the Cariboo Rand property
# Performance Minerals of Canada, Ltd.

by: Greg Hill
Enzyme-ACTLABS, LLC

9 July 1999

**Summary**

Enzyme Leach℠ data were generated from 83 soil samples collected at 50 meter intervals along 3 N45W trending lines on the Cariboo Rand property. Well formed oxidation halos are apparent along all three profiles. Several elements including Cu and Zn, as well as most of the oxidation suite elements, all of the detected rare earth elements, and the high field strength elements show peaks near the center to southeastern portions of the profiles. These peaks appear to be apical anomalies occurring internal to an oxidation halo and directly over buried mineralization cut or controlled by a fault zone or series of faults. Additional sampling to the northeast and southwest of the sampled area should better define the extents of the oxidation halo and apical anomalies indicated by this survey. Drilling is recommended to target the Cu apical anomalies within the central low on L3NE at 550E and L5SW at 400E.

**Introduction and Evaluation Procedure**

Enzyme Leach℠ data were generated from 83 soil samples collected at 50 meter intervals along 3 N45W trending lines on the Cariboo Rand property. A sample location map was produced and inspected for sample coordinate problems by comparison with a faxed location map provided by Performance Minerals of Canada, Ltd. Statistics were then performed and the data was truncated at one standard deviation above the mean (see Table 2 at the end of this report). This procedure prevents the radically anomalous samples from dominating the contouring pattern. Experience has shown that the most useful information for interpreting structures and geology is found in the patterns of the moderately anomalous data. The adjusted data were then plotted using Surfer, a data mapping program. Kriging was used to grid the data. Test plots were completed using data from several elements and the gridding parameters were adjusted based on the sample distribution.

A typical plot includes sample locations without numbers, contours in parts per billion and a color image. The warmer colors represent the highest values and the cool colors indicate the lowest. Samples with values above the standard deviation plus the mean are represented by larger solid symbols rather than the small symbols used for the bulk of the data. For a small number of elements in which the range of values is small, the raw, non-truncated data was plotted. The element plots were inspected individually and together, as relationships between patterns were noted. Possible halos, highs, and central lows were outlined for anomalous elements and overlaid on each other. Several iterations of this process are generally necessary in order to distill the data and understand complex geochemical relationships.

Because the background levels of many elements tend to be much higher on L3NE than the other two profiles, it can be difficult to compare the anomalies between the three sampled lines. In order to address this, line graphs were constructed for each element and placed next to the colored and contoured Surfer plots. The line graphs illustrate many anomalies that are much less recognizable in the map plots. In addition to showing spatial relationships, plotting the data in map views allows for easy, direct comparison of the magnitudes of the anomalies along each line.

**Enzyme Leach℠ Patterns**

It is important to briefly reiterate the types of anomalies revealed by Enzyme Leach℠ in areas covered by alluvial overburden, volcanic units, or barren bedrock. Enzyme Leach℠ anomalies tend to form two predominant patterns: oxidation halo anomalies and diffusion or apical anomalies.

The more important oxidation anomaly patterns tend to be characterized by oxidation halos where reduced material in the subsurface is undergoing very subtle oxidation. These halos flank the reduced body, and a "central low" is found over a "reduced chimney" located between the reduced body and the surface. The elements in these halos characteristically include at least part of the oxidation suite: Cl, Br, I, Mo, As, Sb, W, Re, V, U, Th, and sometimes Au, Hg and rare earth elements. Oxidation halos are typically asymmetrical, and often require comparison of a number of trace element patterns before they become apparent. Where a strong oxidation cell is present in the subsurface, some or all of the metals will migrate into the halo.
Apical or diffusion anomaly patterns tend to form apical highs directly over the source of the anomaly rather than forming a halo around the source. The source of the anomaly can be the actual source of the anomalous trace elements, or it can be a fault, unconformity or other feature that facilitates the movement of the trace elements to the surface. In either case the anomaly will usually be almost directly over the source. In simple diffusion anomalies, the trace element suite does not include the oxidation suite elements. In fault-related diffusion anomalies, the trace element suite can contain many of the oxidation suite elements. Typically, diffusion anomalies exhibit a more diminished contrast above background than do oxidation anomalies. Alternatively, fault-related anomalies can have extreme anomaly/background contrast.

In the real world, mineralized bodies tend to be geologically complex and the anomalies frequently are combined or partially overlap each other. For example, where a deeply buried reduced body is intersected by a fault, many of the oxidation suite elements will commonly form an extremely high contrast anomaly directly over the trace of the buried fault. This high contrast anomaly may partially mask the oxidation anomaly. In another example, in moderately strong oxidation cells some base metals will migrate into the halo, while others will migrate into the apical anomaly. Another pattern is the multi-sample, multi-line high values or platform anomaly. These platform anomalies will often have high contrast boundaries, will flank oxidation anomalies, and different elements will have opposing high and low areas. Frequently, lower values internal to the platform and the high contrast flanks will have similar linear trends. These parallel trends could represent the underlying structural fabric of the area.

The key is pattern recognition in multiple trace element plots in conjunction with other available geologic information. The element patterns are often more important than the absolute values. Thus, the initial interpretation of Enzyme Leach℠ data is enhanced by later comparison with all other available project data.

## Geologic Setting and Location of Enzyme Leach℠ grid

Interpretation of Enzyme Leach℠ data usually benefits from an initial analysis of the data outside of a geologic context, and then a modification of the initial interpretation utilizing all available geologic, geochemical, and geophysical data. The comparison of Enzyme Leach℠ data with other project data can reveal important relationships. For example, different lithologic units sometimes produce unique Enzyme Leach℠ background levels. This is common in certain geologic environments and is important to recognize since the background levels can be helpful in mapping subsurface features and can significantly obscure oxidation halos.

The Cariboo Rand property is underlain by a barren (?) package of Miocene volcanics that contain minor alteration. These rocks overlay a package of Triassic volcanics that serve as the primary host to supergene Cu mineralization. The Triassic package is intruded by syenitic Jurassic (?) intrusives. The pre-Miocene surface is deeply weathered saprolite. An induced polarization anomaly marks the Deerhorn structure which trends to the northeast across the sampled area.

## Interpretation

<u>Oxidation Suite Elements</u>

All three lines show indications of oxidation halos developed among the Cl data. An extremely high contrast asymmetrical anomaly is present along L3NE (300N). The central low at 250E associated with this anomaly is approximately 150 m wide. Although this "rabbit ears" pattern is quite asymmetrical, a central low is discernible here. A more symmetrical but lower contrast central low is present along L5SW (-500N). The southwestern most line L15SW (-1500N) features a moderate contrast central low at 400-450E. This central low could be interpreted as a much larger feature extending from 450E to about 200E. A moderate contrast single point low is also present at -100E. This small anomaly is of interest because it is developed among many elements and is represented by multiple point lows developed among some elements.

The Br distribution is similar to that of Cl. Like Cl, a high contrast anomaly is also present along L3NE. Although a central low is apparent at 300N/250E it is extremely subtle. A wide, low contrast, anomaly is present in the middle of L5SW. This "rabbit ears" pattern contains three central lows, the best developed of which overlaps the Cl central low at 500E. A 300 m wide moderate contrast Br central low is also present along L15SW. Like Cl, a single point Br low is present at -1500N/-100E.

A multi-sample iodine spike corresponds with that of Cl and Br along L3NE. However, in the case of I, an accompanying central low is not apparent. L5SW features a high contrast central low covering much of the sample profile. Although this "rabbit ears" pattern appears to define a well formed central low, the one-dimensional sample distribution makes it difficult to definitively establish the presence of an oxidation halo here. However, the correspondence of variably sized lows developed among many elements strongly suggests that an oxidation halo exists here. L15SW features a very asymmetrical anomaly with a wide central low centered near 300E. Additionally, a two sample iodine central low occurs in the same location as the single point Cl and Br lows at -100E, further establishing the importance of this anomaly.

It can be seen in Figure 1 that the Cl values are much higher than those of the other halogens and in order to compare the distributions of these three elements, Br and I must be normalized to the Cl values. When this is done it becomes apparent that the halogens are differentiated along line L5SW, with Cl peaks proximal to the central low, Br peaks more distal to the central low, and I peaks farthest from the central low. This relationship is well demonstrated on the northwestern end of L5SW. Although the Cl, Br and I peaks on the southeastern ends of L5SW coincide, the Cl, Br, and I peaks here are progressively thinner, bounding the central low successively farther to the southeast. Similar but somewhat less distinct relationships are present along L15SW. Cl is differentiated from Br and I on L3NE suggesting that the accompanying peaks marking the southeastern edge of an oxidation halo are beyond the southeastern end of L3NE.

This differentiation has been noted among a number of porphyry systems and other large mineralized systems. There are large differences in the oxidation potentials required to oxidize chloride, bromide, and iodide to elemental chlorine, bromine, and iodine. Because the voltage required to oxidize iodide is smallest, iodine is mobilized farthest within an electrochemical cell while Cl is the least dispersed of the halogens.

**Table 1. Standard electrode potentials for the oxidation of halides to halogens.**

| Reaction | E° volts |
|---|---|
| $2Cl^- = Cl^2 + 2e^-$ | +1.39 |
| $2Br^- = Br^2 + 2e^-$ | +1.08 |
| $2I^- = I^2 + 2e^-$ | +0.62 |

V, As, and Sb, all form central lows along the two southwestern most profiles (L5SW and L15SW) at roughly the same locations as the halogens. The Mo and Re distributions indicate the central low along L5SW only. The precise positions of the peaks among the halogens are slightly different than those of V, As, Mo, Sb, and Re. The L5SW profile shows V, As, and Sb peaks internal to the central low (from 200-500E) that occur adjacent to or correspond with halogen peaks. Several elements including Cu and Zn, as well as most of the oxidation suite elements, all of the detected rare earth elements, and the high field strength elements show peaks near the center to southeastern portions of the profiles (Figures 2 and 3, and individual element plots). These peaks appear to be apical anomalies occurring internal to an oxidation halo and directly over buried mineralization cut or controlled by a fault zone or series of faults. Similar features are present on profiles L3NE and L15SW suggesting that a mineralized fault zone extends across all three sample lines and curves or is off set slightly to the east at the northeastern end of the sampled area.

W, Th, and U all produce low contrast patterns that show some correspondence to the other oxidation suite elements, but the patterns are mainly showing background variations.

Se occurs only in a few samples along the northeastern most profile (L3NE) where it is concentrated in a few peaks corresponding with elevated values of several other oxidation suite elements.

Rare Earth Elements

The rare earth elements (REE) are geochemically similar and, as such, tend to yield similar patterns. Only La, Ce, pr, and Nd were plotted because the other REE were detected at very low levels or not detected. A large single point REE spike at 300N/-150E corresponds to the northwestern most of three Cu spikes on line L3NE. Zr and Y spikes, and small Ni and Mn spikes are also present here and suggest the presence of a Cu, Zn, Ni, and Mn bearing structure beneath this location. Profiles L5SW and L15SW yield REE patterns that are very similar to the V distribution.

Metals

As discussed above, Cu and Zn are both partitioned into apparent apical anomalies above possible structural zones (perhaps the same fault zone) on all three sample lines. Cu is distributed into the apical zones but is more strongly partitioned into the oxidation halos. Zn is strongly distributed into the apical anomalies and is generally not concentrated in the oxidation halo(s).

A Pb spike occurring at 300N/900E corresponds with a small Zn high but does not coincide with highs developed among any other elements. The significance of this Pb value is unknown but it could indicate Pb mineralization at depth. Extending L3NE to the southwest may reveal other Pb spikes and would allow one to better assess the significance of this Pb anomaly. The remainder of the Pb values in this survey are background values below the threshold level.

The Co and Mn distributions are similar. Both elements show low contrast patterns that appear to be weakly partitioned into the oxidation halo(s) and apical anomalies.

The Ni distribution is very similar to the Br and I distributions. This is not a commonly noted but interesting association.

Cd highs correspond with oxidation suite highs on profiles L3NE at -50E and 100E and L15SW at -150E. The remainder of the Pb values in this survey are background values below the threshold level.

The Ga values are background values below the threshold level.

Lithophile Elements

Li and Sr are distributed similarly to Br and I but form slightly wider "rabbit ears" patterns than those elements along profiles L5SW (Li only) and L15SW. Sr is distributed in a low contrast pattern that is below the threshold level on L5SW.
Ba is concentrated along with many other elements on L3NE at -50E but is otherwise distributed in a low contrast pattern at the threshold level. Rb yields a low contrast pattern below the threshold level.

High Field Strength Elements

The high field strength elements are often good indicators of faults in Enzyme Leach℠ surveys. In very strong oxidation cells, the high field strength elements can also enter oxidation halos. Ti, Y, Zr, and Nb all show peaks along L3NE at -100E (Ti, Nb) and -150E (Y, Zr). These peaks are 50-100 meters northwest of the oxidation suite peaks defining an oxidation halo in this area and may be marking the edge of an electrochemical cell and/or be fault controlled. Ti, Zr, and Nb are all elevated along the southwestern portion of L3NE. All four of these high field strength elements form multiple peaks in the southeastern portions of L5SW and L15SW. The high field strength element peaks described above along L5SW and L15SW appear to mark fault zones and correspond with probable apical anomalies developed among several other elements including Cu and Zn.

Precious Metals

Ag was measured in only one sample at the detection limit. No other precious metals were detected in these samples.

**Discussion of Interpretations**

The results of this Enzyme Leach℠ survey strongly suggest the presence of mineralization in the subsurface. Well formed oxidation halos are apparent along all three profiles. On L3NE, the southeastern edge of the oxidation halo is not defined and probably exists to the southeast of the end of L3NE. Both edges of the oxidation halo are present along profiles L5SW and L15SW and apparent apical base metal anomalies are present near the centers of the central lows along these lines. It seems likely that the oxidation halos and apical anomalies present along all three lines are related to one another. Assuming this is true, a large northeast trending oxidation halo is present with dimensions of approximately 400 meters across on L15SW, 700 meters on L5SW, and greater than 700 meters on L3NE. The halo extends to the northeast and southwest of the sampled area. A northeast trending zone of apical anomalies is also present. This zone appears to parallel the Deerhorn structural zone defined by induced polarization. The location of this IP feature is not precisely known so its relationship to the Enzyme Leach℠ data has not been established. The geochemical features seen in this Enzyme Leach℠ data suggest a zone of base metal mineralization.

**Recommendations**

Extending L3NE to the southwest would likely define the southeastern edge of the oxidation halo in that area. Additional sampling to the northeast and southwest of the sampled area should better define the extents of the oxidation halo and apical anomalies indicated by this survey. Drilling is recommended to target the Cu apical anomalies within the central low on L3NE at 550E and L5SW at 400E. The Zn high along L15SW at 300E would also make a good drill target. Numerous other drill targets could also be defined based on the Enzyme Leach℠ data. Secondary targeting should be undertaken based on the results of an initial round of drilling focusing on the areas outlined above.

**Table 2. Simple statistics generated from the Enzyme Leach℠ (ICP-MS) data. n/a - not applicable due to too few or no detected values.**

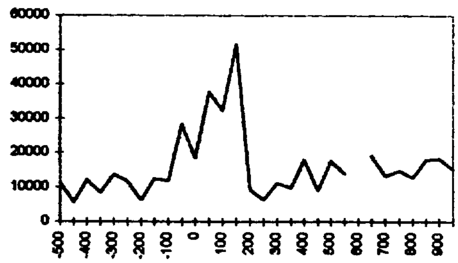
| Element | Li | Be | Cl | Sc | Ti | V | Mn | Co | Ni | Cu | Zn |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit (ppb) | 10 | 20 | 3000 | 100 | 100 | 5 | 10 | 1 | 5 | 5 | 10 |
| Maximum | 176 | n/a | 51738 | n/a | 1868 | 14221 | 338754 | 158 | 600 | 443 | 407 |
| Minimum Det. | 5 | n/a | 1500 | n/a | 50 | 40 | 187 | 11 | 12 | 10 | 43 |
| Mean | 16.4 | n/a | 12825.2 | n/a | 728.4 | 410.5 | 9027.5 | 43.1 | 59.1 | 34.9 | 104.6 |
| Std. Dev. | 21.7 | n/a | 8077.2 | n/a | 378.6 | 1701.6 | 39886.3 | 26.5 | 98.4 | 50.2 | 57.3 |
| Mean+Std. Dev. | 38.1 | n/a | 20902.4 | n/a | 1107.0 | 2112.1 | 48913.8 | 69.6 | 157.5 | 85.1 | 161.9 |

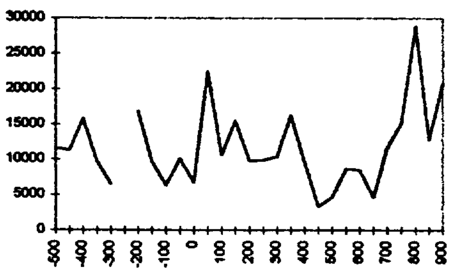
| Element | Ga | Ge | As | Se | Br | Rb | Sr | Y | Zr | Nb | Mo | Ru | Pd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit (ppb) | 1 | 1 | 5 | 30 | 30 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum | 5 | 2 | 969 | 1064 | 1788 | 74 | 5257 | 108 | 168 | 3 | 1,790 | n/a | n/a |
| Minimum Det. | 1 | 1 | 3 | 15 | 32 | 2 | 354 | 1 | 2 | 1 | 2 | n/a | n/a |
| Mean | 1.7 | 0.5 | 36.8 | 30.0 | 185.9 | 25.8 | 1132.9 | 8.1 | 25.7 | 1.5 | 64.7 | n/a | n/a |
| Std. Dev. | 1.1 | 0.2 | 117.5 | 115.7 | 240.0 | 11.8 | 757.0 | 15.1 | 22.3 | 0.7 | 267.4 | n/a | n/a |
| Mean+Std. Dev. | 2.8 | 0.7 | 154.3 | 145.7 | 425.9 | 37.6 | 1889.9 | 23.2 | 48.0 | 2.2 | 332.1 | n/a | n/a |

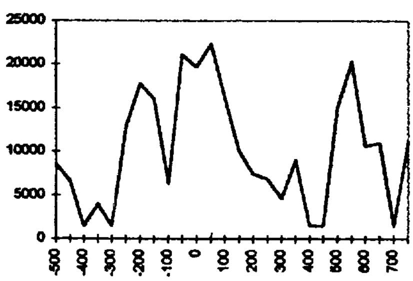
| Element | Ag | Cd | In | Sn | Sb | Te | I | Cs | Ba | La | Ce | Pr | Nd | Sm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit (ppb) | 0.2 | 0.2 | 0.2 | 1 | 1 | 1 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum | n/a | 7.4 | n/a | n/a | 216 | n/a | 970 | n/a | 5926 | 63 | 100 | 18 | 96 | 25 |
| Minimum Det. | n/a | 0.1 | n/a | n/a | 1 | n/a | 16 | n/a | 191 | 1 | 1 | 1 | 1 | 1 |
| Mean | n/a | 1.21 | n/a | n/a | 4.5 | n/a | 72.0 | n/a | 1610.4 | 6.8 | 16.3 | 2.2 | 10.1 | 2.3 |
| Std. Dev. | n/a | 1.14 | n/a | n/a | 24.6 | n/a | 137.9 | n/a | 991.2 | 9.3 | 16.3 | 3.3 | 15.5 | 3.8 |
| Mean+Std. Dev. | n/a | 2.35 | n/a | n/a | 29.1 | n/a | 209.9 | n/a | 2601.6 | 16.1 | 32.6 | 5.5 | 25.6 | 6.1 |

| Element | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit (ppb) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum | 6 | 20 | 3 | 17 | n/a | 9 | n/a | 10 | n/a | 4 | n/a | 3 |
| Minimum Det. | 1 | 1 | 1 | 1 | n/a | 1 | n/a | 1 | n/a | 1 | n/a | 1 |
| Mean | 0.8 | 2.0 | 0.6 | 1.7 | n/a | 1.0 | n/a | 1.0 | n/a | 0.6 | n/a | 1.1 |
| Std. Dev. | 1.0 | 3.4 | 0.4 | 2.8 | n/a | 1.5 | n/a | 1.6 | n/a | 0.4 | n/a | 0.7 |
| Mean+Std. Dev. | 1.8 | 5.4 | 1.0 | 4.5 | n/a | 2.5 | n/a | 2.6 | n/a | 1.0 | n/a | 1.8 |

| Element | Re | Os | Pt | Au | Hg | Tl | Pb | Bi | Th | U |
|---|---|---|---|---|---|---|---|---|---|---|
| Det. Limit (ppb) | 0.1 | 1 | 1 | 0.1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Maximum | 4.5 | n/a | n/a | n/a | n/a | n/a | 43 | n/a | 5 | 8 |
| Minimum Det. | 0.1 | n/a | n/a | n/a | n/a | n/a | 1 | n/a | 1 | 1 |
| Mean | 0.13 | n/a | n/a | n/a | n/a | n/a | 1.8 | n/a | 1.6 | 1.5 |
| Std. Dev. | 0.50 | n/a | n/a | n/a | n/a | n/a | 4.7 | n/a | 1.0 | 1.2 |
| Mean+Std. Dev. | 0.63 | n/a | n/a | n/a | n/a | n/a | 6.5 | n/a | 2.6 | 2.8 |




Actlabs

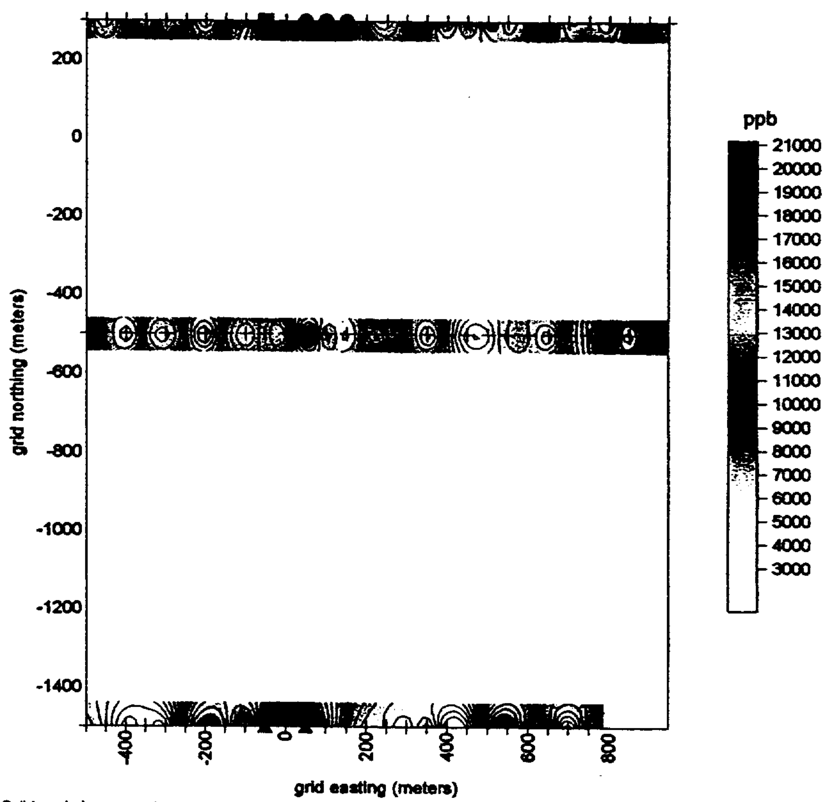
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project

Enzyme Leach[SM] Data

Elements Group: Oxidation Suite — Element: Chlorine

Drawn by: Greg Hill — Date: June 17, 1999



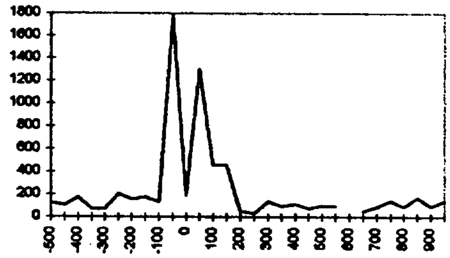

Solid symbols represent values greater than mean + standard deviation

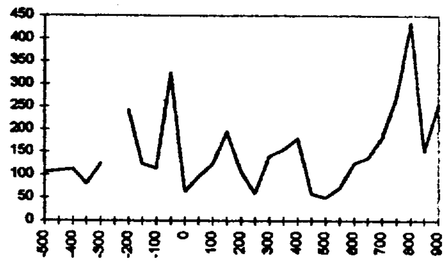
- + 0 to 21106
- ▲ 21106 to 22515
- ■ 22515 to 32225
- ● 32225 to 51740

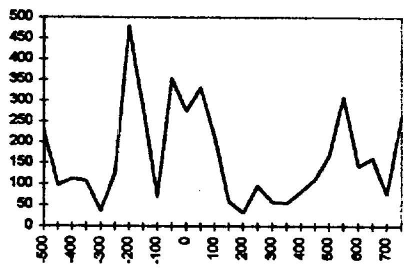
meters

0 200 400 600 800

Cl
Br

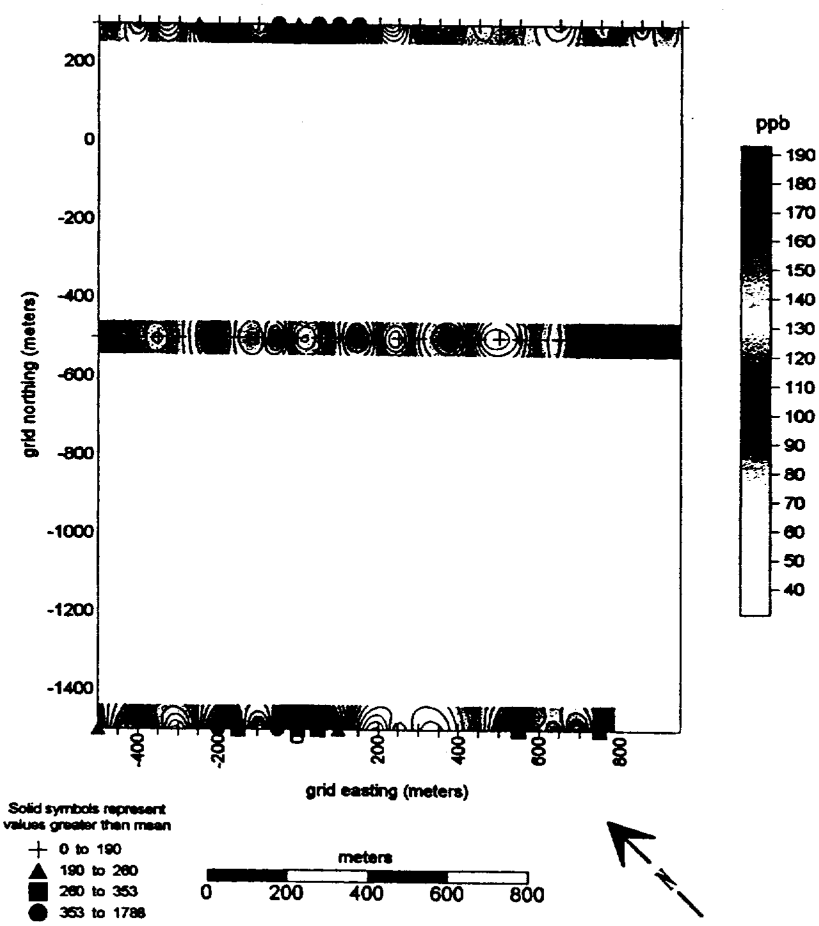




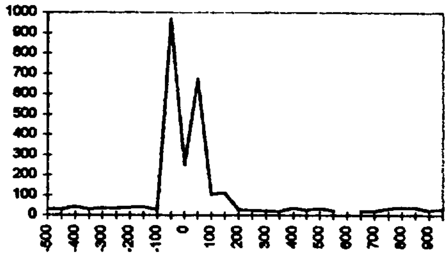


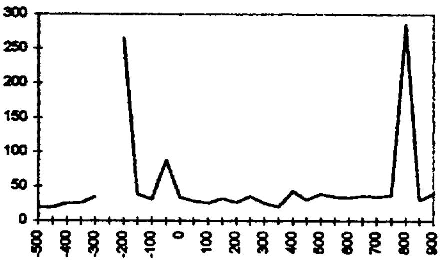
**Enzyme Laboratories, Inc.**

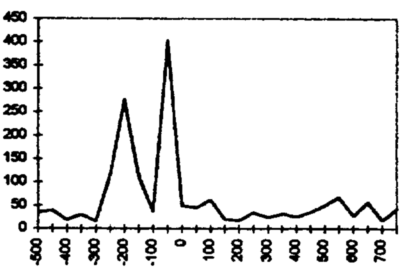
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Oxidation Suite    Element: Bromine
Drawn by: Greg Hill    Date: June 17, 1999




Actlabs

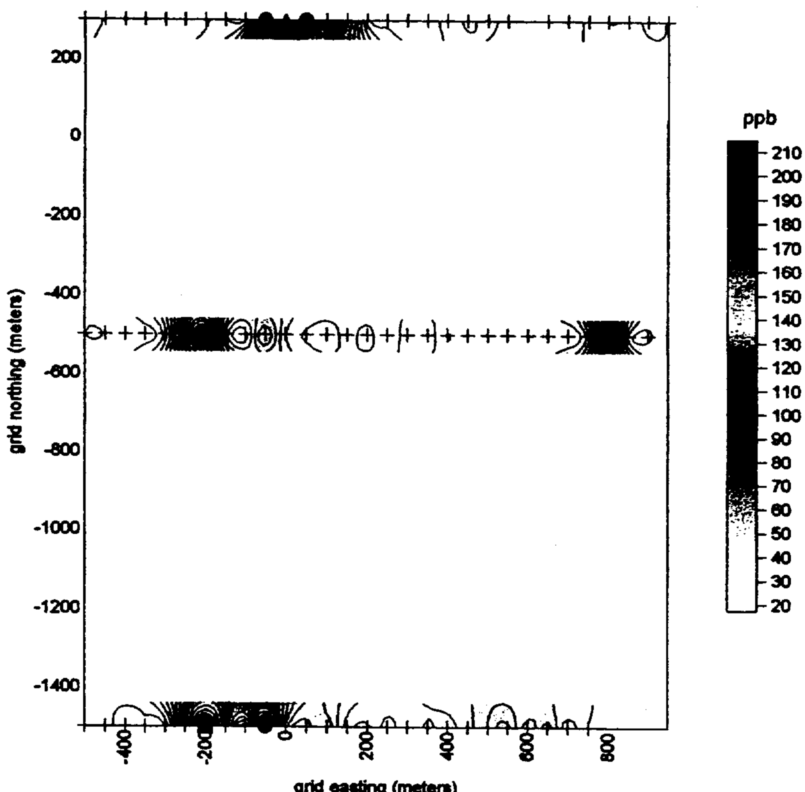


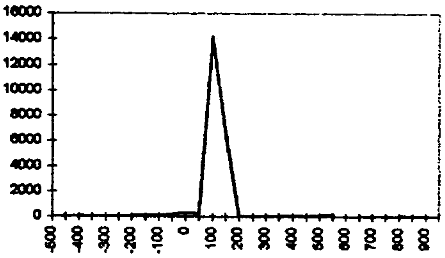

**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite — Element: Iodine
Drawn by: Greg Hill — Date: June 17, 1999



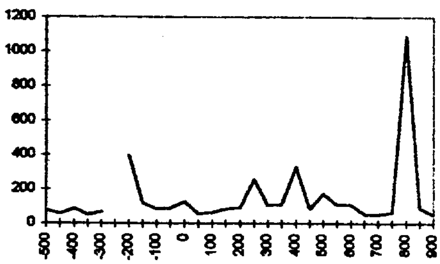

Solid symbols represent values greater than mean + standard deviation

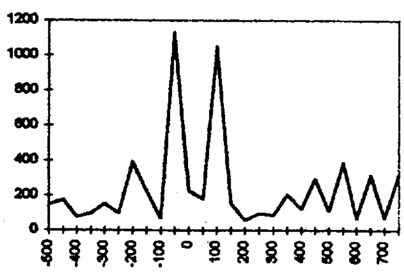
- + 0 to 248
- ▲ 248 to 277
- ■ 277 to 404
- ● 404 to 971

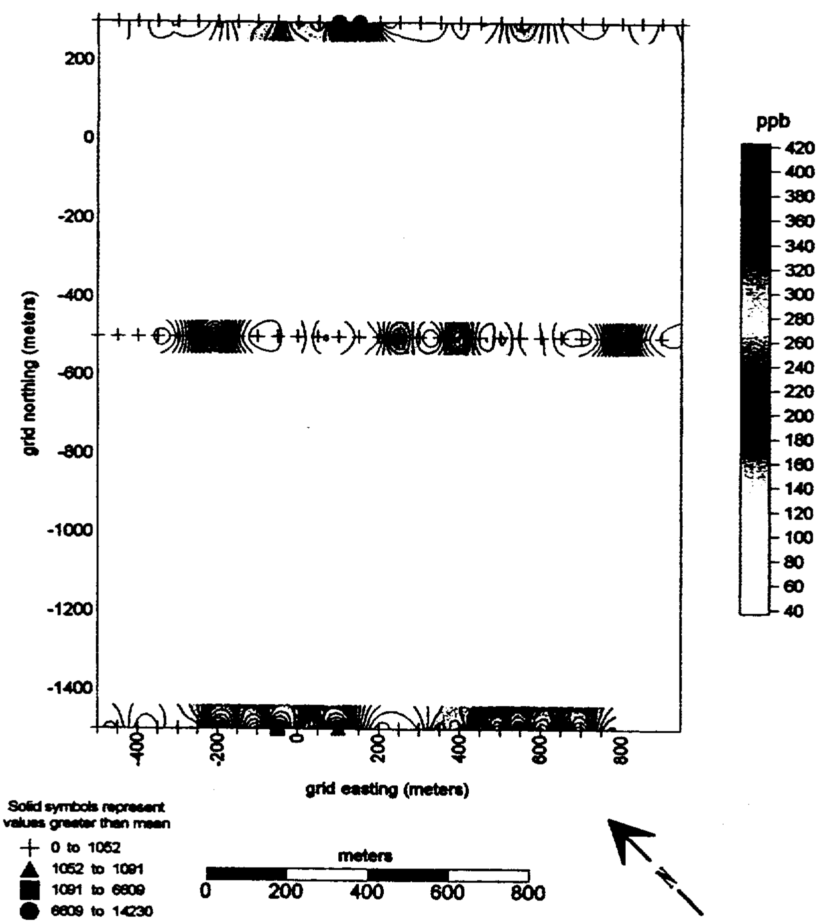


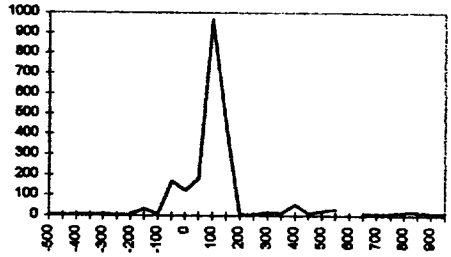

**Enzyme Laboratories, Inc.**

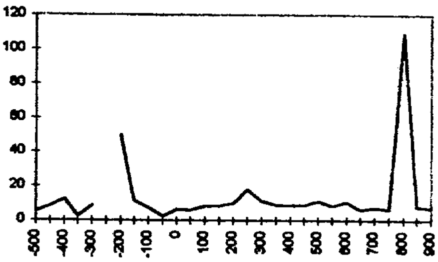
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite    Element: Vanadium
Drawn by: Greg Hill    Date: June 17, 1999

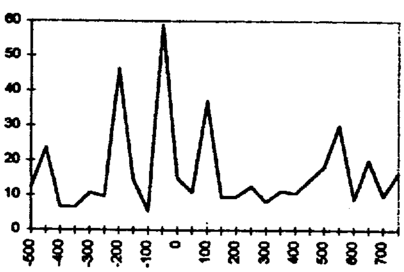


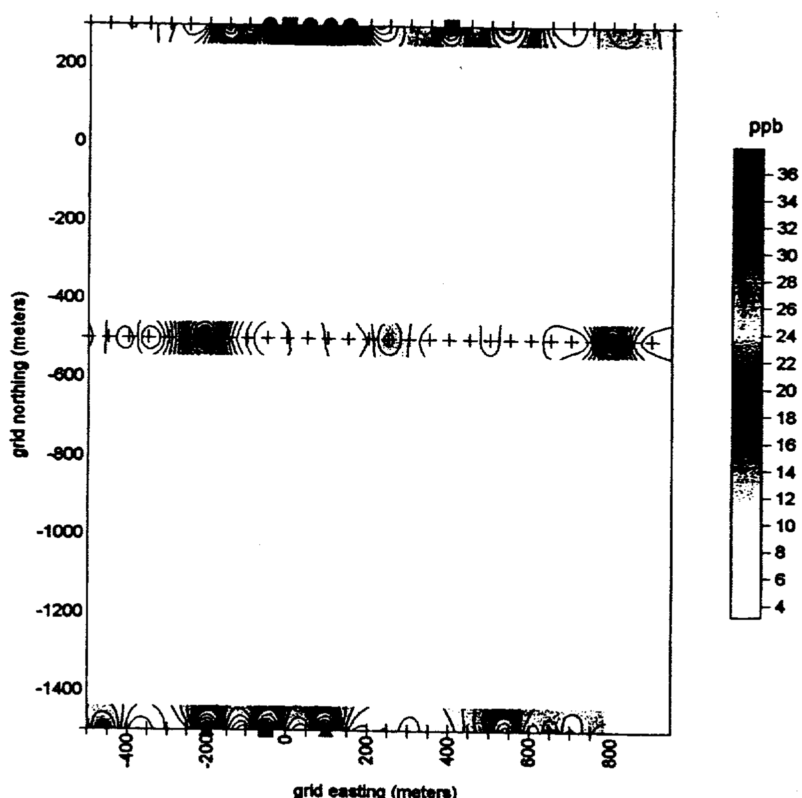






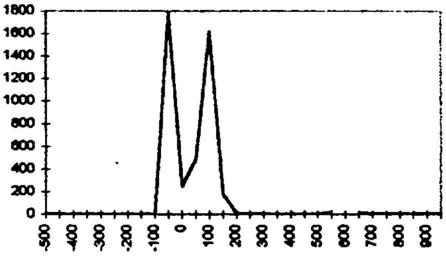
## Enzyme Laboratories, Inc.

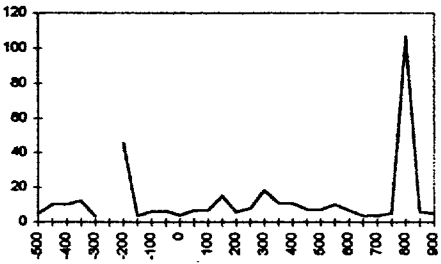
**Performance Minerals of Canada Ltd. - Cariboo Rand Project**
**Enzyme Leach℠ Data**
**Elements Group: Oxidation Suite** **Element: Arsenic**
**Drawn by: Greg Hill** **Date: June 17, 1999**

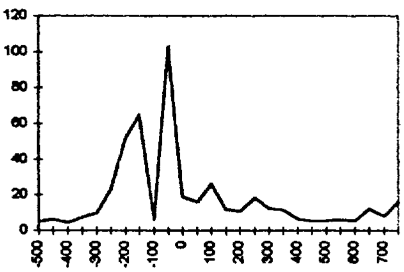



Solid symbols represent values greater than mean

- + 0 to 37
- ▲ 37 to 55
- ■ 55 to 170
- ● 170 to 969

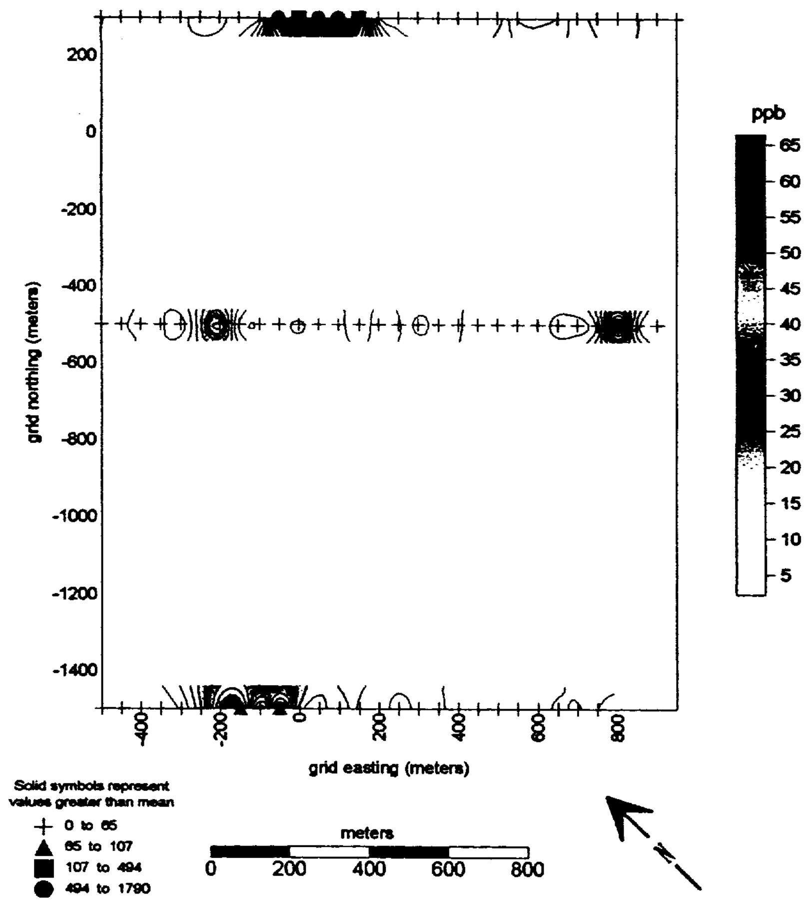


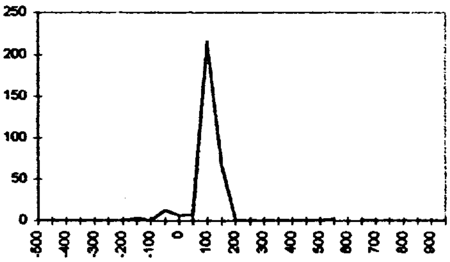


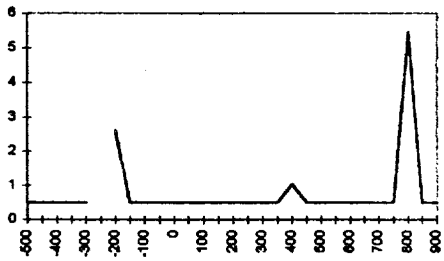


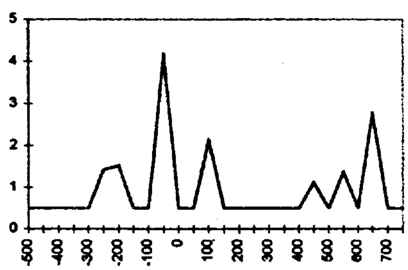
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite Element: Molybdenum
Drawn by: Greg Hill Date: June 17, 1999



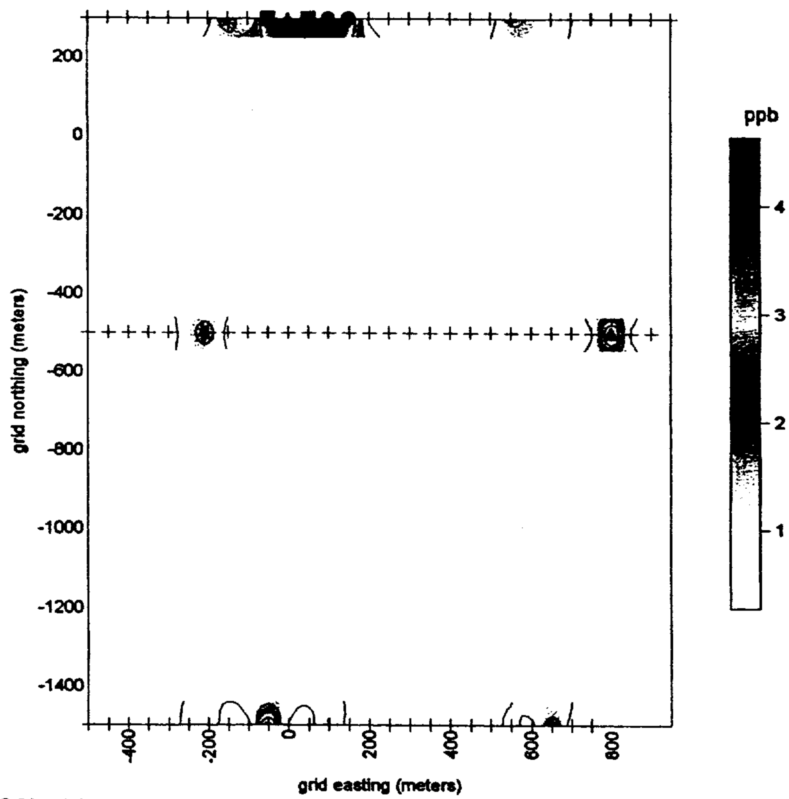






**Enzyme Laboratories, Inc.**

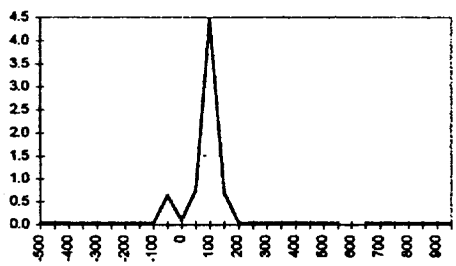
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite — Element: Antimony
Drawn by: Greg Hill — Date: June 17, 1999




Solid symbols represent values greater than mean
+ 0 to 5
▲ 5 to 8
■ 8 to 67
● 67 to 216

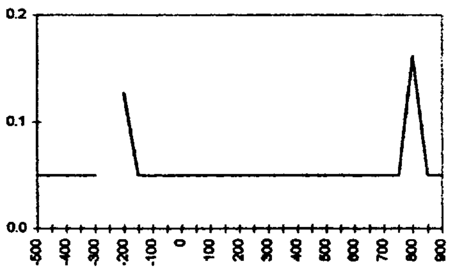
meters
0 200 400 600 800

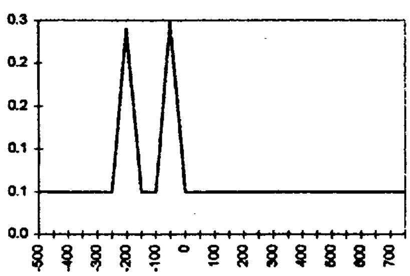
N

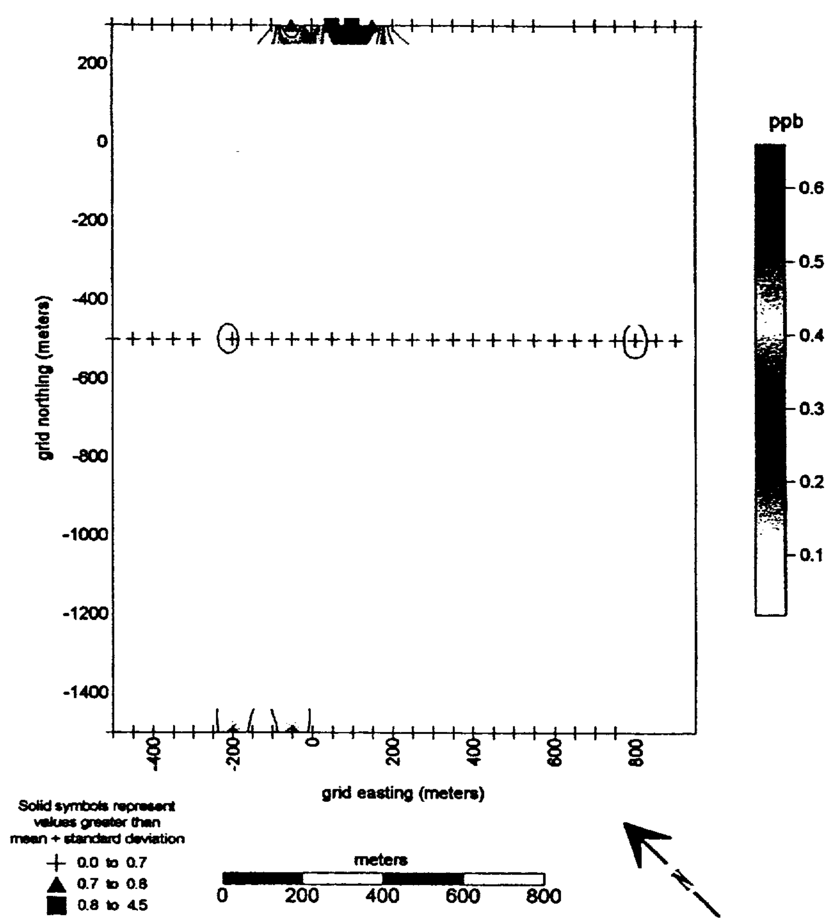



**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite — Element: Rhenium
Drawn by: Greg Hill — Date: June 17, 1999

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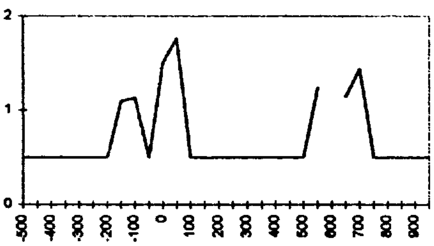
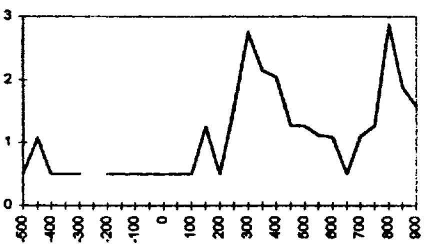
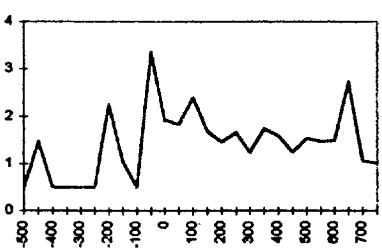
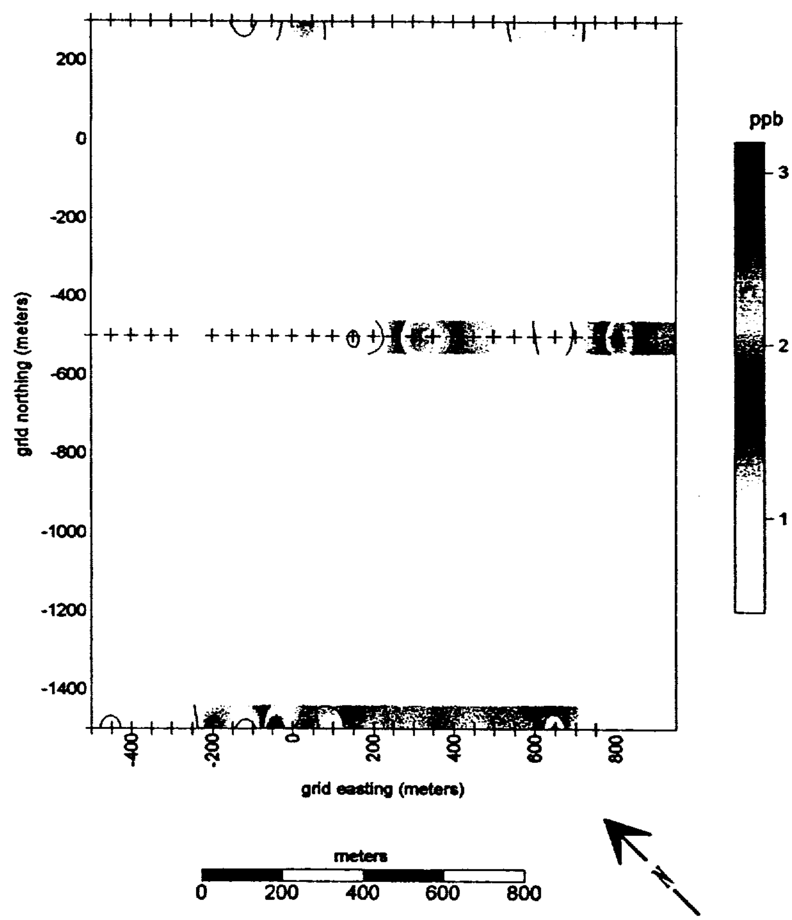
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite | Element: Tungsten
Drawn by: Greg Hill | Date: June 17, 1999

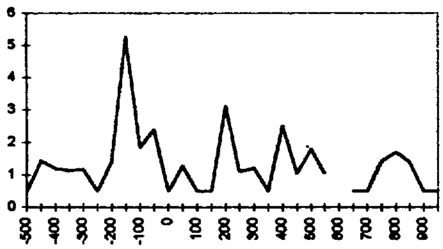


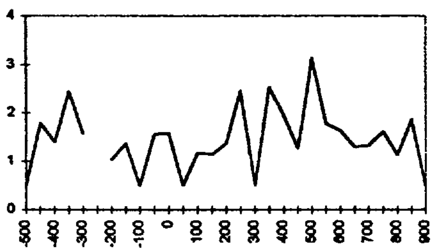



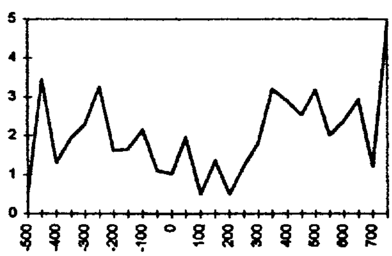




Actlabs




Actilabs

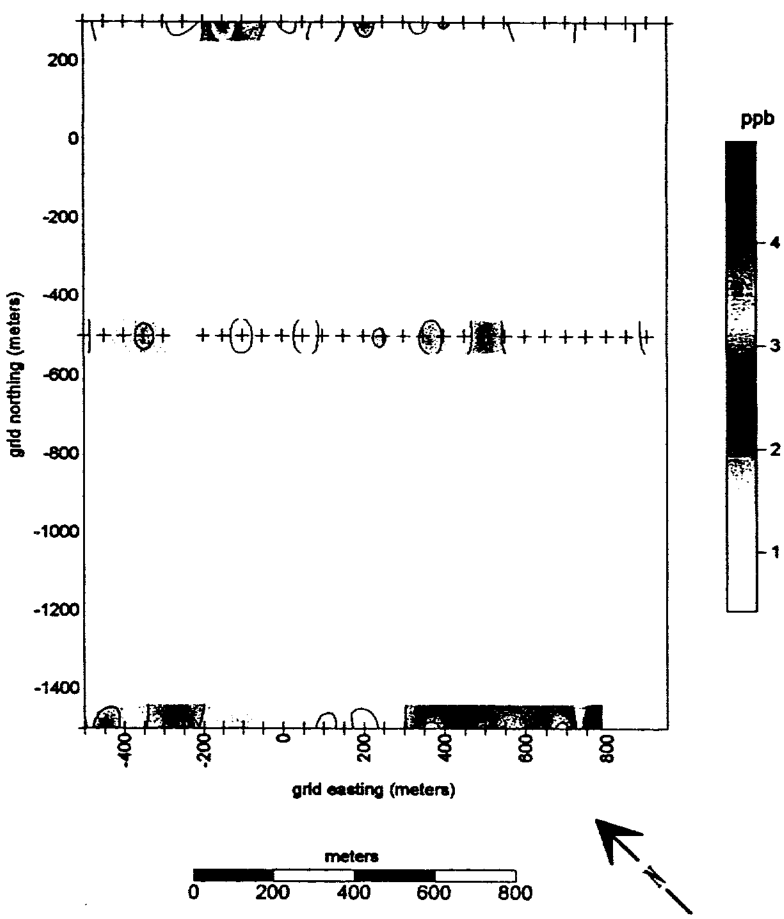
**Enzyme Laboratories, Inc.**

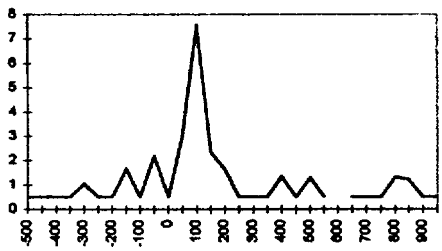
Performance Minerals of Canada Ltd. - Cariboo Rand Project

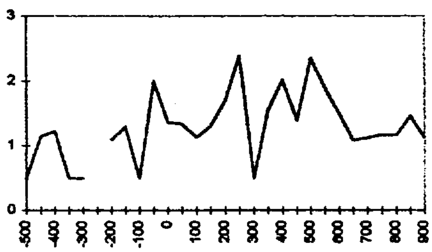
Enzyme Leach™ Data

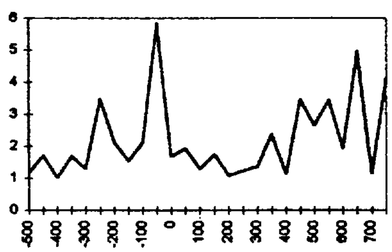
Elements Group: Oxidation Suite — Element: Thorium

Drawn by: Greg Hill — Date: June 17, 1999



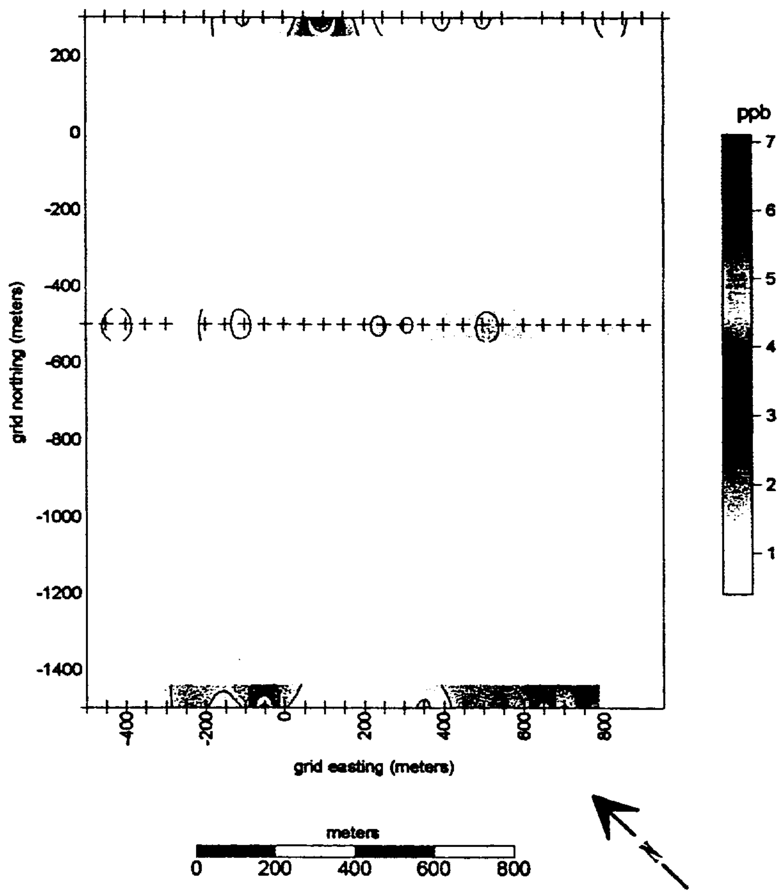


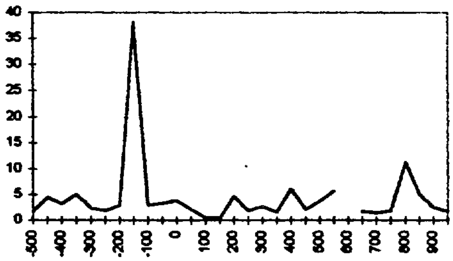



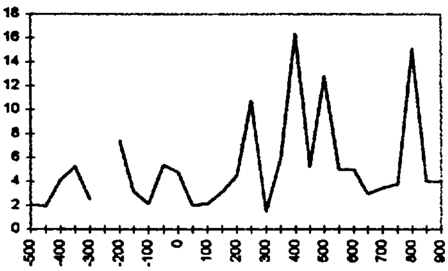

**Enzyme Laboratories, Inc.**

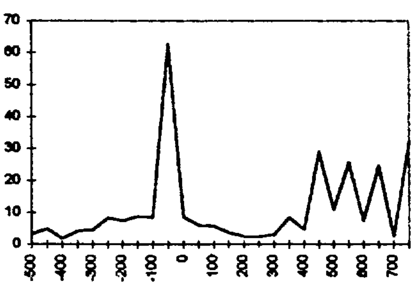
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Oxidation Suite | Element: Uranium
Drawn by: Greg Hill | Date: June 17, 1999




Actlabs

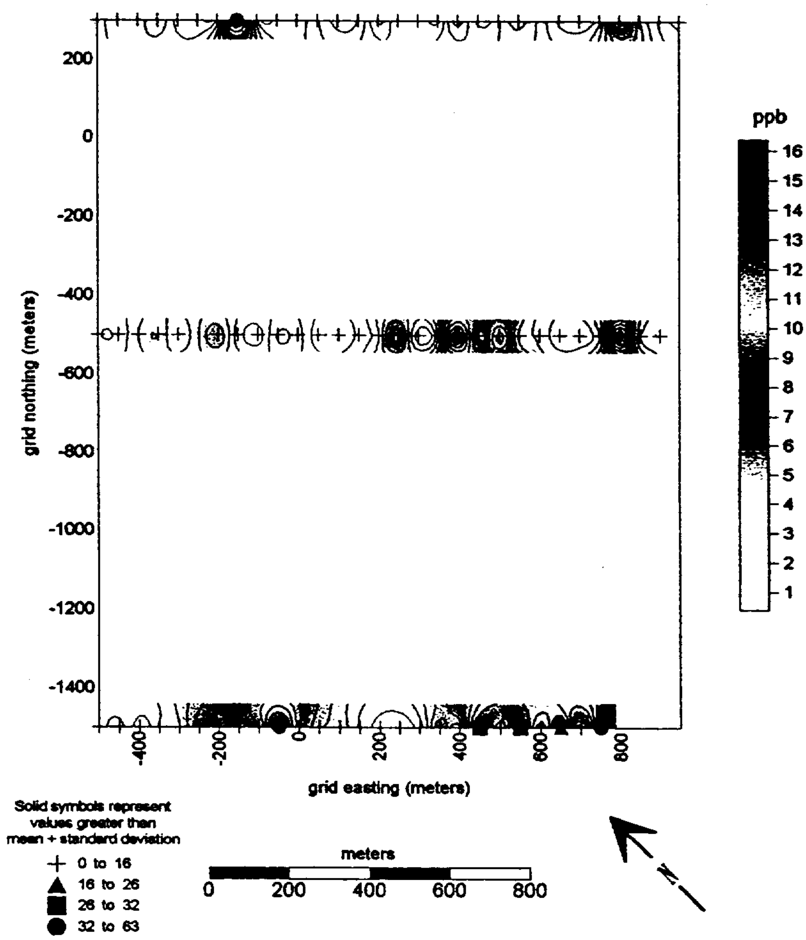


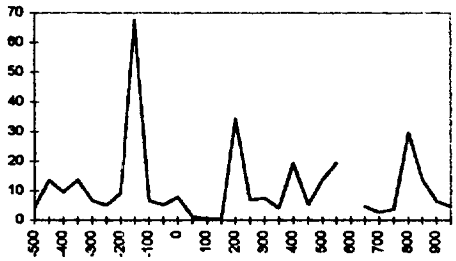

**Enzyme Laboratories, Inc.**

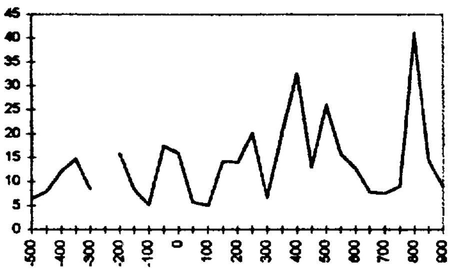
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Rare Earth    Element: Lanthanum
Drawn by: Greg Hill    Date: June 17, 1999

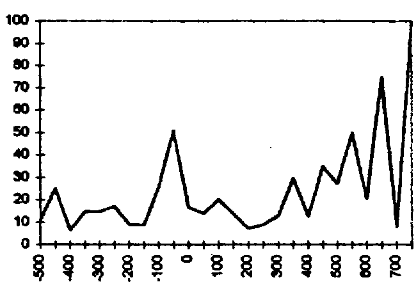


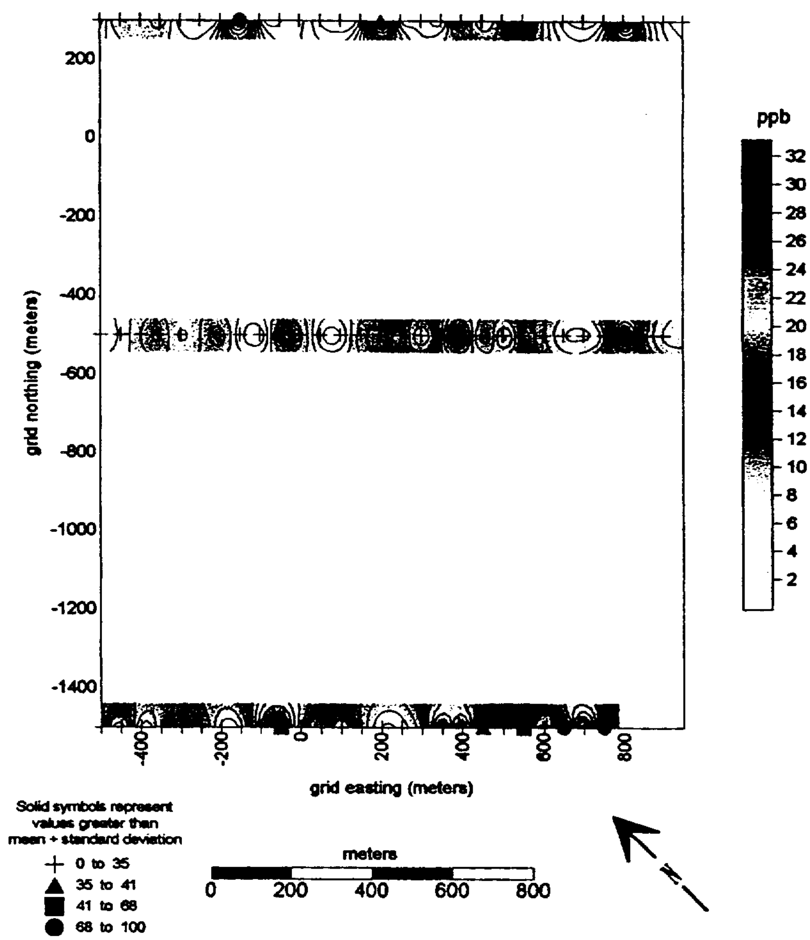
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Rare Earth — Element: Cerium
Drawn by: Greg Hill — Date: June 17, 1999



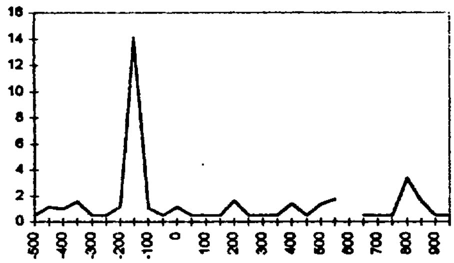



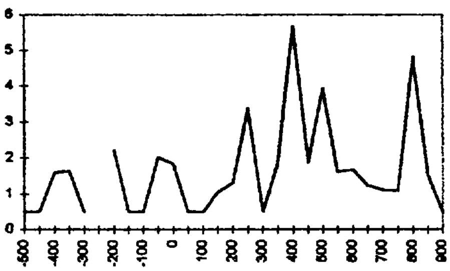



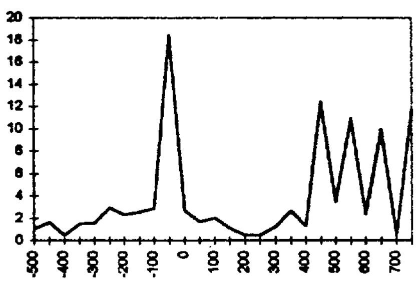

Actlabs

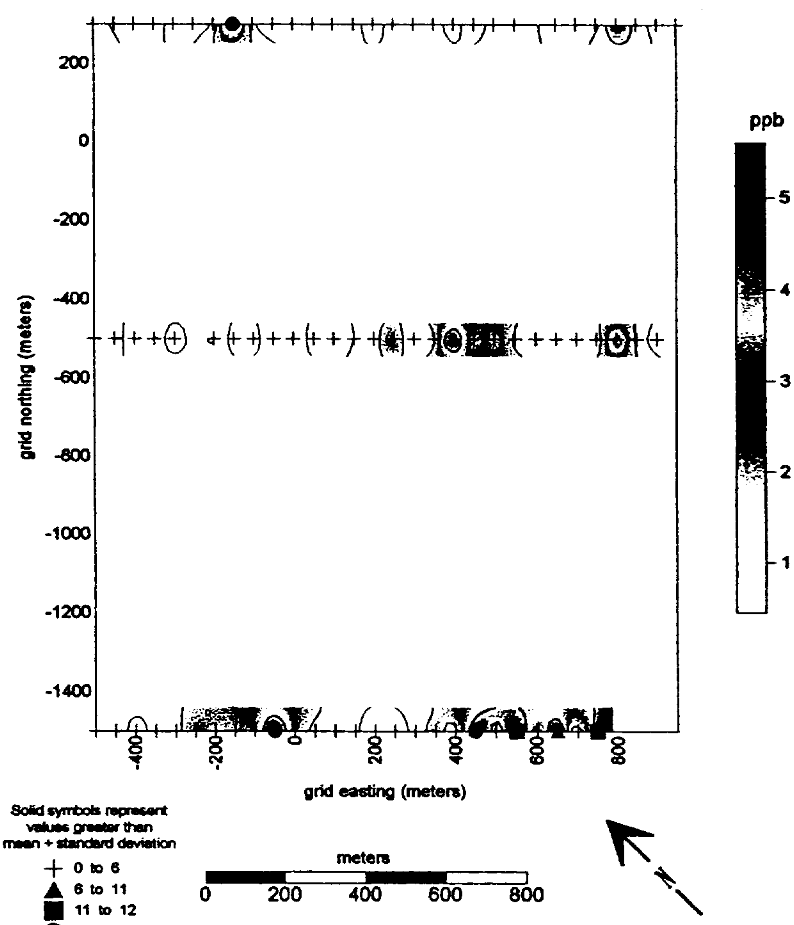
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Rare Earth    Element: Praseodymium
Drawn by: Greg Hill    Date: June 17, 1999



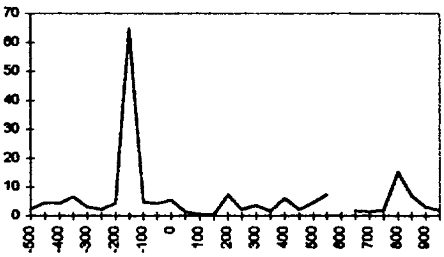



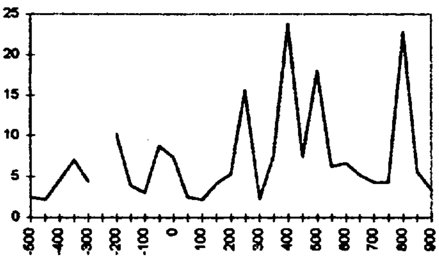

Solid symbols represent values greater than mean + standard deviation

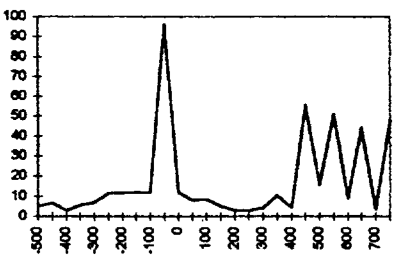
- + 0 to 6
- ▲ 6 to 11
- ■ 11 to 12
- ● 12 to 18

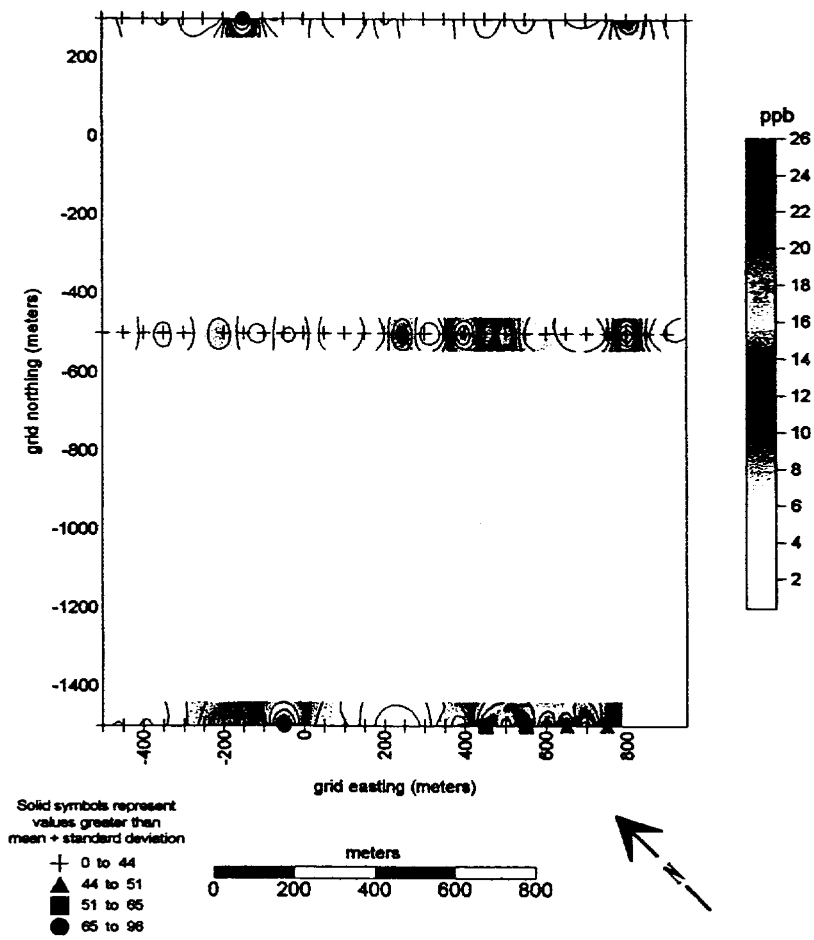
**Enzyme Laboratories, Inc.**

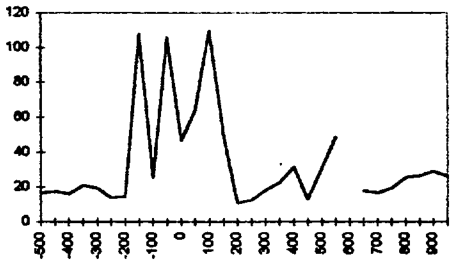
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Rare Earth — Element: Neodymium
Drawn by: Greg Hill — Date: June 17, 1999





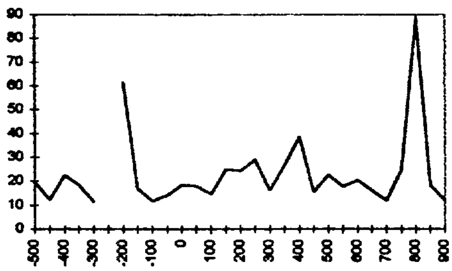


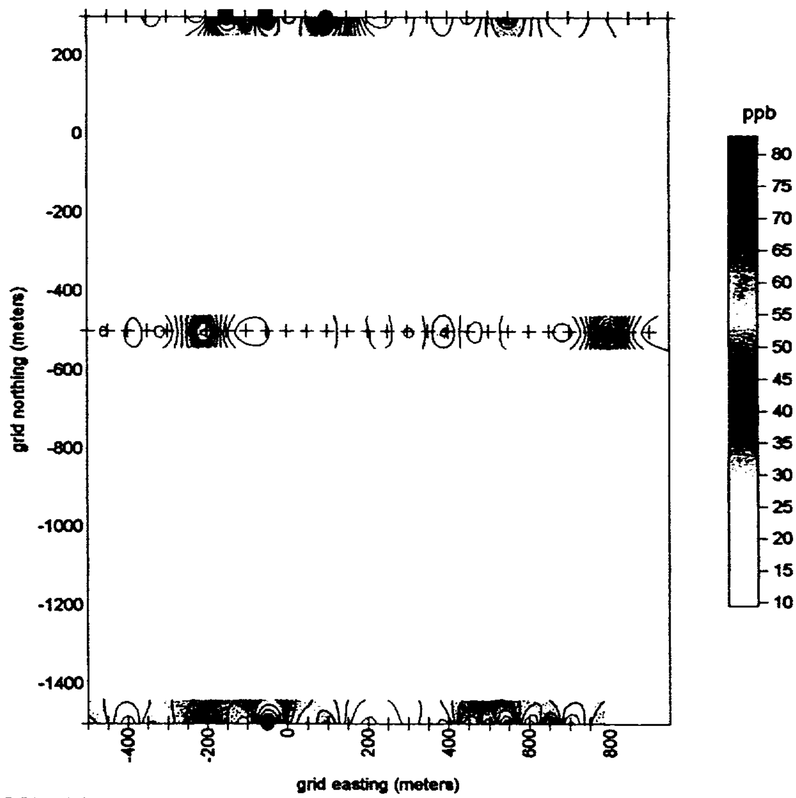


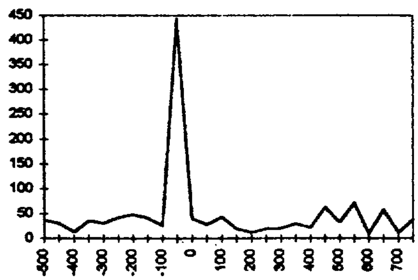



## Enzyme Laboratories, Inc.

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Metals    Element: Copper
Drawn by: Greg Hill    Date: June 17, 1999

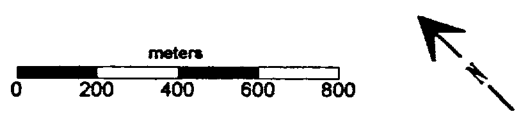


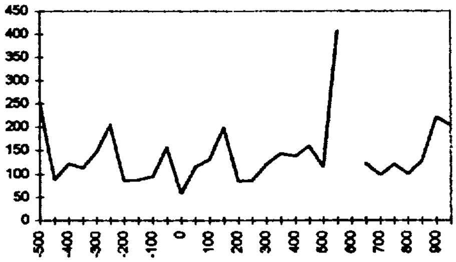



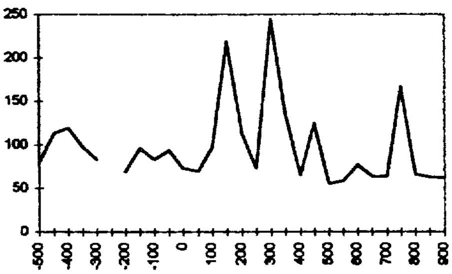



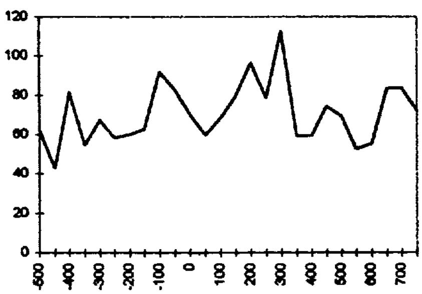

Solid symbols represent values greater than mean + standard deviation

- + 0 to 89
- ▲ 89 to 106
- ■ 106 to 110
- ● 110 to 443





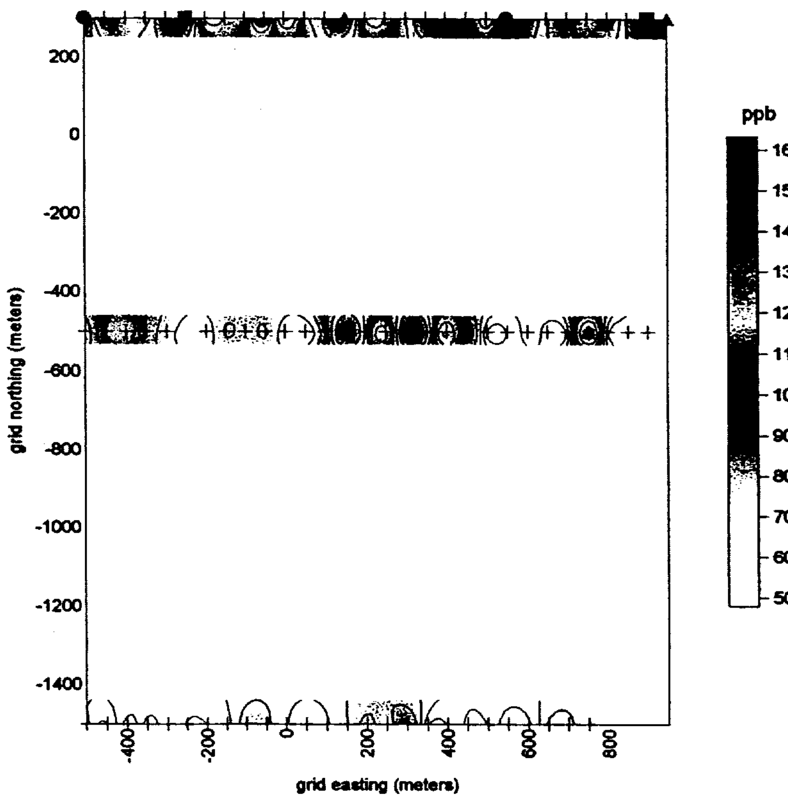

**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project

Enzyme Leach℠ Data

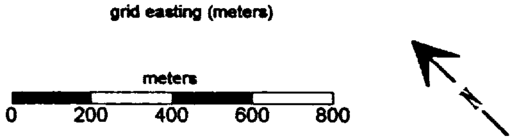
Elements Group: Metals | Element: Zinc

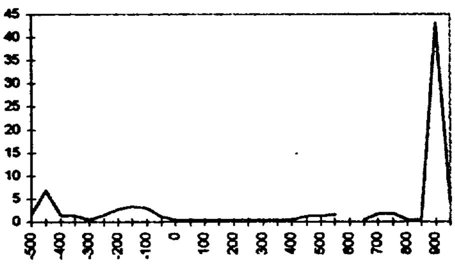
Drawn by: Greg Hill | Date: June 17, 1999

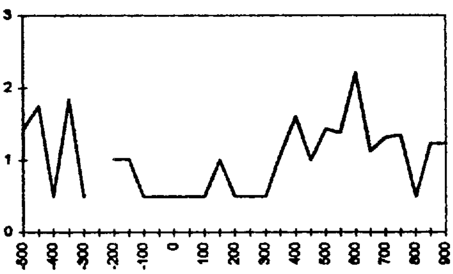


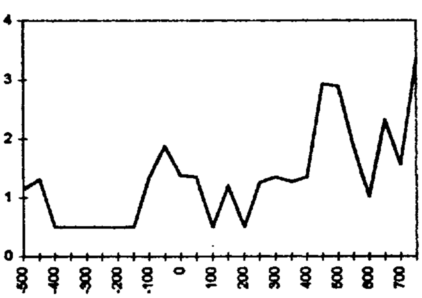

Solid symbols represent values greater than mean + standard deviation

- \+ 0 to 167
- ▲ 167 to 205
- ■ 205 to 245
- ● 245 to 408



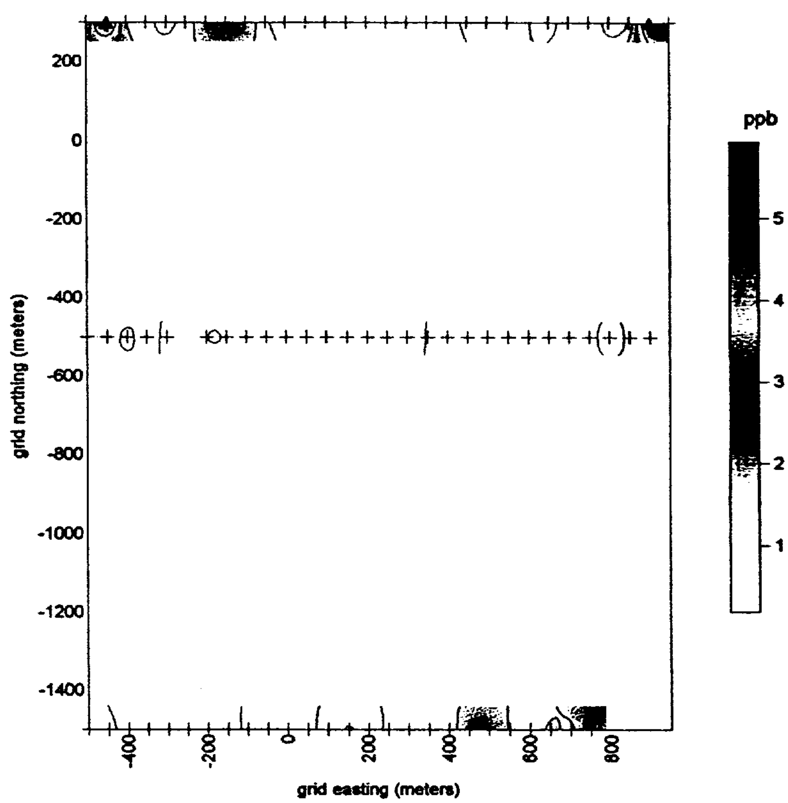


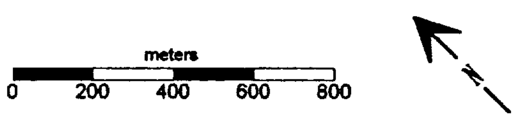



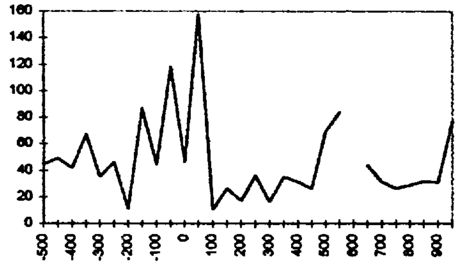

**Enzyme Laboratories, Inc.**

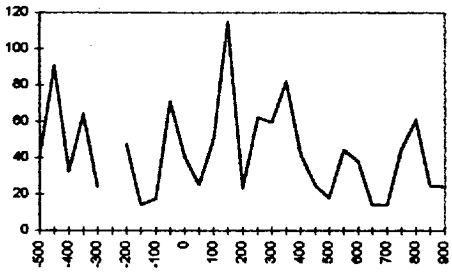
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Metals — Element: Lead
Drawn by: Greg Hill — Date: June 17, 1999

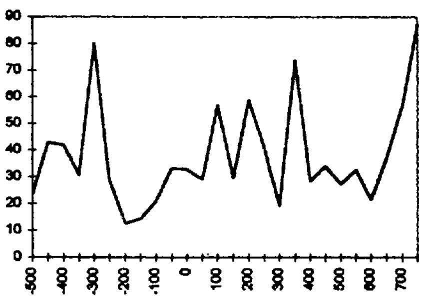



Solid symbols represent values greater than mean + standard deviation
+ 0 to 7
▲ 7 to 43



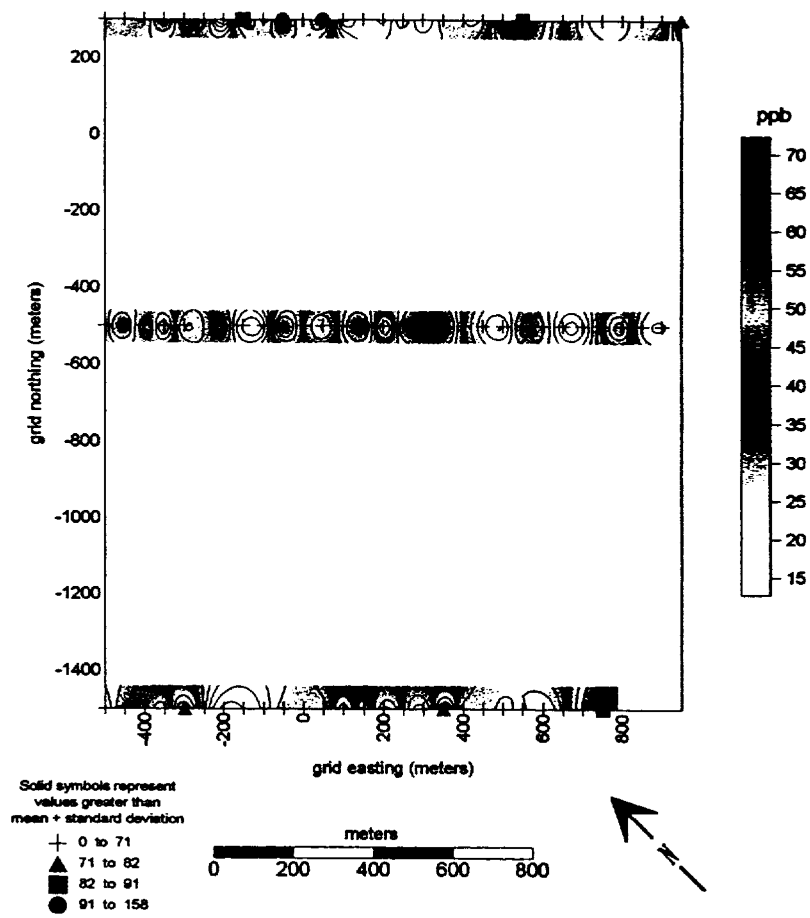



**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: Metals — Element: Cobalt
Drawn by: Greg Hill — Date: June 17, 1999



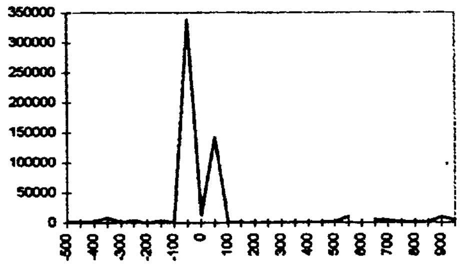
**Enzyme Laboratories, Inc.**

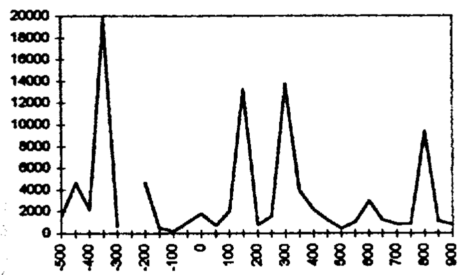
Performance Minerals of Canada Ltd. - Cariboo Rand Project

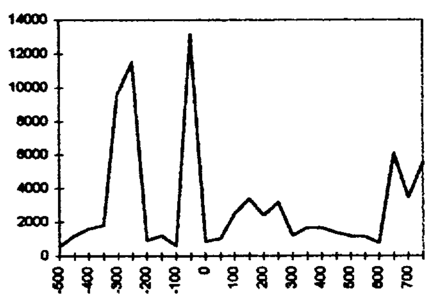
Enzyme Leach℠ Data

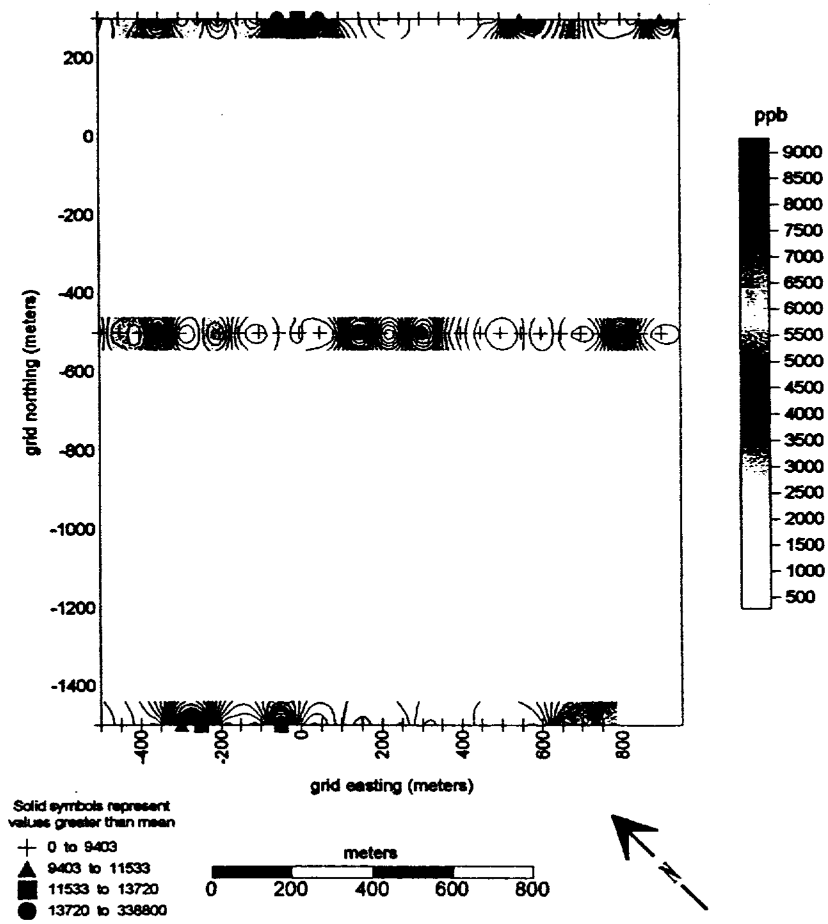
Elements Group: Metals Element: Manganese

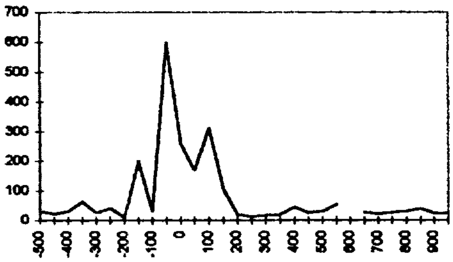
Drawn by: Greg Hill Date: June 17, 1999

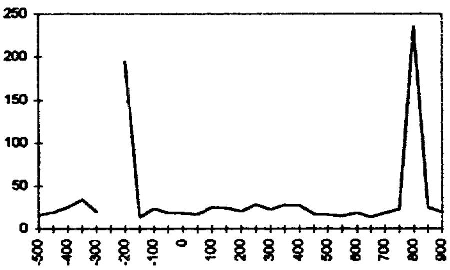


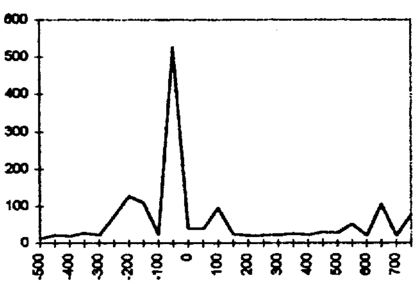




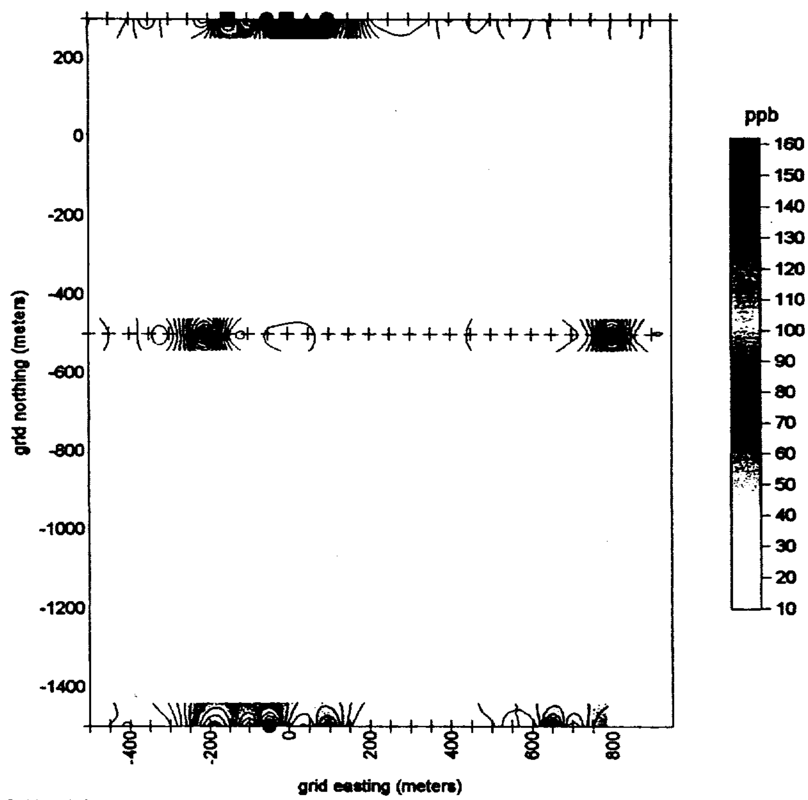





| Enzyme Laboratories, Inc. | |
|---|---|
| Performance Minerals of Canada Ltd. - Cariboo Rand Project<br>Enzyme Leach℠ Data | |
| Elements Group: Metals | Element: Nickel |
| Drawn by: Greg Hill | Date: June 17, 1999 |




Solid symbols represent values greater than mean + standard deviation

- + 0 to 167
- ▲ 167 to 200
- ■ 200 to 312
- ● 312 to 601

meters

0 200 400 600 800

N

Actlabs

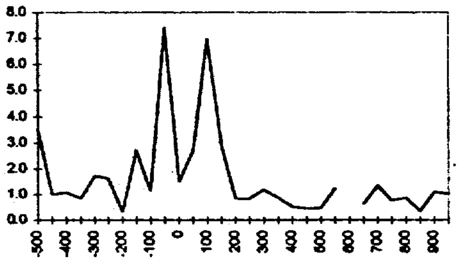
**Enzyme Laboratories, Inc.**

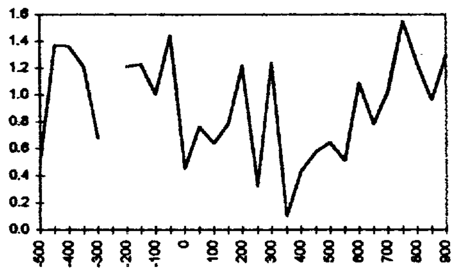
Performance Minerals of Canada Ltd. - Cariboo Rand Project

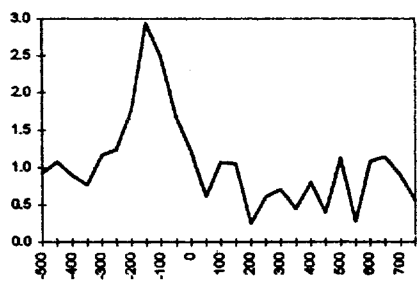
Enzyme Leach℠ Data

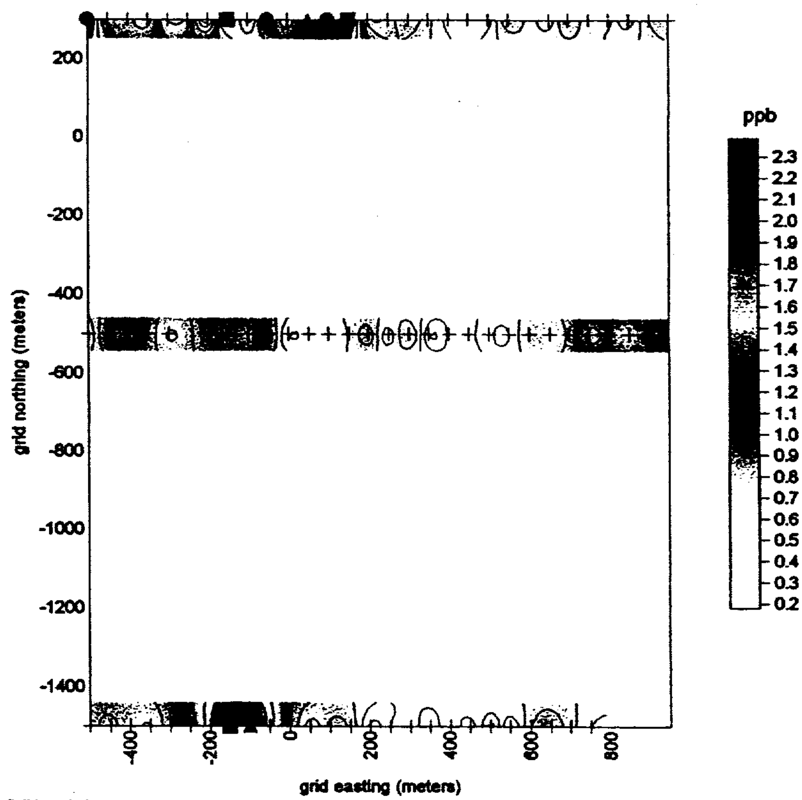
Elements Group: Metals — Element: Cadmium

Drawn by: Greg Hill — Date: June 17, 1999




Solid symbols represent values greater than mean + standard deviation

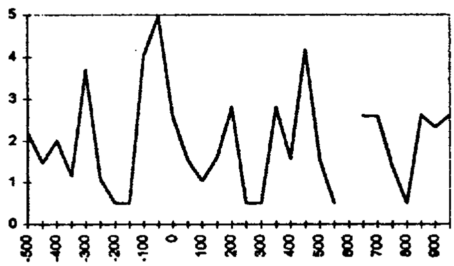
- + 0.0 to 2.5
- ▲ 2.5 to 2.7
- ■ 2.7 to 3.5
- ● 3.5 to 7.4

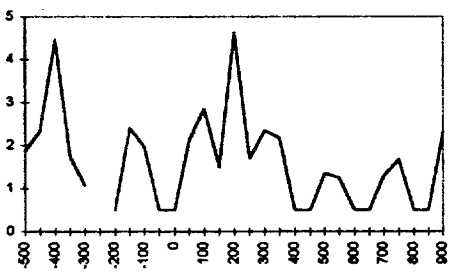
meters

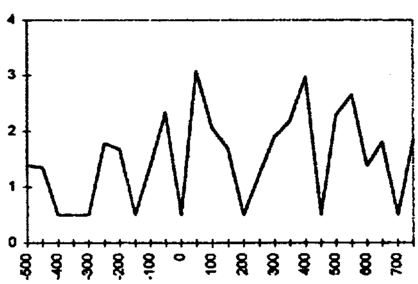
0 200 400 600 800

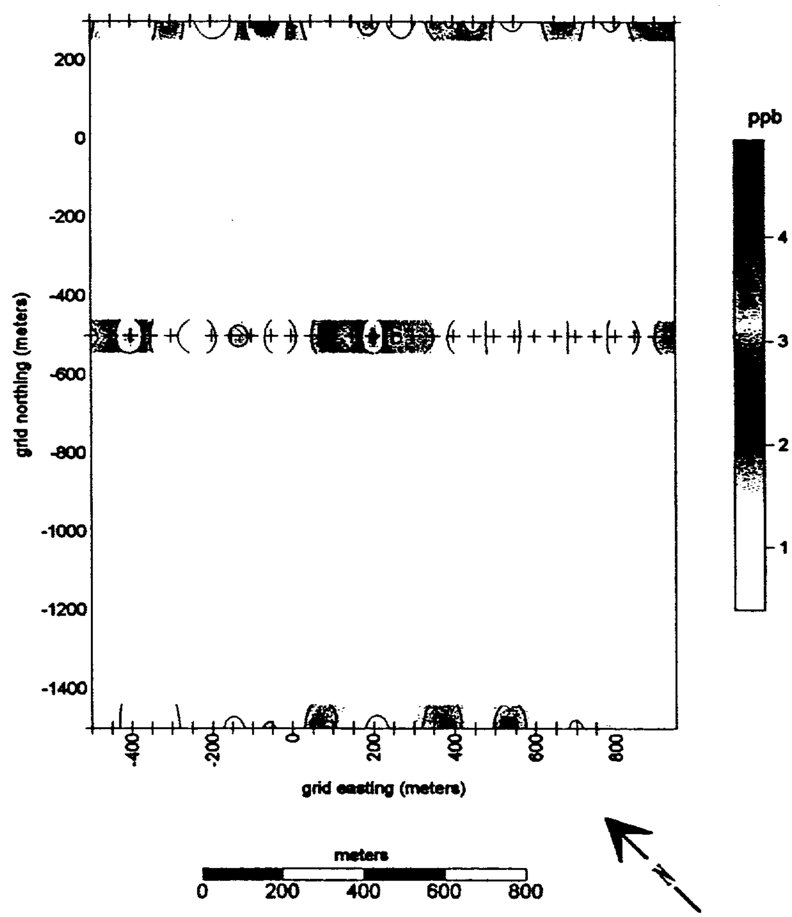
**Enzyme Laboratories, Inc.**

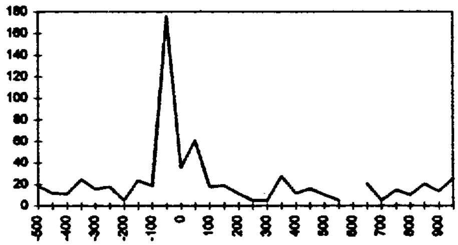
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach™ Data
Elements Group: Metals Element: Gallium
Drawn by: Greg Hill Date: June 17, 1999

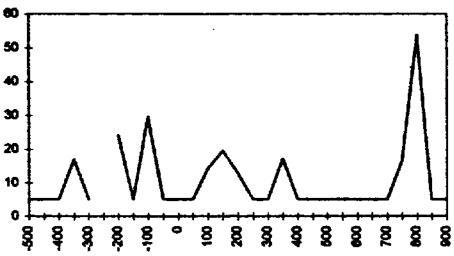


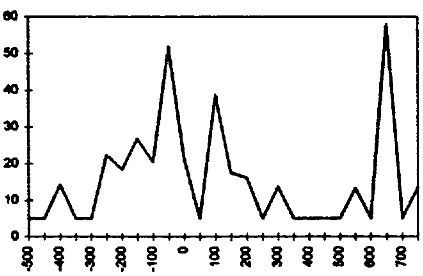



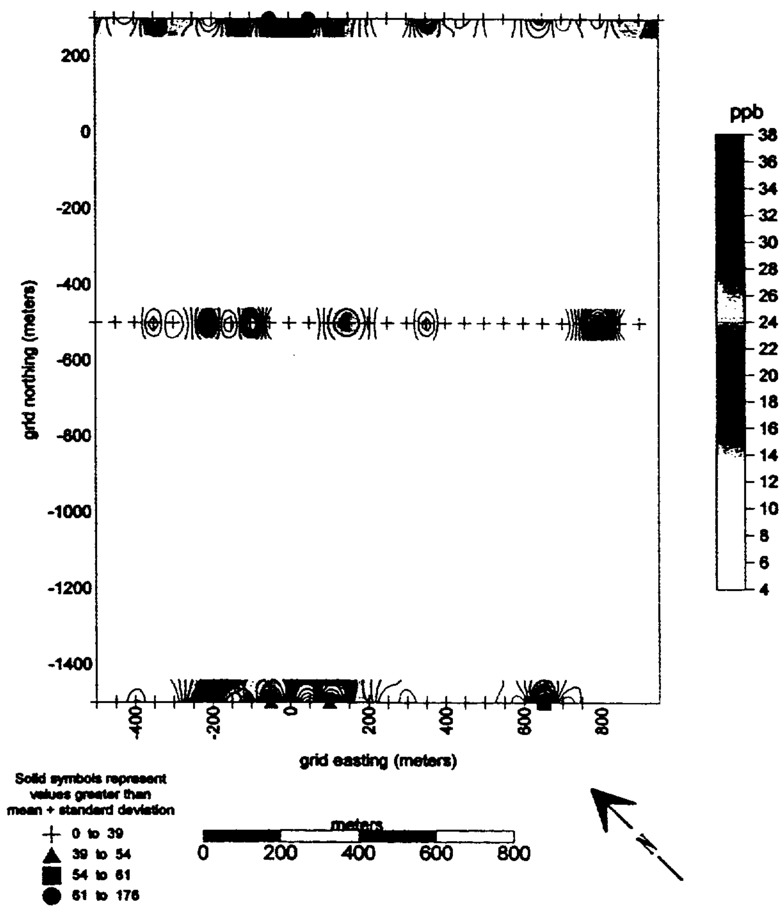


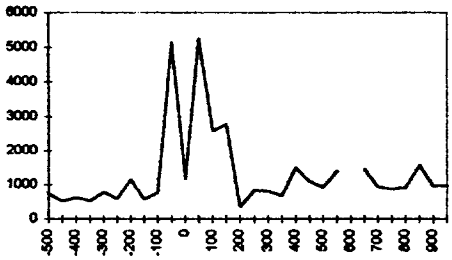


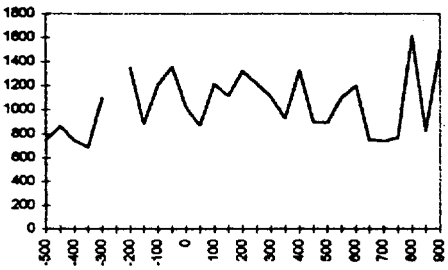


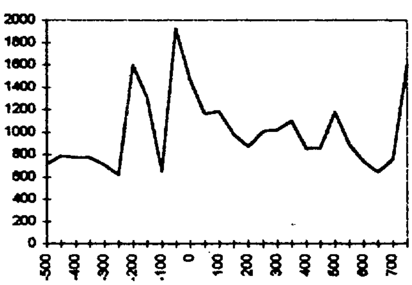
## Enzyme Laboratories, Inc.

**Performance Minerals of Canada Ltd. - Cariboo Rand Project**
**Enzyme Leach[SM] Data**
**Elements Group: Lithophile** **Element: Lithium**
**Drawn by: Greg Hill** **Date: June 17, 1999**



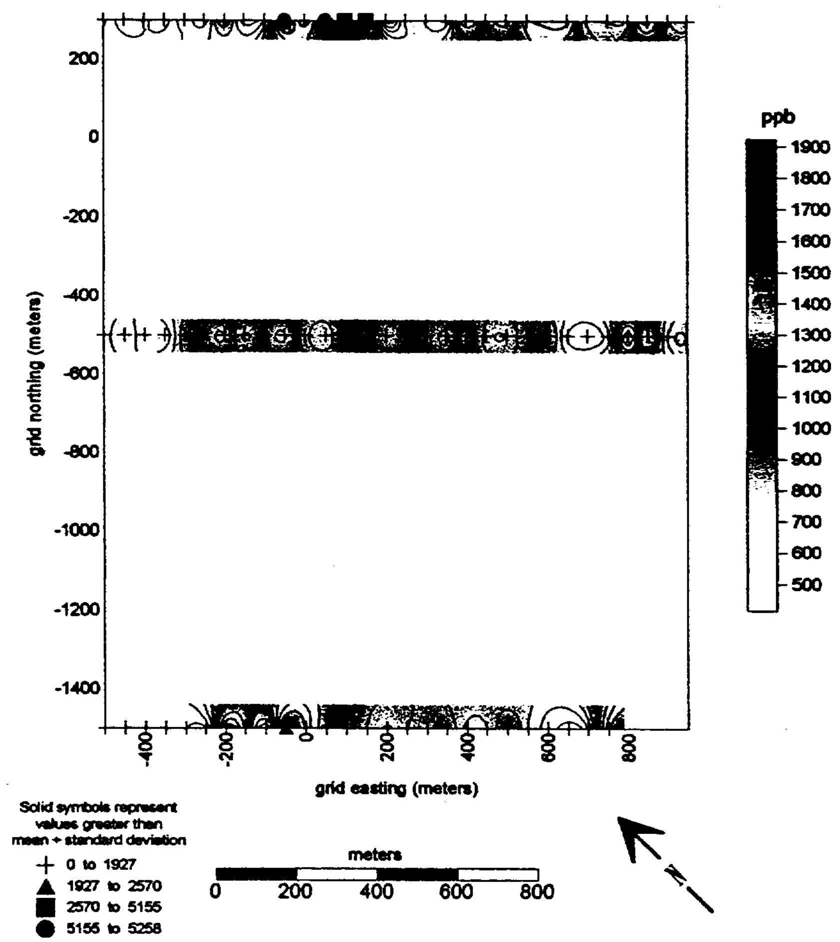


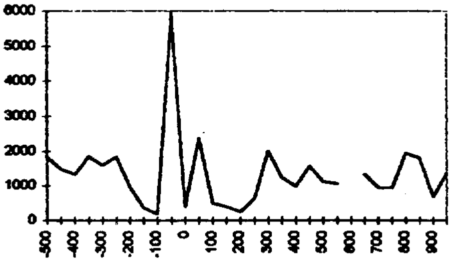


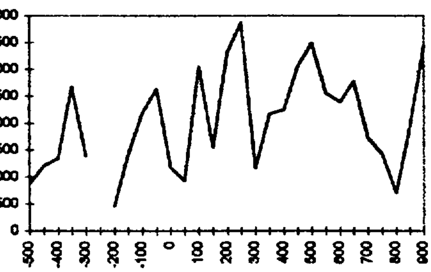


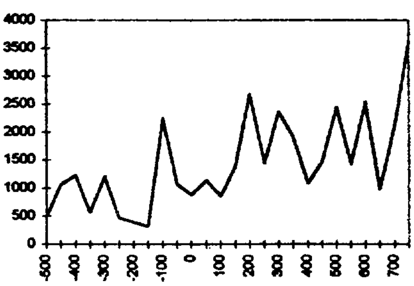
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach[SM] Data
Elements Group: Lithophile    Element: Strontium
Drawn by: Greg Hill    Date: June 17, 1999









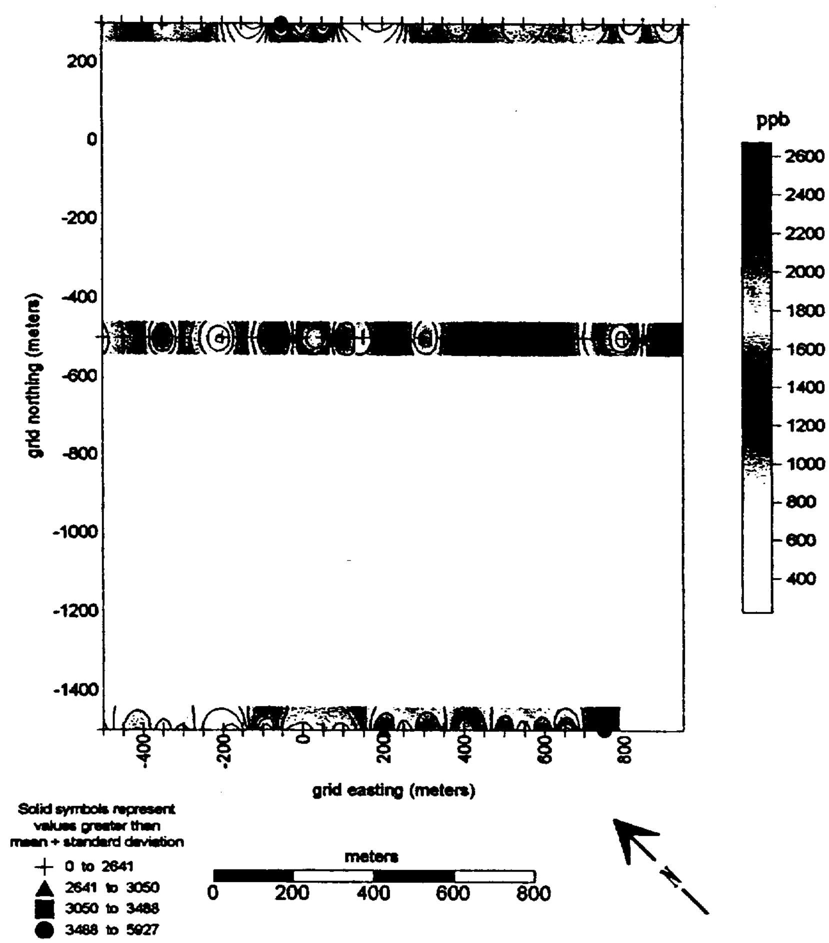
**Enzyme Laboratories, Inc.**

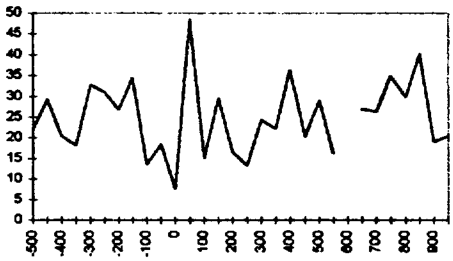
Performance Minerals of Canada Ltd. - Cariboo Rand Project

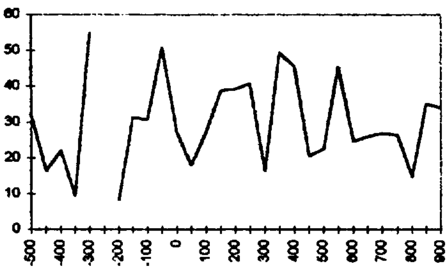
Enzyme Leach[SM] Data

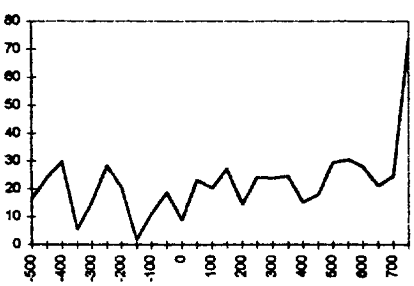
Elements Group: Lithophile Element: Barium

Drawn by: Greg Hill Date: June 17, 1999



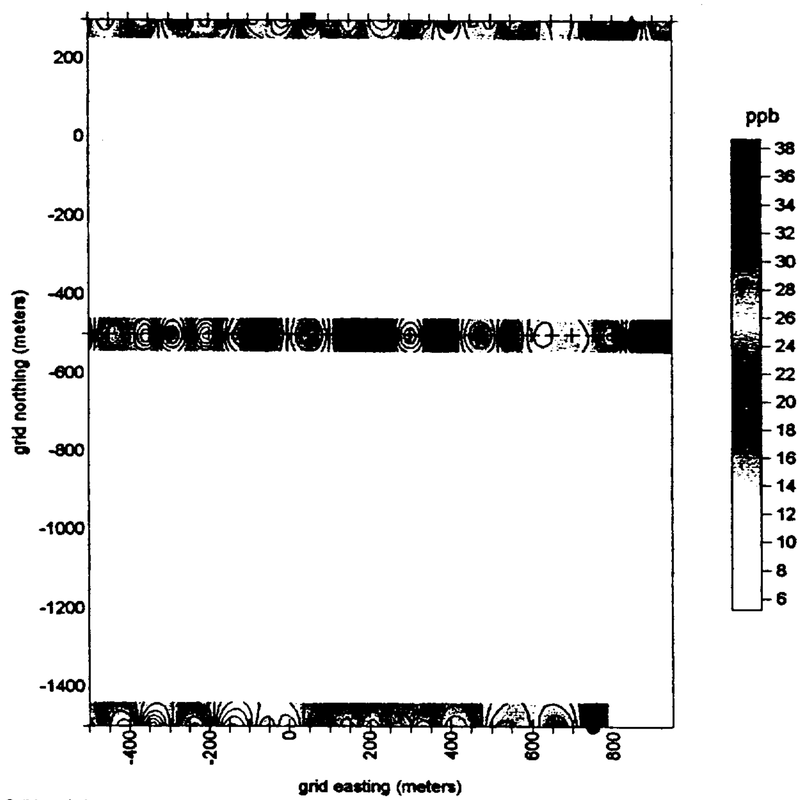






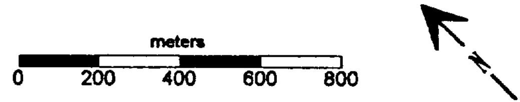
**Enzyme Laboratories, Inc.**

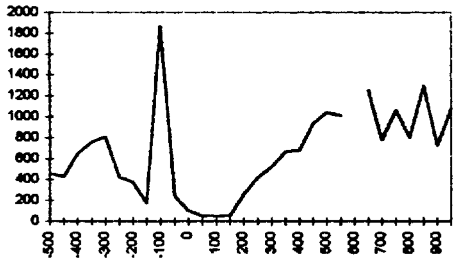
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach™ Data
Elements Group: Lithophile — Element: Rubidium
Drawn by: Greg Hill — Date: June 17, 1999

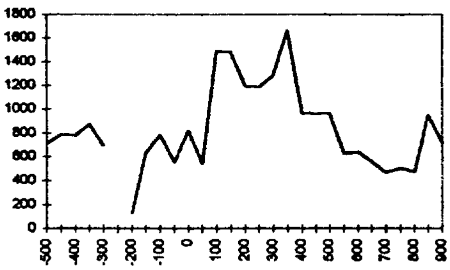


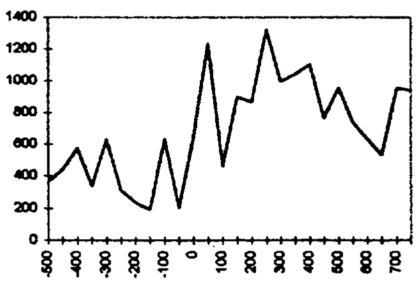

Solid symbols represent values greater than mean + standard deviation

- + 0 to 39
- ▲ 39 to 41
- ■ 41 to 49
- ● 49 to 74





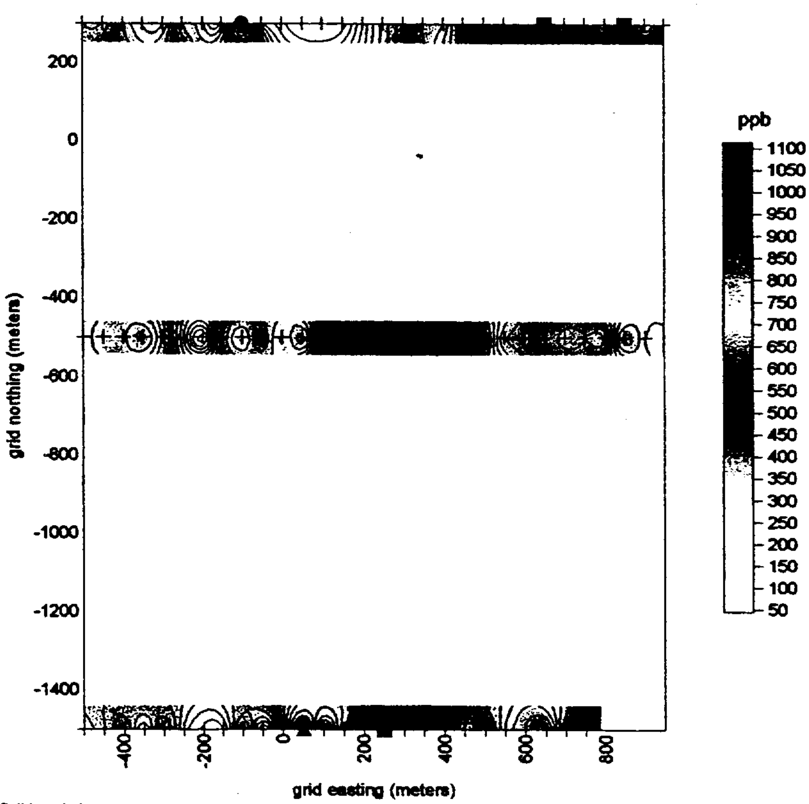

**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project

Enzyme Leach℠ Data

Elements Group: High Field Strength Element: Titanium

Drawn by: Greg Hill Date: June 17, 1999



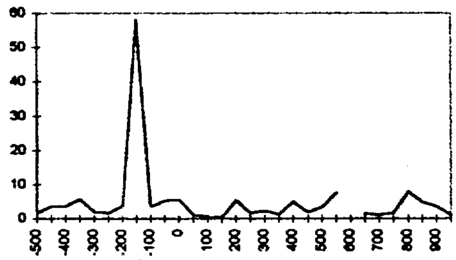

Solid symbols represent values greater than mean + standard deviation

+ 0 to 1185

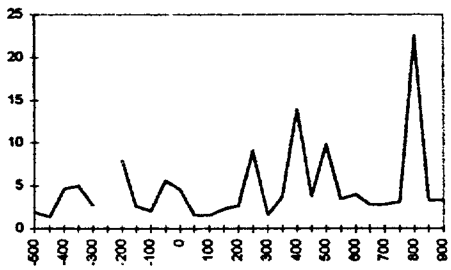
▲ 1185 to 1255

■ 1255 to 1484

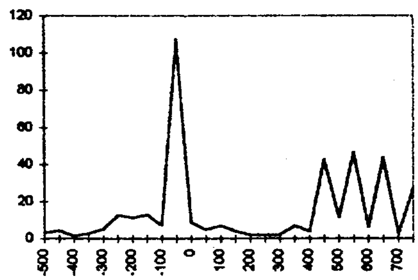
● 1484 to 1869











Actlabs

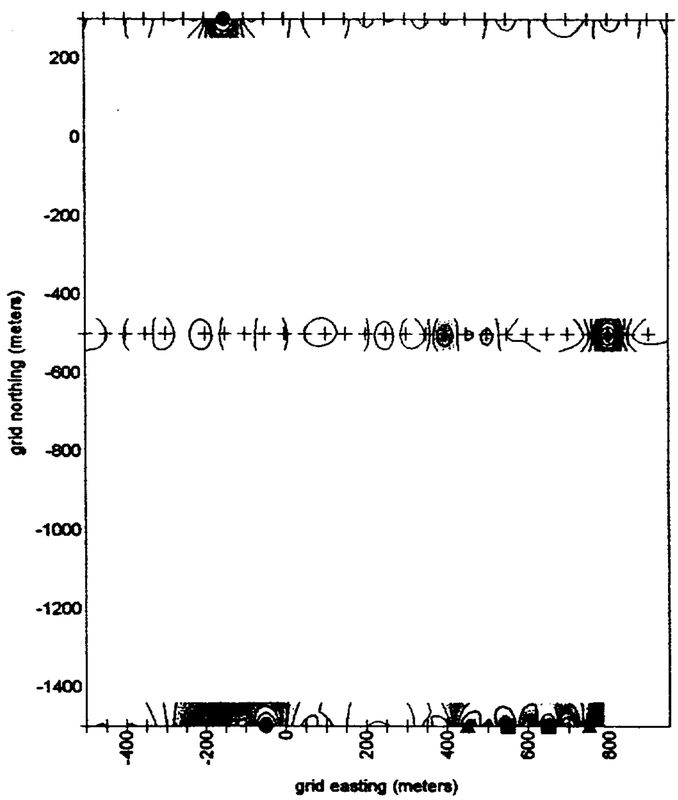
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project

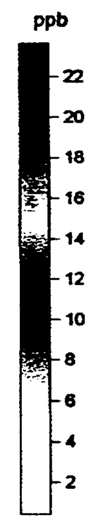
Enzyme Leach[SM] Data

Elements Group: High Field Strength — Element: Yttrium

Drawn by: Greg Hill — Date: June 17, 1999





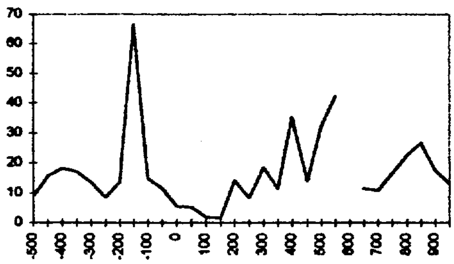


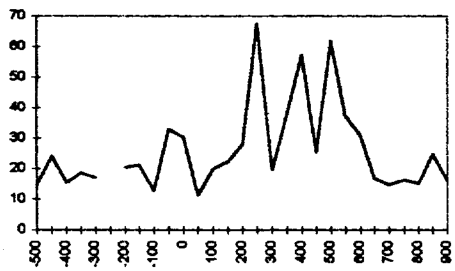


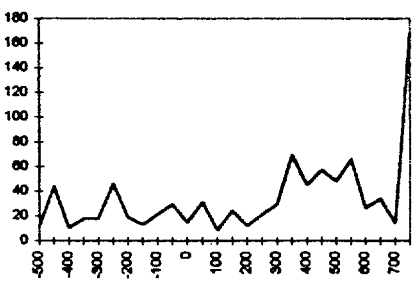
Solid symbols represent values greater than mean + standard deviation

- + 0 to 27
- ▲ 27 to 44
- ■ 44 to 58
- ● 58 to 108



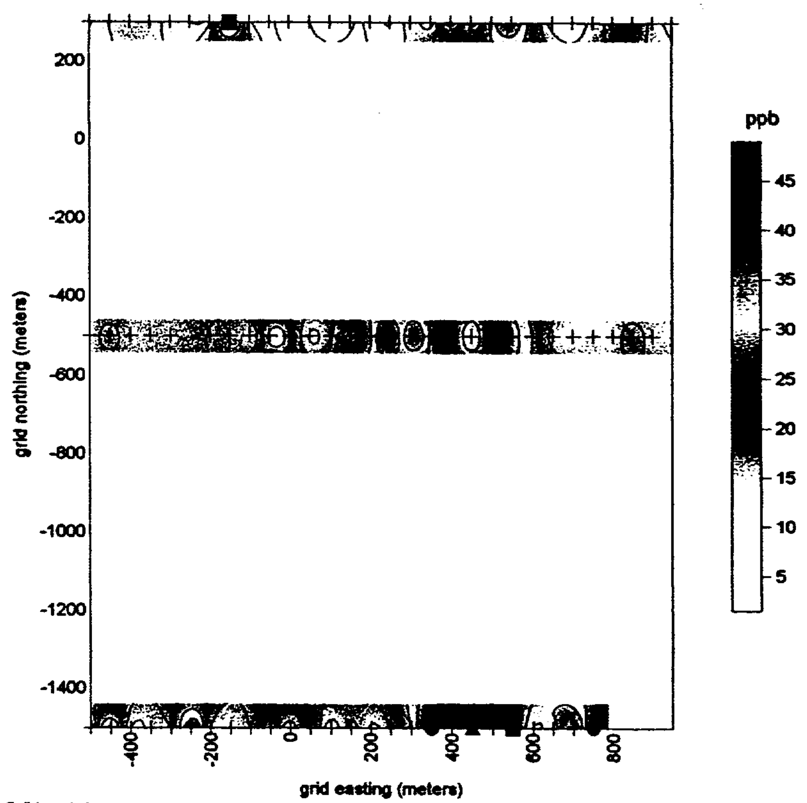



**Enzyme Laboratories, Inc.**

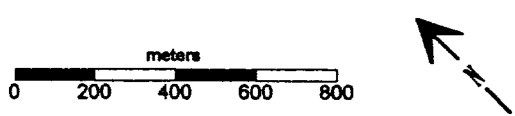
Performance Minerals of Canada Ltd. - Cariboo Rand Project
Enzyme Leach℠ Data
Elements Group: High Field Strength   Element: Zirconium
Drawn by: Greg Hill   Date: June 17, 1999

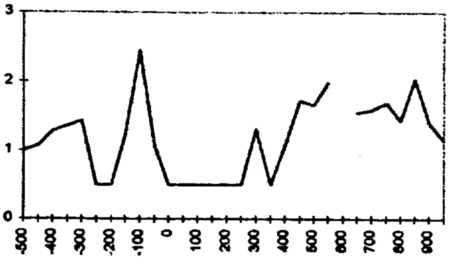


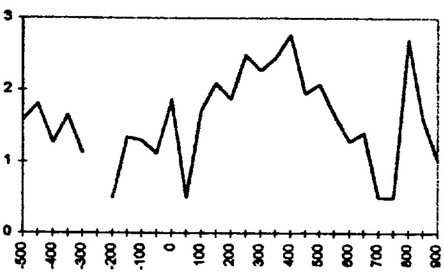

Actlabs

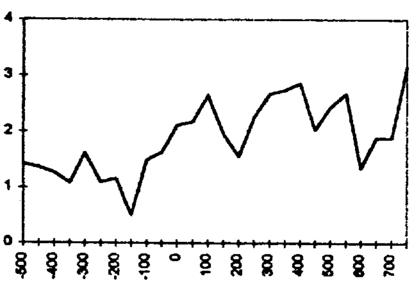
Solid symbols represent values greater than mean + standard deviation

- + 0 to 57
- ▲ 57 to 62
- ■ 62 to 68
- ● 68 to 168






Actlabs

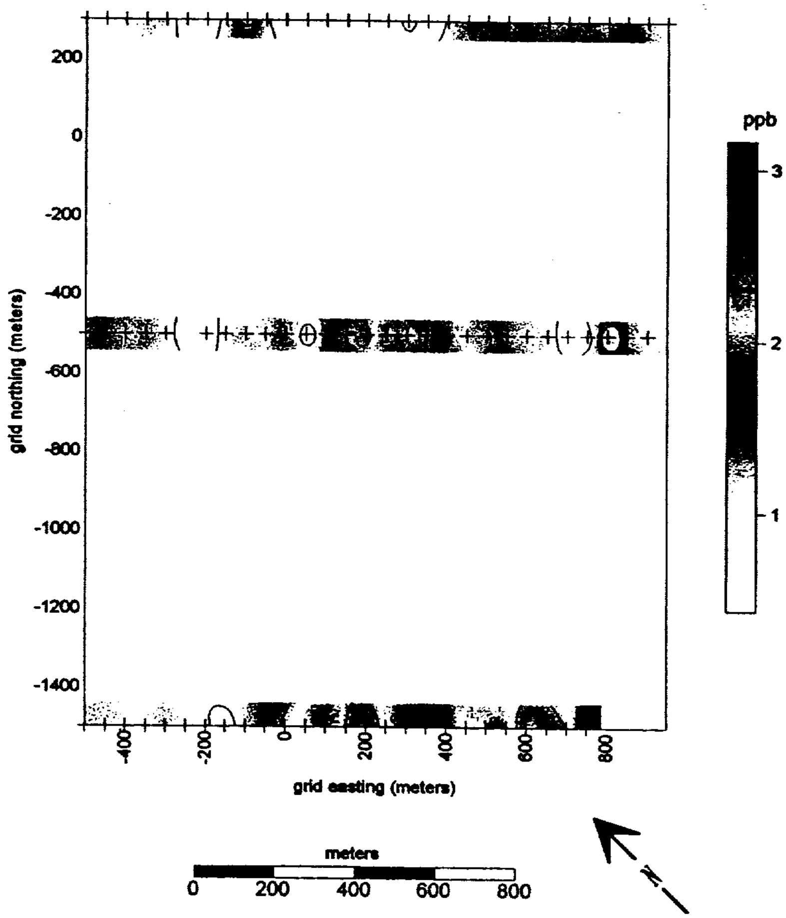
**Enzyme Laboratories, Inc.**

Performance Minerals of Canada Ltd. - Cariboo Rand Project

Enzyme Leach[SM] Data

Elements Group: High Field Strength    Element: Niobium

Drawn by: Greg Hill    Date: June 17, 1999



NTS 93A 3W·6W
N
Tvb
TRIPLET L
GARNER L
GREEN L
L79
EPCITY-5
EPCITY-2
EPCITY-4
EPCITY-6
EPCITY-3
EPCITY-1
HORSEFLY
RAND #2
RAND #1
SCATTERED HIGH SOIL Au TO 455 PPb
BL 045°
CREEK
I.P. 14 Ms.
STARLIKE LAKE
SYENITE STOCK
I.P. 11 Ms.
AERODAT MAG Hi
DEERHORN
L82
L87-88
L3NE
HIGH SOIL Au TO 376 PPb
I.P. 6 Ms.
L87
L78-79
AERODAT RESISTIVITY CONTOUR
MAG HIGH 12,000γ P.D. GROUND SURVEY
538
MICA LAKE
TREND & DIP VLCS & SEDS.
PYRITE HALO ZONE
MEGABUCKS DEPOSIT
2 mt @ 0.9 g/t ≈ 0.15% Cu
SANDSTONE
VOLCANIC BRECCIA
L92
RAND #3 368561
WOODJAM CREEK
L75-76
L9577
DEERHORN MAINLINE
RDST-1, ETC. SILT SITE
⊗ ROCK SAMPLE SITE AND No.
SCALE 1:10,000
DEERHORN PROJECT
RAND AND EPCITY MINERAL CLAIMS
CARIBOO M.D. BRITISH COLUMBIA
SULPHIDE TARGET COMPILATION, LOCATION OF ENZYME LEACH SOILS GRID AND RECCOMMENDED DRILL TEST LOCATIONS
H. WAHL, P.ENG. B.C.
JULY 1999