**BRITISH COLUMBIA**
**PROSPECTORS ASSISTANCE PROGRAM**
**PROSPECTING REPORT FORM**



# BRITISH COLUMBIA

# PROSPECTORS ASSISTANCE PROGRAM

# MINISTRY OF ENERGY AND MINES

# GEOLOGICAL SURVEY BRANCH

| | |
|---|---|
| PROGRAM YEAR: | 1999/2000 |
| REPORT #: | PAP 99-5 |
| NAME: | RALPH KEEFE |

# BRITISH COLUMBIA
# PROSPECTORS ASSISTANCE PROGRAM
# PROSPECTING REPORT FORM (continued)



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) SIB **MINFILE No. if applicable** N/A

Location of Project Area NTS 93 E 11/E **Lat** 53 42 **Long** 127 04

Description of Location and Access Main Haul Roads (Needle Main) plus winter and current logging (H.F.P.)

Main Commodities Searched For Cu, AG & Au

Known Mineral Occurrences in Project Area Huckleberry Mine approx. 10 Km. S.W.

**WORK PERFORMED**

1. Conventional Prospecting (area) New Road construction plus current logging
2. Geological Mapping (hectares/scale) As above
3. Geochemical (type and no. of samples) Nil required
4. Geophysical (type and line km) Nil required
5. Physical Work (type and amount) Nil required
6. Drilling (no. holes, size, depth in m, total m) Nil required
7. Other (specify) Nil required

**SIGNIFICANT RESULTS** Nil

Commodities _____ **Claim Name** _____

Location (show on map) **Lat** _____ **Long** _____ **Elevation** _____

Best assay/sample type _____

Description of mineralization, host rocks, anomalies _____

No new discoveries in current logging this season. Further follow-up in 2000/2001 under O.G.D.P.

No indication why SIB should be continued as good Geology/potential & similar for road development near Huckleberry

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.**

SIB PROJECT

SIB PROJECT
SCALE 1:50000
PROSPECTED - 1999

SCALE 1:50000

TWINKLE LAKE

NICOLE LAKE

SIBOLA CREEK

TAHTSA ROAD

SED + VOL

SED RACES

C.P. 199

C.P. 156

ANDREW

199-3

199-4

199-6

199-7

156-8

156-10

156-11

156-12

156-13

156-14

156-5

144-1

A23

A5

120-3

C.P. 120-2

C.P. 037

037-11

037-9

037-8

123-12

123-10

C.P. 046

046-7

046-6

046-5

046-4

HOULTON FOREST PRODUCTS

HFP BARGE

TAHTSA ROAD (M.R.P.)

TAHTSA REACH

C.P. 128

C.P. 127

C.P. 126

99 PROP

1997 PROPOSED KM

420

419

418

415

416

414

413

422 S/CCR

421 S/CCR

409 S/CCR

411 S/CCR

410 W/CC

407 W/CC

408 W/CC

125-3 S/CCR

125-4 S/CCR

125-5

125-1

125-2

24-3 W/CC S

43 W/CC

93E 10e

99-05 pg. 8

126°52'30"

# BRITISH COLUMBIA
# PROSPECTORS ASSISTANCE PROGRAM
# PROSPECTING REPORT FORM (continued)

## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) CABIN **MINFILE No. if applicable** N/A

Location of Project Area NTS 93 M 8/W **Lat** 55 25 **Long** 125 15

Description of Location and Access New road construction of Houston Forest Products plus current logging N. W. of Morrison Lake.

Main Commodities Searched For Porphyry Cu, & Au

Known Mineral Occurrences in Project Area Morrison potential type ore bodies (Noranda and Booker Gold)

**WORK PERFORMED**

1. Conventional Prospecting (area) New road construction & logging todate
2. Geological Mapping (hectares/scale) As above
3. Geochemical (type and no. of samples) Nil required
4. Geophysical (type and line km) Nil required
5. Physical Work (type and amount) Nil required
6. Drilling (no. holes, size, depth in m, total m) Nil required
7. Other (specify) Nil required

**SIGNIFICANT RESULTS** Nil

Commodities _____ Claim Name _____

Location (show on map) Lat _____ Long _____ Elevation _____

Best assay/sample type _____

Description of mineralization, host rocks, anomalies

No new porphyry outcrops examined during prospecting. Considerable amount of sediments looked at in current logging N. of CABIN Lake plus extension of main haul road (1600) to N.W. Further Follow-up in 2000/2001 under O.G.D.P.

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.***

CABIN PROJECT
N.T.S. 93M 8/W 99-05
SCALE 1:50000 P9. 11
ROADS TOBE BUILT PROPOSED 1999

608T026

608T001

608T024

Haul Lake

Tahlo Lake

Creek

Gully

Ohio Creek

Morrison Main FSR

West Arm Rd

1800 RD

RD 7167

RD 6940

BABINE LAKE

**BRITISH COLUMBIA**
**PROSPECTORS ASSISTANCE PROGRAM**
**PROSPECTING REPORT FORM (continued)**



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) BAR **MINFILE No. if applicable** N/A

Location of Project Area NTS 93 L 8/W Lat 54 30 Long 120 25

Description of Location and Access 4 x 4 Access along Hydro Line in addition to walking for approx. 3 km.

Main Commodities Searched For Barite

Known Mineral Occurrences in Project Area Cu, AG & Barite in volcanics

**WORK PERFORMED**

1. Conventional Prospecting (area) Prospecting for Economic Barite in Volcanics — Poor target
2. Geological Mapping (hectares/scale) As above
3. Geochemical (type and no. of samples) Nil required
4. Geophysical (type and line km) Nil required
5. Physical Work (type and amount) Nil required
6. Drilling (no. holes, size, depth in m, total m) Nil required
7. Other (specify) Nil required

**SIGNIFICANT RESULTS** Nil

Commodities Claim Name

Location (show on map) Lat Long Elevation

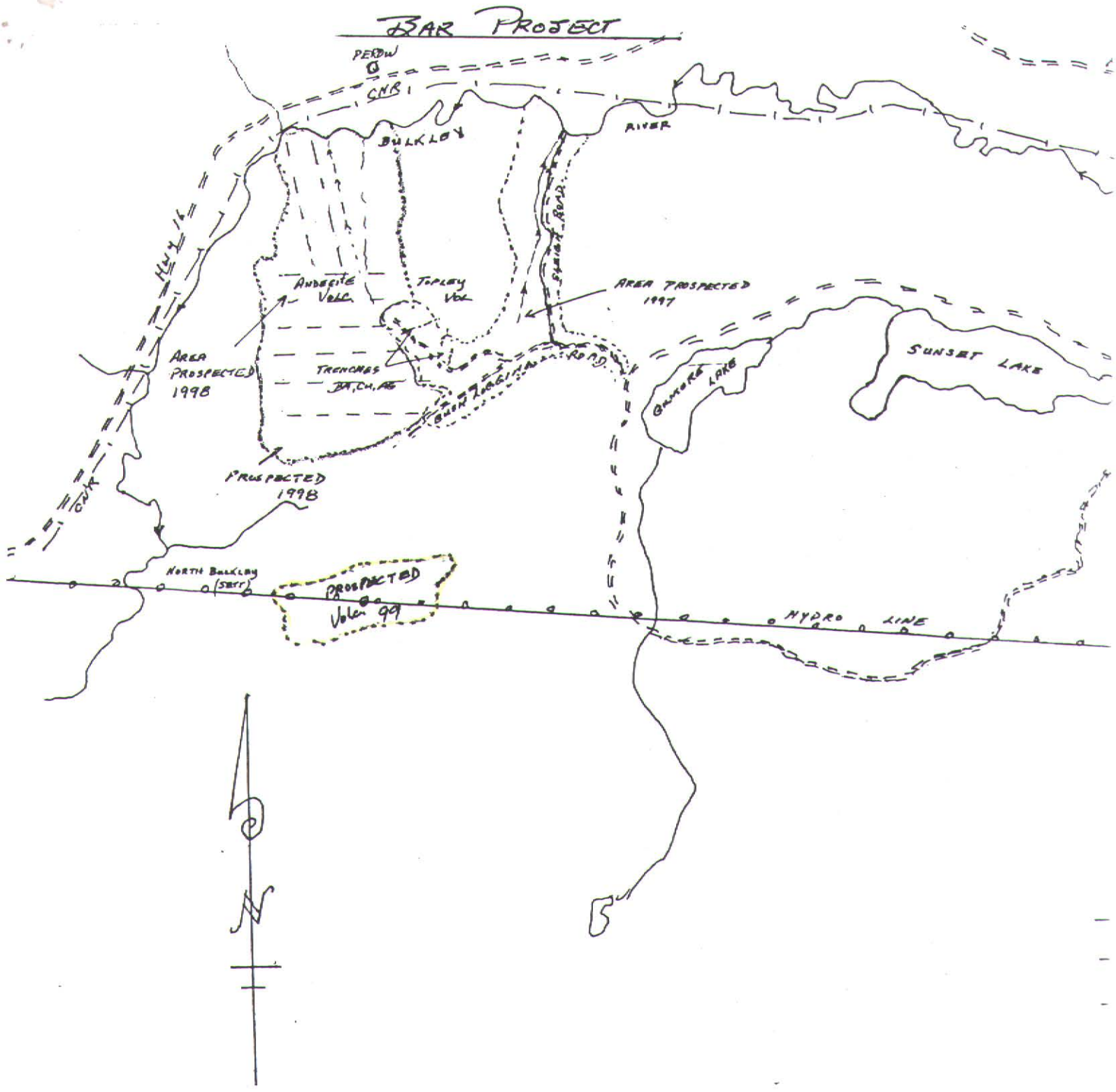
Best assay/sample type

Description of mineralization, host rocks, anomalies

Have been unable to locate potential economic Barite veins in volcanics - this area. Further prospecting in area in 2000/2001 under O.G.D.P.

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.**


BAR PROJECT
PERDU
CNR
BULKLEY
RIVER
HWY 16
ANDESITE VOLC
TIPLEY VOL
AREA PROSPECTED 1997
AREA PROSPECTED 1998
TRENCHES BA, CH, AE
BUCK CREEK ROAD
SUNSET LAKE
GILMORE LAKE
PROSPECTED 1998
CNR
NORTH BULKLEY (STAFF)
PROSPECTED BY Volcan 99
HYDRO LINE

**BRITISH COLUMBIA**
**PROSPECTORS ASSISTANCE PROGRAM**
**PROSPECTING REPORT FORM (continued)**



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

**Project Area (as listed in Part A)** PAM **MINFILE No. if applicable** 093E-088

**Location of Project Area NTS** 93 E/14/E **Lat** 53 51 **Long** 127 01

**Description of Location and Access** Approx. 104 km S. of Houston - Old Thatsa Rd. S. of Nadina Lake

**Main Commodities Searched For** Cu, Ag, Mo & Au Porphyry

**Known Mineral Occurrences in Project Area** Porphyry Cu, Mo & Au

**WORK PERFORMED**

1. Conventional Prospecting (area) Staked PAM M.C.'s #1 to 12 inclusive (Prospecting)
2. Geological Mapping (hectares/scale) As submitted
3. Geochemical (type and no. of samples) Total of 92 samples taken as follows - 19 rock & 73 soils
4. Geophysical (type and line km) Nil
5. Physical Work (type and amount) Nil
6. Drilling (no. holes, size, depth in m, total m) Nil
7. Other (specify) Nil

**SIGNIFICANT RESULTS**

**Commodities** Cu, Mo, Ag & Au **Claim Name** PAM #1 to 12 inclusive

**Location (show on map) Lat** 53 51 **Long** 127 01 **Elevation**

**Best assay/sample type** #64873 - 3.7 Mo, 153 Cu, 94ZN, 1161 AG & 2772 Au. #64871 - 4.32 Mo, 4060 Cu, 132 Zn, 3705 AG & 252 Au # 64899 - 2.86 Mo, 350 Cu, 9166 Zn & 827 Au

**Description of mineralization, host rocks, anomalies** (1) Mineralization - Porphyry Cu, Mo, Ag & Au

(2) Host Rocks - Granodiorite stock plus intrusion into Andesitic Volcanics

(3) Anomalies - extent of the mineralization within the Potassic Zone has yet to be tested by DDH.

- Several outcrops within the Phyllic Zone has turned up significant precious metals - not Ag
- One float sample in the outer prophylitic zone assayed 1161 AG & 2772 Au.

(4) Geo-Chemistry (Soils) - Two lines of soils spaced at approx 31 metres apart were taken. Results were disappointing. However on review of previous percussion drilling done in 1974 - overburden averaged between 55 to 60 ft. This could very well tell the story. Expect main potassic & phyllic zones to be logged this winter.

**Request a conidentiality period for a minimum period of 2 years. Further project work contemplated for 2000/2001

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.***



← good values in Au, Cu, Zn, (anomalous)

Should have looked at perc drill's prior to soil sampling

PAM PROJECT

SCALE – 1:10000

PAM 1

PAM 2

PAM 3

PAM 4

PAM 5

PAM 6

PAM 7

PAM 8

PAM 9

PAM 10

PAM 11

PAM 12

POTASSIC ZONE (?)

PHYLLIC ZONE (?)

LINE "A"

LINE "B"

SU 1

SU 2

SU 3

SU 4

SU 5

NDC 1

NDC 2

NDC 3

NDC 4

NDC 5

NDC 6

NDC 7

NDC 8

NDC 9

NDC 10

NDC 11

NDC

WTP #1

WTP #2

WTP #3

WTP #4

WTP #5

WTP #6

WTP #7

WTP #8

WTP #9

WTP #10

WTP #11

WTP #12

32Km

33Km

34Km

OLD TAHTSA FSR

SPUR #1

SPUR #2

Spur # 1

Spur # 5

Spur # 6

Spur # 7

Spur # 8

Spur # 9

Spur # 10

Spur # 15

Spur # 16

CP 023 BLK 002

CP 023 BLK 003

CP 023 BLK 001

STR J (S3) 20mRRZ, 20mRMZ

STR V (S4) 0mRRZ, 30mRMZ

STR B (S4) 0mRRZ, 30mRMZ

STR C (S3) 20mRRZ, 20mRMZ

STR U (S4) 0mRRZ, 30mRMZ

STR L (S4) 0mRRZ, 30mRMZ

STR H (NDC)

STR H (S4) DEFAULT 0m RRZ, 30m RMZ

STR F (S4) 0m RRZ, 30m RMZ

STR E (S4) 0m RRZ, 30m RMZ

Wetland O (W3) 0m RRZ, 30m RMZ

Wetland E (W5) 10m RRZ, 40m RMZ

Wetland K (W5) 10m RRZ, 40m RMZ

Wetland J (W3) 0m RRZ, 30m RMZ

Lake A (L3) 0m RRZ, 30m RMZ

RRZ is 20m Slope distance from STR bank

64872

64871

64873

64874

64900

64902

64862

64870 incl

167902

167903

167901

093E085-001

99-05 p8 17

3-COPIES

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902550 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64861 | 4.84 | 10.21 | 2.36 | 48.4 | 59 | 6.9 | 4.8 | 310 | 9.11 | 5.2 | <.1 | 38.3 | .2 | 650.5 | .02 | 1.15 | 2.30 | 97 | .07 | .059 | 1.6 | 24.8 | 1.18 | 87.0 | .037 | 1 | 1.70 | .031 | .31 | 1.4 | .14 | <5 | 1.1 | 1.40 | 7.0 |
| 64862 | 33.81 | 2877.28 | 3.11 | 57.1 | 720 | 22.2 | 38.3 | 278 | 5.43 | 6.0 | .4 | 84.0 | 2.3 | 8.8 | .29 | .16 | .29 | 46 | .38 | .047 | 11.9 | 14.8 | .21 | 73.2 | .008 | 4 | .73 | .036 | .27 | 3.9 | .14 | 7 | 2.5 | .13 | 2.3 |
| 64863 | 37.33 | 1783.80 | 5.07 | 61.8 | 555 | 20.5 | 25.4 | 229 | 5.86 | 101.2 | .4 | 59.0 | 2.6 | 11.9 | .27 | .62 | .23 | 51 | 1.08 | .051 | 4.8 | 19.9 | .59 | 51.6 | .026 | 4 | .79 | .032 | .42 | 3.4 | .20 | 71 | 3.8 | .14 | 3.4 |
| 64864 | 41.08 | 1655.20 | 2.95 | 43.0 | 483 | 15.5 | 29.2 | 238 | 5.36 | 12.2 | .3 | 78.7 | 3.0 | 13.7 | .19 | .20 | .27 | 48 | 1.37 | .044 | 6.6 | 17.2 | .64 | 62.1 | .035 | 2 | .68 | .037 | .40 | 4.2 | .16 | 15 | 2.4 | .26 | 2.9 |
| 64865 | 31.29 | 1781.82 | 2.85 | 62.2 | 517 | 20.8 | 26.4 | 242 | 4.95 | 2.1 | .4 | 86.2 | 3.4 | 10.0 | .31 | .11 | .21 | 64 | .86 | .056 | 8.5 | 29.4 | .75 | 80.1 | .080 | 2 | 1.03 | .055 | .57 | 3.9 | .23 | 14 | 2.7 | .13 | 5.4 |
| 64866 | 72.17 | 1949.26 | 4.79 | 37.9 | 922 | 12.7 | 22.9 | 95 | 5.57 | 13.6 | .3 | 109.7 | 2.7 | 4.6 | .18 | .33 | .53 | 23 | .16 | .045 | 5.0 | 15.8 | .15 | 46.4 | .007 | 2 | .58 | .027 | .29 | 6.3 | .14 | 16 | 4.0 | .21 | 1.6 |
| 64867 | 26.07 | 1470.81 | 4.79 | 47.1 | 632 | 20.0 | 31.4 | 121 | 6.72 | 41.6 | .3 | 74.5 | 2.3 | 10.3 | .13 | .51 | .41 | 32 | 1.01 | .044 | 3.5 | 20.0 | .37 | 33.0 | .012 | 4 | .56 | .026 | .34 | 4.8 | .15 | 34 | 4.1 | .26 | 2.0 |
| 64868 | 1126.35 | 87.40 | 7.67 | 29.3 | 93 | 7.4 | 6.6 | 267 | 2.89 | 12.8 | .7 | 11.1 | 1.1 | 23.1 | 1.40 | 1.88 | .11 | 7 | 1.09 | .151 | 40.0 | 31.4 | .05 | 124.6 | .001 | 1 | .12 | .006 | .06 | 21.2 | .07 | 72 | 1.2 | .10 | .4 |
| 64869 | 77.93 | 2604.46 | 3.57 | 46.9 | 972 | 18.1 | 24.5 | 160 | 5.02 | 15.6 | .4 | 184.6 | 2.9 | 6.7 | .24 | .39 | .63 | 33 | .57 | .042 | 5.1 | 21.8 | .27 | 71.2 | .005 | 4 | .65 | .036 | .31 | 5.5 | .19 | 15 | 3.4 | .27 | 2.2 |
| 64870 | 48.55 | 1562.33 | 3.13 | 62.6 | 444 | 18.2 | 24.0 | 254 | 4.60 | 3.4 | .4 | 96.5 | 3.1 | 13.3 | .31 | .31 | .23 | 61 | 1.26 | .057 | 6.9 | 25.1 | .68 | 66.4 | .087 | 2 | 1.00 | .044 | .60 | 5.1 | .27 | 13 | 2.4 | .12 | 5.0 |
| RE 64870 | 48.56 | 1553.96 | 3.25 | 62.2 | 449 | 18.5 | 24.7 | 254 | 4.59 | 3.6 | .4 | 105.7 | 3.2 | 15.4 | .33 | .32 | .23 | 62 | 1.25 | .057 | 7.6 | 28.3 | .71 | 86.7 | .093 | 2 | 1.07 | .048 | .61 | 5.4 | .27 | 15 | 2.5 | .12 | 5.2 |
| 64871 | 4.32 | 4060.05 | 5.04 | 132.0 | 3705 | 19.5 | 21.7 | 905 | 3.32 | 21.2 | .6 | 251.8 | 2.6 | 12.7 | .67 | .32 | 21.09 | 36 | 1.30 | .073 | 9.8 | 20.0 | .13 | 181.5 | .003 | 2 | .67 | .054 | .23 | 4.0 | .09 | 6 | .6 | 11.92 | 2.3 |
| 64872 | 3.66 | 41.60 | 11.42 | 55.3 | 81 | 5.8 | 15.5 | 826 | 4.40 | 26.2 | .1 | 3.5 | .7 | 70.3 | .11 | 1.42 | 1.00 | 38 | 2.12 | .061 | 1.4 | 17.7 | 1.10 | 99.2 | .105 | 2 | 3.94 | .322 | .35 | 6.3 | .21 | <5 | .6 | .26 | 8.9 |
| 64873 | 3.70 | 152.74 | 2.70 | 93.7 | 1161 | 22.4 | 19.5 | 1358 | 14.83 | 24.9 | .3 | 2772.0 | .7 | 9.3 | .06 | 1.13 | 220.04 | 168 | .33 | .073 | 4.1 | 37.8 | 2.23 | 39.7 | .115 | 1 | 3.00 | .042 | .06 | 1.3 | .04 | 7 | 1.3 | 114.70 | 16.1 |
| 64874 | 2.96 | 158.20 | 4.56 | 58.4 | 117 | 2.6 | 3.8 | 252 | 3.43 | 6.2 | .4 | 31.7 | 4.0 | 11.0 | .45 | 1.80 | 1.68 | 11 | .70 | .121 | 19.6 | 15.3 | .39 | 105.9 | .005 | 1 | .47 | .032 | .25 | 5.5 | .11 | 8 | .2 | 1.07 | 1.9 |
| STANDARD | 13.95 | 132.10 | 29.87 | 160.3 | 249 | 36.9 | 12.5 | 835 | 3.36 | 59.9 | 19.2 | 187.4 | 3.4 | 30.6 | 11.30 | 9.76 | 10.40 | 75 | .58 | .087 | 13.2 | 152.2 | .52 | 131.8 | .107 | 2 | 1.64 | .037 | .16 | 7.1 | 1.90 | 235 | 2.4 | 1.77 | 5.9 |

Standard is STANDARD DS2.

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1999 DATE REPORT MAILED: Aug 10/99 SIGNED BY. C. Leong .. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data / FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902550 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64861 | 1.87 | .1 | .02 | 13.1 | 6.6 | 1.1 | .75 | .6 | 2.43 | 4.2 | .10 | <1 | 6.8 |
| 64862 | 5.32 | <.1 | .05 | 12.6 | 6.2 | .3 | 1.91 | 1.7 | 15.06 | 25.6 | .07 | 24 | 4.8 |
| 64863 | 6.32 | .1 | .07 | 21.4 | 7.1 | .5 | 2.74 | 1.8 | 6.51 | 10.5 | .04 | 53 | 6.6 |
| 64864 | 3.41 | .1 | .07 | 18.9 | 5.8 | .4 | 2.46 | 2.0 | 6.32 | 15.5 | .03 | 74 | 2.4 |
| 64865 | 4.47 | .1 | .09 | 29.7 | 6.8 | .6 | 2.20 | 2.1 | 7.56 | 18.4 | .03 | 55 | 4.2 |
| 64866 | 3.03 | <.1 | .02 | 12.1 | 4.0 | .3 | 2.86 | 2.0 | 3.16 | 11.1 | .11 | 67 | 1.6 |
| 64867 | 3.57 | .1 | .04 | 15.6 | 4.1 | .5 | 3.96 | 1.4 | 3.49 | 8.2 | .04 | 41 | 1.9 |
| 64868 | .40 | <.1 | .02 | 2.2 | .9 | .3 | 1.02 | 1.6 | 10.51 | 78.0 | <.02 | 579 | .5 |
| 64869 | 4.09 | .1 | .09 | 13.5 | 6.0 | .4 | 2.66 | 1.5 | 3.99 | 11.5 | .08 | 82 | 1.8 |
| 64870 | 4.44 | .1 | .10 | 30.4 | 6.9 | .6 | 2.00 | 2.1 | 5.81 | 15.4 | .04 | 43 | 3.4 |
| RE 64870 | 4.87 | .1 | .12 | 33.6 | 7.5 | .6 | 2.06 | 2.2 | 6.61 | 16.4 | .04 | 47 | 3.4 |
| 64871 | 2.38 | <.1 | <.02 | 7.5 | 5.2 | .4 | 1.15 | 2.6 | 13.42 | 20.1 | .35 | 1 | 1.8 |
| 64872 | 3.16 | .1 | .10 | 15.1 | 3.9 | .3 | 2.50 | 1.9 | 2.89 | 3.9 | .02 | <1 | 17.7 |
| 64873 | .44 | .6 | .08 | 4.6 | 16.0 | 5.3 | 4.97 | 5.1 | 5.10 | 8.2 | 2.92 | <1 | 10.0 |
| 64874 | 1.24 | <.1 | .02 | 9.7 | 2.5 | .4 | 1.75 | 3.4 | 9.74 | 43.2 | .03 | <1 | 2.5 |
| STANDARD DS2 | 3.06 | <.1 | 1.91 | 14.8 | 2.9 | 23.4 | .02 | 3.4 | 5.17 | 30.0 | 5.11 | <1 | 13.5 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1999 DATE REPORT MAILED: Aug 10/99 SIGNED BY C. Leong ..D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data F FA

2 - Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Rock

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902879 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64899 | 2.86 | 349.56 | 7.85 | 9165.7 | 468 | 13.8 | 19.1 | 787 | 6.34 | 318.6 | <.1 | 826.7 | .5 | 9.4 | 55.46 | 4.09 | 2.40 | 45 | .64 | .040 | 5.4 | 34.6 | .42 | 45.2 | .004 | <1 | .75 | .065 | .13 | 5.7 | .37 | 80 | .8 | .31 | 4.7 |
| 64900 | 6.01 | 85.49 | 10.56 | 231.0 | 465 | 13.1 | 12.5 | 2657 | 4.10 | 78.7 | .1 | 23.5 | .7 | 47.5 | .62 | 1.22 | 2.48 | 84 | 4.01 | .064 | 6.8 | 15.4 | 1.16 | 62.2 | .001 | 3 | .69 | .037 | .20 | 1.8 | .12 | 9 | .2 | .04 | 3.4 |
| 167901 | 3.27 | 16.93 | 11.23 | 75.8 | 146 | 14.3 | 18.6 | 687 | 4.93 | 7.3 | .4 | 28.2 | 1.5 | 18.5 | .23 | 1.14 | 1.44 | 58 | 1.42 | .059 | 4.4 | 7.8 | .41 | 96.1 | .002 | 1 | .85 | .031 | .31 | 1.5 | .07 | 19 | 1.2 | .59 | 2.4 |
| 167902 | 2.38 | 22.32 | 9.64 | 49.2 | 332 | 21.9 | 13.0 | 570 | 3.74 | 35.4 | .8 | 62.4 | 2.0 | 23.7 | .29 | .30 | 1.69 | 52 | 1.06 | .089 | 13.1 | 12.5 | .34 | 71.3 | .003 | 1 | .86 | .027 | .27 | 1.1 | 14 | 34 | .2 | 1.22 | 2.8 |
| 167903 | 4.00 | 6.51 | 3.83 | 15.0 | 52 | 3.4 | 1.6 | 100 | 90 | 6.3 | .2 | 5.0 | .4 | 26.3 | .04 | 2.73 | 2.61 | 16 | .04 | .010 | 1.1 | 9.4 | .07 | 42.4 | .008 | <1 | .87 | .007 | .04 | 1.1 | .04 | 156 | .4 | .72 | 2.1 |
| RE 167903 | 4.31 | 7.28 | 4.16 | 15.2 | 55 | 3.7 | 1.9 | 116 | 89 | 6.9 | .3 | 3.2 | .3 | 25.9 | .05 | 2.98 | 2.82 | 16 | .04 | .010 | 1.1 | 9.4 | .07 | 44.6 | .007 | 1 | .90 | .009 | .04 | 1.0 | .04 | 175 | .5 | .77 | 2.1 |
| STANDARD DS2 | 14.40 | 135.08 | 31.49 | 171.5 | 254 | 38.7 | 13.3 | 847 | 3.31 | 65.5 | 22.0 | 206.8 | 3.1 | 32.2 | 11.48 | 9.98 | 11.63 | 84 | .57 | .086 | 14.3 | 181.7 | .64 | 151.6 | .120 | 2 | 1.89 | .040 | .17 | 7.1 | 1.98 | 259 | 2.6 | 1.95 | 6.3 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** AUG 13 1999 **DATE REPORT MAILED:** Aug 30/99 **SIGNED BY** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data A FA

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

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902879 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64899 | .94 | .1 | .03 | 5.6 | 7.0 | 1.5 | 3.31 | 2.0 | 5.34 | 12.0 | 5.38 | <1 | 5.8 |
| 64900 | 4.84 | <.1 | <.02 | 6.9 | 9.9 | .3 | .34 | 1.0 | 10.36 | 14.7 | .07 | <1 | 5.2 |
| 167901 | 1.89 | <.1 | <.02 | 8.8 | 6.1 | .2 | 2.14 | 3.1 | 5.52 | 9.5 | .03 | 3 | 8.8 |
| 167902 | .79 | <.1 | <.02 | 9.7 | 4.4 | .4 | 1.82 | 6.8 | 12.83 | 23.2 | .05 | 1 | 5.6 |
| 167903 | .22 | <.1 | .02 | 1.4 | .9 | .2 | .05 | 2.9 | .83 | 2.5 | <.02 | <1 | 3.4 |
| RE 167903 | .23 | <.1 | <.02 | 1.4 | 1.0 | .3 | .05 | 2.9 | .91 | 2.5 | <.02 | <1 | 3.3 |
| STANDARD DS2 | 2.81 | <.1 | 2.01 | 14.3 | 3.2 | 23.6 | .02 | 4.2 | 5.71 | 31.9 | 5.97 | <1 | 13.9 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER FOLLOWED BY ANALYSIS BY ICP/ES & MS. THIS LEACH IS PARTIAL FOR ALL ELEMENTS.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** AUG 13 1999 **DATE REPORT MAILED:** Aug 30/99 **SIGNED BY** .....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data 1 FA ___

3 - Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Soils

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902549 Page 1 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-A ON-0E | 1.73 | 22.63 | 11.78 | 114.5 | 202 | 13.0 | 7.0 | 275 | 2.94 | 15.6 | .3 | 9.3 | .9 | 12.1 | .19 | .74 | .47 | 57 | .11 | .065 | 4.6 | 17.3 | .36 | 121.9 | .032 | 1 | 2.05 | .011 | .03 | .3 | .07 | 35 | .4 | .06 | 6.1 |
| L-A ON-31E | 2.20 | 45.62 | 10.57 | 138.2 | 243 | 15.3 | 8.9 | 328 | 3.27 | 16.7 | .3 | 4.7 | 1.2 | 13.9 | .23 | .81 | .28 | 61 | .15 | .094 | 5.2 | 22.0 | .40 | 146.6 | .025 | 1 | 2.29 | .010 | .04 | .2 | .09 | 45 | .4 | .09 | 6.6 |
| L-A ON-62E | 2.19 | 26.83 | 11.58 | 121.9 | 218 | 11.2 | 8.7 | 523 | 3.96 | 24.0 | .2 | 30.6 | 1.0 | 6.3 | .25 | .98 | .29 | 78 | .08 | .168 | 2.9 | 22.9 | .31 | 58.5 | .039 | 1 | 2.68 | .009 | .03 | .2 | .06 | 78 | .4 | .13 | 6.8 |
| L-A ON-93E | 2.32 | 22.10 | 14.36 | 128.6 | 305 | 14.0 | 7.3 | 288 | 2.95 | 11.1 | .3 | 1.7 | 1.2 | 9.9 | .12 | .53 | .20 | 60 | .14 | .064 | 3.1 | 22.0 | .35 | 90.5 | .051 | 1 | 2.30 | .011 | .03 | <.2 | .07 | 31 | .3 | .05 | 6.4 |
| L-A ON-124E | 1.73 | 36.49 | 10.60 | 113.4 | 324 | 22.4 | 11.2 | 350 | 3.49 | 21.2 | .4 | 8.1 | 1.3 | 12.2 | .23 | .92 | .37 | 67 | .15 | .096 | 4.3 | 30.2 | .61 | 108.6 | .054 | 1 | 2.40 | .015 | .05 | <.2 | .07 | 58 | .4 | .12 | 5.8 |
| L-A ON-155E | 2.58 | 45.76 | 13.51 | 162.4 | 456 | 18.0 | 10.7 | 376 | 4.30 | 29.6 | .3 | 22.2 | 1.3 | 10.1 | .23 | 1.05 | .41 | 80 | .12 | .131 | 4.0 | 27.3 | .49 | 93.5 | .044 | 1 | 2.70 | .010 | .05 | .2 | .09 | 61 | .4 | .14 | 7.3 |
| L-A ON-186E | 1.96 | 72.54 | 11.92 | 105.9 | 125 | 15.6 | 10.0 | 393 | 3.40 | 22.6 | .4 | 7.8 | 1.7 | 7.3 | .20 | 1.04 | .22 | 64 | .10 | .100 | 4.0 | 22.3 | .54 | 64.5 | .050 | 1 | 2.21 | .011 | .04 | <.2 | .08 | 56 | .4 | .10 | 4.7 |
| L-A ON-217E | 43.65 | 254.25 | 24.76 | 189.7 | 326 | 11.6 | 15.0 | 655 | 5.72 | 81.2 | .3 | 29.8 | 1.2 | 7.6 | .66 | 4.83 | .49 | 90 | .08 | .180 | 4.0 | 23.5 | .44 | 158.2 | .039 | 1 | 2.93 | .010 | .07 | <.2 | .18 | 165 | 1.0 | .16 | 6.9 |
| L-A ON-248E | 29.14 | 240.69 | 12.04 | 172.5 | 409 | 16.0 | 14.9 | 244 | 4.68 | 42.8 | .3 | 33.2 | 1.4 | 6.7 | .41 | 2.30 | .43 | 81 | .07 | .144 | 3.8 | 25.7 | .43 | 121.1 | .038 | 1 | 2.57 | .012 | .04 | <.2 | .13 | 116 | .7 | .16 | 5.9 |
| L-A ON-279E | 1.36 | 21.42 | 8.28 | 102.2 | 191 | 10.4 | 4.7 | 163 | 1.96 | 10.9 | .3 | 15.6 | .7 | 22.5 | .18 | .45 | .30 | 41 | .27 | .023 | 4.5 | 17.4 | .35 | 101.2 | .021 | <1 | 1.31 | .012 | .03 | <.2 | .07 | 22 | .2 | .06 | 4.7 |
| L-A ON-310E | 1.44 | 19.38 | 10.52 | 143.0 | 344 | 9.6 | 6.0 | 183 | 2.95 | 14.2 | .3 | 11.4 | 1.0 | 8.5 | .28 | .60 | .27 | 60 | .10 | .109 | 4.0 | 21.9 | .27 | 88.2 | .029 | 1 | 2.16 | .013 | .03 | <.2 | .08 | 58 | .3 | .07 | 6.1 |
| L-A ON-340E | 1.54 | 17.60 | 12.62 | 72.6 | 267 | 6.8 | 3.8 | 145 | 2.59 | 13.0 | .2 | 12.3 | .7 | 18.6 | .29 | .61 | .37 | 55 | .24 | .117 | 3.9 | 17.0 | .20 | 89.0 | .022 | 1 | 1.29 | .010 | .04 | .2 | .07 | 48 | .3 | .08 | 6.0 |
| L-A ON-372E | 2.24 | 32.60 | 13.28 | 131.2 | 522 | 10.2 | 6.6 | 211 | 4.23 | 26.9 | .3 | 28.2 | 1.1 | 10.2 | .35 | .97 | .38 | 77 | .11 | .196 | 4.2 | 24.0 | .27 | 68.4 | .026 | 1 | 2.27 | .010 | .03 | <.2 | .07 | 97 | .4 | .15 | 7.0 |
| L-A ON-403E | 1.71 | 16.48 | 13.44 | 67.8 | 278 | 5.4 | 3.6 | 254 | 2.08 | 8.1 | .2 | 33.1 | .9 | 16.7 | .25 | .51 | .25 | 51 | .19 | .061 | 6.3 | 15.3 | .16 | 125.2 | .025 | 1 | 1.18 | .013 | .04 | <.2 | .08 | 40 | .2 | .06 | 6.0 |
| L-A ON-434E | .68 | 15.78 | 4.83 | 66.0 | 68 | 8.5 | 4.7 | 253 | 1.67 | 3.6 | .3 | 7.7 | .6 | 17.1 | .14 | .35 | .14 | 37 | .23 | .016 | 4.4 | 16.9 | .46 | 73.6 | .038 | 1 | 1.16 | .015 | .03 | <.2 | .06 | 16 | .2 | .02 | 3.9 |
| L-A ON-465E | 1.99 | 53.63 | 11.52 | 173.9 | 171 | 16.6 | 9.1 | 391 | 2.79 | 24.7 | .5 | 56.9 | .6 | 28.5 | .28 | .77 | .44 | 56 | .36 | .050 | 8.1 | 21.2 | .47 | 207.1 | .026 | 1 | 2.00 | .016 | .05 | <.2 | .11 | 44 | .5 | .09 | 5.9 |
| L-A ON-496E | 2.82 | 47.08 | 19.37 | 178.2 | 280 | 18.3 | 10.8 | 1574 | 3.18 | 18.0 | .6 | 17.7 | .5 | 41.9 | .67 | .73 | .37 | 63 | .62 | .056 | 7.9 | 26.0 | .63 | 173.4 | .022 | 1 | 1.98 | .016 | .05 | <.2 | .14 | 42 | .5 | .11 | 6.3 |
| L-A ON-527E | 4.85 | 144.30 | 17.85 | 207.0 | 1244 | 33.9 | 15.1 | 1243 | 4.72 | 36.7 | 1.5 | 11.0 | .9 | 98.7 | 1.47 | 1.64 | .95 | 73 | 1.46 | .131 | 17.4 | 33.6 | .75 | 346.9 | .014 | 2 | 3.05 | .016 | .10 | .4 | .21 | 140 | .7 | .28 | 8.7 |
| L-A ON-558E | 2.98 | 63.72 | 12.95 | 188.5 | 271 | 24.6 | 12.5 | 627 | 3.88 | 33.2 | .6 | 31.4 | .7 | 44.6 | .44 | .96 | .61 | 70 | .64 | .052 | 8.7 | 31.5 | .71 | 176.4 | .022 | 1 | 2.19 | .014 | .07 | <.2 | .13 | 38 | .3 | .23 | 7.2 |
| L-A ON-589E | 2.47 | 45.38 | 13.60 | 147.2 | 325 | 20.3 | 8.6 | 240 | 3.63 | 36.8 | .4 | 48.2 | .9 | 23.1 | .27 | 1.07 | .55 | 65 | .28 | .061 | 5.1 | 30.7 | .50 | 139.2 | .030 | 1 | 2.08 | .013 | .04 | <.2 | .10 | 42 | .4 | .19 | 6.7 |
| L-A ON-620E | 2.31 | 60.36 | 12.75 | 170.6 | 210 | 18.9 | 13.5 | 500 | 3.25 | 20.6 | .5 | 46.8 | .5 | 31.7 | .25 | .86 | .53 | 63 | .42 | .062 | 7.0 | 26.5 | .65 | 150.5 | .025 | 1 | 2.18 | .015 | .05 | <.2 | .12 | 34 | .5 | .15 | 6.5 |
| RE L-A ON-186E | 1.95 | 70.63 | 12.15 | 104.3 | 118 | 15.6 | 9.8 | 386 | 3.32 | 21.7 | .4 | 28.5 | 1.7 | 7.7 | .20 | 1.03 | .23 | 63 | .10 | .095 | 4.0 | 25.3 | .58 | 69.5 | .053 | 1 | 2.35 | .011 | .03 | <.2 | .08 | 52 | .4 | .09 | 4.7 |
| L-A ON-651E | 4.07 | 81.20 | 17.56 | 149.0 | 314 | 22.4 | 17.4 | 958 | 3.56 | 31.3 | .6 | 25.9 | .6 | 53.8 | .61 | 1.08 | .67 | 66 | .82 | .064 | 9.8 | 24.3 | .55 | 185.2 | .026 | 1 | 2.22 | .015 | .06 | <.2 | .11 | 60 | .4 | .19 | 7.2 |
| L-A ON-682E | 3.51 | 37.09 | 13.46 | 144.6 | 638 | 17.3 | 9.3 | 262 | 4.42 | 28.6 | .3 | 33.3 | .8 | 15.5 | .48 | 1.14 | .47 | 77 | .26 | .129 | 4.3 | 28.7 | .45 | 104.5 | .047 | 1 | 2.36 | .011 | .05 | <.2 | .09 | 72 | .5 | .19 | 7.2 |
| L-A ON-713E | 7.07 | 120.86 | 13.48 | 150.2 | 428 | 23.1 | 14.1 | 1010 | 3.91 | 23.8 | .9 | 294.7 | .8 | 36.1 | .43 | 1.00 | .55 | 75 | .56 | .057 | 12.5 | 30.1 | .74 | 197.1 | .026 | 1 | 2.61 | .019 | .08 | <.2 | .18 | 56 | .4 | .16 | 8.1 |
| L-A ON-744E | 8.04 | 124.40 | 12.99 | 168.1 | 435 | 23.1 | 12.1 | 949 | 3.68 | 23.9 | 1.0 | 16.3 | .9 | 36.3 | .47 | .89 | .55 | 66 | .52 | .056 | 12.9 | 29.6 | .68 | 202.2 | .024 | 1 | 2.53 | .016 | .07 | < 2 | .16 | 54 | .4 | .16 | 7.1 |
| L-A ON-775E | 5.17 | 58.47 | 7.41 | 91.9 | 244 | 14.4 | 7.0 | 431 | 2.54 | 12.8 | .5 | 31.2 | .6 | 20.8 | .18 | .65 | .37 | 55 | .29 | .031 | 6.8 | 24.5 | .63 | 116.3 | .028 | 1 | 1.79 | .018 | .05 | <.2 | .14 | 30 | .3 | .09 | 5.9 |
| L-A ON-806E | 11.77 | 220.98 | 19.53 | 216.6 | 877 | 41.7 | 23.1 | 2818 | 4.99 | 27.5 | 1.4 | 12.6 | 1.4 | 46.7 | .90 | 1.08 | .54 | 77 | .85 | .131 | 14.4 | 43.8 | .97 | 359.9 | .009 | 1 | 4.24 | .015 | .14 | <.2 | .32 | 137 | .8 | .19 | 11.3 |
| L-A ON-837E | 2.36 | 32.86 | 11.13 | 45.6 | 192 | 7.2 | 3.8 | 119 | 2.41 | 35.4 | .3 | 28.3 | .4 | 14.6 | .24 | .78 | .44 | 63 | .15 | .035 | 5.2 | 17.9 | .20 | 108.4 | .037 | 1 | 1.04 | .011 | .06 | <.2 | .07 | 33 | .2 | .15 | 5.7 |
| L-A ON-868E | 8.46 | 83.30 | 11.84 | 92.1 | 277 | 13.7 | 8.4 | 495 | 2.65 | 12.2 | .5 | 7.8 | .8 | 18.5 | .24 | .58 | .28 | 55 | .29 | .031 | 5.9 | 23.2 | .52 | 106.0 | .018 | 1 | 1.73 | .016 | .04 | <.2 | .10 | 31 | .3 | .08 | 5.6 |
| L-A ON-899E | 16.13 | 76.41 | 9.48 | 126.1 | 172 | 12.4 | 8.8 | 658 | 3.08 | 15.2 | .3 | 20.4 | .5 | 23.0 | .50 | .82 | .30 | 68 | .37 | .044 | 4.7 | 24.1 | .46 | 141.9 | .026 | 1 | 1.47 | .015 | .05 | <.2 | .08 | 27 | .3 | .10 | 6.1 |
| L-A ON-930E | 6.39 | 105.89 | 15.24 | 117.8 | 253 | 15.5 | 10.1 | 516 | 3.29 | 21.5 | 1.0 | 10.8 | .9 | 32.0 | .49 | .82 | .37 | 65 | .36 | .052 | 15.4 | 21.7 | .43 | 179.2 | .017 | 1 | 2.04 | .014 | .05 | <.2 | .09 | 52 | .3 | .13 | 6.4 |
| L-A ON-961E | 1.94 | 28.02 | 9.78 | 123.8 | 175 | 10.8 | 5.8 | 294 | 3.07 | 12.9 | .3 | 69.5 | .7 | 16.8 | .39 | .67 | .27 | 57 | .29 | .095 | 3.6 | 20.6 | .33 | 88.7 | .020 | 1 | 1.72 | .011 | .06 | <.2 | .06 | 65 | .3 | .09 | 6.4 |
| L-A ON-992E | 1.99 | 38.31 | 12.27 | 81.8 | 141 | 14.2 | 8.9 | 520 | 3.33 | 20.2 | .2 | 85.8 | 1.1 | 8.9 | .28 | 1.15 | .31 | 67 | .11 | .035 | 3.8 | 21.9 | .44 | 83.3 | .038 | 1 | 1.53 | .014 | .03 | <.2 | .08 | 25 | .3 | .13 | 4.8 |
| STANDARD DS2 | 14.40 | 130.68 | 28.86 | 158.6 | 250 | 36.4 | 12.2 | 821 | 3.24 | 61.4 | 20.8 | 189.3 | 3.5 | 33.2 | 11.39 | 9.86 | 10.83 | 76 | .57 | .086 | 13.7 | 163.3 | .57 | 140.7 | .111 | 2 | 1.77 | .039 | .16 | 7.3 | 1.92 | 242 | 2.5 | 1.82 | 6.0 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1999 DATE REPORT MAILED: Aug 10/99 SIGNED BY: C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data FA

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-A ON-1023E | 2.13 | 48.32 | 11.84 | 180.1 | 303 | 21.6 | 11.2 | 1109 | 3.83 | 17.4 | .7 | 8.0 | .8 | 36.7 | .44 | .99 | .41 | 70 | .47 | .064 | 11.7 | 28.6 | .65 | 197.3 | .021 | 2 | 2.42 | .016 | .06 | <.2 | .15 | 46 | .3 | .12 | 8.1 |
| L-A ON-1054E | 1.99 | 33.55 | 10.46 | 98.4 | 194 | 15.3 | 8.0 | 498 | 2.72 | 12.4 | .5 | 15.4 | .7 | 24.4 | .27 | .72 | .28 | 56 | .29 | .038 | 7.6 | 22.4 | .57 | 129.1 | .035 | 1 | 1.68 | .022 | .05 | <.2 | .10 | 38 | .4 | .08 | 5.5 |
| L-A ON-1085E | 1.72 | 30.54 | 13.51 | 104.2 | 220 | 12.9 | 8.2 | 385 | 3.09 | 15.7 | .3 | 8.9 | .8 | 21.1 | .32 | .85 | .29 | 65 | .23 | .046 | 7.6 | 23.4 | .37 | 157.2 | .020 | 1 | 1.98 | .016 | .05 | <.2 | .09 | 49 | .4 | .09 | 6.7 |
| L-A ON-1116E | 1.36 | 27.66 | 13.93 | 150.0 | 151 | 16.2 | 10.9 | 348 | 3.53 | 18.2 | .3 | 14.6 | .9 | 14.2 | .42 | .96 | .22 | 70 | .20 | .086 | 3.8 | 27.9 | .51 | 146.2 | .033 | 1 | 2.06 | .014 | .05 | <.2 | .08 | 54 | .2 | .09 | 5.9 |
| L-A ON-1147E | 1 79 | 39.63 | 16.12 | 136.1 | 273 | 16.4 | 10.8 | 762 | 3.28 | 21.9 | .8 | 21.1 | 9 | 30.7 | .30 | .64 | .35 | 74 | .34 | .042 | 11.1 | 26.2 | .56 | 168.8 | .032 | 1 | 2.13 | .018 | .06 | <.2 | .12 | 44 | .3 | .09 | 6.9 |
| L-A ON-1178E | 1.81 | 29.52 | 16.76 | 109.0 | 206 | 13.8 | 9.0 | 563 | 3.56 | 24 1 | . .2 | 13.1 | .8 | 9.9 | .36 | 1.12 | .28 | 74 | .12 | .075 | 3.8 | 26.9 | .48 | 66.2 | .031 | 1 | 1.52 | .015 | .05 | <.2 | .07 | 20 | .1 | .11 | 5.8 |
| L-A ON-1209E | 1.55 | 28.44 | 11.50 | 87.6 | 182 | 12.5 | 7.5 | 612 | 2.59 | 10.5 | .4 | 9.2 | .5 | 21.0 | .26 | .61 | .25 | 56 | .24 | .037 | 8.4 | 22.5 | .48 | 123.4 | .022 | 1 | 1.69 | .016 | .04 | <.2 | .09 | 28 | .2 | .07 | 5.5 |
| L-A ON-1240E | 2.03 | 28.10 | 17.65 | 90.5 | 188 | 11.6 | 7.8 | 362 | 3.28 | 21.2 | .3 | 18.7 | .4 | 32.6 | .31 | 1.09 | .29 | 75 | .27 | .042 | 4.6 | 22.5 | .31 | 140.6 | .032 | 1 | 1.25 | .015 | .06 | <.2 | .09 | 35 | .2 | .12 | 6.0 |
| L-A ON-1271E | 1.90 | 22.55 | 16.76 | 119.0 | 192 | 13 9 | 10.8 | 769 | 3.87 | 18.7 | .2 | 9.8 | .6 | 9.8 | .42 | .97 | .36 | 79 | .14 | .142 | 3.9 | 26.3 | .43 | 101.0 | .030 | 1 | 1.75 | .013 | .04 | .2 | .10 | 30 | .2 | .11 | 6.4 |
| L-A ON-1302E | 2.09 | 52.89 | 23.04 | 162.7 | 618 | 24.9 | 15.2 | 405 | 3.88 | 38.1 | .3 | 19.0 | .8 | 13.1 | .59 | 1.34 | .34 | 70 | .18 | .085 | 4.4 | 31.4 | .64 | 106.9 | .032 | 2 | 2.60 | .014 | .05 | <.2 | .09 | 76 | .4 | .14 | 5.7 |
| L-A ON-1333E | 1.80 | 29.67 | 14.84 | 126.3 | 232 | 16.7 | 10.0 | 554 | 3.75 | 20.6 | .3 | 5.9 | .8 | 14.3 | .33 | 1.12 | .31 | 79 | .16 | .056 | 5.0 | 27.9 | .51 | 96.2 | .028 | 1 | 1.90 | .015 | .05 | <.2 | .08 | 38 | .2 | .12 | 6.7 |
| L-A ON-1364E | 1.49 | 23.71 | 15.02 | 114.9 | 335 | 13.9 | 8.9 | 595 | 3.64 | 18.3 | .3 | 39.8 | .4 | 11.2 | .59 | .87 | .36 | 78 | .15 | .090 | 4.5 | 27.1 | .39 | 102.4 | .033 | 1 | 1.65 | .014 | .04 | <.2 | .08 | 45 | .2 | .13 | 6.6 |
| L-A ON-1395E | 1.59 | 154.87 | 28.02 | 535.7 | 1095 | 45.6 | 22.0 | 1769 | 5.15 | 40.2 | 1.8 | 101.9 | 1.0 | 62.6 | 2.39 | 1.68 | 1.69 | 90 | 1.07 | .082 | 14.3 | 61.3 | 1.07 | 269.7 | .037 | 1 | 3.02 | .016 | .16 | <.2 | .25 | 95 | .6 | .69 | 8.2 |
| L-B 190N-217E | 1.73 | 29.69 | 19.12 | 300.0 | 245 | 17.2 | 13.0 | 470 | 4.49 | 28.5 | .3 | 7.5 | 1.4 | 16.4 | .46 | 1.22 | .56 | 79 | .22 | .164 | 5.0 | 34.1 | .50 | 118.3 | .038 | 1 | 2.86 | .012 | .06 | .4 | .14 | 62 | .2 | .17 | 9.2 |
| L-B 190N-248E | 1.79 | 17.88 | 13.49 | 146.0 | 220 | 12.0 | 7.0 | 246 | 4.55 | 20.8 | .2 | 21.3 | 1.0 | 12.0 | .22 | 1.05 | .45 | 108 | .14 | .066 | 4.4 | 27.3 | .38 | 85.8 | .057 | 1 | 1.73 | .013 | .05 | .2 | .09 | 55 | .1 | .17 | 10.1 |
| L-B 190N-279E | 1.38 | 29.96 | 9.60 | 136.3 | 160 | 21.5 | 9.5 | 325 | 3.59 | 13.1 | .3 | 8.2 | .7 | 18.8 | .22 | .89 | .40 | 73 | .23 | .050 | 5.1 | 55.7 | .90 | 133.9 | .058 | 1 | 2.22 | .014 | .07 | <.2 | .10 | 32 | .1 | .11 | 7.3 |
| L-B 190N-309E | 1.48 | 30.85 | 14.07 | 182.7 | 108 | 23.1 | 10.2 | 272 | 3.99 | 20.6 | .3 | 8.4 | 1.2 | 14.0 | .20 | .89 | .41 | 77 | .17 | .101 | 4.3 | 29.8 | .49 | 113.9 | .032 | 1 | 2.90 | .013 | .05 | <.2 | .10 | 50 | .1 | .12 | 8.3 |
| L-B 190N-340E | .57 | 13.66 | 7.28 | 78.7 | 164 | 7.1 | 4.5 | 241 | 1.52 | 3.0 | .2 | 26.4 | .7 | 13.4 | .10 | .36 | .25 | 35 | .17 | .030 | 5.2 | 12.3 | .29 | 70.2 | .039 | 1 | 1.18 | .015 | .04 | <.2 | .08 | 33 | .1 | .03 | 4.2 |
| L-B 190N-372E | .94 | 19.14 | 10.67 | 134.8 | 123 | 12.6 | 8.7 | 319 | 2.63 | 9.4 | .3 | 12.6 | .7 | 15.4 | .24 | .59 | .32 | 55 | .19 | .044 | 5.4 | 20.3 | .41 | 104.8 | .034 | 1 | 1.61 | .017 | .04 | <.2 | .08 | 23 | .1 | .06 | 5.4 |
| L-B 190N-403E | .97 | 11.14 | 7.77 | 57.6 | 106 | 5.3 | 2.9 | 116 | 1.80 | 5.0 | .2 | 24.5 | .7 | 12.1 | .13 | .42 | .19 | 46 | .15 | .025 | 4.0 | 11.3 | .18 | 63.0 | .041 | 1 | .82 | .013 | .03 | <.2 | .05 | 18 | <.1 | .04 | 4.3 |
| L-B 190N-434E | 1.54 | 32.50 | 13.22 | 150.1 | 251 | 18.9 | 10.9 | 396 | 3.02 | 14.8 | .4 | 40.5 | 1.3 | 15.5 | .23 | .81 | .28 | 59 | .21 | .067 | 6.0 | 22.5 | .46 | 128.8 | .033 | 1 | 2.48 | .014 | .05 | <.2 | .10 | 52 | .2 | .08 | 5.9 |
| RE L-B 190N-434E | 1.54 | 31.71 | 13.29 | 146.8 | 252 | 18.2 | 10.5 | 375 | 2.88 | 14.6 | .4 | 10.9 | 1.3 | 16.1 | .22 | .80 | .28 | 57 | .21 | .063 | 6.0 | 23.0 | .46 | 129.7 | .042 | 1 | 2.52 | .015 | .05 | <.2 | .10 | 54 | .2 | .07 | 6.0 |
| L-B 190N-465E | 2.24 | 43.25 | 17.28 | 164.2 | 328 | 16.1 | 14.1 | 1153 | 2.95 | 14.6 | .6 | 11.5 | .7 | 37.0 | .27 | .60 | .49 | 65 | .42 | .064 | 10.0 | 22.5 | .52 | 193.4 | .024 | 1 | 2.45 | .017 | .06 | <.2 | .13 | 36 | .1 | .11 | 7.3 |
| L-B 190N-496E | 3.03 | 81.29 | 22.07 | 209.7 | 606 | 28.1 | 17.4 | 1017 | 4.25 | 27.5 | 1.7 | 6.3 | 1.6 | 56.9 | .70 | .70 | .68 | 87 | 1.02 | .075 | 18.4 | 40.1 | .72 | 329.5 | .018 | 1 | 3.30 | .016 | .08 | <.2 | .15 | 73 | .3 | .16 | 10.1 |
| L-B 190N-527E | 5.09 | 149.11 | 26.92 | 269.8 | 1226 | 45.2 | 18.8 | 1597 | 5.38 | 34.9 | 3.7 | 9.6 | 2.3 | 95.3 | 1.22 | .85 | .70 | 92 | 1.12 | .097 | 36.6 | 46.6 | .92 | 454.3 | .012 | 1 | 4.35 | .017 | .12 | .3 | .22 | 114 | 1.8 | .20 | 11.8 |
| L-B 190N-558E | 1.15 | 26.04 | 10.83 | 114.7 | 246 | 14.6 | 7.4 | 350 | 2.47 | 9.9 | .3 | 17.3 | .4 | 22.8 | .22 | .59 | .33 | 50 | .27 | .048 | 6.8 | 20.4 | .52 | 120.0 | .029 | 1 | 1.84 | .018 | .05 | <.2 | .10 | 26 | .2 | .06 | 5.7 |
| L-B 190N-589E | 1.54 | 21.24 | 10.01 | 94.8 | 362 | 12.0 | 6.1 | 270 | 2.38 | 10.4 | .2 | 763.2 | .9 | 17.5 | .28 | .60 | .30 | 51 | .22 | .059 | 5.0 | 22.3 | .52 | 88.1 | .039 | 1 | 1.49 | .016 | .05 | <.2 | .08 | 29 | .1 | .08 | 6.1 |
| L-B 190N-620E | 2.05 | 30.10 | 9.26 | 109.5 | 140 | 14.3 | 8.8 | 454 | 2.58 | 11.1 | .3 | 20.8 | .9 | 17.5 | .18 | .59 | .33 | 57 | .20 | .037 | 5.7 | 24.2 | .62 | 96.0 | .044 | 1 | 1.74 | .019 | .05 | <.2 | .10 | 18 | .1 | .09 | 6.0 |
| L-B 190N-651E | 2.09 | 44.11 | 10.07 | 119.3 | 276 | 18.1 | 7.7 | 324 | 2.66 | 13.8 | .4 | 577.4 | 1.1 | 21.6 | .22 | .72 | .49 | 54 | .24 | .040 | 6.1 | 26.0 | .61 | 127.9 | .029 | 1 | 2.20 | .017 | .06 | <.2 | .12 | 45 | .2 | .11 | 6.7 |
| L-B 190N-682E | 1.10 | 21.37 | 8.13 | 82.0 | 81 | 11.3 | 5.4 | 225 | 1.87 | 5.9 | .3 | 17.2 | .7 | 15.4 | .16 | .41 | .33 | 43 | .16 | .026 | 5.1 | 19.4 | .50 | 68.7 | .036 | 1 | 1.43 | .015 | .03 | <.2 | .08 | 20 | <.1 | .05 | 5.8 |
| L-B 190N-713E | .81 | 13.19 | 8.77 | 65.0 | 66 | 10.8 | 4.8 | 229 | 1.77 | 6.8 | .3 | 23.3 | .8 | 18.8 | .07 | .39 | .24 | 44 | .24 | .033 | 5.1 | 19.1 | .49 | 70.1 | .050 | 1 | 1.25 | .020 | .03 | <.2 | .07 | 21 | .1 | .03 | 4.6 |
| L-B 190N-744E | 5.72 | 78.32 | 22.83 | 159.5 | 309 | 25.6 | 12.1 | 750 | 5.81 | 35.6 | 1.9 | 7.4 | 1.8 | 84.3 | .28 | .75 | .55 | 104 | .78 | .074 | 21.3 | 36.9 | .64 | 297.4 | .015 | <1 | 3.08 | .015 | .09 | <.2 | .15 | 81 | .4 | .16 | 9.7 |
| L-B 190N-775E | 2.27 | 29.40 | 13.39 | 88.6 | 299 | 13.1 | 12.1 | 663 | 2.41 | 11.0 | .5 | 10.4 | .9 | 37.4 | .26 | .50 | .44 | 57 | .41 | .038 | 8.8 | 18.6 | .46 | 176.6 | .021 | <1 | 2.01 | .016 | .05 | <.2 | .13 | 43 | .3 | .07 | 7.0 |
| L-B 190N-806E | 1.79 | 47.98 | 17.08 | 120.8 | 322 | 15.2 | 11.3 | 1345 | 4.78 | 26.2 | .2 | 32.9 | 1.2 | 7.6 | .24 | 1.03 | .96 | 77 | .08 | .173 | 3.5 | 25.4 | .40 | 95.8 | .030 | 1 | 2.30 | .009 | .06 | <.2 | .11 | 114 | .3 | .35 | 7.3 |
| STANDARD DS2 | 13.95 | 128.18 | 29.14 | 158.1 | 250 | 35.8 | 12.2 | 816 | 3.22 | 61.2 | 19.7 | 189.8 | 3.4 | 33.2 | 11.10 | 9.54 | 10.80 | 74 | .57 | .085 | 13.5 | 154.4 | .54 | 135.0 | .110 | 2 | 1.69 | .038 | .16 | 7.2 | 1.97 | 237 | 2.4 | 1.82 | 6.1 |

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Data ✓ FA ____

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-B 190N-837E | 1.11 | 20.95 | 7.16 | 72.7 | 50 | 9.5 | 6.3 | 251 | 2.03 | 5.6 | .3 | 12.4 | .9 | 17.3 | .13 | .50 | .18 | 44 | .17 | .016 | 5.5 | 15.7 | .44 | 116.0 | .049 | 1 | 1.61 | .023 | .03 | <.2 | .08 | 21 | .2 | .04 | 5.2 |
| L-B 190N-868E | 1.35 | 25.08 | 10.76 | 88.9 | 253 | 14.7 | 6.6 | 205 | 2.26 | 10.5 | .4 | 7.3 | 1.0 | 14.1 | .11 | .56 | .26 | 48 | .12 | .045 | 6.1 | 23.0 | .40 | 124.5 | .022 | 1 | 2.55 | .013 | .04 | <.2 | .09 | 71 | .5 | .05 | 7.3 |
| L-B 190N-930E | 1.09 | 12.72 | 10.81 | 63.6 | 197 | 7.9 | 4.9 | 230 | 2.58 | 11.0 | .3 | 14.9 | .5 | 10.4 | .16 | .65 | .22 | 58 | .09 | .027 | 4.1 | 15.9 | .23 | 76.4 | .028 | 1 | 1.20 | .014 | .04 | <.2 | .07 | 35 | .2 | .07 | 4.8 |
| L-B 190N-961E | 2.30 | 26.57 | 12.86 | 108.6 | 248 | 11.8 | 5.5 | 162 | 3.25 | 17.6 | .4 | 8.6 | .4 | 20.0 | .27 | .71 | .31 | 70 | .19 | .043 | 4.3 | 20.9 | .37 | 176.5 | .021 | 2 | 1.83 | .011 | .05 | <.2 | .07 | 59 | .3 | .10 | 7.0 |
| L-B 190N-992E | 3.53 | 16.56 | 15.03 | 111.6 | 164 | 9.6 | 6.0 | 206 | 3.91 | 26.5 | .2 | 75.9 | .5 | 8.8 | .26 | 1.27 | .47 | 106 | .11 | .062 | 3.1 | 25.7 | .28 | 80.1 | .063 | 1 | 1.20 | .013 | .03 | <.2 | .08 | 36 | .2 | .18 | 7.8 |
| L-B 190N-1023E | 1.95 | 31.71 | 15.22 | 184.5 | 213 | 19.8 | 9.9 | 343 | 4.46 | 36.6 | .2 | 14.4 | .9 | 8.8 | .41 | 1.19 | .33 | 84 | .13 | .085 | 3.4 | 28.4 | .58 | 105.1 | .037 | 1 | 2.12 | .012 | .04 | <.2 | .10 | 32 | .2 | .14 | 6.7 |
| L-B 190N-1054E | 2.06 | 13.54 | 18.43 | 90.4 | 249 | 10.3 | 6.9 | 251 | 3.78 | 26.9 | .2 | 42.2 | .7 | 12.2 | .40 | 1.19 | .40 | 104 | .13 | .049 | 4.1 | 30.8 | .30 | 79.5 | .057 | 1 | 1.13 | .014 | .04 | <.2 | .07 | 21 | .2 | .14 | 8.3 |
| RE L-B 190N-1054E | 1.95 | 13.14 | 17.84 | 83.8 | 234 | 10.7 | 6.7 | 246 | 3.75 | 25.6 | .2 | 14.2 | .6 | 11.6 | .42 | 1.20 | .41 | 99 | .13 | .048 | 3.9 | 30.3 | .30 | 80.4 | .081 | 1 | 1.18 | .018 | .05 | .3 | .08 | 29 | .2 | .12 | 7.6 |
| STANDARD DS2 | 13.61 | 128.39 | 29.50 | 158.7 | 261 | 35.5 | 12.6 | 821 | 3.25 | 61.1 | 20.4 | 194.0 | 3.3 | 33.2 | 11.83 | 9.82 | 10.65 | 74 | .57 | .086 | 13.5 | 159.0 | .55 | 137.3 | .111 | 2 | 1.72 | .037 | .16 | 7.3 | 1.99 | 233 | 2.6 | 1.83 | 6.0 |

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Data A FA ___

(ISO 9002 Accredited Co.)

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT PAM File # 9902549 Page 1 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-A 0N-0E | 2.21 | <.1 | 1.33 | 7.4 | 2.7 | .6 | .01 | 2.3 | 3.45 | 9.7 | .05 | <1 | 12.1 |
| L-A 0N-31E | 2.38 | <.1 | 1.07 | 8.0 | 3.5 | .5 | .01 | 2.2 | 3.99 | 13.5 | .05 | <1 | 15.4 |
| L-A 0N-62E | 2.12 | <.1 | 1.48 | 7.5 | 2.9 | .5 | <.01 | 2.3 | 1.28 | 6.7 | .06 | <1 | 14.1 |
| L-A 0N-93E | 1.95 | <.1 | 1.88 | 5.6 | 3.2 | .7 | <.01 | 6.1 | 1.92 | 7.4 | .04 | <1 | 11.2 |
| L-A 0N-124E | 2.41 | <.1 | .98 | 9.5 | 3.9 | .4 | <.01 | 4.2 | 2.80 | 12.8 | .05 | <1 | 10.8 |
| L-A 0N-155E | 3.06 | <.1 | 1.21 | 11.5 | 3.7 | .6 | .01 | 2.4 | 1.96 | 10.2 | .08 | <1 | 15.8 |
| L-A 0N-186E | 2.19 | <.1 | .35 | 6.4 | 4.8 | .3 | <.01 | 6.2 | 2.57 | 18.7 | .05 | <1 | 8.7 |
| L-A 0N-217E | 6.77 | <.1 | 1.53 | 12.3 | 6.7 | .8 | .04 | 4.2 | 1.52 | 10.5 | .07 | <1 | 23.5 |
| L-A 0N-248E | 6.75 | <.1 | .53 | 12.1 | 5.5 | .4 | <.01 | 2.9 | 1.54 | 9.5 | .06 | <1 | 18.6 |
| L-A 0N-279E | 1.81 | <.1 | .80 | 6.8 | 2.3 | .4 | <.01 | .7 | 2.45 | 9.2 | .04 | <1 | 10.3 |
| L-A 0N-310E | 2.15 | <.1 | .84 | 7.9 | 2.8 | .4 | <.01 | 2.5 | 1.37 | 9.1 | .05 | <1 | 11.3 |
| L-A 0N-340E | 1.60 | <.1 | .69 | 6.2 | 1.9 | .5 | .02 | .7 | 1.38 | 8.8 | .03 | <1 | 8.6 |
| L-A 0N-372E | 2.19 | <.1 | .83 | 6.3 | 3.2 | .5 | <.01 | 1.9 | 2.54 | 9.4 | .10 | <1 | 13.1 |
| L-A 0N-403E | 2.60 | <.1 | .75 | 9.3 | 1.9 | .6 | <.01 | .4 | 2.21 | 13.6 | .03 | <1 | 7.3 |
| L-A 0N-434E | 1.98 | <.1 | .37 | 6.5 | 2.6 | .3 | <.01 | .5 | 2.24 | 9.8 | .03 | <1 | 8.3 |
| L-A 0N-465E | 3.20 | <.1 | 1.03 | 8.1 | 4.1 | .5 | .01 | .4 | 6.00 | 18.9 | .05 | <1 | 13.3 |
| L-A 0N-496E | 3.53 | <.1 | 1.14 | 10.2 | 3.8 | .4 | .02 | .6 | 6.06 | 19.7 | .06 | <1 | 16.2 |
| L-A 0N-527E | 4.49 | <.1 | 2.12 | 17.4 | 8.1 | 1.0 | .09 | 2.6 | 17.28 | 29.3 | .14 | 8 | 13.8 |
| L-A 0N-558E | 3.79 | <.1 | 1.16 | 18.6 | 4.7 | .6 | .03 | .8 | 7.04 | 17.0 | .08 | <1 | 17.5 |
| L-A 0N-589E | 2.36 | <.1 | .81 | 9.8 | 3.4 | .5 | .01 | .6 | 2.86 | 12.5 | .07 | <1 | 13.6 |
| L-A 0N-620E | 3.70 | <.1 | .63 | 13.9 | 4.1 | .5 | <.01 | .3 | 4.42 | 16.3 | .06 | <1 | 14.9 |
| RE L-A 0N-186E | 2.10 | <.1 | .39 | 6.4 | 4.9 | .3 | <.01 | 6.7 | 2.57 | 19.4 | .06 | <1 | 8.6 |
| L-A 0N-651E | 2.96 | <.1 | 1.10 | 13.2 | 4.7 | .5 | .05 | .6 | 8.93 | 19.3 | .08 | <1 | 12.5 |
| L-A 0N-682E | 2.27 | <.1 | 1.78 | 11.1 | 3.4 | .5 | .02 | 1.3 | 2.14 | 9.9 | .07 | <1 | 16.0 |
| L-A 0N-713E | 4.77 | <.1 | .99 | 16.3 | 6.2 | .6 | .02 | .7 | 9.17 | 23.4 | .07 | <1 | 16.6 |
| L-A 0N-744E | 4.43 | <.1 | 1.10 | 14.9 | 6.1 | .6 | .01 | .8 | 10.11 | 24.9 | .06 | <1 | 15.6 |
| L-A 0N-775E | 3.32 | <.1 | .44 | 13.6 | 4.0 | .4 | .02 | .3 | 3.52 | 14.7 | .04 | <1 | 14.1 |
| L-A 0N-806E | 6.14 | <.1 | 1.04 | 19.3 | 10.3 | .7 | .07 | 3.9 | 12.54 | 35.7 | .10 | <1 | 23.4 |
| L-A 0N-837E | 1.03 | <.1 | .56 | 12.4 | 2.0 | .5 | .02 | .3 | 1.85 | 11.3 | .03 | <1 | 3.5 |
| L-A 0N-868E | 3.20 | <.1 | .55 | 11.1 | 3.4 | .4 | .01 | .6 | 3.53 | 12.4 | .04 | <1 | 14.1 |
| L-A 0N-899E | 2.32 | <.1 | .48 | 12.8 | 3.0 | .4 | .01 | .2 | 2.36 | 10.9 | .04 | <1 | 12.9 |
| L-A 0N-930E | 2.69 | <.1 | .68 | 10.6 | 5.3 | .5 | .01 | .6 | 10.41 | 29.0 | .05 | <1 | 11.9 |
| L-A 0N-961E | 2.13 | <.1 | 1.42 | 8.7 | 2.7 | .5 | .02 | .7 | 1.12 | 10.0 | .05 | <1 | 15.6 |
| L-A 0N-992E | 1.68 | <.1 | .50 | 7.0 | 3.1 | .3 | <.01 | 1.8 | 1.53 | 12.5 | .04 | <1 | 9.9 |
| STANDARD DS2 | 3.40 | <.1 | 1.78 | 14.4 | 3.2 | 22.9 | .01 | 3.4 | 5.18 | 29.6 | 5.50 | <1 | 12.6 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1999 DATE REPORT MAILED: Aug 10/99 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data ✓ FA ____

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-A 0N-1023E | 4.84 | <.1 | 1.14 | 10.8 | 5.9 | .8 | .05 | 1.1 | 8.99 | 32.8 | .07 | <1 | 19.5 |
| L-A 0N-1054E | 3.22 | <.1 | .65 | 8.6 | 4.0 | .5 | .02 | .6 | 4.33 | 17.9 | .04 | <1 | 13.1 |
| L-A 0N-1085E | 2.98 | <.1 | .59 | 10.9 | 3.5 | .5 | .03 | .8 | 4.23 | 18.1 | .05 | <1 | 12.0 |
| L-A 0N-1116E | 2.81 | <.1 | .70 | 7.2 | 3.2 | .4 | .03 | 1.5 | 1.45 | 10.5 | .05 | <1 | 15.6 |
| L-A 0N-1147E | 3.72 | <.1 | .98 | 9.5 | 5.1 | .6 | .03 | .6 | 7.75 | 22.7 | .05 | <1 | 16.4 |
| L-A 0N-1178E | 1.98 | <.1 | .40 | 8.8 | 3.1 | .4 | .01 | .8 | 1.12 | 9.4 | .04 | <1 | 10.9 |
| L-A 0N-1209E | 3.37 | <.1 | .63 | 10.0 | 3.3 | .4 | .02 | .4 | 4.63 | 18.4 | .04 | <1 | 11.5 |
| L-A 0N-1240E | 2.41 | <.1 | .52 | 19.1 | 2.8 | .4 | .03 | .4 | 1.38 | 11.2 | .04 | <1 | 7.1 |
| L-A 0N-1271E | 2.93 | <.1 | .55 | 9.6 | 3.0 | .3 | .01 | .6 | 1.26 | 9.3 | .05 | <1 | 15.0 |
| L-A 0N-1302E | 3.80 | <.1 | .79 | 9.7 | 3.5 | .4 | .02 | 1.4 | 1.91 | 12.3 | .06 | <1 | 13.8 |
| L-A 0N-1333E | 2.97 | <.1 | .58 | 9.8 | 3.5 | .5 | .01 | 2.4 | 1.66 | 12.4 | .05 | <1 | 16.3 |
| L-A 0N-1364E | 3.34 | <.1 | .77 | 10.4 | 2.5 | .4 | .02 | .3 | 1.25 | 10.6 | .05 | <1 | 12.9 |
| L-A 0N-1395E | 8.83 | <.1 | 1.03 | 27.6 | 12.2 | .6 | .05 | 2.0 | 16.59 | 25.9 | .20 | 2 | 26.1 |
| L-B 190N-217E | 4.29 | <.1 | 2.35 | 12.8 | 4.1 | .6 | .01 | 2.6 | 1.47 | 10.7 | .08 | <1 | 25.7 |
| L-B 190N-248E | 4.89 | <.1 | 1.39 | 10.7 | 2.8 | .8 | .01 | 1.6 | .93 | 10.1 | .05 | <1 | 17.5 |
| L-B 190N-279E | 4.15 | <.1 | .86 | 11.0 | 5.2 | .6 | .03 | .6 | 2.13 | 11.5 | .04 | <1 | 17.0 |
| L-B 190N-309E | 3.33 | <.1 | 1.32 | 11.3 | 4.0 | .6 | .02 | 3.0 | 1.83 | 11.1 | .08 | <1 | 20.9 |
| L-B 190N-340E | 2.85 | <.1 | .62 | 11.9 | 2.1 | .4 | <.01 | .4 | 1.69 | 12.8 | .03 | <1 | 9.2 |
| L-B 190N-372E | 3.02 | <.1 | .57 | 12.2 | 2.7 | .5 | <.01 | .5 | 2.09 | 12.7 | .04 | <1 | 14.3 |
| L-B 190N-403E | 1.87 | <.1 | .81 | 8.4 | 1.8 | .5 | <.01 | .9 | .85 | 8.8 | .02 | <1 | 6.9 |
| L-B 190N-434E | 3.02 | <.1 | .92 | 12.8 | 3.6 | .4 | <.01 | 2.8 | 3.24 | 15.2 | .05 | <1 | 13.0 |
| RE L-B 190N-434E | 3.08 | <.1 | .99 | 13.4 | 3.5 | .5 | <.01 | 2.6 | 3.29 | 15.4 | .05 | <1 | 12.4 |
| L-B 190N-465E | 4.22 | <.1 | .71 | 12.9 | 3.7 | .5 | .01 | .6 | 5.79 | 26.9 | .06 | <1 | 17.2 |
| L-B 190N-496E | 5.38 | <.1 | 1.47 | 16.8 | 7.6 | .8 | .03 | 2.5 | 11.63 | 30.7 | .10 | 2 | 18.1 |
| L-B 190N-527E | 6.94 | <.1 | 1.72 | 20.2 | 12.6 | 1.0 | .05 | 6.5 | 24.22 | 80.2 | .13 | 13 | 22.9 |
| L-B 190N-558E | 3.34 | <.1 | .58 | 12.3 | 2.8 | .4 | .01 | .4 | 3.81 | 16.1 | .04 | <1 | 12.7 |
| L-B 190N-589E | 2.95 | <.1 | .81 | 11.5 | 3.0 | .4 | .02 | 1.1 | 1.47 | 11.3 | .03 | <1 | 12.2 |
| L-B 190N-620E | 3.65 | <.1 | .66 | 12.1 | 3.4 | .5 | .01 | .9 | 2.15 | 13.1 | .04 | <1 | 12.5 |
| L-B 190N-651E | 3.82 | <.1 | .86 | 10.0 | 3.9 | .6 | .02 | 1.3 | 2.87 | 13.9 | .05 | <1 | 14.6 |
| L-B 190N-682E | 2.72 | <.1 | .76 | 9.1 | 2.6 | .5 | .02 | .6 | 1.48 | 11.8 | .02 | <1 | 10.9 |
| L-B 190N-713E | 2.82 | <.1 | .56 | 9.4 | 2.4 | .4 | .01 | .9 | 1.84 | 12.0 | .03 | <1 | 10.3 |
| L-B 190N-744E | 4.74 | <.1 | 1.55 | 16.8 | 7.1 | .8 | .06 | 2.5 | 11.35 | 42.9 | .10 | 3 | 20.5 |
| L-B 190N-775E | 3.90 | <.1 | .88 | 13.4 | 3.4 | .6 | .03 | .6 | 3.81 | 20.1 | .05 | <1 | 11.3 |
| L-B 190N-806E | 3.71 | <.1 | 1.00 | 10.3 | 3.5 | .5 | .02 | 2.1 | .93 | 8.4 | .08 | <1 | 17.4 |
| STANDARD DS2 | 3.30 | <.1 | 1.82 | 13.4 | 3.2 | 22.2 | .04 | 3.3 | 5.03 | 30.0 | 5.45 | <1 | 12.8 |

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

Data A FA

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-B 190N-837E | 2.39 | <.1 | .84 | 7.7 | 2.8 | .5 | <.01 | 1.7 | 2.27 | 12.6 | .03 | <1 | 10.3 |
| L-B 190N-868E | 2.27 | <.1 | 1.19 | 5.0 | 3.2 | .5 | .01 | 1.8 | 2.65 | 15.2 | .04 | <1 | 16.6 |
| L-B 190N-930E | 1.06 | <.1 | .46 | 4.1 | 1.9 | .4 | <.01 | .5 | 1.02 | 9.8 | .03 | <1 | 6.1 |
| L-B 190N-961E | 1.36 | <.1 | .98 | 4.1 | 3.0 | .5 | .01 | .4 | 1.92 | 9.6 | .05 | <1 | 11.4 |
| L-B 190N-992E | 1.36 | <.1 | .95 | 6.2 | 2.3 | .6 | <.01 | .6 | .72 | 7.3 | .04 | <1 | 6.8 |
| L-B 190N-1023E | 2.76 | <.1 | .76 | 9.5 | 3.6 | .5 | <.01 | 2.1 | 1.35 | 7.9 | .07 | <1 | 18.3 |
| L-B 190N-1054E | 2.13 | <.1 | 1.28 | 16.5 | 2.4 | .7 | <.01 | 1.0 | .80 | 9.4 | .04 | <1 | 7.9 |
| RE L-B 190N-1054E | 2.49 | <.1 | 1.46 | 18.9 | 2.5 | .8 | <.01 | .8 | .65 | 9.6 | .04 | <1 | 7.6 |
| STANDARD DS2 | 3.21 | <.1 | 1.77 | 14.0 | 3.1 | 23.7 | .03 | 3.6 | 5.18 | 30.4 | 5.70 | <1 | 13.2 |

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



Data A FA

**BRITISH COLUMBIA**
**PROSPECTORS ASSISTANCE PROGRAM**
**PROSPECTING REPORT FORM (continued)**



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) NAD **MINFILE No. if applicable** Numerous

Location of Project Area NTS 93 E/14/E **Lat** 55 50 **Long** 127 00 Locality

Description of Location and Access Approx. 101 km S. of Houston - Old Thatsa Rd. - New Rd construction & log blocks new & old S.W. & N. E. of PAM M.C.'s (Glacier Main, Smoke Mtn. Main & Sibola Main - Haul Roads)

Main Commodities Searched For Cu, Mo & Au Porphyry & Epithermal

Known Mineral Occurrences in Project Area Smoke Mtn, Tara, Sylvia, CQ & PAM - predominentaly porphyry

**WORK PERFORMED**

1. Conventional Prospecting (area) Prospecting areas as listed above
2. Geological Mapping (hectares/scale) On going during prospecting
3. Geochemical (type and no. of samples) Total of 24 samples taken as follows - 12 rock & 12 silts
4. Geophysical (type and line km) Nil
5. Physical Work (type and amount) Nil
6. Drilling (no. holes, size, depth in m, total m) Nil
7. Other (specify) Nil

**SIGNIFICANT RESULTS** Nil

Commodities Claim Name

Location (show on map) Lat Long Elevation

Best assay/sample type

Description of mineralization, host rocks, anomalies

Mineralization - Review of old Tara property. Could not locate the CQ showing. Prospected all new Rd Const. plus log blks. from last winter & old blocks S.W. & N.E. of the PAM M.C.'s. Entire area S. of Nadina & Newcomb Lakes being developed at moment

* Further follow-up required in 2000/2001

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.***

NAD PROJECT

93E/14/E

SCALE 1:50000

PROSPECTED 1999

99-05

PG. 29

PROSPECTED 99

NADINA LAKE

Nadina Lake

Morice Nadina FSR

604S007

604T048

604T045

SIBOLA MAIN

BERRY MINE RD

GLACIER MAIN

HUCKLEBERRY MINE ROAD

NAD PROJECT
SCALE 1:50 000
PROJECTED - 1999

604T01

609T018

LHBS2
LHB61
LOGGING CAMP
LHB64
SMOKE
SIBOLA MAIN
SIKUYIA
SIBOLA MAIN
TARA
L4860
L4859
L4856
OLD CAMP CORE PILE
L4857
L4858
L4877
L4878

3-COPIES

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

SILTS

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT NAD File # 9902552 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64851 | .71 | 17.12 | 7.67 | 69.5 | 56 | 20.1 | 12.6 | 772 | 2.71 | 15.3 | .5 | 8.5 | 1.0 | 28.1 | .20 | .56 | .18 | 55 | .37 | .064 | 6.2 | 23.3 | .52 | 104.5 | .039 | 1 | 1.10 | .020 | .05 | <.2 | .05 | 23 | .3 | .10 | 3.6 |
| 64852 | 1.11 | 21.21 | 8.67 | 77.7 | 114 | 23.5 | 12.8 | 573 | 2.92 | 21.5 | .5 | 5.3 | 1.1 | 33.8 | .21 | .64 | .22 | 56 | .41 | .065 | 6.5 | 23.4 | .58 | 111.4 | .034 | 1 | 1.16 | .021 | .05 | <.2 | .05 | 20 | .3 | .16 | 3.9 |
| 64853 | .94 | 21.77 | 9.22 | 82.0 | 79 | 25.1 | 13.1 | 602 | 3.07 | 24.2 | .6 | 7.9 | 1.1 | 36.8 | .21 | .59 | .20 | 56 | .43 | .066 | 6.8 | 24.8 | .62 | 127.2 | .031 | 1 | 1.26 | .023 | .05 | <.2 | .05 | 22 | .4 | .16 | 4.2 |
| 64854 | 1.47 | 35.58 | 13.42 | 122.2 | 632 | 13.4 | 11.8 | 1130 | 2.81 | 6.0 | 1.1 | 13.5 | .3 | 41.2 | .42 | .53 | .49 | 64 | .56 | .095 | 10.7 | 16.8 | .49 | 215.1 | .025 | 1 | 2.51 | .015 | .09 | .2 | .13 | 63 | .3 | .07 | 8.1 |
| 64855 | .92 | 33.77 | 8.14 | 82.3 | 171 | 23.9 | 9.6 | 583 | 2.77 | 8.4 | .9 | 11.7 | .5 | 58.8 | .40 | .73 | .27 | 57 | .81 | .089 | 11.9 | 25.1 | .54 | 185.6 | .030 | 1 | 2.43 | .016 | .09 | .3 | .11 | 70 | .3 | .07 | 5.5 |
| 64856 | 1.80 | 38.44 | 50.81 | 151.8 | 1631 | 13.2 | 10.7 | 845 | 2.59 | 7.8 | 1.1 | 5.3 | 1.7 | 29.4 | 1.08 | 6.89 | .59 | 49 | .34 | .061 | 6.0 | 14.6 | .54 | 93.1 | .060 | 1 | 1.28 | .020 | .07 | .5 | .08 | 23 | .4 | .11 | 4.1 |
| 64857 | 2.52 | 18.74 | 9.16 | 69.8 | 224 | 18.8 | 17.5 | 6210 | 3.43 | 4.4 | .9 | 24.7 | .4 | 49.8 | .38 | .39 | .32 | 60 | .78 | .123 | 11.8 | 22.7 | .39 | 266.6 | .014 | 1 | 2.13 | .011 | .05 | .4 | .27 | 105 | .6 | .05 | 5.5 |
| 64858 | 1.84 | 33.34 | 10.03 | 83.1 | 134 | 12.1 | 9.5 | 1004 | 2.72 | 8.8 | .8 | 22.0 | .8 | 44.4 | .67 | 1.07 | .27 | 60 | .68 | .084 | 9.6 | 18.6 | .49 | 187.2 | .034 | 2 | 1.82 | .019 | .11 | .4 | .11 | 67 | .5 | .09 | 4.6 |
| RE 64858 | 1.82 | 35.90 | 10.00 | 87.1 | 139 | 12.9 | 9.8 | 1043 | 2.87 | 8.9 | .8 | 53.9 | .8 | 46.7 | .68 | 1.06 | .27 | 63 | .72 | .088 | 9.9 | 19.8 | .50 | 189.7 | .037 | 2 | 1.87 | .020 | .11 | .3 | .11 | 68 | .5 | .08 | 4.9 |
| 64878 | .92 | 32.79 | 9.45 | 76.0 | 55 | 12.6 | 12.2 | 779 | 3.71 | 7.5 | .5 | 3.6 | 1.6 | 22.0 | .29 | 1.51 | .27 | 95 | .39 | .063 | 5.7 | 26.7 | .56 | 127.4 | .066 | 1 | 1.36 | .021 | .06 | .2 | .06 | 33 | .4 | .14 | 4.4 |
| 64879 | 1.98 | 29.61 | 12.06 | 161.3 | 118 | 10.0 | 8.0 | 1825 | 2.84 | 8.3 | 1.5 | 26.6 | .4 | 50.7 | 1.42 | 1.43 | .46 | 40 | .84 | .136 | 15.9 | 13.1 | .32 | 386.8 | .015 | 2 | 1.75 | .012 | .14 | .5 | .11 | 129 | .5 | .09 | 3.8 |
| 64880 | 1.63 | 35.01 | 8.02 | 59.5 | 81 | 10.6 | 11.3 | 750 | 3.04 | 7.9 | .5 | 87.7 | 1.6 | 24.8 | .27 | 2.82 | .20 | 74 | .39 | .057 | 5.3 | 17.0 | .54 | 102.5 | .065 | 1 | 1.15 | .025 | .06 | <.2 | .05 | 48 | .3 | .09 | 3.8 |
| 70550 | 2.60 | 17.45 | 13.31 | 54.3 | 405 | 10.0 | 13.5 | 2125 | 3.43 | 10.4 | .7 | 11.4 | .1 | 86.7 | .41 | .22 | .28 | 117 | .70 | .161 | 6.7 | 15.3 | .22 | 255.8 | .015 | 1 | 1.84 | .014 | .05 | <.2 | .11 | 104 | .5 | .04 | 7.5 |
| STANDARD DS2 | 13.61 | 128.39 | 29.50 | 158.7 | 261 | 35.5 | 12.6 | 821 | 3.25 | 61.1 | 20.4 | 194.0 | 3.3 | 33.2 | 11.83 | 9.82 | 10.65 | 74 | .57 | .086 | 13.5 | 159.0 | .55 | 137.3 | .111 | 2 | 1.72 | .037 | .16 | 7.3 | 1.99 | 233 | 2.6 | 1.83 | 6.0 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SILT Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** JUL 27 1999 **DATE REPORT MAILED:** Aug 10/99 **SIGNED BY:** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data / FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT NAD File # 9902552 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64851 | 1.38 | <.1 | .31 | 4.8 | 3.2 | .6 | .04 | 1.2 | 4.05 | 15.4 | .03 | <1 | 9.1 |
| 64852 | 1.51 | <.1 | .24 | 5.1 | 3.6 | .4 | .03 | 1.4 | 4.58 | 15.6 | .03 | <1 | 10.0 |
| 64853 | 1.58 | <.1 | .28 | 5.5 | 3.9 | .3 | .02 | 1.3 | 4.95 | 16.5 | .03 | <1 | 10.3 |
| 64854 | 4.05 | <.1 | .66 | 11.6 | 2.3 | .5 | .05 | .2 | 7.62 | 18.7 | .05 | <1 | 17.6 |
| 64855 | 2.51 | <.1 | 1.23 | 9.3 | 5.0 | .3 | .08 | 1.2 | 11.71 | 27.8 | .04 | 2 | 12.0 |
| 64856 | 2.05 | <.1 | .28 | 6.1 | 3.0 | .3 | .02 | 1.1 | 3.99 | 14.9 | .03 | <1 | 10.9 |
| 64857 | 2.93 | <.1 | .76 | 4.7 | 3.1 | .2 | .13 | .9 | 9.85 | 34.9 | .02 | 6 | 11.2 |
| 64858 | 2.98 | <.1 | .49 | 8.3 | 3.5 | .4 | .04 | .6 | 8.14 | 19.6 | .04 | <1 | 12.3 |
| RE 64858 | 3.05 | <.1 | .48 | 8.8 | 3.8 | .3 | .04 | .5 | 8.28 | 20.5 | .04 | <1 | 13.5 |
| 64878 | 2.57 | <.1 | .19 | 4.9 | 4.4 | .4 | .02 | .8 | 4.95 | 15.1 | .03 | <1 | 11.0 |
| 64879 | 6.73 | <.1 | .49 | 9.7 | 3.1 | .4 | .10 | .5 | 18.12 | 25.7 | .05 | <1 | 11.8 |
| 64880 | 1.48 | .1 | .12 | 3.5 | 3.2 | .3 | .04 | 1.8 | 4.30 | 14.3 | .02 | <1 | 8.8 |
| 70550 | 2.47 | <.1 | .67 | 7.3 | 1.3 | .5 | .13 | .2 | 4.57 | 18.5 | .04 | <1 | 9.5 |
| STANDARD DS2 | 3.21 | <.1 | 1.77 | 14.0 | 3.1 | 23.7 | .03 | 3.6 | 5.18 | 30.4 | 5.70 | <1 | 13.2 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SILT Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 27 1999 DATE REPORT MAILED: Aug 10/99 SIGNED BY. . . . . D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data A FA ___

Received - Aug 27/99 3- COPIES

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

# GEOCHEMICAL ANALYSIS CERTIFICATE Rock

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT NAD File # 9902551 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64859 | 3.57 | 669.27 | 11.53 | 140.6 | 2504 | 1.6 | 3.9 | 51 | 2.38 | 568.8 | .3 | 778.2 | 3.9 | 5.5 | .86 | 917.46 | .62 | 6 | .07 | .064 | 2.6 | 12.2 | .03 | 127.6 | .001 | 1 | .46 | .062 | .23 | 7.7 | .14 | 231 | 2.2 | .24 | 1.4 |
| 64860 | 5.64 | 510.32 | 9.18 | 59.1 | 231 | 4.5 | 4.9 | 533 | 1.74 | 21.3 | .3 | 59.4 | 2.9 | 13.6 | .95 | 25.73 | .46 | 8 | .24 | .041 | 1.5 | 12.7 | .08 | 198.6 | .001 | 2 | .69 | .056 | .23 | 5.1 | .10 | 12 | .6 | .13 | 1.6 |
| 64875 | 1.97 | 149.40 | 12.13 | 88.4 | 251 | 20.8 | 33.9 | 870 | 6.11 | 46.1 | <.1 | 2.7 | .3 | 20.7 | .28 | 2.85 | .38 | 124 | 1.33 | .058 | 1.0 | 39.8 | 1.68 | 78.7 | .211 | <1 | 2.65 | .056 | .03 | 3.5 | .03 | 10 | 1.5 | .36 | 8.2 |
| 64876 | 2.74 | 45.58 | 2.39 | 83.9 | 68 | 4.9 | 20.9 | 1331 | 5.11 | 6.6 | <.1 | .4 | .3 | 21.7 | .08 | .38 | .13 | 74 | 2.57 | .069 | 1.1 | 10.6 | 1.34 | 13.3 | .141 | 1 | 3.12 | .032 | .01 | 3.8 | <.02 | <5 | .5 | .15 | 7.8 |
| 64877 | 4.00 | 14.39 | 5.92 | 37.7 | 82 | 5.7 | 7.7 | 444 | 2.52 | 3.4 | .3 | 1.3 | 1.8 | 21.6 | .10 | .49 | .29 | 21 | .59 | .079 | 3.9 | 20.6 | .56 | 42.8 | .124 | 1 | .95 | .088 | .13 | 8.1 | .04 | <5 | .7 | .12 | 4.8 |
| 64881 | .87 | 21.64 | 1.54 | 25.4 | 44 | 12.5 | 9.7 | 407 | 2.12 | .8 | .8 | <.2 | 4.3 | 47.2 | .03 | .33 | .03 | 55 | .62 | .143 | 15.1 | 36.4 | .19 | 48.8 | .072 | 1 | .74 | .131 | .09 | 1.0 | .03 | 14 | <.1 | <.02 | 2.9 |
| 64882 | 1.52 | 34.19 | 5.25 | 79.4 | 61 | 23.9 | 19.1 | 835 | 1.80 | 11.0 | 1.8 | <.2 | 5.0 | 70.2 | .09 | .35 | .06 | 62 | .82 | .129 | 15.4 | 27.1 | .64 | 102.6 | .137 | <1 | 1.28 | .111 | .15 | .6 | .09 | 1048 | <.1 | <.02 | 3.9 |
| 64883 | .70 | 29.05 | 3.53 | 59.9 | 42 | 19.7 | 10.7 | 349 | 1.36 | 5.6 | 1.1 | <.2 | 3.3 | 42.8 | .08 | .28 | .04 | 42 | .57 | .137 | 12.6 | 36.4 | .31 | 94.6 | .071 | 1 | .61 | .110 | .37 | .3 | .04 | 170 | <.1 | <.02 | 2.1 |
| RE 64883 | .71 | 29.03 | 3.74 | 60.9 | 43 | 19.0 | 10.4 | 349 | 1.35 | 5.7 | 1.1 | <.2 | 3.4 | 42.1 | .10 | .29 | .04 | 42 | .57 | .136 | 13.0 | 38.4 | .32 | 96.3 | .072 | 1 | .61 | .112 | .40 | .3 | .04 | 189 | <.1 | <.02 | 2.2 |
| 64884 | 1.94 | 28.67 | 4.11 | 40.2 | 54 | 19.5 | 10.1 | 260 | 1.77 | 80.6 | 1.1 | <.2 | 3.1 | 53.6 | .07 | .40 | .04 | 39 | .68 | .137 | 11.5 | 40.5 | .42 | 97.8 | .050 | 1 | .73 | .156 | .22 | .6 | .27 | 599 | .3 | <.02 | 2.3 |
| 64885 | 1.89 | 27.73 | 3.95 | 74.9 | 25 | 17.5 | 6.6 | 359 | 2.53 | 66.9 | 1.4 | 4.0 | 2.8 | 60.1 | .04 | .16 | .03 | 46 | .53 | .093 | 8.7 | 30.0 | .26 | 1587.9 | .065 | <1 | 1.28 | .219 | .26 | .2 | .07 | 40 | .2 | <.02 | 3.8 |
| 64886 | 4.87 | 742.41 | 5.96 | 44.7 | 676 | 6.6 | 10.6 | 525 | 3.01 | 4.2 | .6 | 82.3 | 3.0 | 66.1 | .21 | 1.50 | .36 | 53 | 1.61 | .058 | 4.7 | 16.7 | .44 | 79.3 | .061 | 2 | .68 | .075 | .17 | 6.4 | .06 | 6 | .5 | .19 | 3.0 |
| 64887 | 8.91 | 19.42 | 56.85 | 187.7 | 285 | 2.7 | 8.1 | 402 | 2.15 | 6.6 | 1.3 | 7.3 | 2.5 | 70.1 | 1.40 | 1.52 | .63 | 3 | 1.54 | .034 | 3.2 | 9.4 | .16 | 82.8 | .001 | 2 | .50 | .039 | .30 | 6.0 | .10 | 50 | .9 | .32 | 1.2 |
| STANDARD DS2 | 13.95 | 132.10 | 29.87 | 160.3 | 249 | 36.9 | 12.5 | 835 | 3.36 | 59.9 | 19.2 | 187.4 | 3.4 | 30.6 | 11.30 | 9.76 | 10.40 | 75 | .58 | .087 | 13.2 | 152.2 | .52 | 131.8 | .107 | 2 | 1.64 | .037 | .16 | 7.1 | 1.90 | 235 | 2.4 | 1.77 | 5.9 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** JUL 27 1999 **DATE REPORT MAILED:** Aug 10/99 **SIGNED BY** C. Leong ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

HBL



Data ✓ FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT NAD File # 9902551 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64859 | 2.83 | <.1 | <.02 | 8.2 | .7 | .2 | .46 | 2.1 | 2.64 | 8.3 | .24 | 4 | .4 |
| 64860 | 4.34 | <.1 | <.02 | 9.6 | 1.0 | .2 | .49 | 2.6 | 2.82 | 4.2 | .08 | 17 | 2.0 |
| 64875 | .64 | .1 | .02 | .8 | 10.0 | .9 | 1.03 | 3.8 | 3.99 | 3.0 | .04 | <1 | 18.1 |
| 64876 | .51 | .1 | .03 | .4 | 5.0 | .4 | .68 | 6.8 | 5.45 | 3.5 | .02 | 1 | 14.1 |
| 64877 | .23 | .1 | .19 | 5.1 | 3.1 | .4 | .90 | 1.8 | 9.66 | 10.0 | <.02 | 2 | 7.1 |
| 64881 | 4.79 | <.1 | <.02 | 6.9 | 5.4 | .3 | <.01 | 7.1 | 7.61 | 37.8 | .03 | <1 | 1.0 |
| 64882 | 2.38 | <.1 | .02 | 10.1 | 3.2 | .8 | .26 | 3.2 | 9.19 | 36.7 | .02 | <1 | 2.6 |
| 64883 | 1.87 | <.1 | .04 | 28.0 | 3.1 | .5 | .08 | 7.4 | 8.46 | 31.2 | .02 | <1 | 3.5 |
| RE 64883 | 1.90 | .1 | <.02 | 28.4 | 3.1 | .5 | .08 | 7.5 | 8.59 | 32.1 | .02 | <1 | 3.7 |
| 64884 | .94 | <.1 | .04 | 16.0 | 2.8 | .5 | .89 | 9.2 | 5.38 | 28.2 | .02 | 1 | 4.0 |
| 64885 | 4.89 | <.1 | <.02 | 27.3 | 2.6 | .4 | .10 | 4.0 | 4.40 | 20.9 | .02 | 2 | 1.4 |
| 64886 | 1.99 | .1 | .14 | 8.2 | 2.9 | .7 | .55 | 3.4 | 4.55 | 11.5 | .08 | 12 | 3.5 |
| 64887 | 3.45 | <.1 | <.02 | 13.1 | .5 | .3 | 2.08 | 5.1 | 4.42 | 7.7 | .03 | 19 | 1.1 |
| STANDARD DS2 | 3.06 | <.1 | 1.91 | 14.8 | 2.9 | 23.4 | .02 | 3.4 | 5.17 | 30.0 | 5.11 | <1 | 13.5 |

15 GRAM SAMPLE IS DIGESTED WITH 90 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 300 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** JUL 27 1999 **DATE REPORT MAILED:** Aug 10/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data 1 FA ___

# BRITISH COLUMBIA
# PROSPECTORS ASSISTANCE PROGRAM
# PROSPECTING REPORT FORM (continued)



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

---

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

**Project Area (as listed in Part A)** O.G.D.P. **New Project "Ches"** **MINFILE No. if applicable** A/R #17679

**Location of Project Area NTS** 93 F 5/E **Lat** 53 25 **Long** 125 42

**Description of Location and Access** 32 km South of the East Ootsa Barge (Fraser Lake Sawmills)

**Main Commodities Searched For** Cu, Zn, Mo, Co, Ag & Au

**Known Mineral Occurrences in Project Area** Skarn - with (3) structural zones of Massive Sulphides plus sulphides visible in between. In addition, there is stockwork mineralization exposed in Road Cuts.

**WORK PERFORMED**

1. **Conventional Prospecting (area)** Mainly on area. Intrusive rock & sediments
2. **Geological Mapping (hectares/scale)** Limited to date - due to overburden
3. **Geochemical (type and no. of samples)** Silts & soils in between lines taken from Leask Bros. - Exo M.C.
4. **Geophysical (type and line km)** Nil to date - previous VLF-EM & MAG taken previous
5. **Physical Work (type and amount)** On going - rock quary
6. **Drilling (no. holes, size, depth in m, total m)** Nil to date
7. **Other (specify)** N/A - other than enlarging a present large rock quarry for road construction(90x20 metres) (Fraser Lk Sawmill)

**SIGNIFICANT RESULTS**

**Commodities** Cu, Zn, Co, Mo, Ag & Au **Claim Name** CHES #1 to 6 inclusive

**Location (show on map) Lat** 53 25 **Long** 125 42 **Elevation**

**Best assay/sample type**

**Description of mineralization, host rocks, anomalies** (1) Mineralization - Skarn type of structural massive sulphides within intruded sediments with visible mineralization between (Open Pit (Quarry)) under development - Present Size (90m x 20m) plus stockwork porphyry type mineralization within limey siltstones & limestones to east.

Host Rocks - Main showing to date lies within intruded limey sediments.

Anomalies - Several significant geological soil, MAG & EM anomalies have yet to be tested.

N.B. - Note - Small Cretacious Granite Intrusion on E. side of M.C.'s is the age class between (76-79)MA. This is "Bulkley" Ass. Report to Follow

**Request a conidentiality period for a minimum period of 2 years. Further project work contemplated for 2000/2001

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.***



No mention of Shawn Turford (40%) On Jan 15, 12 or 13 Ralph said this

MAP OF CHES M.C.S #1 to 6 incl

SCALE 1:20 000

Ref- PIT - ROCK QUARRY

SWAMP

11+00N

8+50N

7+50N

10TH CAR 120°

APPROX LOCATION OF "EXO "M.C."

GUN LAKE

NORTH KETACHAK PLUTON (76-79)Ma

LAKE

SEE MAP 93F.032

99-05 pg. 37

109 R. 60

60 R.

316000 317000 318000 319000 320000 321000 322000 323000 324000

# Rough Sketch Map of Rock Quarry (Pit) on Ches M.C.'s — Ches Project

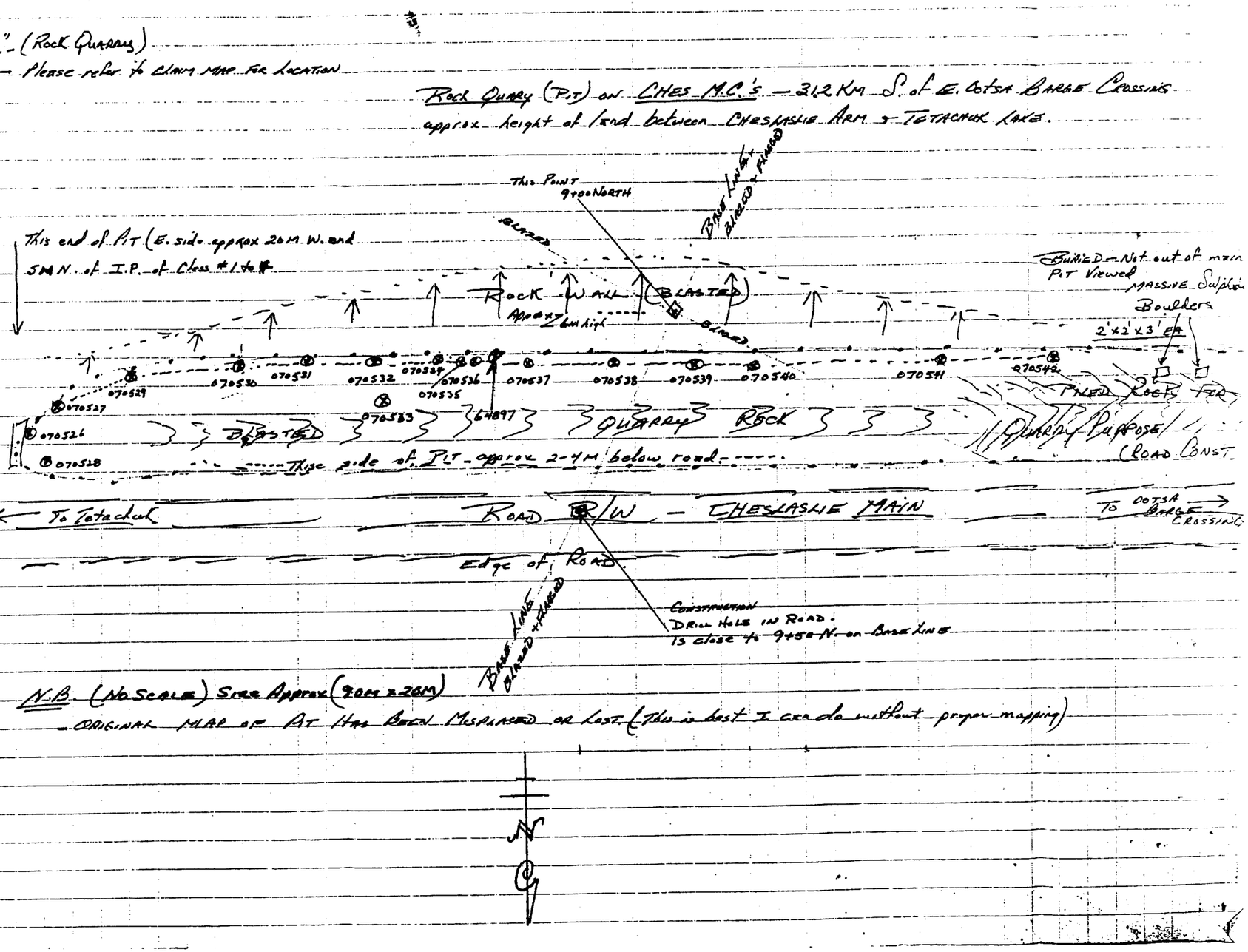
**Samples "Ches Project" - (Rock Quarry)**

- Please refer to Claim Map for Location

070526 \
27 — / West end.
28
29 - Approx 10M - W.
30 — " 10 M - further W.
31 " 8 M. S. of 30
32 " 6 M W. of 30
33 " 6 M W. of 32
34 " 4 M W. of 33
35 " 5 M W. of 34
36 " 2 M W. of 35
37 " 6 M W. of 36
38 " 8 M W. of 37
39 " 7 M W. of 38
40 " 5 M W of 39
41 " More W. end of Pit
42 " W. end of Pit
64897 " Centre of Pit

N.B. Additional M.S. further to W. not sampled to-date
Nov 16/99

Rock Quarry (Pit) on Ches M.C.'s — 21.2 KM S. of E. Cotsa Barge Crossing
approx height of land between Cheslaslie Arm + Tetachuk Lake.



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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT CHES File # 9901986

405 - 470 Granville St., Vancouver BC V6C 1V5

| 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 | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Au* ppb | Hg ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 070526 DR | 20 | 635 | 11 | 564 | .9 | 2 | 5 | 569 | 2.99 | <2 | <8 | <2 | 2 | 6 | 6.3 | 3 | 6 | 6 | .27 | .018 | 4 | 15 | .45 | 18 | .04 | <3 | .63 | .09 | .02 | 24 | 5 | <10 |
| 070527 DR | 4 | 148 | 7 | 539 | <.3 | 4 | 3 | 197 | 1.53 | 5 | <8 | <2 | 2 | 6 | 6.3 | <3 | 3 | 4 | .25 | .031 | 5 | 11 | .16 | 42 | .04 | <3 | .39 | .09 | .07 | 8 | 1 | <10 |
| 070528 DR | 12 | 149 | 84 | 197 | .7 | 2 | 1 | 1006 | .55 | 17 | 11 | <2 | <2 | 28 | 1.4 | <3 | 4 | 3 | 3.27 | .006 | 8 | 2 | .10 | 39 | <.01 | <3 | .58 | .02 | .23 | 2 | 1 | <10 |
| 070529 DR | 17 | 1178 | 6 | 118 | 1.6 | 4 | 4 | 265 | 2.10 | 13 | <8 | <2 | <2 | 9 | 1.2 | <3 | <3 | 4 | .37 | .027 | 3 | 11 | .22 | 14 | .02 | <3 | .45 | .07 | .04 | 10 | 8 | <10 |
| 070530 DR | 6 | 134 | 6 | 47 | <.3 | 6 | 3 | 309 | 1.58 | 4 | 10 | <2 | <2 | 6 | .2 | <3 | <3 | 7 | .36 | .011 | 2 | 13 | .32 | 22 | .04 | <3 | .59 | .10 | .07 | 10 | 1 | <10 |
| 070531 DR | 3 | 95 | 3 | 27 | <.3 | 4 | 3 | 274 | 2.02 | 6 | 8 | <2 | <2 | 8 | <.2 | <3 | <3 | 6 | .52 | .014 | 4 | 12 | .31 | 26 | .04 | <3 | .60 | .10 | .08 | 11 | 1 | <10 |
| 070532 DR | 5 | 271 | 6 | 53 | .6 | 5 | 3 | 322 | 2.57 | <2 | <8 | <2 | 2 | 8 | <.2 | <3 | <3 | 3 | .47 | .013 | 2 | 5 | .22 | 21 | .04 | 3 | .45 | .10 | .04 | 9 | 1 | <10 |
| 070533 DR | 2 | 453 | 10 | 454 | 1.0 | 7 | 3 | 420 | 2.17 | <2 | 11 | <2 | 2 | 8 | 4.6 | <3 | 8 | 14 | .58 | .029 | 3 | 22 | .18 | 9 | .06 | <3 | .44 | .11 | .05 | 24 | 2 | <10 |
| 070534 DR | 3 | 689 | 23 | 347 | 1.3 | 7 | 5 | 459 | 2.63 | 4 | <8 | <2 | <2 | 12 | 2.5 | <3 | <3 | 23 | .82 | .038 | 4 | 9 | .25 | 25 | .08 | 5 | .64 | .10 | .12 | 105 | 3 | <10 |
| 070535 DR | 13 | 243 | 11 | 613 | .4 | 3 | 3 | 281 | 2.20 | 3 | 16 | <2 | 2 | 13 | 6.5 | <3 | <3 | 8 | .69 | .039 | 3 | 8 | .08 | 38 | .07 | 6 | .56 | .10 | .09 | 12 | 2 | <10 |
| 070536 DR | 6 | 12049 | 29 | 592 | 23.0 | 57 | 199 | 3774 | 13.41 | 82 | <8 | <2 | 3 | 22 | 9.6 | <3 | 6 | 38 | 2.96 | .135 | 4 | 25 | .76 | 18 | .09 | 9 | 1.99 | .11 | .09 | 1014 | 37 | <10 |
| RE 070536 DR | 5 | 11973 | 26 | 589 | 22.9 | 60 | 198 | 3767 | 13.42 | 77 | <8 | <2 | 3 | 23 | 9.5 | <3 | <3 | 38 | 2.95 | .135 | 4 | 24 | .76 | 22 | .09 | <3 | 2.00 | .11 | .09 | 1026 | 41 | <10 |
| 070537 DR | 1 | 150 | 16 | 1617 | .4 | 9 | 7 | 2929 | .87 | 7 | 21 | <2 | 4 | 39 | 14.4 | <3 | 12 | 13 | 16.66 | .060 | 3 | 3 | .01 | 26 | .06 | 3 | .61 | .12 | .04 | 6 | 2 | 15 |
| 070538 DR | 3 | 76 | 10 | 549 | <.3 | 5 | 3 | 223 | 1.84 | 2 | <8 | <2 | <2 | 10 | 7.3 | <3 | <3 | 8 | .68 | .024 | 3 | 13 | .33 | 16 | .06 | <3 | .73 | .07 | .08 | 13 | 2 | 10 |
| 070539 DR | 9 | 1200 | 3 | 161 | 1.8 | 18 | 11 | 2000 | 4.49 | <2 | <8 | <2 | <2 | 9 | <.2 | 5 | <3 | 17 | 2.79 | .070 | 4 | 12 | .12 | 12 | .05 | 10 | 1.05 | .04 | .01 | 1368 | 6 | <10 |
| 070540 DR | 8 | 803 | 14 | 103 | 2.0 | 48 | 104 | 1355 | 25.97 | 26 | <8 | <2 | 5 | 10 | 1.8 | <3 | 4 | 13 | 1.02 | .048 | 2 | 23 | .13 | 17 | .03 | <3 | .85 | .06 | <.01 | 2449 | 5 | 15 |
| 070541 DR | 18 | 46 | 17 | 10256 | <.3 | 8 | 8 | 1582 | 1.25 | 2 | 9 | <2 | <2 | 13 | 110.3 | <3 | <3 | 13 | 2.60 | .047 | 3 | 19 | .10 | 12 | .09 | <3 | 1.00 | .08 | .05 | 32 | 1 | 20 |
| 070542 DR | 11 | 6277 | <3 | 564 | 8.2 | 33 | 45 | 2652 | 17.05 | 24 | <8 | <2 | 3 | 5 | 8.8 | <3 | <3 | 40 | 2.55 | .089 | 3 | 23 | .17 | 3 | .04 | <3 | .94 | .03 | .01 | 1709 | 29 | <10 |
| STANDARD C3/AU-R | 26 | 67 | 36 | 164 | 5.5 | 36 | 11 | 781 | 3.29 | 54 | 26 | 2 | 21 | 28 | 23.5 | 19 | 21 | 79 | .56 | .085 | 19 | 164 | .60 | 152 | .08 | 20 | 1.81 | .04 | .15 | 20 | 553 | 920 |
| STANDARD G-2 | 2 | 5 | 7 | 45 | <.3 | 7 | 4 | 572 | 2.11 | <2 | 11 | <2 | 7 | 77 | <.2 | <3 | <3 | 43 | .68 | .096 | 9 | 76 | .62 | 238 | .13 | <3 | 1.02 | .09 | .48 | 2 | <1 | <10 |

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) HG ANALYSIS BY FLAMELESS AA.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUL 2 1999 DATE REPORT MAILED: July 8/99 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data FA

3 - Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Rock

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT CHES File # 9902878 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64897 | 10.76 | 9109.07 | 6.88 | 1443.4 | 12511 | 38.2 | 31.9 | 2495 | 17.50 | 2.7 | 4.4 | 17.1 | 2 | 2.1 | 13.32 | .35 | 2.89 | 33 | 2.54 | .038 | 1.2 | 22.2 | .06 | 4.6 | .038 | <1 | .89 | .009< | .01 | 368 | 3 < | 0.2 | 226 | 21.8 | 55.4 | 7 |
| STANDARD DS2 | 14.40 | 135.08 | 31.49 | 171.5 | 254 | 38.7 | 13.3 | 847 | 3.31 | 65.5 | 22.0 | 206.8 | 3.1 | 32.2 | 11.48 | 9.98 | 11.63 | 84 | .57 | .086 | 14.3 | 181.7 | .64 | 151.6 | .120 | 2 | 1.89 | .040 | .17 | 7 | 1.1 | 1.98 | 259 | 2.5 | 1.35 | 5.3 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: Aug 30/99 SIGNED BY: C. Leong p. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data f FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT CHES File # 9902878 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64897 | .04 | .8 | .09 | .1 | 1.4 | 4.6 | 5.23 | 5.4 | 4.01 | 3.3 | .67 | 4 | 1.0 |
| STANDARD DS2 | 2.81 | <.1 | 2.01 | 14.3 | 3.2 | 23.6 | .02 | 4.2 | 5.71 | 31.9 | 5.97 | <1 | 13.9 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER FOLLOWED BY ANALYSIS BY ICP/ES & MS. THIS LEACH IS PARTIAL FOR ALL ELEMENTS.
- SAMPLE TYPE: ROCK

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: Aug 30/99 SIGNED BY..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data F FA

— 5 Copies —

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

**Hudson Bay Expl. & Dev. Co. Ltd. PROJECT CHES** File # 9904243 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167907 | 1.71 | 35.92 | 10.19 | 86.9 | 321 | 10.8 | 8.9 | 615 | 2.68 | 19.7 | .6 | 1.8 | .8 | 29.6 | .53 | .52 | .50 | 65 | .72 | .047 | 10.3 | 15.7 | .45 | 90.3 | .112 | <1 | 1.46 | .016 | .07 | .4 | .15 | 73 | .3 | .04 | 4.5 |

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 12/99 **SIGNED BY.** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT CHES File # 9904243 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167907 | 2.65 | <.1 | 1.54 | 8.4 | 4.4 | .4 | .04 | 1.8 | 12.71 | 18.0 | .03 | 2 | 10.6 |

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 12/99 **SIGNED BY** C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data A FA

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

**Hudson Bay Expl. & Dev. Co. Ltd. PROJECT 2318** File # 9904106 Page 1 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Jason K. Dunning

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99RLLS008851+ 00E | 1.53 | 12.12 | 9.48 | 140.5 | 123 | 13.9 | 7.8 | 229 | 3.17 | 13.5 | .3 | 1.0 | 1.4 | 12.1 | .27 | .56 | .51 | 80 | .12 | .038 | 5.4 | 19.3 | .27 | 90.4 | .162 | 1 | 2.14 | .008 | .02 | .4 | .06 | 45 | .3 | .07 | 5.5 |
| 99RLLS008852+ 025E | 1.72 | 16.94 | 9.24 | 160.4 | 116 | 11.6 | 6.2 | 259 | 2.51 | 8.1 | .3 | 1.3 | 1.1 | 10.6 | .33 | .39 | .49 | 68 | .11 | .035 | 5.1 | 17.6 | .25 | 95.2 | .146 | 1 | 2.01 | .006 | .02 | .5 | .06 | 48 | .3 | .04 | 5.5 |
| 99RLLS008853+ 050E | 2.38 | 227.43 | 10.27 | 472.7 | 91 | 14.3 | 6.6 | 307 | 2.40 | 7.5 | .7 | 2.7 | 1.3 | 30.5 | 1.43 | .51 | .75 | 61 | .39 | .026 | 14.0 | 17.2 | .33 | 72.5 | .156 | 1 | 1.59 | .012 | .03 | .3 | .10 | 45 | .1 | .11 | 5.0 |
| 99RLLS008854+ 075E | 1.12 | 9.69 | 7.21 | 132.1 | 80 | 13.6 | 8.8 | 261 | 2.80 | 4.9 | .4 | .6 | 1.5 | 14.4 | .28 | .30 | .22 | 75 | .15 | .067 | 7.2 | 19.7 | .28 | 88.2 | .148 | 1 | 2.07 | .007 | .04 | .2 | .05 | 38 | .3 | .04 | 5.4 |
| 99RLLS008855+100E | 1.45 | 7.68 | 9.53 | 200.0 | 190 | 9.9 | 6.2 | 225 | 3.22 | 5.0 | .4 | .5 | 1.6 | 12.3 | .83 | .25 | .21 | 85 | .13 | .110 | 6.2 | 23.2 | .18 | 60.2 | .156 | 1 | 2.61 | .007 | .03 | .3 | .05 | 53 | .4 | .04 | 7.2 |
| 99RLLS008856+ 125E | 1.05 | 10.61 | 7.36 | 236.0 | 235 | 7.6 | 6.9 | 237 | 2.67 | 3.9 | .3 | 58.6 | 1.3 | 13.0 | 1.18 | .27 | .19 | 74 | .14 | .089 | 6.1 | 15.5 | .23 | 51.6 | .127 | 1 | 1.70 | .007 | .04 | .2 | .04 | 39 | .2 | .02 | 5.3 |
| 99RLLS008857+ 150E | 1.21 | 9.51 | 6.49 | 139.2 | 208 | 9.0 | 5.9 | 225 | 2.54 | 4.3 | .4 | 1.6 | 1.5 | 15.4 | .37 | .28 | .14 | 71 | .17 | .035 | 7.0 | 17.4 | .25 | 79.3 | .142 | 1 | 1.84 | .009 | .03 | .2 | .03 | 27 | .2 | .02 | 4.4 |
| 99RLLS008858+ 175E | 1.34 | 10.15 | 7.02 | 165.6 | 61 | 8.1 | 6.8 | 511 | 2.30 | 3.3 | .4 | .5 | 1.4 | 27.0 | .34 | .36 | .25 | 74 | .51 | .015 | 7.4 | 20.3 | .47 | 49.4 | .217 | <1 | 1.18 | .013 | .04 | <.2 | .05 | 15 | .2 | .03 | 4.5 |
| 99RLLS008859+ 200E | 1.64 | 58.30 | 7.27 | 241.6 | 360 | 12.4 | 6.4 | 506 | 2.52 | 5.6 | .6 | 1.0 | .6 | 66.3 | 2.49 | .63 | .38 | 61 | 1.70 | .053 | 24.4 | 20.1 | .27 | 105.1 | .092 | 1 | 1.84 | .011 | .05 | .2 | .12 | 75 | 1.0 | .06 | 5.1 |
| 99RLLS008860+ 225E | .85 | 6.67 | 6.77 | 134.5 | 178 | 7.0 | 4.6 | 205 | 2.52 | 3.7 | .3 | .4 | 1.3 | 12.7 | .37 | .27 | .14 | 75 | .15 | .069 | 5.7 | 17.8 | .21 | 53.3 | .137 | 1 | 1.60 | .007 | .03 | .2 | .03 | 25 | .2 | .03 | 4.8 |
| 99RLLS008862+ 275E | 1.71 | 20.83 | 6.50 | 191.2 | 221 | 11.3 | 10.2 | 491 | 2.93 | 4.8 | .3 | 3.1 | 1.3 | 10.8 | .70 | .32 | .63 | 81 | .12 | .095 | 5.1 | 23.8 | .20 | 52.5 | .145 | 1 | 1.93 | .007 | .03 | .5 | .06 | 46 | .2 | .07 | 5.3 |
| 99RLLS008863+ 300E | 2.55 | 17.63 | 7.68 | 98.7 | 185 | 14.0 | 7.3 | 255 | 3.64 | 7.2 | .4 | .8 | 1.5 | 15.0 | .35 | .36 | .22 | 106 | .17 | .047 | 6.6 | 26.0 | .29 | 72.6 | .175 | 1 | 2.02 | .007 | .03 | .2 | .04 | 57 | .3 | .05 | 5.8 |
| 99RLLS008864+ 325E | 4.65 | 69.84 | 6.40 | 336.8 | 136 | 14.5 | 9.0 | 323 | 2.58 | 3.7 | .5 | 1.0 | 1.5 | 28.3 | 1.11 | .33 | .24 | 69 | .39 | .016 | 8.1 | 20.1 | .31 | 65.9 | .164 | <1 | 1.36 | .009 | .03 | 1.0 | .05 | 26 | .5 | .04 | 4.2 |
| 99RLLS008865+ 350E | 2.01 | 14.75 | 6.99 | 252.9 | 176 | 17.9 | 10.3 | 270 | 3.49 | 8.2 | .4 | .6 | 1.6 | 13.8 | 1.40 | .37 | .20 | 94 | .14 | .040 | 6.5 | 25.9 | .28 | 77.1 | .169 | 1 | 2.35 | .007 | .03 | .2 | .05 | 43 | .3 | .06 | 6.0 |
| 99RLLS008867+ 400E | 2.25 | 16.06 | 7.21 | 110.3 | 172 | 8.8 | 6.4 | 230 | 3.01 | 8.7 | .3 | 1.9 | 1.1 | 10.4 | .34 | .39 | .74 | 85 | .11 | .035 | 6.2 | 23.3 | .27 | 52.1 | .167 | <1 | 1.79 | .007 | .02 | .3 | .07 | 37 | .3 | .09 | 5.4 |
| 99RLLS008868+ 425E | 16.05 | 330.10 | 9.75 | 172.0 | 294 | 14.9 | 13.6 | 384 | 3.32 | 21.2 | .5 | 3.8 | 1.7 | 19.7 | .37 | 1.04 | 1.00 | 81 | .14 | .032 | 8.0 | 24.9 | .46 | 83.3 | .162 | 1 | 2.00 | .011 | .04 | 12.3 | .10 | 46 | .7 | .13 | 5.3 |
| 99RLLS008869+ 450E | 18.93 | 314.92 | 11.92 | 186.3 | 1147 | 9.8 | 14.5 | 653 | 5.83 | 34.2 | .4 | 1.8 | 1.3 | 25.5 | .78 | 2.36 | 1.89 | 88 | .22 | .142 | 4.3 | 16.6 | .42 | 45.6 | .122 | 1 | 2.16 | .008 | .04 | 6.4 | .11 | 80 | 1.3 | .39 | 7.3 |
| RE 99RLLS008877 | 1.73 | 37.15 | 8.97 | 153.0 | 198 | 9.8 | 5.1 | 244 | 2.21 | 8.7 | .3 | 7.0 | .8 | 23.7 | .24 | .56 | .59 | 57 | .46 | .024 | 5.4 | 14.9 | .26 | 45.4 | .123 | 1 | 1.09 | .014 | .02 | .9 | .06 | 19 | .2 | .08 | 3.7 |
| 99KFFS008870+ 00 | 1.42 | 10.76 | 8.65 | 116.9 | 83 | 7.7 | 6.6 | 429 | 2.07 | 6.4 | .4 | 7.1 | 1.1 | 29.1 | .37 | .38 | .29 | 58 | .60 | .016 | 7.0 | 16.9 | .37 | 55.7 | .172 | 1 | 1.14 | .013 | .03 | .3 | .07 | 27 | .3 | .03 | 4.2 |
| 99KFFS008871+ 025E | 1.37 | 21.71 | 8.13 | 156.1 | 162 | 9.8 | 7.3 | 506 | 2.53 | 16.3 | .8 | 9.2 | .9 | 36.2 | .76 | .39 | .36 | 62 | .89 | .041 | 9.8 | 19.8 | .33 | 78.0 | .113 | 1 | 1.32 | .014 | .04 | .2 | .07 | 44 | .6 | .03 | 4.2 |
| 99KFFS008872+ 050E | 1.25 | 8.51 | 7.03 | 137.2 | 36 | 8.0 | 5.6 | 224 | 2.39 | 11.2 | .3 | 10.4 | 1.0 | 19.7 | .47 | .31 | .18 | 81 | .34 | .010 | 5.6 | 20.1 | .22 | 48.9 | .205 | 1 | 1.12 | .009 | .03 | <.2 | .05 | 16 | .1 | <.02 | 4.3 |
| 99KFFS008873 +075E | 1.89 | 29.22 | 8.53 | 325.1 | 211 | 10.2 | 8.1 | 660 | 2.62 | 32.8 | .7 | 11.8 | 1.3 | 25.0 | 1.29 | .63 | .35 | 63 | .53 | .028 | 8.6 | 15.8 | .37 | 60.4 | .134 | 1 | 1.41 | .012 | .03 | .2 | .10 | 44 | .7 | .02 | 4.5 |
| 99KFFS008874 + 100E | .69 | 5.76 | 24.18 | 68.9 | 71 | 5.8 | 3.4 | 149 | 1.24 | 3.2 | .3 | 13.6 | .8 | 12.8 | .19 | .20 | .60 | 44 | .14 | .010 | 5.1 | 11.4 | .22 | 47.8 | .140 | 1 | 1.09 | .007 | .02 | <.2 | .05 | 20 | .1 | .02 | 5.6 |
| 99KFFS008875+ 125E | 1.45 | 11.87 | 8.83 | 100.0 | 112 | 10.8 | 5.4 | 200 | 3.36 | 11.3 | .3 | 31.3 | 1.4 | 13.0 | .22 | .40 | .33 | 85 | .13 | .039 | 6.1 | 22.8 | .26 | 79.8 | .146 | <1 | 2.14 | .006 | .02 | .2 | .05 | 51 | .2 | .07 | 5.8 |
| 99KFFS008876+ 150E | 1.36 | 10.44 | 7.41 | 59.4 | 76 | 10.9 | 5.3 | 187 | 2.91 | 9.8 | .3 | 15.6 | 1.3 | 10.2 | .16 | .39 | .21 | 78 | .11 | .058 | 5.0 | 25.7 | .24 | 75.3 | .149 | <1 | 1.89 | .006 | .02 | .3 | .04 | 41 | .2 | .03 | 4.9 |
| 99KFFS008877+ 175E | 1.82 | 37.92 | 9.51 | 156.8 | 204 | 9.7 | 5.3 | 252 | 2.33 | 8.9 | .3 | 5.3 | .9 | 24.9 | .27 | .57 | .53 | 58 | .48 | .025 | 6.0 | 17.0 | .27 | 46.7 | .128 | 1 | 1.12 | .014 | .02 | 1.0 | .07 | 28 | .2 | .07 | 3.7 |
| 99KFFS008878+ 200E | 3.33 | 48.26 | 14.32 | 1010.2 | 576 | 16.7 | 10.3 | 1542 | 3.20 | 31.4 | .8 | 4.1 | 1.9 | 36.4 | 6.29 | 1.54 | .83 | 75 | .84 | .036 | 13.1 | 19.5 | .35 | 77.0 | .141 | 1 | 2.00 | .014 | .05 | .3 | .17 | 54 | .9 | .05 | 5.9 |
| 99KFFS008879+ 225E | 1.85 | 43.31 | 14.80 | 383.4 | 234 | 10.2 | 13.5 | 961 | 3.41 | 13.1 | .4 | 19.4 | 1.1 | 30.6 | 2.81 | .60 | 1.34 | 92 | .43 | .031 | 8.6 | 18.0 | .52 | 54.2 | .167 | 1 | 1.49 | .012 | .04 | .4 | .08 | 26 | .3 | .10 | 6.4 |
| 99KFFS008880+ 250E | 2.27 | 78.91 | 13.47 | 683.0 | 258 | 12.4 | 15.5 | 1532 | 3.24 | 11.9 | .4 | 7.9 | .9 | 34.3 | 6.45 | .60 | .72 | 81 | .64 | .043 | 9.7 | 23.5 | .35 | 58.4 | .155 | 1 | 1.43 | .010 | .04 | .3 | .12 | 33 | .4 | .07 | 6.0 |
| 99KFFS008882+ 275E | 1.89 | 14.19 | 10.49 | 168.0 | 242 | 6.1 | 5.3 | 302 | 2.99 | 13.6 | .2 | 8.9 | .9 | 11.1 | 1.14 | .47 | 1.63 | 91 | .12 | .039 | 4.9 | 18.6 | .25 | 40.7 | .193 | 1 | 1.15 | .008 | .03 | .8 | .06 | 23 | .1 | .12 | 7.0 |
| 99KFFS008883+ 300E | 1.66 | 10.16 | 8.82 | 70.8 | 81 | 5.8 | 4.1 | 207 | 3.05 | 19.5 | .2 | 9.4 | .7 | 9.0 | .35 | .51 | .80 | 102 | .11 | .028 | 3.8 | 16.5 | .24 | 32.9 | .191 | <1 | 1.02 | .006 | .03 | .6 | .06 | 27 | .2 | .08 | 6.8 |
| 99KFFS008884+ 325E | 1.65 | 18.07 | 10.82 | 96.8 | 142 | 7.3 | 6.0 | 238 | 3.11 | 21.5 | .3 | 33.7 | 1.1 | 12.3 | .44 | .57 | .75 | 88 | .12 | .041 | 5.5 | 18.6 | .27 | 39.9 | .176 | <1 | 1.49 | .007 | .03 | .5 | .08 | 62 | .2 | .09 | 6.4 |
| 99KFFS008885+ 350E | 3.73 | 96.51 | 15.24 | 4908.2 | 301 | 13.4 | 16.8 | 1559 | 4.48 | 90.6 | .4 | 27.1 | 1.1 | 22.0 | 11.42 | 1.03 | 1.83 | 107 | .35 | .039 | 4.6 | 23.7 | 1.09 | 65.5 | .254 | 1 | 2.45 | .016 | .06 | 1.3 | .21 | 31 | .4 | .32 | 9.0 |
| 99KFFS008886+ 375E | 1.43 | 8.96 | 6.88 | 81.8 | 51 | 5.0 | 6.3 | 294 | 3.27 | 5.9 | .1 | 15.4 | .5 | 7.2 | .27 | .42 | .69 | 168 | .09 | .022 | 3.0 | 16.6 | .68 | 75.8 | .374 | <1 | 1.22 | .012 | .15 | .5 | .20 | 16 | .1 | .10 | 11.7 |
| STANDARD DS2 | 13.58 | 126.59 | 29.87 | 159.8 | 259 | 35.7 | 12.3 | 799 | 3.09 | 57.5 | 20.4 | 195.4 | 3.4 | 28.0 | 10.99 | 10.46 | 11.04 | 78 | .52 | .085 | 16.5 | 161.9 | .59 | 138.7 | .116 | 2 | 1.70 | .030 | .16 | 7.4 | 1.86 | 234 | 2.6 | 1.94 | 5.8 |

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SOIL Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** OCT 22 1999 **DATE REPORT MAILED:** Nov 2/99 **SIGNED BY** .....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data FA

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N75° 99KFFS008887+400E | 2.56 | 20.29 | 11.32 | 113.3 | 149 | 7.1 | 8.2 | 359 | 3.84 | 51.9 | .3 | 33.0 | .8 | 15.3 | .58 | .85 | .95 | 140 | .20 | .033 | 6.2 | 19.9 | .32 | 59.0 | .253 | 1 | 1.23 | .009 | .05 | .6 | .10 | 27 | .2 | .12 | 9.6 |
| N 1150 99KFFS008888+00E | 2.51 | 8.85 | 8.82 | 117.3 | 121 | 5.3 | 3.4 | 182 | 2.56 | 6.1 | .2 | 10.2 | .9 | 12.8 | .46 | .40 | 1.42 | 89 | .12 | .015 | 4.8 | 14.2 | .19 | 52.6 | .172 | 1 | 1.19 | .006 | .02 | .4 | .04 | 28 | .2 | .16 | 6.7 |
| " 99KFFS008889+75E | 4.04 | 98.25 | 8.51 | 1156.2 | 191 | 13.2 | 9.0 | 1003 | 2.46 | 3.6 | .6 | 45.0 | 1.3 | 35.7 | 7.43 | .43 | .42 | 72 | .59 | .021 | 8.1 | 21.4 | .46 | 49.6 | .249 | <1 | 1.18 | .015 | .04 | .2 | .14 | 41 | .5 | .03 | 5.5 |
| " 99KFFS008890+100E | 2.92 | 15.73 | 10.89 | 347.7 | 186 | 5.8 | 4.2 | 248 | 1.71 | 3.8 | .3 | 13.0 | .9 | 19.0 | 2.12 | .23 | .68 | 65 | .24 | .011 | 6.6 | 15.8 | .23 | 47.4 | .166 | <1 | .98 | .009 | .02 | .9 | .05 | 12 | .2 | .03 | 5.0 |
| " 99KFFS008891+125E | 8.09 | 100.14 | 12.18 | 1808.5 | 196 | 11.3 | 9.9 | 962 | 2.92 | 7.9 | .5 | 10.9 | .9 | 39.2 | 11.32 | .95 | 1.57 | 72 | .72 | .041 | 7.2 | 16.5 | .53 | 37.2 | .152 | 1 | 1.43 | .019 | .06 | .9 | .11 | 38 | 1.0 | .17 | 6.6 |
| " 99KFFS008892+150E | 2.28 | 16.79 | 8.85 | 108.7 | 165 | 10.1 | 6.4 | 247 | 2.77 | 8.1 | .3 | 6.9 | 1.2 | 15.1 | .82 | .36 | .53 | 93 | .18 | .026 | 6.4 | 22.1 | .33 | 66.0 | .192 | <1 | 1.73 | .008 | .04 | .4 | .06 | 35 | .2 | .06 | 7.1 |
| RE 99KFFS008892 | 2.25 | 17.77 | 8.49 | 110.1 | 159 | 10.8 | 6.7 | 259 | 2.91 | 7.7 | .3 | 6.9 | 1.2 | 16.1 | .77 | .32 | .46 | 97 | .19 | .025 | 7.0 | 22.0 | .35 | 69.1 | .203 | 1 | 1.82 | .008 | .04 | .4 | .06 | 25 | .2 | .05 | 7.0 |
| STANDARD DS2 | 13.94 | 127.79 | 29.93 | 160.5 | 256 | 36.0 | 12.8 | 810 | 3.08 | 60.7 | 19.7 | 193.0 | 3.4 | 28.5 | 11.22 | 10.75 | 11.12 | 79 | .53 | .089 | 17.0 | 167.0 | .59 | 140.8 | .112 | 2 | 1.71 | .030 | .16 | 7.4 | 1.83 | 232 | 2.5 | 1.81 | 5.9 |

Sample type: SOIL. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

NOTE

SAMPLES MISSED

— LINE 850N-250E (SWAMP)-NO "B" HORIZON
" " N-375E " - " " "

— LINE 1150N-025E (SWAMP)- " " "
" " N-050E " - " " "



Data ✓ FA ___

**BRITISH COLUMBIA**
**PROSPECTORS ASSISTANCE PROGRAM**
**PROSPECTING REPORT FORM (continued)**



## B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

**Name** Ralph R. Keefe **Reference Number** P7 1999/2000

**LOCATION/COMMODITIES**

Project Area (as listed in Part A) O.G.D.P. **MINFILE No. if applicable** N/A

Location of Project Area NTS Map Sheets 93E, KL **Lat** 53 58 **Long** 122 130

Description of Location and Access Mainly road access to numerous logging and industrial operations throughout plus previous winter log blocks in higher priority areas

Main Commodities Searched For Cu, Mo, Co, Zn, Pb, Ag & Au

Known Mineral Occurrences in Project Area Numerous porphyry, epithermal & M.S.

**WORK PERFORMED**

1. Conventional Prospecting (area) Hardrock prospecting, soil & silt sampling
2. Geological Mapping (hectares/scale) Outcrops noted
3. Geochemical (type and no. of samples) Silts & soils taken were deemed necessary - Total of 11 rock plus 5 seds = 16
4. Geophysical (type and line km) Nil
5. Physical Work (type and amount) Nil
6. Drilling (no. holes, size, depth in m, total m) Nil
7. Other (specify) Nil

**SIGNIFICANT RESULTS** - Staking of CHES Property

Commodities Cu, Mo, Co, Zn, Ag & Au **Claim Name** CHES #1 to 6 inclusive

Location (show on map) **Lat** 53 25 **Long** 125 42 **Elevation**

Best assay/sample type

Description of mineralization, host rocks, anomalies CHES Project - SKARN, MS & Porphyry

(1) Discovery of CHES Property during follow-up of the LASS Project with partner S. Turford, O.G.D.P. & follow up previous "Tet Project" - 1989

(2) Balance of O.G.D.P. confined to new development roads & 1998/99 winter log blocks - No new discoveries elsewhere at this time.

(3) A new M.S. discovery was found - but on an old existing M.C. Existence I do not believe known - to be followed.

(4) Follow - up of R. G. Anderson (1997) report of Amethyset - bearing amyddules in the basal andesite in maps 93 F11 - 14 do not indicate being jewelery quality. (5) Two rock samples were taken from a marble rock quarry 1km S.E. from Osilinka Camp on main haul road leading to McKenzie (64895 & 64896)

**Supporting data must be submitted with this TECHNICAL REPORT**

**Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.***

99-05
pg. 49

OGDP - PROJECT
OOTSA LAKE - CHESLATTA AREA
SCALE = 1:50000
PROSPECTED 1999

604T007

FLS-97(S)
164432
FLS-97(S)
164431
070548
070546
070547
164-34
164-30
164-31
A44179
A44178
A44180
A44182
A44183
A44177
A44181
L89
SUP
VOLC TUFF + RYOLITE
VOLC (BASALT)
BASALT PERLITE
VOLC
070545
A31818
FLS-99(S)
172223A
FLS-99(S)
172223B
FLS-99(S)
172222
FLS-00(W)
174221
FLS-00(W)
174233
FLS-00(W)
174220
FLS-00(W)
174218
FLS-99(W)
172224
FLS-00(W)
167280
H.U. "H"
H.U. "E"
H.U. "D"
H.U. "F"
RHUB #7
239328
RHUB #8
239329
RHUBARB M.R.
FLS-01(W/S)
000285
FLS-01(W/S)
000286
FLS-01(W/S)
000293
FLS-96(S)
10001, G2, G3
FLS-99(S)
170237
FLS-99(W)
188232
FLS-99(W)
188227
FLS-99(W)
188231
FLS-99(W)
188229
FLS-99(W)
188226
FLS-99(W)
188225
FLS-97(W)
505H
FLS-97(W)
506001
FLS-98(W)
506008
FLS-99(W)
178250
FLS-98(W)
178251
FLS-99(W)
178252
450-F
SEE EP

O.G.D.P. PROJECT
OOTSA LAKE – CHESLATTA LK.
SCALE 1:50 000
PROSPECTED – 1999

99-05
P9.50

GRAZING LEASE
ROSE RANCH

WATER LICENSE
D.L. 100

WATER LICENSE
TK RANCH LTD.

H.U. "G"

H.U. "K"

H.U. "M"

TONK
325

FLS-99(S)
172242

FLS-99(S)
172239

FLS-99(S)
172219

FLS-01(W/S)
176207

FLS-01(W/S)
176208

FLS-01(W/S)
175204

FLS-01(W/S)
175205

FLS-01(W/S)
175201

FLS-01(W/S)
000301

FLS-01(W/S)
000302

FLS-01(W/S)
173212

FLS-00(S)
173211

FLS-00(W)
173213

FLS-01(W/S)
173210

FLS-01(W/S)
175200

FLS-00(S)
171244

FLS-00(S)
171241

FLS-00(S)
171243

FLS-99(S)
170236

FLS-98(W)
170235

NPT-00(I)
484001

FLS-01(W/S)
506010

L3085

L3063

L3062

L1672

L1671

L1674

L1665

L2630

L2615

L2631

L2632

L2618

L2629

L2654

L490

L491

L1758

L470

L399

L397

L120

L100

L101

L339

L340

L445

L446

99-2

99-14

24-12

261-1

261-3

158-3

158-2

158-1

99-05
P1.51

O.G.D.P. / PROJECT

SCALE 1:50000

PROSPECTED-1999

B008

27T002

27G001

B010

B009

Connection

99-05 P9 52

B009

B011

O.G.D.P PROJECT

SCALE 1:50 000

PROSPECTED 1979

99-05 Pg. 53

# NECHAKO PLATEAU (INTERIOR PLATEAU)

O.G.D.P. PROJECT
SCALE 1:50000

AMETHYST SHOWINGS in VOLCANIC

Meuqon Lake

Graham

Scott L.

Trout Lake

KNAPP LAKE

Alaska Mth.

KNAPP LAKE INDIAN RESERVE 6
RESERVE INDIENNE KNAPP LAKE 6

Block A

Block B

L 963

L 964

L 965

L 966

L 967

L 968

L 969

L 970

L 971

L 972

L 973

L 974

L 975

L 976

L 977

L 978

L 979

L 980

L 981

L 982

L 983

L 984

L 985

L 986

L 987

L 988

L 989

L 990

Knapp Creek

Routes:

gravier, aggloméré, toute saison .. 2 lanes or more / 2 voies ou plus — less than 2 lanes / moins de 2 voies

temps sec .....

ussée ou rue .....

..... — — — — — —

au portage ..... — — — — — —

R UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO

## KNAPP LAKE

BRITISH COLUMBIA COLOMBIE-BRITANNIQUE

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Miles

Metres 1000 0 1000 2000 3000 4000 Mètres

Information concerning bench marks ... be obtained from Geodetic Survey. Sur...

CONVERSION ...

Metres 30 20 10 0

Feet 100 50 0

CONTO...

Elevations in ...

North ...

Transver...

(3) F/11 NW (ANDERSON)

F/11 NW (ANDERSON)

125°30' 336000m. E.

53°45'

5957000m. N.

L 2655

RIVER

CHESLATTA

Δ2906

Δ2907

Δ2905

Δ2904

Δ2903

O.G.D.P. PROJECT

SCALE = 1:50000

MF64

MO

MF27

Per

AT98-2803

AT98-2801

2802

2803

2804

AT98-2604

AT98-2606

Tent 2805

Trail

2807

AT98-2808

Lake

Chaoborus

AT98-2603

AT98-2602

2708

2709

2710

2711

2712

2713

2714

2715

AMPHIBIAN STATION

3500

1400

O O T S A

F O R E S T

N E C H A K O

Mackenzie Lake

Davids

99-05 pg. 54

I I N T E R I O R

MINERAL & PLACER RESERVE
B.C. REG 245/96
1996 SEP 12
SUBJECT TO CONDITIONS

329472

125°00' N75 94C5/WE BESSHI MCS #2,344

335806

BASIN 1
321854
4NX4E
226981

RANITE

226982

BASIN 2
321855
5SX4E

242792
*12642*
4NX5E
226984

BASIN 3
321856
4SX5W

BESSHI 9
312068

BESSHI 8
320683
5NX2W

BESSHI 1
312678
5NX4E

POL 3
312050

225574

223581

64894

64893

POL 2
312049

POL 1
312048

BESSHI 10
320684
5SX3E

BESSHI #3
TAG # 682768M

64892

BESSHI #4
TAG # 682775M

225575

BESSHI #2
TAG # 682767M

64898

P.G.C. (N. WESTWARD)
SOILS + SILTS TAKEN

END OF SOILS + SILTS

Rock Rd

Cr.

Creek

Aiken

MESSINKA

STAR 4
334028
4NX5E

225881

225883

STAR 3
334027
4SX5E

O.G.D.P PROJECT
SCALE 1:50000

99-05
pg. 55

MINERAL & PLACER RESERVE
B.C. REG 245/96
1996 SEP 12
SUBJECT TO CONDITIONS

3-copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT ~~BESSHI~~ O.G.D.P File # 9902876 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64892 | 19.43 | 186.36 | 6.39 | 61.5 | 441 | 13.0 | 12.1 | 670 | 6.09 | 17.9 | 1.0 | 5.0 | 1.3 | 314.0 | .29 | 6.50 | .21 | 181 | .55 | .075 | 5.9 | 41.6 | 1.48 | 247.8 | .159 | 4 | 2.85 | .218 | .16 | 2.1 | .24 | 141 | 3.4 | .22 | 11.8 |
| 64893 | 2.92 | 68.98 | 3.43 | 62.0 | 191 | 26.1 | 19.8 | 740 | 4.59 | 2.0 | .3 | 3 | 4 | 55.8 | .17 | 25 | .14 | 54 | 99 | .061 | 2.3 | 35.6 | 1.16 | 85.9 | .347 | 1 | 1.65 | .042 | .10 | 4.0 | .05 | 11 | 1.4 | .07 | 3.8 |
| 64894 | 2.20 | 61.06 | 2.75 | 75.0 | 365 | 13.2 | 9.0 | 692 | 4.60 | 2.1 | .3 | < 2 | 4 | 20.8 | .02 | 1.59 | .12 | 119 | .76 | .048 | 1.6 | 65.1 | 1.66 | 51.5 | .358 | <1 | 2.04 | .051 | .16 | 9 | .07 | 15 | 5.3 | .11 | 7.6 |
| 64898 | 20.81 | 58.66 | 3.31 | 89.3 | 165 | 21.4 | 15.0 | 705 | 4.19 | 11.1 | 3.5 | < .2 | 1.9 | 104.5 | .79 | .89 | .21 | 57.2 | .84 | .063 | 6.0 | 21.8 | .60 | 171.6 | .412 | 1 | 1.25 | .025 | .12 | 4.3 | .08 | 49 | 4.2 | .18 | 5.7 |
| RE 64898 | 19.23 | 59.30 | 3.32 | 90.1 | 173 | 21.9 | 14.9 | 708 | 4.18 | 10.9 | 3.6 | < 2 | 1.4 | 106.5 | .84 | .88 | .21 | 58.2 | .84 | .063 | 6.0 | 21.9 | .59 | 169.7 | .410 | 1 | 1.24 | .025 | .11 | 4.3 | .08 | 42 | 4.2 | .21 | 5.7 |
| STANDARD DS2 | 14.40 | 135.08 | 31.49 | 171.5 | 254 | 38.7 | 13.3 | 847 | 3.31 | 65.5 | 22.0 | 206.8 | 3.1 | 32.2 | 11.48 | 9.98 | 11.63 | 84 | .57 | .086 | 14.3 | 181.7 | .64 | 151.6 | .120 | 2 | 1.89 | .040 | .17 | 7.1 | 1.98 | 259 | 2.6 | 1.96 | 6.3 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** AUG 13 1999 **DATE REPORT MAILED:** Aug 30/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA

3 - cadres

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT ~~BESSHI~~ OGD-1 File # 9902876 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64892 | 1.14 | .1 | .10 | 5.2 | 14.3 | .6 | .97 | 3.9 | 9.08 | 14.1 | .08 | 11 | 48.7 |
| 64893 | .16 | <.1 | .24 | 3.3 | 4.0 | .4 | 1.31 | 9.5 | 4.67 | 5.6 | <.02 | 3 | 12.6 |
| 64894 | .26 | .1 | .09 | 4.5 | 5.1 | .5 | .60 | 7.2 | 3.39 | 3.7 | .02 | 6 | 13.1 |
| 64898 | .14 | .1 | .40 | 3.4 | 5.6 | 1.0 | 1.12 | 13.5 | 8.65 | 13.8 | .06 | 38 | 15.2 |
| RE 64898 | .14 | .1 | .46 | 3.3 | 5.7 | 1.0 | 1.10 | 13.6 | 8.89 | 14.0 | .06 | 30 | 15.2 |
| STANDARD DS2 | 2.81 | <.1 | 2.01 | 14.3 | 3.2 | 23.6 | .02 | 4.2 | 5.71 | 31.9 | 5.97 | <1 | 13.9 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER FOLLOWED BY ANALYSIS BY ICP/ES & MS. THIS LEACH IS PARTIAL FOR ALL ELEMENTS.

- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: Aug 30/99 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data 1 FA ___

5 - Copies

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

**Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P.** File # 9904244 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167904 - OSINI | 9.37 | 80.65 | 10.65 | 72.4 | 139 | 65.7 | 22.8 | 151 | 4.62 | 3.3 | 2.8 | 2.8 | 12.3 | 19.5 | .06 | .14 | 1.15 | 35 | .14 | .060 | 40.0 | 33.1 | 1.28 | 103.4 | .055 | <1 | 2.08 | .026 | .70 | 1.9 | .46 | <5 | 1.1 | .08 | 5.9 |
| 167905 - Pinkut | 3.98 | 10.23 | 1.56 | 18.8 | 18 | 4.3 | 1.5 | 57 | .65 | 7.6 | .8 | .9 | 7.1 | 6.9 | .07 | .13 | .07 | 2 | .05 | .019 | 3.4 | 10.1 | .04 | 100.2 | .012 | 1 | .51 | .115 | .24 | 2.9 | .12 | <5 | <.1 | <.02 | 1.1 |
| 167906 " | 2.47 | 5.60 | .19 | .9 | 4 | 7.3 | .6 | 49 | .32 | 2.1 | <.1 | .9 | .1 | .8 | .01 | .10 | <.02 | <2 | .01 | .002 | <.5 | 23.3 | .01 | 3.6 | .006 | <1 | .02 | .004 | .01 | 9.8 | <.02 | <5 | <.1 | <.02 | .1 |
| 167914 - Tsuk | .43 | 11.34 | 1.07 | 58.8 | 2 | 93.4 | 40.3 | 725 | 5.63 | 1.7 | .6 | .6 | 1.0 | 43.9 | .02 | .25 | <.02 | 190 | 1.57 | .122 | 7.0 | 158.4 | 3.85 | 23.1 | .257 | 10 | 3.39 | .721 | .47 | .5 | .02 | <5 | <.1 | <.02 | 9.7 |
| RE 167914 | .41 | 10.70 | .97 | 57.0 | 2 | 91.0 | 39.3 | 701 | 5.43 | 1.7 | .6 | .3 | 1.0 | 41.3 | .01 | .23 | <.02 | 181 | 1.48 | .119 | 7.3 | 158.6 | 3.72 | 22.2 | .232 | 9 | 3.29 | .699 | .45 | .5 | .02 | <5 | <.1 | <.02 | 9.3 |
| STANDARD DS2 | 14.28 | 134.59 | 28.16 | 161.1 | 256 | 36.9 | 12.2 | 818 | 3.23 | 61.3 | 21.4 | 211.1 | 3.7 | 29.6 | 11.29 | 10.73 | 11.36 | 80 | .56 | .072 | 16.9 | 170.7 | .60 | 146.6 | .115 | 1 | 1.74 | .030 | .15 | 8.0 | 1.89 | 255 | 2.3 | 1.82 | 5.9 |

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 12/99 **SIGNED BY.** C. Leong .D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9904244 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167904 | 3.65 | <.1 | .12 | 58.3 | 2.3 | .6 | 2.67 | 1.6 | 12.46 | 73.2 | .02 | 12 | 30.9 |
| 167905 | .33 | <.1 | .08 | 5.4 | .6 | .4 | .05 | 2.6 | 5.62 | 7.3 | <.02 | 3 | 1.5 |
| 167906 | .02 | <.1 | .08 | .3 | .1 | .3 | <.01 | .3 | .08 | .2 | <.02 | <1 | .3 |
| 167914 | .78 | .2 | .05 | 21.0 | 4.4 | .3 | <.01 | 9.9 | 6.94 | 11.4 | <.02 | 2 | 24.1 |
| RE 167914 | .76 | .2 | .05 | 20.2 | 4.2 | .3 | <.01 | 9.2 | 6.62 | 10.8 | <.02 | <1 | 23.1 |
| STANDARD DS2 | 2.80 | <.1 | 2.05 | 15.0 | 3.1 | 25.6 | .03 | 3.0 | 7.93 | 31.1 | 5.18 | <1 | 14.1 |

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 15/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data f FA ___

2-Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Rod Quesnel Osisko

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9902877 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64895 | .64 | 23.24 | 89.41 | 30.6 | 503 | 87.3 | 42.8 | 995 | 10.23 | 282.6 | .3 | 24.9 | 3.4 | 423.9 | .20 | 2.28 | 1.10 | 2 | 13.24 | .014 | 2.1 | 6.3 | 4.08 | 103.9 | <.001 | <1 | .21 | .014 | .10 | 2.9 | .03 | <5 | 1.1 | .52 | .9 |
| 64896 | .23 | 1.23 | 5.48 | 2.8 | 17 | 2.4 | 1.2 | 385 | .48 | 2.4 | <.1 | 1.6 | .7 | 327.3 | .05 | .09 | .03 | <2 | 33.36 | .009 | 2.6 | 2.3 | .21 | 31.8 | <.001 | <1 | .02 | .005 | .02 | 1.2 | <.02 | <5 | .4 | .06 | .1 |
| RE 64896 | .22 | .77 | 5.59 | 2.1 | 16 | 2.9 | 1.2 | 384 | .48 | 2.4 | <.1 | .6 | .7 | 335.2 | .05 | .09 | <.02 | <2 | 33.40 | .009 | 2.6 | 2.3 | .21 | 32.0 | <.001 | <1 | .02 | .005 | .02 | 1.2 | <.02 | <5 | .3 | .06 | .1 |
| STANDARD DS2 | 14.40 | 135.08 | 31.49 | 171.5 | 254 | 38.7 | 13.3 | 847 | 3.31 | 65.5 | 22.0 | 206.8 | 3.1 | 32.2 | 11.48 | 9.98 | 11.63 | 84 | .57 | .086 | 14.3 | 181.7 | .64 | 151.6 | .120 | 2 | 1.89 | .040 | .17 | 7.1 | 1.98 | 259 | 2.6 | 1.95 | 6.3 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** AUG 13 1999 **DATE REPORT MAILED:** Aug 30/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data A FA ___

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9902877 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64895 | .22 | .1 | .06 | 4.7 | 1.6 | .2 | 7.29 | .3 | 4.87 | 5.7 | .03 | 1 | 2.3 |
| 64896 | .03 | <.1 | .04 | .6 | .7 | <.1 | .02 | .1 | 1.91 | 6.5 | <.02 | <1 | .5 |
| RE 64896 | .03 | <.1 | .04 | .7 | .8 | <.1 | .04 | .1 | 1.97 | 6.5 | <.02 | <1 | .4 |
| STANDARD DS2 | 2.81 | <.1 | 2.01 | 14.3 | 3.2 | 23.6 | .02 | 4.2 | 5.71 | 31.9 | 5.97 | <1 | 13.9 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER FOLLOWED BY ANALYSIS BY ICP/ES & MS. THIS LEACH IS PARTIAL FOR ALL ELEMENTS.

- SAMPLE TYPE: ROCK Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** AUG 13 1999 **DATE REPORT MAILED:** Aug 30/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA ___

2-Copies

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

N.of Rith and B Rock

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT OGDP File # 9901987

405 - 470 Granville St., Vancouver BC V6C 1V5

| 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 | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Au* ppb | Hg ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 070543 DR | 2 | 8 | 20 | 79 | .6 | 2 | 1 | 533 | 2.43 | 31 | <8 | <2 | 3 | 12 | <.2 | 3 | 5 | 6 | .25 | .076 | 24 | <1 | .38 | 134 | <.01 | <3 | 1.15 | .05 | .28 | <2 | 3 | 10 |
| 070544 DR | 2 | 28 | 16 | 20 | <.3 | 2 | <1 | 120 | .87 | 63 | <8 | <2 | 9 | 12 | .2 | <3 | <3 | 9 | .35 | .034 | 33 | <1 | .04 | 32 | <.01 | <3 | .59 | .03 | .32 | <2 | 2 | 30 |
| 070545 DR | 1 | 25 | 7 | 54 | <.3 | 3 | 1 | 103 | .83 | 3 | <8 | <2 | 16 | 40 | <.2 | 5 | <3 | 12 | .37 | .022 | 29 | 2 | .15 | 108 | .01 | <3 | .78 | .02 | .15 | 3 | 1 | 20 |
| 070546 DR | 4 | 4 | 11 | 17 | <.3 | 4 | <1 | 118 | 1.45 | 81 | <8 | <2 | 7 | 10 | <.2 | 3 | <3 | 12 | .07 | .012 | 18 | 3 | .04 | 24 | .01 | <3 | .43 | .03 | .23 | 4 | 1 | 185 |
| 070549 DR | 2 | 3 | 14 | 41 | <.3 | 2 | <1 | 68 | .62 | 32 | <8 | <2 | 7 | 1 | .2 | <3 | 5 | 5 | .01 | .004 | 27 | 6 | .02 | 11 | .02 | <3 | .25 | .05 | .19 | 4 | 1 | 125 |
| RE 070549 DR | 1 | 5 | 13 | 40 | <.3 | 2 | 1 | 61 | .60 | 30 | <8 | <2 | 7 | <1 | .2 | <3 | <3 | 5 | .01 | .003 | 26 | 6 | .01 | 6 | .02 | <3 | .24 | .04 | .18 | 3 | 1 | 115 |

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) HG ANALYSIS BY FLAMELESS AA.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** JUL 2 1999 **DATE REPORT MAILED:** July 8/99 **SIGNED BY.** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data / FA

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

SILT

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT OGDP File # 9901988

405 - 470 Granville St., Vancouver BC V6C 1V5

| 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 | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Au* ppb | Hg ppb |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 070547 DR | 1 | 13 | 19 | 54 | 1.4 | 8 | 6 | 1021 | 1.85 | 7 | 8 | <2 | 2 | 76 | .3 | 8 | 4 | 39 | .58 | .072 | 15 | 7 | .28 | 179 | .05 | <3 | 1.48 | .05 | .13 | <2 | 5 | 70 |
| 070548 DR | 1 | 10 | 5 | 49 | .3 | 8 | 6 | 630 | 2.19 | 9 | <8 | <2 | 3 | 48 | <.2 | <3 | 3 | 52 | .49 | .070 | 14 | 7 | .29 | 113 | .06 | <3 | 1.00 | .03 | .09 | <2 | 3 | 55 |
| RE 070548 DR | 1 | 13 | 11 | 53 | .3 | 11 | 7 | 666 | 2.41 | 5 | <8 | <2 | 3 | 51 | <.2 | 7 | 4 | 59 | .53 | .074 | 15 | 10 | .31 | 126 | .07 | <3 | 1.08 | .04 | .10 | <2 | 4 | 80 |
| STANDARD C3/AU-S | 27 | 67 | 37 | 171 | 5.5 | 37 | 13 | 789 | 3.41 | 58 | 13 | 2 | 19 | 29 | 23.5 | 20 | 23 | 81 | .59 | .087 | 19 | 170 | .62 | 157 | .10 | 17 | 1.90 | .04 | .16 | 15 | 53 | 925 |
| STANDARD G-2 | 2 | 5 | 6 | 45 | <.3 | 8 | 5 | 545 | 2.08 | <2 | <8 | <2 | 4 | 74 | <.2 | <3 | 8 | 41 | .67 | .094 | 8 | 75 | .61 | 221 | .15 | 4 | 1.00 | .09 | .48 | 2 | <1 | 10 |

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.
- SAMPLE TYPE: SILT AU* - AQUA-REGIA/MIBK EXTRACT, GF/AA FINISHED. (10 gm) HG ANALYSIS BY FLAMELESS AA.
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

**DATE RECEIVED:** JUL 2 1999 **DATE REPORT MAILED:** July 8/99 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data f FA ___

5 - Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

**Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P.** File # 9904245 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167915 | 1.51 | 38.51 | 4.47 | 74.9 | 94 | 15.2 | 10.6 | 3243 | 2.64 | 4.9 | .7 | 9.9 | .7 | 37.7 | .25 | .29 | .06 | 56 | .59 | .093 | 12.2 | 25.1 | .49 | 171.4 | .055 | 6 | 1.36 | .009 | .04 | <.2 | .12 | 115 | .8 | <.02 | 4.2 |

GROUP 1F30 - 30.00 GM SAMPLE, 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML, ANALYSIS BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 12/99 **SIGNED BY.** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data d FA ___

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

**Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9904245 (b)**

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: Ralph Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 167915 | .65 | <.1 | .63 | 4.2 | 3.7 | .4 | .08 | .8 | 11.14 | 23.8 | .02 | <1 | <.1 |

GROUP 1F30 - 30.00 GM SAMPLE LEACHED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 600 ML, ANALYSED BY ICP/ES & MS.
UPPER LIMITS - AG, AU, HG, W, SE, TE, TL, GA, SN = 100 PPM; MO, CO, CD, SB, BI, TH, U, B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
- SAMPLE TYPE: SILT

**DATE RECEIVED:** NOV 2 1999 **DATE REPORT MAILED:** Nov 12/99 **SIGNED BY.** C. Leong D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA ___

2-Copies

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9902875 (a)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Mo ppm | Cu ppm | Pb ppm | Zn ppm | Ag ppb | Ni ppm | Co ppm | Mn ppm | Fe % | As ppm | U ppm | Au ppb | Th ppm | Sr ppm | Cd ppm | Sb ppm | Bi ppm | V ppm | Ca % | P % | La ppm | Cr ppm | Mg % | Ba ppm | Ti % | B ppm | Al % | Na % | K % | W ppm | Tl ppm | Hg ppb | Se ppm | Te ppm | Ga ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64888 | 1.45 | 33.64 | 6.17 | 76.1 | 192 | 21.5 | 11.4 | 1699 | 2.93 | 2.8 | .9 | 7.8 | .4 | 80.9 | .63 | .41 | .10 | 64 | 1.40 | .074 | 7.3 | 30.4 | .48 | 192.5 | .032 | 4 | 1.60 | .015 | .05 | <.2 | .07 | 110 | 2.1 | .03 | 4.8 |
| 64889 | 1.41 | 18.93 | 4.72 | 75.6 | 113 | 19.2 | 10.8 | 3259 | 2.97 | 2.4 | .7 | 44.1 | .6 | 62.8 | .61 | .29 | .07 | 58 | .84 | .066 | 7.6 | 26.2 | .42 | 189.5 | .035 | 3 | 1.45 | .013 | .04 | <.2 | .08 | 90 | .9 | .02 | 4.1 |
| 64890 | 1.27 | 29.70 | 8.11 | 114.1 | 108 | 19.8 | 11.8 | 846 | 3.25 | 8.2 | .6 | 6.7 | .9 | 54.6 | .91 | 1.09 | .09 | 95 | .76 | .076 | 8.9 | 30.1 | .49 | 138.3 | .058 | 3 | 1.29 | .016 | .05 | <.2 | .06 | 173 | .8 | .04 | 4.4 |
| 64891 | .96 | 22.11 | 5.44 | 65.8 | 56 | 17.6 | 11.7 | 1222 | 2.76 | 3.1 | .8 | 12.1 | 1.1 | 41.3 | .23 | .66 | .07 | 78 | .60 | .066 | 6.7 | 28.9 | .52 | 127.7 | .056 | 4 | 1.26 | .014 | .05 | <.2 | .05 | 47 | .8 | .02 | 4.2 |
| RE 64889 | 1.47 | 19.88 | 4.70 | 78.0 | 112 | 19.4 | 11.0 | 3396 | 3.03 | 4.5 | .7 | 8.1 | .5 | 63.2 | .64 | .32 | .06 | 59 | .86 | .068 | 7.7 | 26.0 | .42 | 193.2 | .033 | 2 | 1.44 | .013 | .04 | <.2 | .08 | 87 | .9 | .03 | 4.2 |
| STANDARD DS2 | 14.51 | 135.79 | 32.10 | 171.6 | 298 | 38.2 | 13.2 | 853 | 3.35 | 63.7 | 21.4 | 205.7 | 3.5 | 31.7 | 11.34 | 10.16 | 11.38 | 84 | .58 | .085 | 14.4 | 181.3 | .63 | 150.6 | .119 | 3 | 1.87 | .042 | .17 | 7.3 | 1.97 | 257 | 2.8 | 1.95 | 6.2 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SILT Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: Aug 30/99 SIGNED BY ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data ✓ FA ____

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

# GEOCHEMICAL ANALYSIS CERTIFICATE

Hudson Bay Expl. & Dev. Co. Ltd. PROJECT O.G.D.P. File # 9902875 (b)

405 - 470 Granville St., Vancouver BC V6C 1V5 Submitted by: R. Keefe

| SAMPLE# | Cs ppm | Ge ppm | Nb ppm | Rb ppm | Sc ppm | Sn ppm | S % | Zr ppm | Y ppm | Ce ppm | In ppm | Re ppb | Li ppm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 64888 | .46 | <.1 | .74 | 6.0 | 4.9 | .4 | .08 | 1.6 | 7.31 | 13.5 | .03 | 7 | 9.5 |
| 64889 | .48 | <.1 | .42 | 5.2 | 4.5 | .4 | .05 | 1.0 | 6.76 | 16.6 | .02 | 2 | 9.2 |
| 64890 | .61 | .1 | .54 | 4.0 | 4.6 | .4 | .03 | 1.2 | 7.24 | 15.7 | .03 | 2 | 9.0 |
| 64891 | .59 | .1 | .42 | 4.0 | 4.3 | .4 | .03 | 1.3 | 5.41 | 14.9 | .02 | 2 | 9.1 |
| RE 64889 | .47 | .1 | .46 | 5.2 | 4.4 | .4 | .04 | 1.1 | 6.84 | 16.6 | .03 | 2 | 9.1 |
| STANDARD DS2 | 2.52 | .1 | 2.02 | 14.3 | 3.4 | 23.1 | .03 | 3.8 | 5.49 | 29.3 | 5.74 | <1 | 13.7 |

30 GRAM SAMPLE IS DIGESTED WITH 180 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 600 ML WITH WATER, ANALYSIS BY ICP/ES & MS.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K GA AND AL.
- SAMPLE TYPE: SILT Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 13 1999 DATE REPORT MAILED: Aug 30/99 SIGNED BY. . . . . D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



Data FA