

GM 31071

SUMMARY OF EXPLORATION WORK

Documents complémentaires

Additional Files



Licence

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**Énergie et Ressources
naturelles**

Québec

133 faces

SUMMARY OF EXPLORATION WORK
MONTVIEL TOWNSHIP CLAIMS
ABITIBI-EST DISTRICT QUEBEC

INTRODUCTION

During the time period August 1973 to November 1974, Duval International Corporation undertook an exploration program consisting of airborne magnetic and electromagnetic surveying, ground magnetic and electromagnetic surveying, prospection, trenching, and overburden sampling on a group of some 145 contiguous claims situated in Montviel Township, Abitibi-Est Territory, Quebec.

Total expenditure to date, including the airborne work, has been \$65,780.26. Of this amount \$11,953.70 (the cost of the airborne work) has already been submitted (1974) for assessment credit. The remaining \$53,827.26 is submitted for credit at this time. Required expenditures on 130 claims for which renewal of development licences are applied for, is \$20,800.00 or 4\$ per acre on 5200 acres. The remaining \$31,873.75 will be applied against subsequent renewals.

Appendix I gives a cost breakdown for the expenditures, excluding the airborne survey previously reported.

LOCATION AND ACCESS

The property is situated in Spruce and Jackpine forested terrain, in the central part of Montviel Township, some 50 air miles due east of Matagami, and 25 air miles north of Miquelon, Quebec.

Access is best achieved by helicopter from Matagami or Miquelon, but a canoe route can be followed using the Waswanipi, Inconnue and Noman's Rivers to enter the area from the south (Chibougamau-Seneterre Highway) or from Matagami via Goeland and Macaisagi Lakes to the west and north.

An airstrip for winter use by ski-equipped fixed wing aircraft, has been cleared out of a broad open muskeg swamp, to the east of the camp.

The newly completed Forc George Highway passes about 25 miles west-north-west of the claim group.

PREVIOUS EXPLORATION

The only recorded exploration information for the area consists of a program involving a Turam Survey and three diamond drill holes, completed by Jowsey Mining Company in 1959. The geophysical maps and drill logs were filed with the Quebec Ministere de Richesses Naturelles as assessment work. This work was concentrated on present claim Licences 325044, and 325045, with the drill holes on present claims Licences 325044-2, 325044-3, and 325044-5.

Ministère des Richesses Naturelles, Québec SERVICE DE LA DOCUMENTATION TECHNIQUE
Date: 20 OCT 1975
No. GM: 31071

The core from the drill holes was relatively undisturbed, and has been re-organized and is stored near the Duval camp. Only weak values in lead, zinc and copper were found by Jowsey in the carbonate rich rocks drilled. The Turam anomalies were caused by concentrations of semi massive pyrite and local pyrrhotite in carbonate rich rock.

No exploration work has been reported for the area around Zone 1 at the southwest end of the claim block. Examination of the area, which was recently burned over, disclosed the presence of a survey grid, and drill platform. The electromagnetic conductor located here was apparently tested by Umex Exploration in 1970-71, and the work may be filed for the Township to the west of Montviel.

Previous Geologic Work

The area was mapped in 1949 by P.E. Imbault, (Geologic Report 60) for the Quebec Department of Mines. At that time, no aeromagnetic data was available for the area. Imbault included the claim block area within a metavolcanic belt intruded by the so called "Nomans Stock", a large granitoid mass interpreted to exist beneath most of the claim block. No outcrops were located near those found by the Duval work. Topographically, the claims occupy a low area surrounded by slightly higher elevation terrain.

EXPLORATION ACTIVITIES

Prospection and Geological Survey

The claim block lies in low, swampy land, drained by the Nomans River, and numerous smaller tributaries. A layer of clay underlies much of the drainage basin of this river, and its level varies considerably with rainfall, because there is little internal drainage. Travel on the river itself is fairly easy during high water periods, but at other times, beaver dams and log jams render travel arduous. Outcrops are rare and pace and compass traversing, covering most of the claim group, disclosed only three areas of exposure. Previous geologic mapping of this area (P. E. Imbault, 1949) did not document these bedrock locations.

Outcrop Area, Zone 1

A small exposure of medium to fine grained amphibolitic gneiss is located near the north end of line 4W on Zone 1. Foliations trend north westerly, and dip steeply to the northeast. No mineralization is present in the exposure. Numerous float fragments of migmatite, and biotite-amphibolite gneisses are present in the vicinity.

Outcrop Area 2, Zone 7

Several outcrops of medium grained, pinkish grey feldspathic gneiss are present at the southeast end of Zone 7, east and west of Line 64 west. Locally, these exposures are transected by numerous thin dark green, fine grained lamprophyric dykes or veinlets. A vague north easterly trending foliation is present.

Outcrop Area 3, Zone 8

A small outcrop flanking a sandy hillside was originally discovered using stereo pair air photos as a guide to topography. It is located just south of the Nomans River on line 56 East. Dark green medium to coarse grained amphibolitic material containing minor sulphide mineralization is exposed here, and a trench approximately 30 feet long, 3 feet wide, and 2 feet deep, was blasted out of the hillside. Structurally, there is little textural foliation or banding visible. The finer grained denser parts of the outcrop are not regular in distribution, and resemble a hornfels megascopically. Sulphide mineralization, mainly pyrite with minor chalcopyrite and galena, is sporadically disseminated throughout the rock mass, occasionally associated with irregular masses of pink potash feldspar.

Additonal prospecting in the vicinity failed to locate further exposures. Hilly country further south and east of this occurrence is underlain by sand and gravel ridges.

Float Occurrences

Several float fragments of lamprophyric rock were located near the Nomans River bank, north of the north end of Line 36 west. These are sub angular in character, and appear to be fairly close to their source. A small rapids to the west on the river contains boulders of similar material. Specimens are dark greenish grey, medium to fine grained and contain coarse patches of biotite. Fine white carbonate veinlets are locally present, and these occasionally contain traces of pyrite.

Elsewhere on the property, claim lines, traversing failed to locate additional exposures.

Linecutting and Mnagnetometer Survey

Using the airborne survey data as a guide, a system of about 30 miles of grid lines, was cut to cover zones of interest located by the magnetic and electromagnetic airborne work.

This work began in January of 1974. Magnetometer surveying was completed over the grid lines, and for reference purposes zone numbers have been given to the various magnetically distinct features (see reference Index Map).

Survey Specifications

Grid-Line Spacing 400 feet, stations 100 feet.

Magnetic Survey Specifications Include:

Instrument - McPhar M-700, Fluxgate

Measured - Vertical Field Intensity

Station Spacing - 100 feet Std. or 50 feet
over anomalous areas.

Sensitivity- 10 gammas on the 1k scale

- 25 gammas on the 3k scale

- 50 gammas on the 10k scale

Total Mileage - Approximately 40 miles (all grids)

Following completion of this work, additional linecutting (14 miles) and magnetic surveying, using the same equipment, was completed during July and November of 1974.

The work was done over claim Licence Numbers as follows:

Zone 1	Licence 341723	Claims 1,2,5
	" 341722	Claims 3,4,5
Zone 7	Licence 341727	Claims 2,3,4,5
	" 341720	" 1
	" 334624	" 4
	" 334622	" 3 }
Zone 2	Licence 334622	Claims 1 }
	" 334621	" 4,5
	" 334619	" 4,5
	" 325044	" 1,2,3,4,5
	" 325045	" 1,3,4
Zone 4	Licence 325044	Claims 1
	" 325045	" 1
	" 334619	" 1
	" 334618	" 1-5
	" 334617	" 5
	" 325045	" 2
	" 325046	" 1,2
Zone 8	Licence 325047	Claims 4,5
	" 334615	" 1
Zone 5	Licence 334615	Claims 3
	" 341725	" 1,2,4,5,
	" 341724	" 1-5
	" 341726	" 1,2

The magnetometer work was done by Messrs. L. Mealey, J-P Ducharme, and W. Troup. During February and November of 1974, contouring was done by J. Janeicz.

The survey results are presented on separate sheets for Zone 1, Zones 2,4, and 7, and Zones 5 and 6.

Results verify the existence of strongly magnetic features underlying each of these areas, and have provided more detail than the airborne work. Line to line correlation, along magnetic features, is better, and contours are less herring boned.

Electromagnetic Surveying

Induction type horizontal and vertical loop electromagnetic surveying was completed over portions of the claim area, where bedrock conductivity was indicated by the airborne surveying. The areas covered include parts of Zones 1,2,4,5 and 6.

Survey specifications were as follows:

Instrument - Crone CEM

Methods - Vertical Loop Fixed Transmitter
- Horizontal Loop (In Phase only)

Frequencies - HI=5010 Hz, Med=1830 Hz, Lo=390 Hz

Coil Separation - 300-700 feet depending on methods.

Sensitivity - \pm 1 degree dip angle

- \pm 2 $\frac{1}{2}$ % Field Strength Unit

Readings - Every 100 feet or 50 feet

Operator - L. Barker, J. Tower, G.McKillop
(Duval Personnel)

Survey Period - February - March, 1974

Total Mileage - 9.8

Zone 1

Horizontal loop field strength surveying here disclosed the presence of a strong conductor trending at about 55° to the interpreted strike from the airborne data. The strongest part of the anomaly coincides with the best airborne response, but the north easterly trend indicated from the airborne was not detected on the ground. Rather the zone trends north westerly and parallels the foliation visible in the outcrop on line 4W at the north end.

No definite assymetry is evident from the profiles to interpret a dip direction from the source, but this may be due to the acute angle of intersection of the survey line and the strike of the conductor axis. Overburden is interpreted as very shallow, and the ratio of the High to Low frequency readings indicates a good conductor. Lines 0-0 and 12W did not go far enough to detect more than the shoulders of the anomaly profile, but they indicate

a weakening laterally. Discovery of an old drill set up, and indications of a previous survey grid, suggest that the anomaly area has been tested.

Zone 7

Two lines of Horizontal Loop field strength readings were run over the strongest part of the magnetic anomaly present in this part of the claims. Objective was to check for bedrock conductivity not previously located by the airborne data. No significant anomalous was found.

Zones 2 and 4

The Zone 2 area encompasses part of the area surveyed using Turam type methods by Jowsey in 1958. Horizontal Loop field strength readings were taken using a 300 foot coil separation and Hi and Low frequencies.

The readings were quite noisy, partly due to the conductive overburden present, and also a faulty coil. Results at High and Low frequencies indicate at least 3 separate conductive axes trending nearly east-west, across the grid. These weaken and disappear on lines 8W and 36W, giving a total strike length of about $\frac{1}{2}$ mile. Magnetic correlation indicates the axes to be flanking the magnetic anomaly zone, which makes up this part of the grid. The three Jowsey drill holes appear to have tested the two northerly axes (the strongest) and core examination indicated sections of semi massive pyrite with some pyrrhotite to be the source. A magnetic rich section, logged from DDH 1 appears to explain the magnetic peak into which the hole was directed.

No dip estimates are easily interpreted from the EM, although the high and low frequency profiles on Line 16W are assymetric enough to judge a 75-80° southerly dip for the source. The magnetics and foliations measured from the core indicate this southerly dip to be valid.

The two northerly EM axes appear to merge together on line 16W, and a drill hole to test the anomaly on this line would be worthwhile.

The Zone 4 portion of the grid was surveyed using the Horizontal Loop field strength method, a coil separation of 300 feet, and high and low frequencies.

Object of this work was to detect an airborne Dighem anomaly located on this portion of the claims. Lines 8E and 17E were surveyed, using the Horizontal Loop techniques, and conductor axes were located at about 37+00N, and 37+50N, on each line respectively.

Failure of the low frequency portion of one of the coils, and noisy nature of the readings compelled a change to Vertical Loop, fixed transmitter methods; and lines 16E, 12E, 8E, and 4E were re-surveyed using transmitter set ups near the axes on lines 12E and 8E. 400 foot coil spacings were utilized. The conductive zone located is weak to moderate in strength, and appears to be quite narrow. The High Frequency Horizontal Loop profiles on lines 8E and 12 E indicate a steep southerly dip. The zone is on the south flank of a linear magnetic feature trending north easterly across the grid. Additional EM Surveying should be undertaken east of Line 16E on lines 0-0, and 4W to delimit the extent of the zone. Due to its isolation, a drill test would be adviseable.

Zones 5, 6

Reconnaissance EM Surveying was undertaken to attempt location of the single line Dighem responses located in this part of the claim area.

The airborne indicated a very deeply buried source for both anomalies, and the ground work was somewhat inconclusive. A Horizontal Loop field strength profile was run down line 68E to try and locate the Zone 5 response. Readings on High and Low frequencies were quite noisy, but a weak indication of subsurface conductivity can be seen on the low frequency profile at about 22+50 south. Coil separation used was 300 feet, so effective depth of the survey is only about 150 feet.

A vertical loop fixed transmitter search square type reconnaissance was then attempted using the ground location of the airborne response (line 72E) as a transmitter setup. High frequency dip angle readings on lines 76E, 15 South, 68E and 25S failed to indicate any anomalous zones. The airborne response from Zone 5 is located on the south flank of a strongly magnetic area.

The Zone 6 airborne response similarly did not give much of an indication using Horizontal Loop field strength measurements. Vertical Loop fixed transmitter profiles, run using a transmitter set up on line 72E near the airborne location, detected weakly anomalous indications on line 68E at about 47+00 South. Surveying from this crossover, on line 72E, failed to detect a good anomaly. The profile on 72E read from a transmitter at 42+50S on line 68E, gave a weak crossover at about 41+00S. Using this location as transmitter and reading back on line 68E, a fairly good crossover (6° either side) was located at 43+50S. These crossovers on lines 68E and 72E may represent the source of the anomaly, but detailed wide separation Horizontal loop, or Turam work should be attempted to properly test the area. A narrow magnetic anomaly on lines 64E, and 68E, gives a $\frac{1}{2}$ width depth estimate of only about 50-75 feet, indicating that overburden may not be as deep as indicated from the airborne. This magnetic feature should be checked for associated conductivity.

Basal Till, Overburden Sampling Program

A program of basal till sampling was initiated to gain geochemical information into the nature of mineralization that might be associated with the various conductor zones, and magnetic features outlined during the geophysical work. The known lead and zinc mineralization, from the Jowsey drilling, was selected as an area to begin the work, since something of the bedrock mineralization was known, as were the depths of overburden, and overburden character from the Jowsey drill records.

Adcura Ltd. of Ottawa, Ontario, was engaged to do this work, which was done under the supervision of R. Cormier, during February, March and April, of 1974, with additional work in July of 1974. Analytical work was completed by Bondar Clegg and Company of Ottawa, Ontario.

The technique used involved hammering a metal sampler in vertical holes down through the overburden to the bedrock interface and basal till layer. The sampler is then opened, and further hammering forces a sample into the opening. The sampler and rods are then withdrawn using a hydraulic or hand jack. Boulders hamper the operation and there is always uncertainty as to whether a true basal till has been sampled (if it indeed exists in the area), or if the sample does come from the bedrock interface.

A total of about 2100 feet of drilling in some 46 holes was completed.

The method proved partially satisfactory, especially in areas near the old drilling. Coverage was more detailed on Zone 2, and profiles were run across the conductor axis on Zone 1, Zone 4, and the magnetic anomaly of Zone 7. A reconnaissance profile, with samples spaced every 1000 feet, was run across a broad magnetic low area evident from the airborne data along line 112W.

Uncertainty in reaching bedrock with the method, as well as logistics difficulties, were encountered, and hampered the program somewhat. Depths of holes varied from 5 feet to over 100 feet, with the average being roughly 50 feet. The overburden seems to thicken considerably south of the Zone 2 baseline.

Appendix II gives copies of the overburden drilling logs.

Analytical Results

Each sample was cleaned, and a heavy mineral separation made, using a heavy liquid S.G. 2.96. Various analyses were made on both the heavy and light fractions, and mineral identifications were done on the heavy fractions of the samples.

Appendix III summarizes the results of the basal till analytical work, and gives histograms for the data.

Generally, it can be concluded that lead and zinc are the two elements that seem to best give an expression of the mineralized material located by the Jowsey drilling. Histograms indicate that values of greater than 100 ppm copper, 200 ppm zinc, and 60 ppm lead, can be considered anomalous. Early samples were also analyzed for Uranium and Thorium, and threshold values for these elements can be considered as 1 ppm and 15 ppm respectively.

Spectrographic semi quantitative analyses were made on many of the earlier samples (-80 mesh fraction only). Results are in the Appendix III compilation. The method was not deemed to add any useful information.

Highlights of the basal till heavy fraction analyses are plotted on the compilation sheet for Zones 2, 4, and 7, and on the electromagnetic survey map for Zone 1. Barite content from the heavy mineral identification is also plotted.

For several samples, insufficient material was available for analyses.

Since the Jowsey core was rich in carbonate, it was felt that carbonate content of the light basal till fraction would aid in delimiting similar areas. Leach tests and visual examinations, however, failed to indicate any significant variations between samples checked. Carbonate visual estimates, and leach volumes, were all quite low (See Appendix III).

The mineralized area around the old Jowsey drilling has a good lead-zinc expression. Heavy boulders, south of this zone, hampers use of the small percussion type drill. Sample 52 on line 20W gave a good strong Cu, Pb-Zn response, and should be followed up with more sampling north southeast and west of the Hole 52 location. The magnetic trend north of this site, could be representative of a similar geologic situation to Zone 2.

No anomalous base metal values were obtained from the samples taken across the Zone 1 conductor axis. The numerous boulders in the area, however, may have prevented the sampler from reaching to a true basal till horizon.

The profile of samples along 112W, gave no anomalous values. Barite content on one or two samples seemed slightly high, but barite seems to be ubiquitous in all the heavy fractions, and no definite trends can be seen.

During the course of the July, 1974, overburden sampling, a packsack drill and associated equipment was brought to the property to try and obtain bedrock samples, by using the percussion holes already completed.

The technique proved unworkable due to the heavy amounts of clay at the top of the hole, which plugged the core rods. The small pump supplied with the packsack machine was incapable of clearing the rods.

Diamond Drill Core Analytical Work

Fortunately, the Jowsey drill core had been stored in aluminum boxes with the footages engraved into the metal. Most of it was intact, and the boxes were reorganized, and moved to the Duval camp. Approximately 15% had been dumped following collapse of the old core rack. No assay results were given on the Jowsey logs, and all the core was resampled and analysed for base metals, Uranium, Thorium and Columbium. Spectrographic semi-quantitative analyses were also run on some of the samples. Core Analytical work was by X-Ray Assay Laboratories Ltd., Don Mills, Ontario.

Appendix IV presents the results of the analyses. Certain sections of the core are anomalous in Thorium, Uranium, Lead, Zinc, and Columbium. Anomalous amounts of Strontium and rare earth group elements are indicated from several of the Spectrographic scans.

The anomalous base metal results provide an explanation for the high lead and zinc contents of the heavy fractions from basal till samples near the drill holes.

Visually, the drill core does not appear to have as much zinc mineralization as lead, however, the analytical results seem to indicate the reverse is the case. Zinc mineralization is likely more finely disseminated and difficult to see visually, giving an impression of lesser quantity than the lead, which occurs as randomly distributed 1-3mm crystals of galena.

SUMMARY AND CONCLUSIONS

An exploration program of Basal Till overburden sampling, and ground geophysics, completed over the Montviel property, has indicated several targets for additional evaluation, in a complexly mineralized intrusive environment. A progression of this work should involve a diamond drilling program to assess the relationship between rock type, mineralization and the geophysical-geochemical data accumulated to date. Lack of exposure renders geologic interpretations very difficult at this stage, and core drilling will be a necessity for the next phase of exploration.

Respectfully submitted,

A. L. Barker,
District Geologist,
Duval International Corporation.

APPENDIX I

COST BREAKDOWN

Linecutting - Airstrip Clearing
1. Canwild Explorations

Total Mileage: 29.8411	Costs:	2,384.11
2. J. P. Belisle : 14.75	Costs:	1,843.75
3. P. Nabigon, A. Brown : Airstrip (100'x3500')	Costs:	4,351.35

Magnetometer Surveying

1. Canwild Explorations 29.8411 miles	Costs:	432.06
2. Jan Janeicz contouring "	Costs:	200.00

Helicopter Charter Cost total: Aug.1973 to Apr.1975 : 24,285.06
(Trans Quebec Helicopters)

Overburden Sampling - Feb.Mar.Apr.1974,July-Aug/74 : 7,020.48
(Adcura Ltd.)

Packsack Drill Rental & Supplies 695.77

General Expenses, Camp, Aug.1973-May 1975
Groceries, Fuel etc. 2,163.60

Analytical Expense

1. X-Ray Assay Laboratories Ltd.(core analysts)	1,310.50
2. Bondar Clegg & Co. Ltd.(basal till analyses)	2,027.48

Salaries - Duval Personnel

1973 September	L. Mealey	10 days	\$ 350.00
	D. Lyman	10 days	350.00
1973 October	L. Barker	4 days	220.00
	D. Lyman	4 days	140.00
1974 January	L. Mealey	1½ days	42.50
	L. Barker	3 days	165.00
1974 February	L. Mealey	17 days	595.00
	L. Barker	10 days	550.00
	J. Tower	10 days	350.00
	G. McKillop	5 days	175.00
1974 March	J. Tower	2 days	70.00
1974 April	L. Barker	5 days	275.00
	J. Tower	5 days	175.00
1974 June	J. Ross	7 days	245.00
	L. Barker	7 days	385.00
	L. Mealey	7 days	245.00
1974 July	P. Hawkins	7 days	140.00
1974 August	L. Barker	7 days	385.00
(local laborer)	B. Demill	7 days	140.00
1974 November	W. Troup	5 days	175.00
1975 April	L. Mealey	3 days	175.00
	J. Ross	3 days	105.00

Total Labour costs 5,452.50
Total of all costs Excluding Airborne Survey to Date: \$53,827.36

Alv. Hart, PEng.

*District Geologist
Ontario Ministry of Natural Resources*

HELICOPTER EXPENSE ALLOCATION

1. Prospection, Trenching	\$ 2,906.76
2. Magnetic Survey, Linecutting	6,747.49
3. Overburden Drilling	10,199.14
4. EM Surveying	1,741.35
5. Airstrip Clearing	1,419.98
6. General, Radio Rental, Fuel Transport, Maintenance, Etc.	<u>1,270.34</u>
 TOTAL	 \$24,285.06

A. Barker, P.Eng.
District Geologist
Daval Industrial
Corporation

APPENDIX IA

MAJOR CONTRACTOR INVOICES

November 8, 1974

Duval International Corporation,
Ste. 906, 11 Adelaide St. W.,
TORONTO.

IN ACCOUNT WITH DUVAL INTERNATIONAL CORPORATION RE MONTVIE
AREA - AIRSTRIP CLEARING.

FINAL BILLING:	Contract Total	\$3,500
	Less Advance #1 - Oct. 9	1,000
	Less Advance #2 - Nov. 1	500
	Less Advance #3 - Nov. 7	500
	Amount Owing	\$1,500
	Plus: Food receipts	351.95
	Job bonus	500.00
	Total Amount Owing	\$2,351.95

Approved for Payment
At Bank Nov 1 1974
Change 37-106-761

4351.95

INVOICE

VAL D'OR, Aug. 16/74 .

DUVAL INTERNATIONAL CORPORATION,
suite 906,
11 Adelaide Street, West,
Toronto 105, Ont. Can.

Attention Mr. A.L. Barker

Line cutting in Montvieu township : 14 3/4 miles at \$125.00 per mile

TOTAL \$1813.75

less advance \$400.00

Make cheque to : Jean Paul Bélisle
81 Des Saules Street,
Val d'or, P.Q.

Total owing 1443.75

S. J. Paul Bélisle

Approved by
Payment 1443.75

A. L. Barker, Aug 26-1974

charge 37-106-761

RECEIVED
AUG 21 1974
Ans'd.....

CANWILD EXPLORATION

c/o 230 McCOMBER CRESCENT

THUNDER BAY ONTARIO

February 26, 1974

DuVal International Corporation,
Ste. 906,
11 Adelaide Street W.,
Toronto, Ontario
M5H1L9

Attention: Mr. A. L. Barker

FINAL STATEMENT OF ACCOUNT

Balance statement : Re. work performed for DuVal International Corp. Ltd.

Project: Montviel Township, Quebec January 6/74-February 22/74

Line Grid and Magnetometer Survey:
(as per grid maps mailed under separate cover)

Zone I-22,401'	=	4.2426 Miles
Zone II&IV-62,100'	=	11.7614 Miles
Zone V & VI-46,600'	=	8.8258 Miles
Zone VII -26,460'	=	5.0113 Miles
Total Miles		<u>29.8411</u>

Claim Staking: 40 Claims @ \$50.00
Recordings (Receipt under Separate Cover)

U.S.A. Exchange on Cheque #117257 (attached)
TOTAL CONTRACT

<u>Less:</u>	Advance Jan 4/74 Pd.	\$2,000.00
#1	Interim Feb 20/74 Pd.	. . 2,000.00
#2	Interim Feb 21/74	2,000.00

RUSH PAYMENT IN CANADIAN FUNDS APPRECIATED

TEL. 368-4271

INVOICE

DIAMOND DRILLING CONSULTANTS

SUITE 523, 67 YONGE STREET, TORONTO, ONTARIO M5E 1J8

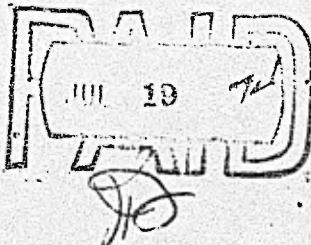
SOLD TO: Duval International Corporation,
Suite 906, 11 Adelaide St., W.
Toronto, Ont.

SHIPPED TO:

VIA Pick-up

CUSTOMERS ORDER NOM. ^r		Verbal A. L. Baker
OUR ORDER NO.		
INVOICE NO.	DATE	
5159	June 26, 1974.	
FEDERAL SALES TAX		12%
PROVINCIAL SALES TAX		Exempt
PAYMENT		

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1	2	"XRT" CORE BITS	\$60.72	\$121.44
2	2	" REAMING SHELLS	76.50	153.00
3	1	"XRL" CASING SHOE (5.45 CTS.)		88.63
4	12	PACK TRAYS	1.70	20.40
	1	PACKSACK DRILL & EQUIPMENT RENTAL		300.00
				<u>\$683.47</u>
		12% Federal Sales Tax on setting	\$103.00	
				<u>12.30</u> <u>\$695.77</u>
		By cheque, Drill rental June 26, 1974 to July 26, 1974		
		Deposit on equipment \$100.00		
				<u>TOTAL PAID</u> <u>300.00</u> <u>\$395.77</u>



TEL. 368-4271

INVOICE

DIAMOND DRILLING CONSULTANTS

SUITE 523, 67 YONGE STREET, TORONTO, ONTARIO M5E 1J8

SOLD TO: Dural International Corporation,
Suite 100, 11 Allendale St., West,
Toronto, Ont.

SHIPPED TO: _____

VIA _____

CUSTOMERS ORDER NO

OUR ORDER NO.

INVOICE NO.	DATE
2176	JULY 27, 1974

FEDERAL SALES TAX

PROVINCIAL SALES TAX

PAYMENT

ITEM	QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
	1	PACKBACK DRILL & EQUIPMENT RENTAL JULY 26th to AUGUST 26th		\$300.00

July 27/74

Charge
Mentioned
Person

ADCURA LTD.

A DIVISION OF

BONDAR-CLEGG & COMPANY LTD.

TELEPHONE (613) 237-3110

764 BELFAST ROAD

OTTAWA, ONTARIO, CANADA

K1G 0Z5

August 30, 1974.

INVOICE NO: 146

TO: Mr. Lee Barker,
Duval International,
906 - 11 Adelaide Street West,
Toronto, Ontario.

Re: Overburden drilling, Montviel, Quebec, August/74.

3 days overburden drilling @ \$175.00 per	\$525.00
1 day mobilization @ \$100.00 per	100.00
Richard Laccoursiere expense account	19.20
Equipment Loss:	
6 feet rods @ \$5.00 per	30.00
	<hr/>
	\$674.20

PLEASE MAKE CHEQUE PAYABLE TO:

ADCURA LTD.
764 BELFAST ROAD,
OTTAWA, ONTARIO K1G 0Z5

ADCURA LTD.A DIVISION OF
BONDAR-CLEGG & COMPANY LTD.

July 31, 1974.

TELEPHONE (613) 237-3110
764 BELFAST ROAD
OTTAWA, ONTARIO, CANADA
K1G 0Z5

INVOICE NO: 140

FILE
MONTVIEU

Mr. Lee Barker,
Duval International,
906 - 11 Adelaide Street West,
Toronto, Ontario.

Re: Overburden drilling, Montviel, Quebec, July /74.

3 days overburden drilling, 2 men @ \$175 per	\$525.00
6 days overburden drilling, 1 man @ \$150 per	900.00
1 day mobilization @ \$100	100.00
Richard Lacoursiere expense account (to July 13, 1974)	24.52
	\$1,549.52
Less: Advance, cheque number 17484	1,000.00
Amount this Invoice	\$549.52

Approved
Aug 9-1974
& forwarded to
Vancouver

PLEASE MAKE CHEQUE PAYABLE
TO: ADCURA LTD.
764 BELFAST ROAD,
OTTAWA, ONTARIO. K1G 0Z5

charge
37-102-761

ADCURA LTD.

A DIVISION OF
BONDAR-CLEGG & COMPANY LTD.

April 30, 1974.

TELEPHONE (613) 237-3110
764 BELFAST ROAD
OTTAWA, ONTARIO, CANADA
K1G 0Z5

INVOICE NO: NO. 114

TO: Mr. Lee Barker,
Duval International Corporation,
206 - 11 Adelaide Street West,
Toronto, Ontario.

Re: Overburden drilling, Montviel, Quebec, February, March and
April, 1974.

22 days overburden drilling @ \$175 per day	\$3,850.00
2 days mobilization - demobilization @ \$75 per day	150.00
3 days supervision, R. Cormier @ \$100 per day	300.00
Equipment loss:	
50 feet rod @ \$4.00 per foot \$200.	
2 small samplers @ \$80 per 160	360.00
D. Fontaine expense account	10.00
Rene Lacoursiere expense account	61.84
Roch Cormier expense account	64.92
	<u>\$4,790.76</u>
LESS: Cheque dated 1/23/74	\$1,500.00
Cheque number 120406	<u>\$2,000.00</u>
AMOUNT THIS INVOICE	<u>\$1,296.76</u>

E.S. JAMIEC

7. HEATH ST. E. APT 5

Re-drafting TORONTO 7. ONT.

DATE	HOURLS
7 march	- 5.0
8 "	- 6.5
9 "	- 3.5
10 "	- 6.5
11 "	- 4.5
13 "	- 5.0
14 "	- 3.5
15 "	- 3.5
16 "	- 2.0

Montreal

Total 40.0 @ 5" = \$200.00

S. S. Jamiec

March 17/41

MAGNETIC
CONTOURING

APPENDIX II

OVERBURDEN DRILLING LOGS

DF

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4D.F 3001	1	26/2/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
47'	D.F. 1F	Dural
LINE:	STATION:	LOCATION:
24 West	6+00N	Montreal

DRILLING TIME

POINT STARTED:	8 ¹ / ₂	SAMPLER STARTED:	10 ¹ / ₄
POINT STOPPED:	9 ¹ / ₂	SAMPLER STOPPED:	11 ¹ / ₄
POINT EXTRACTED:	10	SAMPLER EXTRACTED:	12.

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	Organic	%
2	35	Clay	%
35	41	Silt	%
41	47	Fine Sand	%
		Medium Sand	%
		Coarse Sand	%
		Gravel	%
		Pebbles	%

REMARKS:

DF.

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4D.F 3002	2	27/2/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
90	D.F. 1F	Dural
LINE:	STATION:	LOCATION:
24 W. Baseline	0+00m.	Montreal

DRILLING TIME

POINT STARTED:	1	SAMPLER STARTED:	
POINT STOPPED:	2 ¹ / ₂	SAMPLER STOPPED:	
POINT EXTRACTED:	3 ¹ / ₄	SAMPLER EXTRACTED:	

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
1	2	Organic	%
2	60	Clay	%
60	80	Silt	%
80	90	Fine Sand	%
		Medium Sand	%
		Coarse Sand	%
		Gravel	%
		Pebbles	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4 D.F 3D2	2	11/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
9D	D.F 1F	Dural
LINE:	STATION:	LOCATION:
24 W.	Baseline	Montreal

DRILLING TIME

POINT STARTED: 9.00	SAMPLER STARTED: 11 1/4
POINT STOPPED: 10-1/4	SAMPLER STOPPED: 12-1/4
POINT EXTRACTED: 11	SAMPLER EXTRACTED: 12 1/2

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	organic	ORGANIC %
2	6.0	glaise	CLAY %
6.0	8.0	gravel	SILT %
8.0	9.0	fill	FINE SAND %
			MEDIUM SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
3D2, 4 D.F	2	28/2/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
9D	D.F 1F	Dural
LINE:	STATION:	LOCATION:
24 W.	Baseline	Montreal

DRILLING TIME

POINT STARTED: 9	SAMPLER STARTED: 12 1/2
POINT STOPPED: 10-1/4	SAMPLER STOPPED: 1 1/2
POINT EXTRACTED: 11 1/2	SAMPLER EXTRACTED: 3.00

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
			ORGANIC %
			CLAY %
			SILT %
			FINE SAND %
			MEDIUM SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

REMARQUE:

Le sample n'a pas ouvert
et en le tourrant il a
cassé.

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4 D.F. 3003	3	11/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
70	D.E. 3 F	Dural
LINE:	STATION:	LOCATION:
20 West	3 + 50 sud	Montreal

DRILLING TIME

POINT STARTED: 1. /

POINT STORED: 2, 0

POINT EXTRACTED: 3-14

SAMPLER STARTED: 3

SAMPLES ARE NUMBERED 61-67

SAMPLER EXTRACTED: 5.00

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	Organic	ORGANIC
2	56	Clay	CLAY
56	65	Silt	SILT
65	70	Fine Sand	FINE SAND
		Medium Sand	MEDIUM SAND
		Coarse Sand	COARSE SAND
		Gravel	GRAVEL
		Pebbles	PEBBLES

- MARKS

OVERBURDEN DRILLING LOG

SAMPLE NO: 4 D.F. 3004	DRILL HOLE NO: 4	DATE: 2/13/74
SAMPLE DEPTH: 43.6	SAMPLERS: D.F., J.F.	CONTRACT Dugel
LINE: 20 West	STATION: Baseline	LOCATION: Montiville

DRILLING TIME

POINT STARTED: 8.00

8 1/2

POINT EXTRACTED: 9.01

SAMPLER STARTED: 9/17

卷之三

SAMPLER EXTRACTED: 11

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	organic	ORGANIC
2	35	gravelly glacial	CLAY
35	41	gravel	SILT
41	13.6	tilt	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

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OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F 3005	DRILL HOLE NO: 5	DATE: 2/3/74
SAMPLE DEPTH: 67	SAMPLERS: D.F., T.F.	CONTRACT: Duracal
LINE: 28	STATION: Baseline	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 12 1/2

SAMPLER STARTED: 2.00

POINT STOPPED: 1 1/4

SAMPLER STOPPED: 3.00

POINT EXTRACTED: 1 3/4

SAMPLER EXTRACTED: 4.00

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	organic	ORGANIC
2	40	glass	CLAY
40	63	gravel	SILT
63	67	till	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F 3006	DRILL HOLE NO: 6	DATE: 10/13/74
SAMPLE DEPTH: 11	SAMPLERS: D.F., C.P.	CONTRACT: Duracal
LINE: 8W.	STATION: 3+00 9	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 1.00

SAMPLER STARTED: 2 1/4

POINT STOPPED: 1 1/2

SAMPLER STOPPED: 3 - 1/4

POINT EXTRACTED: 2.00

SAMPLER EXTRACTED: 3. 1/2

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	4	water	ORGANIC
4	8	glaise	CLAY
8	11	gravel	SILT
		20' till	FINE SAND
		8'	MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

8 milles de ski Don
à faire

OVERBURDEN DRILLING LOG

SAMPLE NO.:	DRILL HOLE NO.:	DATE:
4 D.F. 300.7	7	11/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
" 5	D.F. e.p.	Burial
LINE:	STATION:	LOCATION:
8 West	5700S	Montiville

DRILLING TIME

POINT STARTED:	9.00	SAMPLER STARTED:	10 1/2
POINT STOPPED:	9 1/2	SAMPLER STOPPED:	11.00
POINT EXTRACTED:	10.20	SAMPLER EXTRACTED:	11. 1/2

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE:
4D F 3018	8	11/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
10	D.F. C.P.	Dugel
LINE:	STATION:	LOCATION:
8 West	6 + 50 S	Montreal

DRILLING TIME

POINT STARTED:	10 $\frac{1}{2}$	SAMPLER STARTED:	2.00
POINT STOPPED:	7.00	SAMPLER STOPPED:	2 $\frac{3}{4}$
POINT EXTRACTED:	1 $\frac{1}{2}$	SAMPLER EXTRACTED:	3 $\frac{1}{2}$

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE
FROM	TO		DESCRIPTION
0	6	organic	ORGANIC
6	9	gravel	CLAY
9	10	Till	SILT
			FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4 D.F. 3009	DRILL HOLE NO: 9	DATE: 12/3/74
SAMPLE DEPTH: 6	SAMPLERS: D.F., e.p.	CONTRACT: Dunel
LINE: 8 West	STATION: 8+008	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 9.00

SAMPLER STARTED: 10 1/4

POINT STOPPED: 9 1/2

SAMPLER STOPPED: 11-1/4

POINT EXTRACTED: 10.

SAMPLER EXTRACTED: 11 1/4

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE	
FROM	TO		DESCRIPTION	%
0	16	Organic	ORGANIC	%
0.6	5	gravel	CLAY	%
5	6	till	SILT	%
			FINE SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4 D.F. 3010	DRILL HOLE NO: 10	DATE: 12/3/74
SAMPLE DEPTH: 15	SAMPLERS: D.F., e.p.	CONTRACT: Dunel
LINE: 8 W.	STATION: 10+008	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 12

SAMPLER STARTED: 1 1/2

POINT STOPPED: 13-1/4

SAMPLER STOPPED: 2.00

POINT EXTRACTED: 14

SAMPLER EXTRACTED: 2 1/2

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE	
FROM	TO		DESCRIPTION	%
0	1	Organic	ORGANIC	%
1	13	gravel	CLAY	%
13	15	till	SILT	%
			FINE SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F. 3011	DRILL HOLE NO: 11	DATE: 13/3/74
SAMPLE DEPTH: 11	SAMPLERS: D.F., e.P.	CONTRACT: Dural
LINE: 21 West	STATION: 124005	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 3.00

SAMPLER STARTED: 4 1/4

POINT STOPPED: 3 1/2

SAMPLER STOPPED: 4 3/4

POINT EXTRACTED: 3.00

SAMPLER EXTRACTED: 5.00

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F. 3012	DRILL HOLE NO: 12	DATE: 20/3/74
SAMPLE DEPTH: 24	SAMPLERS: D.F., C.P.	CONTRACT: Dural
LINE: 16 West	STATION: 32+00 N	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 3 1/2

SAMPLER STARTED: 4.45

POINT STOPPED: 4.00

SAMPLER STOPPED: 5.44

POINT EXTRACTED: 4.1/2

SAMPLER EXTRACTED: 5.45

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	%
FROM	TO			
0	1	organic	ORGANIC	%
1	10	gravel	CLAY	%
10	11	til	SILT	%
			FINE SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	%
FROM	TO			
0	1	organic	ORGANIC	%
1	11	glaise	CLAY	%
11	22	gravel	SILT	%
22	24	g fill	FINE SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

REMARKS:

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F.	DRILL HOLE NO: 13	DATE: 21/3/74
SAMPLE DEPTH: 18	SAMPLERS: D.F. CP.	CONTRACT: Dural
LINE: 76 W.	STATION: 37+00 NAD 28	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 8.00

SAMPLER STARTED: 9 1/4

POINT STOPPED: 8 1/2

SAMPLER STOPPED: 9. 45

POINT EXTRACTED: 9.00

SAMPLER EXTRACTED: 10 1/4

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1	organic	ORGANIC %
1	9	glare	CLAY %
9	18	gravel	SILT %
			FINE SAND %
			MEDIUM SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F. 3014	DRILL HOLE NO: 14	DATE: 21/3/74
SAMPLE DEPTH: 23	SAMPLERS: D.F. CP	CONTRACT: Dural
LINE: 76 W.	STATION: 42+00 N	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 10 1/2

SAMPLER STARTED: 12 1/2

POINT STOPPED: 11

SAMPLER STOPPED: 1.00

POINT EXTRACTED: 13 1/4

SAMPLER EXTRACTED: 1.1/2

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1	organic	ORGANIC %
1	9	glare	CLAY %
9	22	gravel	SILT %
22	23	lill	FINE SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

REMARKS:

LA
R.L.

OVERBURDEN DRILLING LOG

40F.

SAMPLE NO: <u>D.F. 3015</u>	DRILL HOLE NO: <u>15</u>	DATE: <u>21/3/73</u>
PILE DEPTH: <u>22</u>	SAMPLERS: <u>D.F., C.P.</u>	CONTRACT: <u>Dural</u>
LINE: <u>76 W.</u>	STATION: <u>47+00 N</u>	LOCATION: <u>Montreal</u>

DRILLING TIME

DRILLING TIME
POINT STARTED: 2 1/4 SAMPLER STARTED: 3.45
POINT STOPPED: 3.00 SAMPLER STOPPED: 4. 1/4
POINT EXTRACTED: 3. 1/2 SAMPLER EXTRACTED: 4.45

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	
FROM	TO			
0	1	organic	ORGANIC	%
1	12	glac.	CLAY	%
12	22	gravel	SILT	%
			FINE SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4 D.F. 3016	DRILL HOLE NO: 16	DATE: 22/3/74
SAMPLE DEPTH: 21	SAMPLERS: D.F., C.P.	CONTRACT: Dunad
LINE: 76 W.	STATION: 52 + 07.14	LOCATION: Montreal

DRILLING TIME

POINT STARTED:	8.00	SAMPLER STARTED:	9 $\frac{1}{2}$
POINT STOPPED:	8 $\frac{1}{2}$	SAMPLER STOPPED:	10.
POINT EXTRACTED:	9.00	SAMPLER EXTRACTED:	16 $\frac{1}{2}$

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE
FROM	TO		DESCRIPTION
0	1	organic	ORGANIC
1	10	glaise	CLAY
10	20	gravel	SILT
20	21	till	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3030	DRILL HOLE NO: #24	DATE: 9/4/74
SAMPLE DEPTH: 13' 3"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 44+00W	STATION: 0+00	LOCATION: MONVIEL

DRILLING TIME ZONE 2

POINT STARTED: 2:30 SAMPLER STARTED: 3'
 POINT STOPPED: 2:45 SAMPLER STOPPED: 3:10
 POINT EXTRACTED: 2:55 SAMPLER EXTRACTED: 3:15

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	4'	ORGANIC	ORGANIC %
4'	3'	CLAY	CLAY %
			SILT %
			FINE SAND %
			MEDIUM SAND %
3'	9'	COARSE SAND	COARSE SAND %
9'	13' 3"	GRAVEL	GRAVEL %
			PEBBLES %
13' 3"		SUB OUTCROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3024	DRILL HOLE NO: #26	DATE: 6/4/74
SAMPLE DEPTH: 51'	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 26+00N	LOCATION: MONTVIEL

DRILLING TIME ZONE 4

POINT STARTED: 11:10 SAMPLER STARTED: 1'
 POINT STOPPED: 11:45 SAMPLER STOPPED: 1:35
 POINT EXTRACTED: 12:45 SAMPLER EXTRACTED: 2:10

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	29'	CLAY	CLAY %
			SILT %
29'	46'	FINE SAND	FINE SAND %
			MEDIUM SAND %
46'	51'	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
51'		SUB OUTCROB	

REMARKS:

1 TRIAL
 MOVE FROM LINE 8+00E
 TO LINE 20W STN
 10+00S

OVERBURDEN DRILLING LOG

SAMPLE NO: ALA-3023	DRILL HOLE NO: # 27	DATE: 6/4/74
SAMPLE DEPTH: 46' 5"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 27+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: 8' 15	SAMPLER STARTED: 9' 50
POINT STOPPED: 9' 10	SAMPLER STOPPED: 10' 15
POINT EXTRACTED: 9' 40	SAMPLER EXTRACTED: 10' 50

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	26'	CLAY	CLAY %
			SILT %
26'	40'	FINE SAND	FINE SAND %
			MEDIUM SAND %
40'	46' 5"	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
46' 5"		SUB OUTCROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: ALA-3022	DRILL HOLE NO: # 28	DATE: 3/4/74
SAMPLE DEPTH: 42'	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 28+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: 9' 10	SAMPLER STARTED: 10' 20
POINT STOPPED: 9' 40	SAMPLER STOPPED: 10' 45
POINT EXTRACTED: 9' 10	SAMPLER EXTRACTED: 11' 15

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	27'	CLAY	CLAY %
			SILT %
27'	38'	FINE SAND	FINE SAND %
			MEDIUM SAND %
38'	42'	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
42'		SUB OUTCROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3021	#29	2/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
32'	RL, LR	DUVAL
LINE:	STATION:	LOCATION:
8+00 E	29+00 N	MONTREAL

DRILLING TIME ZONE - 4

POINT STARTED: 3' 25" SAMPLER STARTED: ✓
 POINT STOPPED: 4" SAMPLER STOPPED: ✓
 POINT EXTRACTED: 4' 15" SAMPLER EXTRACTED: ✓

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	24'	CLAY	CLAY %
			SILT %
24'	30'	FINE SAND	FINE SAND %
			MEDIUM SAND %
30'	32'	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
32'		SUB OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3021	#29	3/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
32'	RL, LR	DUVAL
LINE:	STATION:	LOCATION:
8+00 E	29+00 N	MONTREAL

DRILLING TIME ZONE - 4

POINT STARTED: ✓ SAMPLER STARTED: 8'
 POINT STOPPED: ✓ SAMPLER STOPPED: 8' 2 0
 POINT EXTRACTED: ✓ SAMPLER EXTRACTED: 8' 4 5

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	24'	CLAY	CLAY %
			SILT %
24'	30'	FINE SAND	FINE SAND %
			MEDIUM SAND %
30'	32'	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
32'		SUB OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3020	DRILL HOLE NO: #30	DATE: 2/4/74
SAMPLE DEPTH: 41'4"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 30+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: 12'45 SAMPLER STARTED: 2'10
 POINT STOPPED: 1.20 SAMPLER STOPPED: 2'40
 POINT EXTRACTED: 2' SAMPLER EXTRACTED: 3'05

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	28'	CLAY	CLAY %
			SILT %
28'	37'	FINE SAND	FINE SAND %
			MEDIUM SAND %
37'	41'	COARSE SAND	COARSE SAND %
			GRAVEL %
41'	41'4"	TILL	PEBBLES %
41'4"		SUB. OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3019	DRILL HOLE NO: #31	DATE: 2/4/74
SAMPLE DEPTH: 43'4"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 31+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: 9'15 SAMPLER STARTED: 10'30
 POINT STOPPED: 10' SAMPLER STOPPED: 11'10
 POINT EXTRACTED: 10'20 SAMPLER EXTRACTED: 11'35

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC %
1'	27'	CLAY	CLAY %
			SILT %
27'	40'	FINE SAND	FINE SAND %
			MEDIUM SAND %
40'	43'	COARSE SAND	COARSE SAND %
			GRAVEL %
43'	43'4"	TILL	PEBBLES %
43'4"		SUB. OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3018	DRILL HOLE NO: #32	DATE: 1/4/74
SAMPLE DEPTH: 37' 3"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 32+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: 3' 10" SAMPLER STARTED: ✓
 POINT STOPPED: 3' 50" SAMPLER STOPPED: ✓
 POINT EXTRACTED: 4' 15" SAMPLER EXTRACTED: ✓

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC
2'	22'	CLAY	CLAY
			SILT
22'	34'	FINE SAND	FINE SAND
			MEDIUM SAND
34'	37'	COARSE SAND	COARSE SAND
37'	37.3"	TILL	GRAVEL
			PEBBLES
37.3"		SUB OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3018	DRILL HOLE NO: #32	DATE: 2/4/74
SAMPLE DEPTH: 37' 3"	SAMPLERS: BL, LR	CONTRACT: DUVAL
LINE: 8+00E	STATION: 32+00N	LOCATION: MONTREAL

DRILLING TIME ZONE -4

POINT STARTED: ✓ SAMPLER STARTED: 8'
 POINT STOPPED: ✓ SAMPLER STOPPED: 8' 25"
 POINT EXTRACTED: ✓ SAMPLER EXTRACTED: 9'

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC
2'	22'	CLAY	CLAY
			SILT
22'	34'	FINE SAND	FINE SAND
			MEDIUM SAND
34'	37'	COARSE SAND	COARSE SAND
37'	37.3"	TILL	GRAVEL
			PEBBLES
37.3"		SUB OUT CROB	

REMARKS:

1 TRIAL
NO SAMPLE

OVERBURDEN DRILLING LOG

SAMPLE NO: 4LA-3017	DRILL HOLE NO: #33	DATE: 1/4/74
SAMPLE DEPTH: 35'3"	SAMPLERS: RL, LR	CONTRACT: DUVAL
LINE: 8+00 E	STATION: 33+00 N	LOCATION: MONTREAL

DRILLING TIME ZONE - 4

POINT STARTED: 12:30

SAMPLER STARTED: 2:00

POINT STOPPED: 1:15

SAMPLER STOPPED: 2:25

POINT EXTRACTED: 1:50

SAMPLER EXTRACTED: 2:50

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	24'	CLAY	CLAY %
			SILT %
24'	30'	FINE SAND	FINE SAND %
			MEDIUM SAND %
30'	35'	COARSE SAND	COARSE SAND %
			GRAVEL %
35'	35'3"	TILL	
35'3"		SUB OUT CROP	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO: 4D.F. 3A.34	DRILL HOLE NO: 34	DATE: 19/3/74
SAMPLE DEPTH: 45	SAMPLERS: DF, CP.	CONTRACT: Duval
LINE: 112 West	STATION: 2000 m and Rive	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 8

SAMPLER STARTED: 10

POINT STOPPED: 8:00

SAMPLER STOPPED: 11

POINT EXTRACTED: 9:45

SAMPLER EXTRACTED: 11:45

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2	organic	ORGANIC %
2	33	glauze	CLAY %
33	45	gravel	SILT %
43	45	Till	FINE SAND %
			MEDIUM SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
42E 3035	35	14/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
36	D.F. C.P.	Dural
LINE:	STATION:	LOCATION:
112 West	1000 mord	Montreal

DRILLING TIME

POINT STARTED:	SAMPLER STARTED: 8/12
POINT STOPPED:	SAMPLER STOPPED: 9/14
POINT EXTRACTED:	SAMPLER EXTRACTED: 10

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE	
FROM	TO		DESCRIPTION	%
			ORGANIC	%
			CLAY	%
			SILT	%
			PINK SAND	%
			MEDIUM SAND	%
			COARSE SAND	%
			GRAVEL	%
			PEBBLES	%

REMARKS:

Dampierre n'a pas ouvert
Terrain très dur

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
41D.F. 3035	35	18/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
26	D.F. C.P.	Dural
LINE:	STATION:	LOCATION:
112 W	1000 mord	Montreal

DRILLING TIME

POINT STARTED:	1.00	SAMPLER STARTED:	2 1/2
POINT STOPPED:	1. 1/2	SAMPLER STOPPED:	3.00
POINT EXTRACTED:	2. 1/4	SAMPLER EXTRACTED:	3 3/4

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE	
FROM	TO		DESCRIPTION	
D.	2	organic	ORGANIC	%
2	20	clay	CLAY	%
20	25	silt	SILT	%
25	26	fine sand	FINE SAND	%
		medium sand	MEDIUM SAND	%
		coarse sand	COARSE SAND	%
		gravel	GRAVEL	%
		pebbles	PEBBLES	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4.D.F. 3035	35	14/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
26	D.F. e.P.	Dural
LINE:	STATION:	LOCATION:
112 W.	1000 Nord	Montmil

DRILLING TIME

POINT STARTED: SAMPLER STARTED: 10 1/2
 POINT STOPPED: SAMPLER STOPPED: 11 1/4
 POINT EXTRACTED: SAMPLER EXTRACTED: 12

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
		ORGANIC	%
		CLAY	%
		SILT	%
		FINE SAND	%
		MEDIUM SAND	%
		COARSE SAND	%
		GRAVEL	%
		PEBBLES	%

REMARKS:

Il faut mettre la machine sur les roches et le sample de ride

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4.D.F. 3035	35	13/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
26	D.F. e.P.	Dural
LINE:	STATION:	LOCATION:
112 W.	1000 Nord	Montmil

DRILLING TIME
 POINT STARTED: 3 1/4
 POINT STOPPED: 4,00
 POINT EXTRACTED: 5,00

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
		ORGANIC	%
		CLAY	%
		SILT	%
		FINE SAND	%
		MEDIUM SAND	%
		COARSE SAND	%
		GRAVEL	%
		PEBBLES	%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO.:	DRILL HOLE NO.:	DATE:
4 D.F. 3036	36	13/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
48	D.F. c.p.	Durval
LINE:	STATION:	LOCATION:
112 West	River	Montreal

DRILLING TIME

POINT STARTED:	11.00	SAMPLER STARTED:	1 1/4
POINT STOPPED:	11 3/4	SAMPLER STOPPED:	1 3/4
POINT EXTRACTED:	12 1/2	SAMPLER EXTRACTED:	2 1/2

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE
FROM	TO		DESCRIPTION
0	7	glacier	ORGANIC
7	14	glacire	CLAY
14	210	gravel	SILT
40	48	coral sand	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

mouvement de 5 mille

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4D.F 3037	37	19/3/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
33	D.F., C.P.	Dural
LINE:	STATION:	LOCATION:
112 W,	1000 ft. River	Montreal

DRILLING TIME

POINT STARTED:	1,00	SAMPLER STARTED:	300
POINT STOPPED:	2,00	SAMPLER STOPPED:	3 1/2
POINT EXTRACTED:	2.42	SAMPLER EXTRACTED:	4,00

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1	organic	ORGANIC
1	15	glacie	CLAY
15	30	silt gravel	SILT
30	33	till	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS

OVERBURDEN DRILLING LOG

SAMPLE NO: H.D.F. 3038	DRILL HOLE NO: 38	DATE: 20/3/74
SAMPLE DEPTH: 27	SAMPLERS: D.I.F., C.P.	CONTRACT: Dural
LINE: 112 11 est A	STATION: 2000 nad River	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 8.00

SAMPLER STARTED: 9 1/2

POINT STOPPED: 8 1/2

SAMPLER STOPPED: 16

POINT EXTRACTED: 9.00

SAMPLER EXTRACTED: 10 1/2

FOOTAGE

OVERBURDEN DESCRIPTION

SAMPLE DESCRIPTION

FROM

TO

0

1

Organic

ORGANIC

%

1

15

glaise

CLAY

%

15

25

gravel

SILT

%

25

27

Till

FINE SAND

%

MEDIUM SAND

%

COARSE SAND

%

GRAVEL

%

PEBBLES

%

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: H.D.F. 3039	DRILL HOLE NO: 39	DATE: 20/3/74
SAMPLE DEPTH: 21	SAMPLERS: D.F. c.P.	CONTRACT: Dural
LINE: 112 ouest	STATION: 3000 Nord	LOCATION: Montreal

DRILLING TIME

POINT STARTED: 11.

SAMPLER STARTED: 1

POINT STOPPED: 11 3/4

SAMPLER STOPPED: 1 1/2

POINT EXTRACTED: 12 1/4

SAMPLER EXTRACTED: 200

FOOTAGE

OVERBURDEN DESCRIPTION

SAMPLE DESCRIPTION

FROM

TO

0

1

Organic

ORGANIC

1

12

glaise

CLAY

12

20

gravel

SILT

20

21

Till

FINE SAND

MEDIUM SAND

COARSE SAND

GRAVEL

PEBBLES

REMARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3026	#48	8/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
107'	RL, L.R.	DUVALL

LINE: 20+00W STATION: 20+00S LOCATION: MONVIEL

DRILLING TIME ZONE Z

POINT STARTED: 8° SAMPLER STARTED: 10° 25'
 POINT STOPPED: 9° 20' SAMPLER STOPPED: 11° 30'
 POINT EXTRACTED: 10° 15' SAMPLER EXTRACTED: 11° 15'

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	3'	ORGANIC	ORGANIC %
3'	40'	CLAY	CLAY %
			SILT %
40'	80'	FINE SAND	FINE SAND %
			MEDIUM SAND %
80'	96'	COARSE SAND	COARSE SAND %
96'	106'	GRAVEL	GRAVEL %
106'	107'	TILL	PEBBLES %
107'		SUB OUT CROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3025	#49	7/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
85'	RL, L.R.	DUVALL

LINE: 20+00W STATION: 10+00S LOCATION: MONVIEL

DRILLING TIME ZONE Z

POINT STARTED: 8° 30' SAMPLER STARTED: 12° 30'
 POINT STOPPED: 10° SAMPLER STOPPED: 3°
 POINT EXTRACTED: 11° 15' SAMPLER EXTRACTED: 4°

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	3'	ORGANIC	ORGANIC %
3'	54'	CLAY	CLAY %
			SILT %
54'	70'	FINE SAND	FINE SAND %
			MEDIUM SAND %
70'	79'	COARSE SAND	COARSE SAND %
			GRAVEL %
79'	85'	BOULDERS	PEBBLES %
85'		SUB OUT CROB	

REMARKS:

2 TRIAL WITH SAMPLE

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3027	#50	8/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
42' 6"	RL, L, R	DUVAL

LINE: 20+00W STATION: 10+00N LOCATION: MONVIEL

DRILLING TIME ZONE Z

POINT STARTED: 2° 30' SAMPLER STARTED: 3° 20'
 POINT STOPPED: 3° SAMPLER STOPPED: 4°
 POINT EXTRACTED: 3° 15' SAMPLER EXTRACTED: 4° 15'

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	24'	CLAY	CLAY %
			SILT %
24'	36'	FINE SAND	FINE SAND %
			MEDIUM SAND %
36'	42'	COARSE SAND	COARSE SAND %
42'	42' 6"	TILL	GRAVEL %
			PEBBLES %
42' 6"		SUB OUTCROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3028	#51	9/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
34'	RL, L, R	DUVAL

LINE: 20+00W STATION: 20+00N LOCATION: MONVIEL

DRILLING TIME ZONE Z

POINT STARTED: 8° SAMPLER STARTED: 9° 10'
 POINT STOPPED: 8° 30' SAMPLER STOPPED: 9° 25'
 POINT EXTRACTED: 9° SAMPLER EXTRACTED: 9° 45'

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	22'	CLAY	CLAY %
			SILT %
22'	30'	FINE SAND	FINE SAND %
			MEDIUM SAND %
30'	34'	COARSE SAND	COARSE SAND %
			GRAVEL %
			PEBBLES %
34'		SUB OUTCROB	

REMARKS:

1 TRIAL

OVERBURDEN DRILLING LOG

SAMPLE NO:	DRILL HOLE NO:	DATE:
4LA-3029	# 52	9/4/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
67'	RL, L.R.	DUVALL
LINE:	STATION:	LOCATION:
20+00W	30+00N	MONVIEL

DRILLING TIME ZONE Z

POINT STARTED: 10' SAMPLER STARTED: 11' 10

POINT STOPPED: 10' 35 SAMPLER STOPPED: 11' 35

POINT EXTRACTED: 11' SAMPLER EXTRACTED: 12' 10

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	3'	ORGANIC	ORGANIC
3'	34'	CLAY	CLAY
			DUST
34'	50'	FINE SAND	FINE SAND
			MEDIUM SAND
50'	64'	COARSE SAND	COARSE SAND
64'	67'	GRAVEL	GRAVEL
			PEBBLES
67'		SUB OUT CBBB	

REMARKS:

1 TRIAL
 MOVING FROM LINE
 20+00 TO LINE 44 W

OVERBURDEN DRILLING LOG

SAMPLE NO 4RL2001	DRILL HOLE NO 53	DATE 3/7/74
LINE 53'	SAMPLER RL-LA	CONTRACT DUVAL INT. corp
LINE 28+00W	STATION 9+00N	LOCATION MATAGAMI

DRILLING TIME

POINT STARTED 8.00	SAMPLER STARTED 9.40
POINT STOPPED 9.15	SAMPLER STOPPED 10.20
POINT EXTRACTED 9.35	SAMPLER EXTRACTED 10.45

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC
1'	40'	CLAY	CLAY
40'	45'	GRAVEL	SILT
45'	50'	TILL	FINE SAND
50'	53'	BASAL-SAND	MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS

IT RIAL WITH POINTE
HARD GROUND

OVERBURDEN DRILLING LOG

SAMPLE NO 4RL2002	DRILL HOLE NO 54	DATE 3/7/74
LINE 56'	SAMPLER RL-LA	CONTRACT DUVAL INT. corp
LINE 28+00W	STATION 6+00N	LOCATION MATAGAMI

DRILLING TIME

POINT STARTED 11.00	SAMPLER STARTED 1.20
POINT STOPPED 11.45	SAMPLER STOPPED 2.00
POINT EXTRACTED 1.15	SAMPLER EXTRACTED 2.25

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC
1'	43'	CLAY	CLAY
43'	50'	GRAVEL	SILT
50'	54'	COARSE SAND	FINE SAND
54'	56'	BASAL-FINE SAND	MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS

IT RIAL WITH POINTE
HARD GROUND

OVERBURDEN DRILLING LOG

DRILL LINE NO.	55	DATE	3/7/74
LINE	RL-LA	CONTRACT	DUVAL INT. CORP.
LINE	28+00W	LOCATION	MATAGAMI

DRILLING TIME

POINT STARTED

SAMPLER STARTED

POINT STOPPED

SAMPLER STOPPED

POINT EXTRACTED 4:45

SAMPLER EXTRACTED

FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
			FROM	TO		
0' 1'	ORGANIC	ORGANIC				ORGANIC
1' 45'	CLAY	CLAY				CLAY
45' 55'	BOULDER	SILT				SILT
55' 60'	COARSE SAND	FINE SAND				FINE SAND
60' 65'	BASAL SAND	MEDIUM SAND				MEDIUM SAND
		COARSE SAND				COARSE SAND
		GRAVEL				GRAVEL
		PEBBLES				PEBBLES

ITRIAL WITH Pointe
TERRAIN OUR-HARD GROUND.

REMARKS:
MOUVÉ LE JACK HYDRAULIC.
POUR ARRACHER

VERY HARD TO GET SAMPLE

OVERBURDEN DRILLING LOG

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE:	SAMPLE NO.	DRILL HOLE NO.	DATE:
SAMPLE DEPT.	57		56	56	4/21/74
SAMPLERS			SAMPLERS	RL-LA	CONTRACT,
LINE.	STATION:	DUVAL INT.CORP LOCATION: MATAGAMI 28+00W	LINE.	3+00 S	DUVAL INT.CORP LOCATION: MATAGAMI

DRILLING TIME

POINT STARTED: 1.15
 SAMPLER STARTED: 1.15
 POINT STOPPED: 1.20
 SAMPLER STOPPED: 1.20
 POINT EXTRACTED: 1.20
 SAMPLER EXTRACTED: 1.20

DRILLING TIME

POINT STARTED: 10.30
 SAMPLER STARTED: 2.25
 POINT STOPPED: 1.30
 SAMPLER STOPPED: 3.20
 POINT EXTRACTED: 2.20
 SAMPLER EXTRACTED: 4.50

FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE	FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE	
		DESCRIPTION	FROM	TO	DESCRIPTION	
0' 1'	ORGANIC	ORGANIC	0	1'	ORGANIC	ORGANIC
1' 15'	CLAY	CLAY	1'	60'	CLAY	CLAY
15' 18'	TILL	SILT	60'	70'	TILL	SILT
18' 93'	GRAVEL	FINE SAND	70"	80"	GRAVEL	FINE SAND
93' 95'	BOULDERS	MEDIUM SAND	80'	90'	BOULDERS	MEDIUM SAND
95' 100'	COARSE SAND	COARSE SAND	90'	95'	COARSE SAND	COARSE SAND
100' 103'	BASAL TILL	GRAVEL	95'	99'	BASAL-SAND	GRAVEL
		PEBBLES			PEBBLES	

REMARKS:

ITRIAL WITH POINTE
 ITRIAL WITH SAMPLER AND
 SAMPLER BROKEN IN THE HOLE
NO SAMPLE

REMARKS:

ITRIAL WITH POINTE
 TROUBLE TO PULL THE RODS

OVERBURDEN DRILLING LOG

OVERBURDEN DRILLING LOG

DATE	5.2.
DRILLER	RL-PH

DATE	
DRILLER	DUVAL INT CORP. MATAGAMI

DRILLING TIME

POINT STARTED	8.00
SAMPLER STARTED	12.45
POINT STOPPED	10.20
SAMPLER STOPPED	2.30
POINT EXTRACTED	11.45
SAMPLER EXTRACTED	4.10

DRILLER NO.	57
DEPTH	118'
POINT	28+00W
ANGLE	6+00S

12/17/74
DUVAL INT CORP.
MATAGAMI

POINT STARTED	8.00	SAMPLER STARTED	1.40
POINT STOPPED	10.30	SAMPLER STOPPED	3.36
POINT EXTRACTED	11.30	SAMPLER EXTRACTED	5.70

OVERBURDEN DESCRIPTION		SAMPLE DESCRIPTION	
FROM	TO	FROM	TO
0'	1'	ORGANIC	ORGANIC
1'	65'	CLAY	CLAY
65'	80'	GRAVEL	SILT
80'	90'	BOULDERS	FINE SAND
90'	100'	BOULDER & GRAVEL	MEDIUM SAND
100'	107'	BASAL TILL	COARSE SAND
			GRAVEL
			PEBBLES

OVERBURDEN DESCRIPTION		SAMPLE DESCRIPTION	
FROM	TO	FROM	TO
0'	1'	ORGANIC	ORGANIC
1'	65'	CLAY	CLAY
65'	80'	GRAVEL	SILT
80'	100'	COARSE SAND	FINE SAND
100'	110'	GRAVEL BOULDERS	MEG. LIM. SAND
110'	115'	BOULDERS	COARSE SAND
115'	118'	BASAL TILL	GRAVEL
			PEBBLES

REMARKS:

1 POINTED TOO MANY BOULDERS
 1 TRIAL WITH SAMPLER AND IMPOSSIBLE TO GET SAMPLE
 BECAUSE TOO MANY BOULDERS
 SAMPLER VERY HARD TO GET

THE HYDRAULIC JACK IS NOT STRONG ENOUGH TO PULL THE BIG SAMPLER
NO SAMPLE

OVERBURDEN DRILLING LOG

OVERBURDEN DRILLING LOG

4RL2013 DRILL HOLE NO. 62 DATE 13/18/74
 CONTRACTORS 54' SAMPLERS RL - RL
 LOCATION: DRAIL - INTERIOR LINE: ✓
 STATION: 2 + 00.11 3 + 00 N LOCATION: M-TAGAMI

SAMPLE NO. 4RL2014 DRILL HOLE NO. 61 DATE 13/18/74
 SAMPLE DEPTH. ✓ CONTRACTORS RL - RL
 LOCATION: DRAIL - INTERIOR LINE: ✓
 STATION: 24 + 00 W 3 + 00 S LOCATION: M-TAGAMI

DRILLING TIME

POINT STARTED: 7.45 SAMPLER STARTED: 9.30
 POINT STOPPED: 9.00 SAMPLER STOPPED: 10.10
 POINT EXTRACTED: 9.25 SAMPLER EXTRACTED: 10.30

POINT STARTED: 10.50 SAMPLER STARTED: ✓
 POINT STOPPED: 11.5 SAMPLER STOPPED: ✓
 POINT EXTRACTED: 12.10 SAMPLER EXTRACTED: ✓

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	40'	CLAY	CLAY %
40'	50'	RASAL TILL	SILT %
50'	55'	GRAVEL	FINE SAND %
55'	59'	BASAL TILL	MEDIUM SAND %
			COARSE SAND %
			GRAVEL %
			PEBBLES %

FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO	
0	2'	ORGANIC
2'	45'	CLAY
45'	60'	COARSE SAND
60'	70'	FINE SAND
70'	80'	MEDIUM SAND
80'	87'	COARSE SAND
		GRAVEL %
		PEBBLES %

REMARKS:

TRAIL WITH POINTE

MANQUER DE RODS POUR
CONTINUER LE TROU.PRENDRE LE CAROT ET ALLER
VOIR LES AUTRES LIGNES.

PERDU 2 RODS DANS LE TROU

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE:
4RL 2015	77	14/18/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
71'	RL-RL	DIVAL-INTERV
NE:	STATION:	LOCATION:
20 + 000W	3 + 00N	MATAGAMI
DRILLING TIME		
POINT STARTED: 7:45	SAMPLER STARTED: 9:45	
POINT STOPPED: 8:50	SAMPLER STOPPED: 10:35	
POINT EXTRACTED: 9:40	SAMPLER EXTRACTED: 11:20	

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE:
4RL 2016	76	14/18/74
SAMPLE DEPTH:	SAMPLERS:	CONTRACT:
72'	RL-RL	DIVAL-INTERV
LINE:	STATION:	LOCATION:
20 + 000W	6 + 00N	MATAGAMI
DRILLING TIME		
POINT STARTED: 12:15	SAMPLER STARTED: 2:00	
POINT STOPPED: 1:20	SAMPLER STOPPED: 2:40	
POINT EXTRACTED: 1:55	SAMPLER EXTRACTED: 3:05	

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO			FROM	TO		
0	2'	ORGANIC	%	0	2'	ORGANIC	%
2'	55'	CLAY	%	2'	50'	CLAY	%
55'	65'	MEDIUM SAND	%	50'	60'	GRAVEL	%
65'	71'	BASAL FINE SAND	%	60'	68'	CARSE SAND	%
		FINE SAND	%	68'	72'	BASAL FINE SAND	%
		MEDIUM SAND	%			COARSE SAND	%
		COARSE SAND	%			GRAVEL	%
		GRAVEL	%			PEBBLES	%
		PEBBLES	%				

REMARKS:	
1 TRIAL WITH POINTE	1 TRIAL WITH POINTE

OVERBURDEN DRILLING LOG

DRILL HOLE NO: 4RL 2017	DRILL HOLE NO: 79	DATE: 15/8/74
DEPTH: 80'	SAMPLERS: BL-BL	CONTRACT: DNL-INTERV
STATION: 16+00W	LOCATION: B-LINE	LOCATION: MATAGAMI

DRILLING TIME

PT STARTED: 7.45
 PT STOPPED:
 PT EXTRACTED:

SAMPLER STARTED: 7.45
 SAMPLER STOPPED: 8.40
 SAMPLER EXTRACTED: 9.10

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	50'	CLAY	CLAY %
50'	60'	GRAVEL	SILT %
60'	70'	BOULDER-TILL	FINE SAND %
70'	75'	BOULDERS	MEDIUM SAND %
75'	80'	BASAL-TILL	COARSE SAND %
			GRAVEL %
			PEBBLES %

MARKS:

OVERBURDEN DRILLING LOG

SAMPLE NO: 4RL 2017	DRILL HOLE NO: 79	DATE: 14/8/74
SAMPLE DEPTH: -8'	SAMPLERS: BL-BL	CONTRACT: DNL-INTERV
LINE: 16+00W	STATION: B-LINE	LOCATION: MATAGAMI

DRILLING TIME

POINT STARTED: 3.30
 POINT STOPPED: 4.15
 POINT EXTRACTED: 4.45

SAMPLER STARTED:
 SAMPLER STOPPED:
 SAMPLER EXTRACTED:

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	2'	ORGANIC	ORGANIC %
2'	50'	CLAY	CLAY %
50'	60'	GRAVEL	SILT %
60'	70'	BOULDER-TILL	FINE SAND %
70'	75''	BOULDERS	MEDIUM SAND %
75'	80'	BASAL-TILL	COARSE SAND %
			GRAVEL %
			PEBBLES %

EMARKS:

1 PIAL WITH PIONTE

OVERBURDEN DRILLING LOG

OVERBURDEN DRILLING LOG

STATION	DATE	SAMPLE NO.	DRILL HOLE NO.	DATE
AL-PH	16/7/74	4RL2018	83	15/8/74
LOCATION	DUVAL INT. CORP.	ANGLE DEPTH:	SAMPLERS	CONTRACT
MATAGAMI			RL-RL	DUVAL-INTERVAL
DRILLING TIME		2.40	16+00W	3+00S
POINT STARTED:	1.15	SAMPLER STARTED:	1.55	DRILLING TIME
POINT STOPPED:	3.05	SAMPLER STOPPED:	3.40	POINT STARTED: 9.35
POINT EXTRACTED:	2.36	SAMPLER EXTRACTED:	3.40	POINT STOPPED: 10.30
FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE	FOOTAGE	SAMPLE
FROM	TO	DESCRIPTION	FROM	TO
0	1	ORGANIC	0	2'
1	20	CLAY	2'	55'
20'	25'	BOULDERS	55'	65'
25'	28'	GRAVEL-R. SAND	65'	75'
		FINE SAND	75'	80'
		MEDIUM SAND	80'	82'
		COARSE SAND		
		GRAVEL		
		PEBBLES		

NOTES: TRIAL WITH POINTE

SAMPLER VERY HARD TO PULL

REMARKS: PAS DE ROSS POUR CONTINUER
LE TROU.

OVERBURDEN DRILLING LOG

SAMPLE NO 4RL 2012	DRILL HOLE NO 9A	DATE 17/7/74
SAMPLE DEPTH 48	SAMPLER RL PH	CONTRACT DUVAL INT. CORP.
LINE 32 + 00W	STATION 6 + 00N	LOCATION MATA GAMA 1

DRILLING TIME

POINT STARTED	1.00	SAMPLER STARTED:	2.30
POINT STOPPED	1.56	SAMPLER STOPPED.	3.10
POINT EXTRACTED	2.25	SAMPLER EXTRACTED.	3.40

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION	
FROM	TO			
0	1'	ORGANIC	ORGANIC	%
1'	18'	CLAY	CLAY	%
18'	28'	GRAVEL	SILT	%
28'	38'	BOULDERS	FINE SAND	%
38'	45'	GRAVEL-COARSE SAND	MEDIUM SAND	%
45'	48'	BASAL - FINE SAND	COARSE SAND	%
		(GRAVEL	%
			PEBBLES	%

THE ESTATE OF S.

STRIAL WITH POINTE

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE
4RL2011	95	17/7/74
SAMPLE DEPTH	SAMPLED	COPIED
45'	RL-PH	DUVAL INT.CORE
LINE	STATION	SECTION
32+00W	3+00N	MATAGAMI

DRILLING TIME

POINT STARTED	8.00	SAMPLER STARTED	10.00
POINT STOPPED	9.15	SAMPLER STOPPED	10.50
POINT EXTRACTED	9.55	SAMPLER EXTRACTED	11.45

REMARKS:

1 MORE POINTE
HARD TIME TO PULL THE SAMPLE

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE
	96	
SAMPLE DEPTH	SAMPLER	CONTRACT
	RL-PH	DURAC INT CORP
LINE	STATION	LOCATION
	3+005	MATAGAMI

DRILLING TIME

POINT STARTED 9.30
 SAMPLER STARTED
 POINT STOPPED 10.40
 SAMPLER STOPPED
 POINT EXTRACTED 11.05
 SAMPLER EXTRACTED

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPT.
FROM	TO		
0	1'	ORGANIC	ORGANIC
1'	43'	CLAY	CLAY
43'	50'	BOULDERS	SILT
50'	54'	B. SAND - BOULDERS	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

TRIED TO PULL THE BG.
 SAMPLER AND TOO MANY
 BOULDERS.
 1 MORE POINTE
 1 MORE TRIAL WITH SAMPLER.

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE
	95	
SAMPLE DEPTH	SAMPLER	CONTRACT
	RL-PH	DURAC INT. CORP.
LINE	STATION	LOCATION
		MATAGAMI

DRILLING TIME

POINT STARTED
 SAMPLER STARTED
 POINT STOPPED
 SAMPLER STOPPED
 POINT EXTRACTED
 SAMPLER EXTRACTED

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPT.
FROM	TO		
0	6	ORGANIC	ORGANIC
6	32	CLAY	CLAY
32	35	GRAVEL	SILT
35	4.6	BOULDERS	FINE SAND
46'	48'	B. SAND - BOULDERS	MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

1 TRIAL WITH POINTE
 1 ROD BROKEN IN THE HOLE

OVERBURDEN DRILLING LOG

OVERBURDEN DRILLING LOG

SAMPLE NO.	DRILL HOLE NO.	DATE
SAMPLE DEPTH	SAMPLER	CONTRACT
LINE	STATION	LOCATION
32+00W	RL-P14	DUVAL INT CORP. MATAJAMI

DRILLING TIME

POINT STARTED 8.00
 POINT STOPPED 10.10
 POINT EXTRACTED 11.40
 SAMPLER STARTED 12.30
 SAMPLER STOPPED 2 15
 SAMPLER EXTRACTED 3, 35

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1'	ORGANIC	ORGANIC
1'	68'	CLAY	CLAY
68'	75'	GRAVEL	SILT
75'	85'	BOULDERS	FINE SAND
85'	90'	COARSE SAND	MEDIUM SAND
90'	92'	BASAL-TILL - BOULDERS	COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

1 TRIAL WITH POINTE
 SAMPLER VERY HARD TO PULL

SAFETY LINE	DRILL HOLE NO.	DATE
SAFETY LINE	SAMPLER	CONTRACT
LINE	STATION	LOCATION
32+00W	RL-P14	DUVAL INT CORP. MATAJAMI

DRILLING TIME

POINT STARTED 510
 POINT STOPPED 5.15
 POINT EXTRACTED
 SAMPLER STARTED
 SAMPLER STOPPED 5.15
 SAMPLER EXTRACTED

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0	1	ORGANIC	ORGANIC
1	45	CLAY	CLAY
45	50	GRAVEL	SILT
50	54	BOULDERS-BTILL	FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEBBLES

REMARKS:

1 TRIAL WITH POINTE
 1 TRIAL WITH SAMPLER
 ONE POP AND BIG SAMPLER
 LEFT IN THE HOLE
 TRIED TO PULL AND NO WAY.

OVERBURDEN DRILLING LOG

PROJECT NO.	98	DATE
SAMPLER		CONTRACT
STATION		LOCATION

DRILLING TIME

DINT STARTED

SAMPLER STARTED

DINT STOPPED

SAMPLER STOPPED

DINT EXTRACTED

SAMPLER EXTRACTED

FOOTAGE		OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO		
0'	1'	ORGANIC	ORGANIC
1'	70'	CLAY	CLAY
			SILT
			FINE SAND
			MEDIUM SAND
			COARSE SAND
			GRAVEL
			PEDDLES

SAMPLE NO.	98	DRILL HOLE NO.	32
SAMPLE DEPTH	119'	SAMPLER	RL PH
LINE	32+00W	STATION	9+00S

DRILLING TIME

POINT STARTED 8:00

SAMPLER STARTED

POINT STOPPED 1:20

SAMPLER STOPPED

POINT EXTRACTED 2:15

SAMPLER EXTRACTED

FOOTAGE	OVERBURDEN DESCRIPTION	SAMPLE DESCRIPTION
FROM	TO	
0"	1'	ORGANIC
1'	70'	CLAY
70'	86'	GRAVEL
86'	96'	TILL
96'	100'	COARSE SAND
100'	110'	Boulders
110'	115'	GRAVEL-Boulders
115'	119'	BASAL TILL

REMARKS:

2 TRIAL WITH POINTE

SAMPLER VERY HARD TO PULL

70 FEET OF POINTE
STOP AT 520

APPENDIX III

BASAL TILL ANALYTICAL RESULTS



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

Geochemical Lab Report

Extraction Cu, Pb, Zn, Ni - HNO₃-HCl, U - HNO₃, Th

Report No. 176-4

Method A.A. Fluorimetric, XRF

From Duval International Corporation.

Fraction Used H.M.S. -100 rocks.

Date March 21,



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 063-3548

Geochemical Lab Report

Extraction Cu, Pb, Zn - HNO₃-HCl Report No. 210-4
Method A.A. From Duval Corporation Ltd.
Fraction Used -100rocks - H.M.S.-M.I.D. Date April 1, 1974



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

Geochemical Lab Report

Extraction Th Report No. 176-4
Method X.R.F. From Duval International Corporation.
Fraction Used H.M.S. -100 rocks. Date March 21, 1974



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

Geochemical Lab Report

Extraction Cu, Pb, Zn, Ni - HNO₃-HCl, U-HNO₃, Th Report No. 218-4

Method A.A., U-Fluorimetric, Th-X.R.F. From Duval Corporation

Fraction Used -100 Rocks, -80 Soils Date April 4, 1974

SAMPLE NO.	HOLE	Cu ppm	Pb ppm	Zn ppm	Ni ppm			REMARKS
4FT - 3007	7	32	18	67	48			HEAVY FRACTION
3008	8	46	12	55	45			
3009	9	44	10	54	43			
3010	10	36	14	65	41			
3011	11	30	14	52	50			
4FT - 3036	36	126	18	80	115			

		U ppm	Th ppm					
4FT - 3007	7	1.5	22					-80 FRACTION
3008	8	1.5	9					
3009	9	0.4	11					
3010	10	0.4	9					
3011	11	1.0	13					
4FT - 3036	36	0.4	12					



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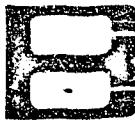
Geochemical Lab Report

Extraction Cu, Pb, Zn, Ni - HNO₃-HCl, u - HNO₃, Th Report No. 275-4
 Method Cu, Pb, Zn, Ni - A.A., U - Fluorimetric From Duval International Corporation
 Th - X.R.F.
 Fraction Used H.M.S., -100 Rocks, -80 Soils Date May 2, 1974

SAMPLE NO.	HOLE #	Cu ppm	Pb ppm	Zn ppm	Ni ppm		REMARKS
4LA - 3023	27	52	20	50	45		HEAVY FRACTION
3024	26	45	18	40 ✓	33		
3025	49	70	89	406	66		
3026	48	73	30	48	66		
3027	50	78	40	155	55		
3028	51	84	20	34	54		
3029	52	157	393	1330	160		
4LA - 3030	24	57	62	134	69		
4FT - 3006	6	22	19	40	26		

		U ppm	Th ppm				
4LA - 3023	27	0.6	5				-80 FRACTION
3024	26	0.6	10				
3025	49	1.0	5				
3026	48	(1.5)	17				
3027	50	1.0	5				
3028	51	(2.0)	10				
3029	52	0.8	5				
4LA - 3030	24	(2.0)	6				
4FT - 3006	6	(1.5)	19				

		LINE	STATION	DEPTH	HOLE
4LA - 3023	/	L 8 + 00 E	27 + 00 N	46'5"	# 27
3024	/	L 8 + 00 E	26 + 00 N	51'	# 26
3025	/	L 20 + 00 W	10 + 00 S	85'	# 49
3026	/	L 20 + 00 W	20 + 00 S	107'	# 48
3027	/	L 20 + 00 W	10 + 00 N	42'6"	# 50
3028		L 20 + 00 W	20 + 00 N	34'	# 51
3029		L 20 + 00 W	30 + 00 N	67'	# 52
3030		L 44 + 00 W	0 + 00	13'3"	# 24
4FT - 3006	6	L 8 W	3 + 00 S	11'	# 6



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

Geochemical Lab Report

Extraction Cu, Pb, Zn, Ni - HNO_3 - HCl , U- HNO_3 , Th

Report No. —

261-4

A,A. Fluorimetric XRF

From Duval International Corporation

Fraction Used -100 rocks. H.M.S.

Date April 22, 19



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

Total sample
Sample 80 mm

No: 176-4

Sample No. 4 FT - 3001 Hole 1

From: Duval International Corporation

Method: X.R.F.

Date: March 21, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂							X			
TRACE ELEMENTS (%)	V		X							
Cr	X									
Mn				(X)						
Co	X									
Ni	X									
Cu		X								
Zn		(X)								
As	X									
Sr				(X)						
Y		X								
Zr				(X)						
Nb		(X)								
Mo	X									
Ag	X									
In	X									
Sb	X									
Ba					(X)					
La			(X)							
Ce				(X)						
W	X									
Pb		X								
Bi	X									
Th		X								
U	X									

-100 FRACTION



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 176-4

Sample No. 4 FT - 3002 Hole 2

From: Duval International Corporation

Method: X.R.F.

Date: March 21, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.10	1.0-.30	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO									X	
Na ₂ O									X	
K ₂ O									X	
TiO ₂					X					
TRADE ELEMENTS (%)										
V		X								
Cr		X								
Mn						X				
Co	X									
Ni	X									
Cu		X								
Zn				X ✓						
As	X				X ✓					
Sr				X ✓						
Y		X								
Zr				X ✓						
Nb		X ✓								
Mo	X									
Ag	X									
In	X									
Sb	X									
Ba					X ✓					
La			X							
Ce				X ✓						
W	X									
Pb			X							
Bi	X									
Th			X							
U	X									

-100 FRACTION

WV



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 176-4

Sample No. 4 HT - 3003 Hole 3

From: Duval International Corporation

Method: X.R.F.

Date: March 21, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.10	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂					X					
TRACE ELEMENTS (%)										
V		X								
Cr	X									.
Mn				X	✓					
Co	X									
Ni	X									
Cu		X								
Zn		X								
As	X									
Sr				X	✓					
Y	X									
Zr			X							
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Sb	X									
Ba					X	✓				
La			X	/						
Ce				X	✓					
W	X									
Pb	X									
Bi	X									
Th		X								
U	X									

-100 FRACTION



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI QUANTITATIVE ANALYSIS

No: 176-4

Sample No. 4 HT - 3004 Hole 4

From: Duval International Corporation

Method: X.R.F.

Date: March 21, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACER ELEMENTS (%)	V		X							
Cr		X								
Mn						X				
Co		X								
Ni		X								
Cu		X								
Zn			X							
As		X								
Sr				X						
Y		X								
Zr				X						
Nb			(X)							
Mo		X								
Ag		X								
Sb		X								
Ba					X					
La			X							
Ce				X	V					
W		X								
Pb			X							
Bi		X								
Th			X							
U		X								

-100 FRACTION



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

Hole
#5

SEMI-QUANTITATIVE ANALYSIS

No: 210-4

Sample No. 4FT.-3005 (2258) -100 fraction

From: Duval Corporation Ltd.

Method: X.R.F.

Date: April 1, 1974

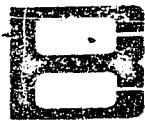
No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂					X					
TRACE ELEMENTS (%)										
K	X									
Cr	X									
Mn			X							
Co	X									
Ni	X									
Cu		X								
Zn		X								
As	X									
Sr				X						
Y		X								
Zr				X						
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Sb	X									
La	X									
Ce		X								
W	X									
Pb		X								
Bi	X									
Th	X									
U	X									

Th = 7 ppm

WJR



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 210-4

Sample No. 2263 Heavies

From: Duval Corporation Ltd.

Method: X.R.F.

Date: April 1, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃								X		
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO									X	
Na ₂ O							X			
K ₂ O							X			
TiO ₂								X		
TRACE ELEMENTS (%)			X							
Cr			X							
Mn						X				
Co		X								
Ni			X							
Cu		X								
Zn		X ~								
As	X									
Sr				X						
Y		X								
Zr				X						
Nb			(X ✓)							
Mo	X									
Ag	X									
Sn	X									
Sb	X									
Ba										
La		X								
Ce			X							
W	X									
Pb		X								
Bi	X									
Th		X								
U	X									

VAN



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 210-4

Sample No. 2264 Heavies

From: Duval Corporation Ltd

Method: X.R.F.

Date: April 1, 1974

No. of Elements: 32

Analyst: R.J.G.

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃								X		
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO									X	
Na ₂ O							X			
K ₂ O							X			
TiO ₂								X		
TRACE ELEMENTS (%)				X ↴						
Cr			X							
Mn						X ↴				
Co		X								
Ni			X							
Cu			X							
Zn		X								
As	X									
Sr				X ↴						
Y	X									
Zr			X							
Nb	X ↴									
Mo	X									
Ag	X									
Sn	X									
Ch Ba	X				X ↴					
La	X									
Ce		X ↴								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

WJH



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4FT-3006, L8W, 3+00S, Depth 11' Hole # 6

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO						X				
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
	X									
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu		X								
Zn		X /								
As	X									
Sr			X							
Y	X									
Zr		X								
Nb	X									
Mo		X								
Ag	X									
Sn	X									
Ba	-	X			X					
La	X									
Ce	X									
W	X									
Pb	X									
Ri	X									
Th	X									
U	X									

W/W

**BONDAR-CLEGG & COMPANY LTD.**

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

218-4
Sample No. 4Ft,3007,L19NE,8W 500S,Depth 5' Hole #7

From: Duval International Corporation

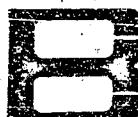
Method: X.R.F.

Date: May 27, 19 74

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)									X	
MgO								X		
CaO							X			
Na ₂ O								X		
K ₂ O								X		
TiO ₂						X				
TRACE ELEMENTS (%)										
V		X								
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu		X								
Zn		X	/							
As		X								
Sr				X						
Y		X								
Zr			X							
Nb	X	/								
Mo	X									
Ag	X									
Sn	X									
Sb	X									
ba					X					
La		X								
Ce		X	/							
W	X									
Pb		X								
Bi	X									
Th	X									
U	X									



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784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

218-4

Sample No. 4FT-3008, L8A, 6.50S, Depth 10' Hole #8

From: Duval International Corporation

Method: _____ X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

218-4

4Ft.-3009,L-8W,A.8+00S Depth 6', Hole #9

Sample No.

Method: _____ X.R.F.

From: Duval International Corporation

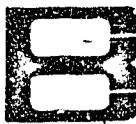
Date: May 27, 1974

No. of Elements: 32

Analyst:

Digitized by srujanika@gmail.com

Digitized by srujanika@gmail.com



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

218-4

Sample No. 4Ft-3910,L18NE.8W.A.10.00S Depth 15' Hole #10

From: Duval International Corporation

Method

Date: May 27, 1974

No. of Elements: 32

Analyst:



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No. 295-4

218-4

Sample No. 4Ft-3011, L18NE 4W A. 1200S Depth 11' Hole #11

From: Duval International Corporation

Method: X.R.F.

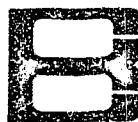
Date: May 27, 1974

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
		X								
Cr		X								
Mn					X					
Co	X									
Ni	X									
Cu		X								
Zn		X								
As	X									
Sr			X							
Y		X								
Zr			X							
Nb		X								
Mo	X									
Ag	X									
Sn	X									
Ba	X					X				
La	X									
Ce	X	V								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



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764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4D,F,3012,L,76W,32+00N,Depth 24' Hole#12

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)		X								
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn			X	✓						
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo	X									
Ag	X									
Sr	X									
	X									
Ba					X					
La		X								
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

WJW



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4.D.F.3013,L76,37+00N,Depth 18' Hole #13

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO									X	
Na ₂ O									X	
K ₂ O								X		
TiO ₂							X			
TRACE ELEMENTS (%)		X								
Cr	X									
Mn						X				
Co	X									
Ni	X									
Cu	X									
Zn			X							
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo		X								
Ag	X									
Sn	X									
	X									
Ba					X					
La		X	/							
Ce		X	/							
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4 D.F. 3014, L76W, 42+00N Depth 23' Hole #14

Method: X.R.F.

No. of Elements: 32

From: Duval International Corporation

Date: May 27, 1974

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO									X	
Na ₂ O									X	
K ₂ O								X		
TiO ₂							X			
TRACE ELEMENTS (%)										
Cr	X									
Mn						X				
Co	X									
Ni	X									
Cu	X									
Zn			X							
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo	X									
Ag	X									
Sn	X									
Ba	X						X			
La		X								
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4DF-3015, L76W, 47+00N, Depth 22', Hole #15

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)										X
MgO									X	
CaO									X	
Na ₂ O									X	
K ₂ O								X		
TiO ₂							X			
TRACE ELEMENTS (%)	V		X							
Cr		X								
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn			X	/						
As	X									
Sr					X					
Y		X								
Zr				X						
Nb	X									
Mo	X									
Ag	X									
Sn	X									
La		X	/							
Ce		X	-							
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4D.F.3016,L.76W,52+00N,Depth 21',Hole #16

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.1.0	1.0-.3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)	V	X								
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr			X							
Y		X								
Zr				X						
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Sb	X									
Ba					X					
La			X							
Ce			X	V						
W	X									
Pb			X							
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

261-4

Sample No. 4LA-3017, L8+00E, STN 33+00N, Depth 35'3", Hole #33

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)									X	
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V		X								
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu	X									
Zn			X	/						
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo		X								
Ag	X									
Sn	X									
Bi	X									
Ba				X						
La		X								
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.H.J.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No. 295-4

261-4

Sample No. 4LA-3019, L8+00E, STN 31+00N, Depth 43'4", Hole #31 From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-0.01	.01-0.03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO								X		
CaO									X	
Na ₂ O									X	
K ₂ O								X		
TiO ₂							X			
TRACE ELEMENTS (%)										
V		X								
Cr		X								
Mn				X						
Co		X								
Ni		X								
Cu		X								
Zn			X							
As		X								
Sr				X						
Y			X							
Zr					X					
Nb			X							
Mo		X								
Ag		X								
Sn		X								
Ba		X								
La			X							
Ce			X							
W		X								
Pb		X								
Bi		X								
Th		X								
U		X								

WPN



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No. 295-4

261-4

Sample No. 4LA-3020, L8+00E, STN 30+00N, Depth 41'4", Hole #30 From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V		X								
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr			X							
Y		X								
Zr			X							
Nb		X								
Mo		X								
Ag	X									
Sn	X									
Sb	X									
Ba				X						
La		X								
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.M.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

261-4

Sample No. 4LA-3021, L8+00E, STN 29+00N, Depth 32', Hole #29

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)		X								
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr			X							
Y		X								
Zr				X						
Nb		X								
Mo	X									
Ag	X									
Sn	X									
	X									
Ba					X					
La	X									
Ce	X									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.M.W.



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

261-4

Sample No. 4LA-3022, L8+00E, STN 28+00N Depth 42', Hole#28

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Date: May 27, 1974



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3023, L8+00E, 27+00N, Depth 46'5", Hole #27

Method: X.R.F.

From: Duval International Corporation

No. of Elements: 32

Date: May 27, 1974

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.10	1.0-3.0	3.0-10.0	>10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)							X			
MgO							X			
CaO							X			
Na ₂ O								X		
K ₂ O							X			
TiO ₂					X					
TRACE ELEMENTS (%)	X									
Cr		X								
Mn			X							
Co	X									
Ni	X									
Cu	X									
Zn		X /								
As	X									
Sr			X							
Y	X									
Zr			X							
Nb	X /									
Mo	X									
Ag	X									
Sn	X									
Ba	X				X					
La	X /									
Ce	X /									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

WPN



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3024, L8+00E, 26+00N, Depth 51', Hole #26

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO								X		
CaO							X			
Na ₂ O									X	
K ₂ O							X			
TiO ₂					X					
TRACE ELEMENTS (%)										
Cr		X								
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn		X ✓								
As	X									
Sr				X						
Y	X									
Zr			X							
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Sb	X									
Ba				X						
La	X									
Ce	X									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

Sample No. 275-4
4LA-3030, L44+00W, 0+00, Depth 13'3", Hole #24

From: Duval International Corporation

Method: X.R.F.

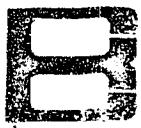
Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.1.0	1.0-.3.0	3.0-.10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
Cr		X								
Mn		X				X				
Co		X								
Ni		X								
Cu		X								
Zn			X							
As		X								
Sr				X						
Y		X								
Zr			X							
Nb		X								
Mo		X								
Ag		X								
Sn		X								
Sb		X								
La		X								
Ce		X								
W		X								
Pb		X								
Bi		X								
Th		X								
U		X								

WAN



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3546

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4D, F-3034, L112W, A. 2000N Depth 45', Hole #34

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 19 74

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu	X									
Zn			X							
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo	X									
Ag	X									
Sn	X									
Sb	X									
ba					X					
La	X									
Ce	X	/								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4D.F-3035, L112W, 1000N, Depth 27', Hole #35

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.10	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)		X								
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu	X									
Zn			X /							
As	X									
Sr				X						
Y		X								
Zr				X						
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Sb	X					X				
La		X /								
Ce		X								
W	X									
Pb	X									
Si	X									
Th	X									
U	X									

W.M.



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

218-4
Sample No. 4Ft-3036, L18NE 112W A River Depth 48' Hole#36

Method: X.R.F.

No. of Elements: 32

From: Duval International Corporation

Date: May 27, 1974

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-0.1	.01-0.3	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)									X	
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)		X								
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr				X						
Y		X								
Zr				X						
Nb		X	/							
Mo	X									
Ag	X									
Sn	X									
Ba					X					
La		X	/							
Ce		X	/							
W	X									
Pb		X								
Bi	X									
Th	X									
U	X									

WAN



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3546

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4D.F-3037, L112W, 1000S, Depth 33', Hole #37

From: Duval International Corporation

Method: X.R.F.

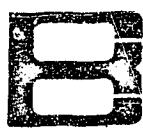
Date: May 27, 19 74

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)			X							
Cr		X								
Mn				X						
Ce		X								
Ni		X								
Cu		X								
Zn				X						
As		X								
Sr					X					
Y			X							
Zr					X					
Nb		X	/							
Mo		X								
Ag		X								
Sn		X								
Ba						X				
La			X	/						
Ce		X	/							
W		X								
Pb		X								
Bi		X								
Th		X								
U		X								

WIN



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3546

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4DF-3038, L18NE, 112W.A 2000, Depth 27', Hole #38

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO								X		
CaO							X			
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V		X								
Cr	X									
Mn			X							
Co	X									
Ni	X									
Cu		X								
Zn	X ✓									
As	X									
Sr			X							
Y		X								
Zr			X							
Nb	X ✓									
Mo	X									
Ag	X									
Sn	X									
P	X									
Ba				X						
La		X ✓								
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.H.



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

239-4

Sample No. 4DF-3039, L8, 112W, A3000, South of River Depth 21' From: Duval International Corporation
Hole #39

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂										X
Al ₂ O ₃										X
Total Fe (Fe ₂ O ₃)									X	
MgO									X	
CaO							X			
Na ₂ O									X	
K ₂ O									X	
TiO ₂						X				
TRACE ELEMENTS (%)										
V			X							
Cr	X									
Mn					X					
Co	X									
Ni	X									
Cu	X									
Zn		X	/							
As	X									
Sr					X					
Y		X								
Zr				X						
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Ba	X					X				
La		X	/							
Ce		X								
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3025, L20+00W, 10+00S, Depth 85', Hole #49

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)							X			
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V	X									
Cr	X									
Mn			X							
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr			X							
Y	X									
Zr			X							
Nb	X									
Mo	X									
Ag	X									
Sn	X									
Co	X									
Ba					X					
La	X									
Ce	X									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W.M.J.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3026, L20+00W, 20+00S, Depth 107', Hole #48

Method: X.R.F.

No. of Elements: 32

From: Duval International Corporation

Date: May 27, 1974

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.1-.3	.3-.10	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V		X								
Cr		X								
Mn				X						
Co		X								
Ni		X								
Cu		X								
Zn			X /							
As		X								
Sr				X						
Y		X								
Zr					X					
Nb		X								
Mo		X								
Ag		X								
Sn		X								
Ba		X				X				
La		X								
Ce		X								
W		X								
Pb		X								
Bi		X								
Th		X								
U		X								

W.W.W.



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 653-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3027, 120+00W, 10+00N, Depth 42'6", Hole #50

From: Duval International Corporation

Method: X.R.F.

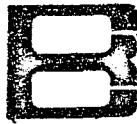
Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.01-.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)							X			
MgO							X			
CaO						X				
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)		X								
Cr	X									
Mn				X						
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr				X						
Y	X									
Zr			X							
Nb	X									
Mo	X									
Ag	X									
Sn	X									
	X									
Ba				X						
La	X									
Ce	X									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

WAW



BONDAR-CLEGG & COMPANY LTD.

784 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z6 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3028, 120+00W, 20+00N, Depth 34', Hole #51

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 19 74

No. of Elements: 32

Analyst:

MAJOR ELEMENTS (%)	<.003	.003-01	.01-03	.03-0.1	0.1-0.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)							X			
MgO							X			
CaO								X		
Na ₂ O								X		
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
V	X									
Cr	X									
Mn			X							
Co	X									
Ni	X									
Cu	X									
Zn		X								
As	X									
Sr				X						
Y	X									
Zr			X							
Nb	X									
Mo	X									
Ag	X									
Sn	X									
As	X									
Ba				X						
La	X									
Ce	X									
W	X									
Pb	X									
Bi	X									
Th	X									
U	X									

W/W



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

SEMI-QUANTITATIVE ANALYSIS

No: 295-4

275-4

Sample No. 4LA-3029, L20+00W, 30+00N, Depth 67', Hole #52

From: Duval International Corporation

Method: X.R.F.

Date: May 27, 1974

No. of Elements: 32

Analyst: _____

MAJOR ELEMENTS (%)	<.003	.003-.01	.01-.03	.03-.1	.01-.3	0.3-1.0	1.0-3.0	3.0-10.0	> 10.0	REMARKS
SiO ₂									X	
Al ₂ O ₃									X	
Total Fe (Fe ₂ O ₃)								X		
MgO								X		
CaO								X		
Na ₂ O						X				
K ₂ O							X			
TiO ₂						X				
TRACE ELEMENTS (%)										
Cr		X								
Mn		X				X				
Co		X								
Ni		X								
Cu		X								
Zn			X							
As		X								
Sr				X						
Y		X								
Zr				X						
Nb		X								
Mo			X							
Ag		X								
Sn		X								
P		X								
Ba					X					
La		X								
Ce		X								
W		X								
Pb		X								
Bi		X								
Th		X								
U		X								

(W.M.W.)

DUVAL INTERNATIONAL CORPORATION

Mineralogical Examination of Light
Fractions by X-ray Diffraction

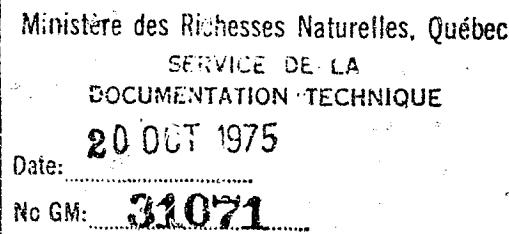
1.

Major components in all ten samples are quartz, microcline, and plagioclase. Very small and fine-grained rock fragments present to about 35% of samples 3008 and 3011, 20% of all others. Dominant minerals in these fragments are quartz and microcline. No apatite was found in any samples.

2.

Calcite content is as follows:

<u>Samp. Number</u>	<u>Calcite</u>	<u>% LOSS</u> <u>LEACH RESULTS</u>
3001	< 1%	3.2
3002	1-2%	4.1
3008	Scattered grains	6.1
3011	Scattered grains	3.1
3013	1%	—
3015	1%	3.9
3025	0.5%	0.4
3030	3-5%	3.2
3036	< 1%	3.0
3038	1%	2.1



DUVAL CORPORATION LTD.

REPORT 210-4

MINERAL IDENTIFICATION -10 + 100 HEAVY FRACTION

SAMPLE # 2259 - Jowsay Hole #2
400'-425' ultramafic dyke br.

Aggregate grains of predominantly biotite plus some pyroxene, olivine, calcite and trace haematite.

SAMPLE # 2263

48% Hornblende
25% Pyroxene
12% Calcite
7% Biotite
5% Magnetite
2% Siderite
1% Haematite

Float Sample - 1/3 mile SW
of Camp ultramafic w/some
chalcocite.

SAMPLE # 2260 Jowsay Hole 1 - 125'-150'-
decomposed ultramafic - kimberlite?

Most grains are full of magnetite inclusions and badly coated with clay minerals.. Biotite is a major constituent plus a mafic mineral, possibly pyroxene. Definite identification of mafic mineral is precluded by clay mineral coating.

SAMPLE # 2264

Aggregate grains of mostly biotite, olivine pyroxene, limonite, chlorite plus minor accessory magnetite and calcite. Same location as above

SAMPLE # 2261 SAME AS 2260 - only
not decomposed.

77% Magnetiferous Biotite (biotite full of magnetite inclusions).
20% Non-magnetic biotite
3% Calcite

SAMPLE # 4 FT.- 3005 (2258) #5 BASAL TILL

30% Hornblende
24% Clinzoisite -
12% Epidote
10% Calcite ←
8% Pyroxene
5% Garnet
3% Clay Minerals
3% Magnetite
2% Biotite
2% Pyrite
1% Haematite
Trace Muscovite

SAMPLE # 2262 Jowsay Hole 2 417.5'
- kimberlitic ultramafic br.

Aggregate grains of biotite, olivine, Pyroxene plus minor calcite, siderite, limonite, haematite and magnetite.

(W.W.)

DUVAL CORPORATION LTD.

REPORT 218-4

MINERAL IDENTIFICATION - HEAVY MINERAL SEPARATES.

R. G. C. 1962
what about
light mineral
separates

SAMPLE # 4FT.-3007

5ft.
Grains badly coated with clay minerals.
Predominant mineral is hornblende plus
subsidiary pyroxene, garnet, epidote,
biotite, and magnetite.

SAMPLE # 4FT.-3010

15ft.
71% Hornblende
18% Pyroxene
4% Magnetite
3% Epidote
2% Garnet
2% Limonite

SAMPLE # 4FT.-3008

10'
66% Hornblende
16% Pyroxene
6% Magnetite
5% Garnet
3% Epidote
3% Biotite
1% Haematite
Trace Pyrite
Trace Pyrrhotite

SAMPLE # 4FT.-3011

11ft.
48% Hornblende
31% Pyroxene
6% Epidote
10% Magnetite
3% Garnet
2% Biotite
Trace Pyrite

SAMPLE # 4FT.-3009

6ft.
60% Hornblende
25% Pyroxene
5% Magnetite
3% Garnet
3% Epidote
2% Limonite
2% Biotite

SAMPLE # 4FT.-3036

N. 15ft.
33% Hornblende
27% Pyroxene
15% Epidote
10% Magnetite
5% Clinzoisite
6% Garnet
4% Pyrite
Trace Zircon, Calcite.

*Weak to
Dense*

W.W.W.

DUVAL CORPORATION LTD.

REPORT 239-4

No Specimen
Run

HEAVY MINERAL IDENTIFICATION

SAMPLE # 4DF-3012

34% Pyroxene ^{SAMPLE}
33% Hornblende ^{#12}
10% Epidote
10% Barite
4% Magnetite
4% Garnet
3% Pyrite
2% Chlorite
Trace Fluorite, Biotite.

SAMPLE # 4DF-3016

35% Pyroxene ^{SAMPLE}
32% Hornblende ^{#16}
14% Epidote
7% Magnetite
4% Barite
3% Garnet
2% Biotite
3% Pyrite

SAMPLE # 4DF-3038

38% Hornblende
32% Pyroxene
14% Epidote
9% Barite
3% Garnet
2% Magnetite
1% Pyrite
1% Biotite
Trace Fluorite

SAMPLE # 4DF-3013

49% Hornblende ^{SAMPLE}
18% Pyroxene ^{#13}
12% Garnet
8% Epidote
5% Biotite
4% Barite
4% Magnetite
Frequent coating of
grains by clay minerals.

SAMPLE # 4DF-3034

34% Hornblende ^{SAMPLE}
27% Pyroxene ^{#17}
15% Epidote
8% Barite
6% Magnetite
5% Garnet
3% Biotite
2% Pyrite

SAMPLE # 4DF-3039

^{SAMPLE}
#39
Very small sample.
Most grains coated with
clay minerals. Predominant
constituents are hornblende,
pyroxene, epidote and garnet
plus subsidiary pyrite, barite
magnetite.

SAMPLE # 4DF-3014

54% Hornblende ^{SAMPLE}
8% Pyroxene ^{#14}
9% Magnetite
12% Epidote
6% Garnet
5% Barite
2% Siderite
2% Pyrite
2% Biotite

SAMPLE # 4DF-3035

41% Hornblende ^{SAMPLE}
31% Pyroxene ^{#15}
15% Epidote
4% Magnetite
4% Garnet
3% Pyrite
2% Barite
Trace Fluorite, Biotite.

= 36

33% hb
27% pyrox
15% epidote
10% magnetite
5% clinozoisite
6% garnet
+? pyrite
Trace barite, galena
1 no barite?

SAMPLE # 4DF-3015

37% Hornblende ^{SAMPLE}
30% Pyroxene ^{#15}
15% Epidote
5% Magnetite
5% Barite
4% Garnet
3% Pyrite
1% Chlorite

SAMPLE # 4DF-3037

35% Hornblende
31% Pyroxene
14% Epidote
7% Magnetite
7% Barite ^{coated like}
3% Garnet
2% Pyrite
1% Biotite

DUVAL CORPORATION LTD.

REPORT 261-4

HEAVY MINERAL CONCENTRATES.

SAMPLE # 4LA-3017

H-33
38% Hornblende
30% Pyroxene
14% Epidote
7% Magnetite
5% Garnet
4% Barite
2% Pyrite
Trace Biotite
Trace Zircon

SAMPLE # 4LA-3021

H-29
45% Hornblende
27% Pyroxene
10% Epidote
5% Garnet
5% Barite
3% Magnetite
3% Pyrite
1% Biotite
1% Chlorite
Trace Zircon

SAMPLE # 4LA-3019

H-28
45% Hornblende
26% Pyroxene
11% Epidote
5% Garnet
4% Magnetite
3% Barite
3% Pyrite
2% Chlorite
1% Biotite
Trace Limonite
Trace Zircon

SAMPLE # 4LA-3022

H-28
36% Hornblende
30% Pyroxene
16% Epidote
5% Garnet
3% Barite
3% Biotite
3% Magnetite
~~2% Pyrite~~
~~2% Chlorite~~
Trace Zircon
Trace Calcite

SAMPLE # 4LA-3020

H-30
31% Pyroxene
26% Hornblende
18% Epidote
7% Garnet
5% Magnetite
~~5% Barite~~
~~4% Pyrite~~
1% Biotite
1% Calcite✓
1% Zircon
1% Chlorite

DUVAL CORPORATION LTD.

REPORT 275-4

HEAVY MINERAL CONCENTRATES.

4LA-3023

1/2# 21
38% Hornblende
28% Pyroxene
21% Epidote
5% Garnet
4% Magnetite
2% Barite
1% Biotite
1% Pyrite
Trace Zircon

4LA-3026

All grains badly coated
with clay minerals.
Predominant constituents
are hornblende, pyroxene,
epidote, with subsidiary
pyrite, garnet, magnetite,
biotite, barite and calcite.

4LA-3024

1/2# 24
41% Hornblende
22% Epidote
20% Pyroxene
9% Garnet
3% Magnetite
2% Pyrite
2% Barite
1% Biotite
Trace Calcite,
Zircon

4LA-3027

1/2# 25
41% Hornblende
28% Pyroxene
11% Epidote
5% Barite
5% Magnetite
4% Garnet
2% Pyrite
2% Biotite
2% Calcite
Trace Zircon

4LA-3025

Hole # X9
1/2# 29
38% Hornblende
17% Pyroxene
14% Epidote
9% Barite
6% Garnet
5% Calcite
4% Pyrite
4% Magnetite
2% Biotite
1% Chlorite
Trace Zircon

4LA-3028

1/2# 31
50% Hornblende
23% Pyroxene
10% Epidote
5% Garnet
4% Magnetite
4% Barite
2% Pyrite
2% Biotite
Trace Calcite, Siderite
and Zircon

REPORT 275-4

HEAVY MINERAL CONCENTRATES.

PAGE 2

4LA-3029

Hole #52
35% Hornblende
28% Pyroxene
12% Pyrite
6% Epidote
5% Garnet
5% Calcite
3% Barite
3% Magnetite
3% Biotite

4LA-3030

Hole #18
Multi-grained
light reddish
34% Hornblende
31% Pyroxene
10% Epidote
10% Magnetite with abundant
limonitic alteration
6% Garnet
3% Chlorite
2% Biotite
2% Pyrite (altered)
2% Barite
Trace Zircon

4FT-3005

Hole #10
48% Hornblende
25% Pyroxene
11% Epidote
7% Garnet
3% Magnetite
3% Biotite
1% Chlorite
1% Pyrite
1% Barite
Trace Calcite

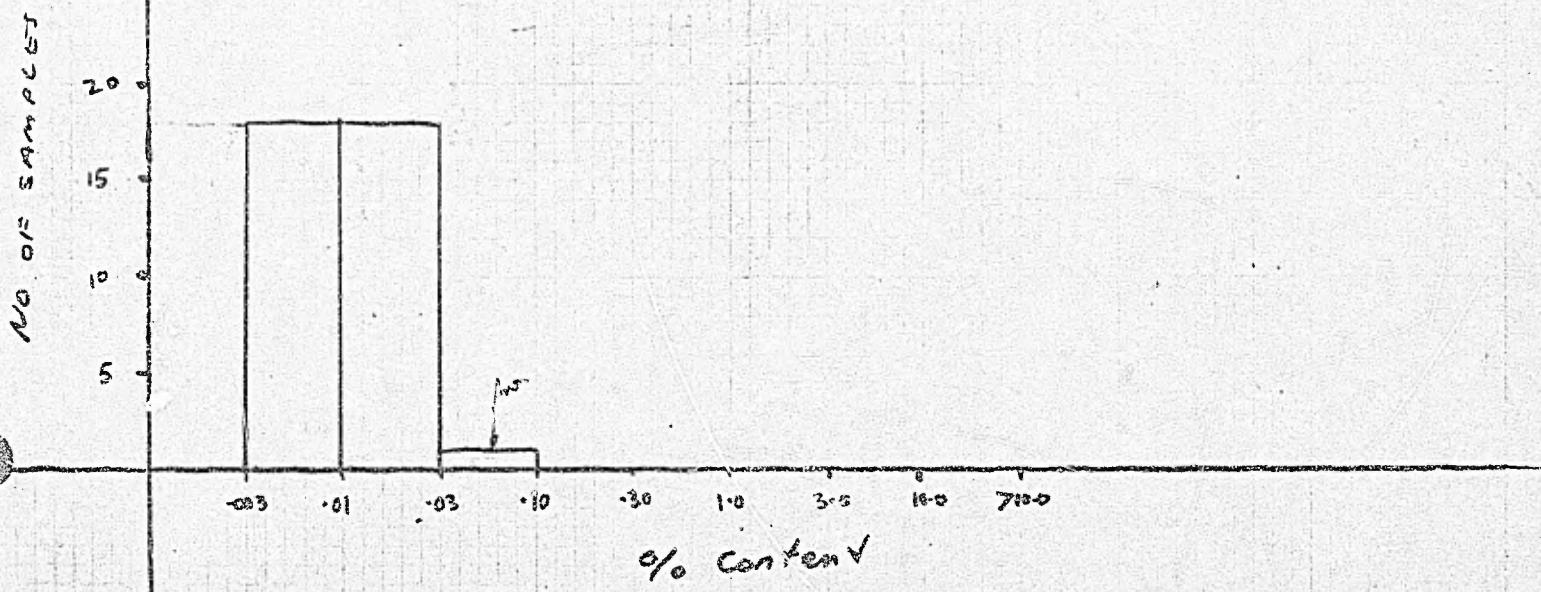
WPH

MONTREAL BASAL TILL

2.67

Zn
SPECTROGRAPHIC SCAN
SEMI QUANTITATIVE.

-80 MESH

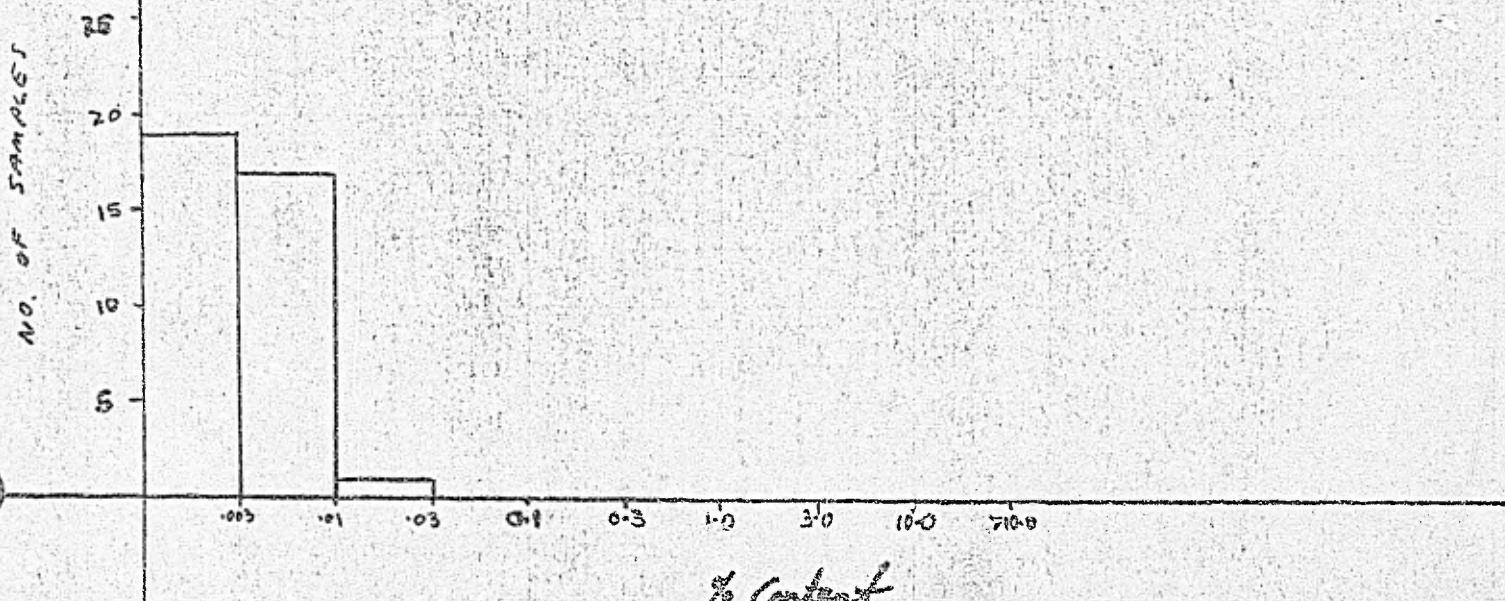


MONTVIEL BASAL TILL

Nb

SPECTROGRAPHIC SCAN
SEMI QUANTITATIVE

- 80 MESH

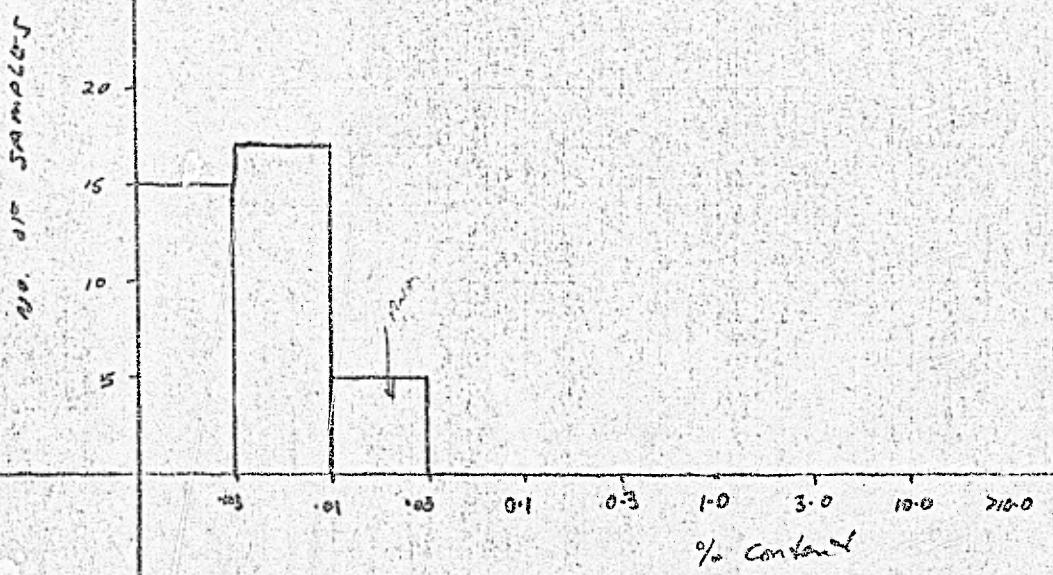


MONTVIEL BASAL TILL

La

SPECTROGRAPHIC SCAN
SEMI QUANT.

-GOMEZ



MONTVIEL BASAL TILL

Ge

SPECTROGRAPHIC SCAN
SEMI QUANTITATIVE
-80 MESH

No. of Samples

20

15

10

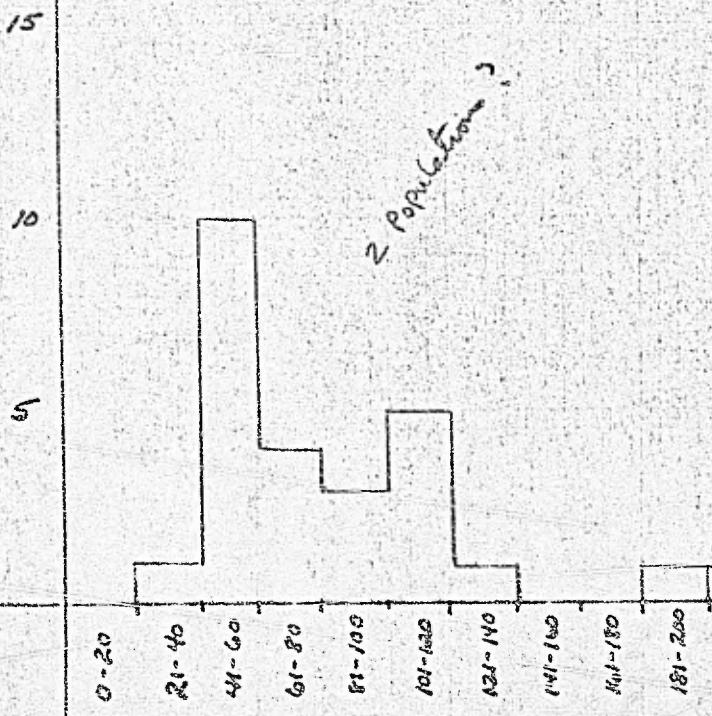
5

-200 -141 -83 -41 -3 1.0 7.0 10.0 > 10.0

% Content

100%

No. of samples



MONTUIEL AREA HEAVY FRACTION
BASAL TILL ANALYSIS
-10+80 MESH HEAVY FRACTION
 $\geq \text{SA } 2.96$

MONTVIEL AREA HEAVY FRACTION
BASAL TILL ANALYSIS
- 60 mesh

NO. OF SAMPLES

10

5

0 - .2

.3 - .4

.5 - .6

.7 - .8

.9 - 1.0

1.1 - 1.2

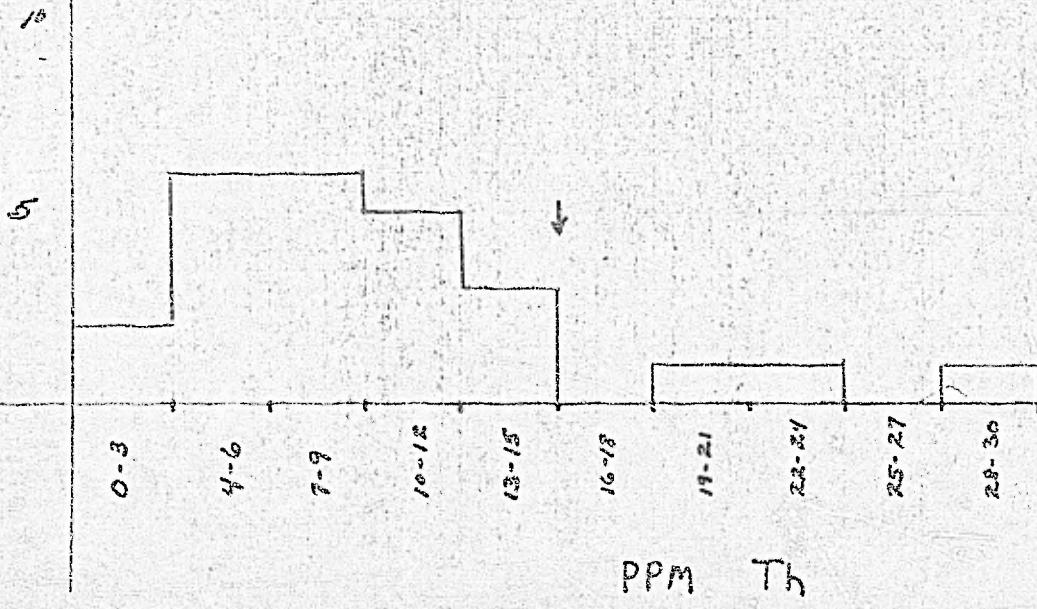
1.3 - 1.4

1.5 - 1.6

PPM U

NO. OF. SAMPLES

MONTVIEL AREA HEAVY FRACTION
BASAL TILL ANALYSIS
- 50 mesh



No. of samples

MONTVIEL AREA HEAVY FRACTION
BASAL TILL ANALYSIS
-10-+20 HEAVY FRACTION
 \Rightarrow SG. 2.96

10

5

0-10

11-20

21-30

31-40

41-50

51-60

61-70

71-80

81-90

91-100

101-110

111-120

121-130

131-140

141-150

151-160

161-170

171-180

PPM Cu

NO. 0-5 SAMPLES

20

15

10

5

0 - 100

101 - 200

201 - 300

301 - 400

401 - 500

501 - 600

601 - 700

701 - 800

801 - 900

901 - 1000

1001 - 1100

1101 - 1200

1201 - 1300

1301 - 1400

1401 - 1500

1501 - 1600

1601 - 1700

1701 - 1800

1801 - 1900

1901 - 2000

2001 - 2100

2101 - 2200

PPM

g

MONTVIEL AREA HEAVY FRACTION
BASAL TILL ANALYSIS
- IN SEDIMENT HEAVY FRACTION
 \approx SG. 2.96

MONTVIEZ AREA HEAVY FRACTION
BASAL TILL ANALYSIS
-10+80 MESH HEAVY FRACTION
S.G. 2.96

No. of samples

20

15

10

5

0-20

21-40

41-60

61-80

81-100

101-120

121-140

141-160

161-180

181-200

201-220

221-240

241-260

261-280

281-300

301-320

321-340

341-360

361-380

381-400

PPM Pb

NO. OF SAMPLES

MONTVIEC AREA HEAVY FRACTION
BASAL TILL ANALYSIS

-10+80 MESH. HEAVY FRACTION
(\bar{x} SG 2.96)

10

5

0-20

21-40

41-60

61-80

81-100

101-120

131-140

141-160

161-180

PPM Cu

2 populations?

APPENDIX IV

DRILL CORE ANALYTICAL RESULTS

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO M3B 2T8

445-5755

Certificate of Analysis

NO. 256 PAGE

TO. Duval International Corporation,
Ste. 906, 11 Adelaide St. West,
Toronto, Ont. M5H 1L9.

RECEIVED July 8/74

INVOICE NO. 256

SAMPLE(S) OF 20 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Hole No. 3

Footage	Sample	% Cb ₂ O ₅
250-255	1601	0.01
255-260	02	0.01
260-265	03	0.03
265-270	04	0.02
270-275	05	Trace
275-280	06	0.01
280-285	07	0.03
285-290	08	0.10
290-295	09	0.44
295-300	10	0.01
300-305	11	0.02
305-310	12	0.02
310-315	13	Trace
315-320	14	0.01
320-325	15	0.03
325-330	16	0.04
330-335	17	0.02
335-340	18	0.04
340-345	19	0.03
345-350	20	0.02

RECEIVED

JUL 15 1974

Ans'd.....

DATE July 11/74

CERTIFIED BY

EJ Brock

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO M3B 2T8

445-5755

Certificate of Analysis

NO. 265 PAGE

TO. Duval International Corporation,
Ste. 906, 11 Adelaide St.W.,
Toronto, Ont. M5H 1L9.

put on footages & to
No. 5.
Put - Copy to UTM.

RECEIVED July 8/74

INVOICE NO. 265

SAMPLE(S) OF 65 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Hole No 3	Sample	% Cb ₂ O ₅	Sample	% Cb ₂ O ₅	Hole No 1	Sample	% Cb ₂ O ₅
350 - 355	1621	Trace	275 - 280	1649	Trace	375 - 387.5	1677
355 - 360	22	Nil	280 - 285	50	0.02	387.5 - 400	78
360 - 365	23	0.02	285 - 290	51	Trace	400 - 412.5	79
365 - 370	24	Nil	N 290 - 295	52	Trace	412.5 - 425	80
372.7 - 374	25	0.01	295 - 299	53	0.05	425 - 430	81
400 - 405	26	Nil	300 - 310	54	Trace	470 - 500	82
410 - 410	27	Nil	310 - 315	55	Nil	500 - 513	83
410 - 415	28	Nil	315 - 320	56	Trace	513 - 525	84
415 - 420	29	Trace	325 - 335	57	Trace	525 - 535	85
420 - 425	30	Nil	335 - 340	58	0.03		
425 - 430	31	Trace	340 - 345	59	0.04		
430 - 435	32	0.01	345 - 350	60	0.01		
435 - 440	33	0.01	350 - 357.5	61	Trace		
440 - 445	34	Trace	360 - 375	62*	Trace		
445 - 450	35	Trace	221 - 223.7	63	Trace		
482.5 - 484	36	0.01	229 - 235	64	0.10		
486.8 - 489.5	37	Trace	235 - 240	65	Trace		
492. - 497.5	38	0.01	240 - 245	66	Nil		
225 - 230	39	0.01	245 - 250	67	Nil		
230 - 235	40	Trace	250 - 262.5	68	Trace		
235 - 240	41	Trace	262.5 - 275	69	Trace		
240 - 245	42	Trace	275 - 285	70	Trace		
245 - 250	43	Trace	285 - 295	71	0.01		
250 - 255	44	Nil	305 - 315	72	Trace		
255 - 260	45	0.01	315 - 325	73	Trace		
260 - 263.5	46	Trace	325 - 330	74 **	Trace		
265 - 270	47	Trace	350 - 360	75	Trace		
270 - 275	48	0.01	360 - 375	76	Trace		

RECEIVED

JUL 15 1974

Ans'd.....

N.B. 1st 50' of Hole 2
MISSING

* 362.5 - 364.0
365.0 - 366.5
370.0 - 375.0

** 50% core missing or defective

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

E.J. Burchell

DATE July 11/74

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO M3B 2T8

445-5755

Certificate of Analysis

NO. 182 PAGE 1 of 1'

TO. Duval International Corporation,
11 Adelaide Street West, Suite 906,
TORONTO, Ontario.
M5H 1L9.

RECEIVED June 25, 1974

INVOICE NO. 182

SAMPLE(S) OF 19 S. Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

HOLE FROM TO	Sample No.	% Cb_2O_5
2 425 430	2278	0.01
2 430 435	79	0.03
2 435 440	80	Trace
2 440 445	81	Trace
2 446 450	82	Trace
3 381 384	83	Trace
3 385 387.5	84	Trace
3 390 395	85	Trace
3 395 400	86	Trace
3 400 405	87	0.11
3 205 210	88	0.03
3 210 215	89	0.03
3 215 220	90	0.01
3 220 225	91	0.01
1 445 450	92	0.08
1 440 445	93	0.05
1 435 440	94	0.15
1 425 430	95	0.08
1 420 425	96	0.05

Montreal Please
check against subsequent
results from next core

HIGHER
OVERALL
THAN #3



X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

DATE June 26, 1974

E.J. Brach

TABLE I Data Summarized from Assay Sheets.

Sample#	Hole#	Footage	Interval	Cu	Pb	Zn	MoS ₂	Au, Ag	U ₃ O ₈	ThO ₂	Nb	Ce	Others
2201	3	240-245	5.0'	≤ 0.01%	0.01- 0.10%	0.01- 0.10%	—	X	0.03%	0.04%	0.1- 1.0%	0.05- 0.3%	
2202	3	245-250	5.0'	—"	0.05- 0.5%	0.05- 0.5%	≤ 0.01%	X	Trace	0.11%	0.05- 0.5%	0.1- 1.0%	
2203	3	230-235	5.0'	—"	0.05- 0.50%	0.1- 1.0%	≤ 0.01%	X	Nil	0.31%	0.01- 0.10%	—"	
2204	3	225-230	5.0'	—"	—"	0.01- 0.10%	—	X	Nil	0.08%	0.05- 0.10%	—"	
2205	3	235-240	5.0'	—"	0.01- 0.10%	0.05- 0.50%	—	X	Trace	0.08%	—"	—"	
2206	3	262-263	1.0'	—"	0.05	—"	—	X	Nil	0.15%	—"	—"	
2207	1	350-375	25', ONE CHIP TAKEN EVERY FOOT	—"	0.01- 0.10%	0.05- 0.50%	—	X	X	X	—	0.05- 0.50%	
2208	OUTCROP SAMPLE	GRAB SAMPLE, SEVERAL CHIPS - 2 TO Total weight	(0.48%)	0.19%	0.28%	Nil	Trace, Trace	X	X	X	X	OUTCROP AREA	TRENCH AREA 3
2209	3	125-150	25', ONE CHIP TAKEN EVERY FOOT	≤ 0.01%	0.01- 0.10%	0.05- 0.50%	—	X	—	0.01- 1.0%	0.05- 0.50%	0.1- 1.0%	
2210	3	122-123.5	1.5'	—"	—"	0.05- 0.50%	—	X	Nil	0.07%	0.01- 0.10%	0.10-	
2211	3	150-175	25', ONE CHIP TAKEN EVERY FOOT	—"	—"	—"	—	X	—	0.01- 0.10%	—"	—"	
2212	3	350-359	3.0'	—"	0.41%	—"	—	X	—	—"	—"	—"	
2213	3	327-330	3.0'	—	0.01- 0.10%	0.1- 1.0%	—	X	Nil	0.08%	—"	—"	
2214	2	225-250	25', ONE CHIP TAKEN EVERY FOOT	≤ 0.01%	0.01- 0.10%	0.01- 0.10%	≤ 0.01%	X	—	0.01- 0.10%	—	0.05- 0.50%	
2215	1	476.5-485	6.5'	—"	—"	—"	—	X	Nil	0.02%	—	—"	
2216	1	490-495	5.0'	—"	0.10%	0.05- 0.50%	—	X	Nil	0.06%	0.01- 0.10%	0.10- 1.0%	
2217	2	222.5-225	2.5'	—"	0.01- 0.10%	0.01- 0.10%	≤ 0.01%	X	—	0.01- 0.10%	—	0.05- 0.50%	
2218	1	231.5-250	18.5'	—"	—"	—"	—	X	—	—"	0.01- 0.10%	0.1- 1.0%	
2219	1	295-300	5.0'	—"	—"	—"	—	X	Nil	0.02%	—"	—"	
2220	1	300-305	5.0'	—"	—"	—"	—	X	—	0.01- 0.10%	—	—"	
2221	2	326-329	3.0'	—"	—"	0.005- 0.50%	≤ 0.01%	X	—	—"	—	0.05- 0.50%	
2222	2	357.5-362.5	5.0'	—"	—"	—"	—	X	—	—"	—	—"	
2223	2	264-265	1.0'	—"	—"	0.05- 0.50%	—"	X	—	0.05- 0.50%	—	—"	
2224 Tag	2	250-275	25', ONE CHIP TAKEN EVERY FOOT	—"	—"	—"	—	X	Nil	0.13%	—	—"	

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO

445-5755

Certificate of Analysis

NO. 9847

Page 1 of 9

TO. Duval International Corporation,
Ste. 906, 11 Adelaide St.W.,
Toronto, Ont.
Attention: L. Barker

RECEIVED June 21/73

INVOICE NO. 9847

SAMPLE(S) OF 14 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

HOLE #	FOOTAGE	Sample	% U ₃ O ₈	% ThO ₂	% Cu	% Zn	% Pb	% MoS ₂	Au. oz/ton	Ag. oz/ton
3	240-45	2201	0.03	0.04						
3	245-50	02	Trace	0.11						
3	230-35	03	Nil	0.31						
3	225-30	04	Nil	0.08						
3	235-40	05	Trace	0.08						
3	262-63	06	Nil	0.15						
Rock	SAMPLE	08	0.08	0.00	0.48	0.28	0.19	Nil	Trace	Trace
3	122-295	10	Nil	0.07						
3	356-59	12						0.41		
3	327-330	13	Nil	0.08						
1	476-5-85	15	Nil	0.02						
1	490-95	16	Nil	0.06			0.10			
1	295-300	19	Nil	0.02						
2	264-69	23	Nil	0.13						

SAMPLE
FROM OUTCROP
AREA 3 - TRENCH

GRAB

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

DATE June 26/73

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO

445-5755

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NO. 9847

Page 2 of 9

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Toronto, Ont.

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SAMPLE(S) OF 1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration			Element	Sens*	Concentration		
		2201	2202	2203			2201	2202	2203
Antimony	(4)	ND	ND	ND	Manganese	(1)	LM	LM	LM
Arsenic	(4)	ND	ND	ND	Mercury	(4)	ND	ND	ND
Beryllium	(2)	ND	ND	ND	Molybdenum	(3)	ND	FT	FT
Bismuth	(2)	ND	ND	ND	Nickel	(1)	FT	FT	FT
Cadmium	(4)	ND	ND	ND	Silver	(1)	ND	ND	ND
Cerium	(5)	TL	L	L	Tantalum	(5)	ND	ND	ND
Columbium	(4)	L	TL	T	Thorium	(3)	T	TL	TL
Chromium	(4)	ND	ND	ND	Tin	(2)	ND	ND	ND
Cobalt	(3)	ND	ND	ND	Titanium	(2)	L	TL	T
Copper	(1)	FT	FT	FT	Tungsten	(4)	ND	ND	ND
Gallium	(2)	ND	ND	ND	Uranium	(3)	T	FT	ND
Germanium	(1)	ND	ND	ND	Vanadium	(2)	ND	ND	ND
Iron	(2)	M	M	M	Yttrium	(3)	FT	ND	FT
Lead	(2)	T	TL	TL	Zinc	(4)	T	TL	L
Lithium	(4)	ND	ND	ND	Zirconium	(4)	T	T	T

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less
ND - Not detected	

*Sensitivity
(limit of detection)

1-	0.0005-0.001%
2-	0.001-0.005%
3-	0.005- 0.01%
4-	0.01 - 0.05%
5-	0.05 - 0.1%

Note: Better sensitivities can be obtained with special techniques, if and when required.

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

DATE June 26/73

X-RAY ASSAY LABORATORIES

LIMITED

46 LESMILL ROAD

DON MILLS ONTARIO

445-5755

Certificate of Analysis

NO. 9847

Page 3 of 9

TO. Duval International Corporation,
Ste.906, 11 Adelaide St.W.,
Toronto, Ont.

RECEIVED June 21/73

INVOICE NO. 9847

SAMPLE(S) OF
1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration			Element	Sens*	Concentration		
		HOLE 3	HOLE 3	HOLE 3			2204	2205	2206
Antimony	(4)	ND	ND	ND	Manganese	(1)	LM	LM	LM
Arsenic	(4)	ND	ND	ND	Mercury	(4)	ND	ND	ND
Beryllium	(2)	ND	ND	ND	Molybdenum	(3)	ND	ND	ND
Bismuth	(2)	ND	ND	ND	Nickel	(1)	FT	FT	FT
Cadmium	(4)	ND	ND	ND	Silver	(1)	ND	ND	ND
Cerium	(5)	ND	ND	ND	Tantalum	(5)	ND	ND	ND
Columbium	(4)	L	L	L	Thorium	(3)	ND	ND	ND
Chromium	(4)	T	T	T	Tin	(2)	T	T	TL
Cobalt	(3)	ND	ND	ND	Titanium	(2)	ND	ND	ND
Copper	(1)	ND	ND	ND	Tungsten	(4)	ND	ND	ND
Gallium	(2)	FT	FT	FT	Uranium	(3)	ND	FT	ND
Germanium	(1)	ND	ND	ND	Vanadium	(2)	ND	ND	ND
Iron	(2)	ND	ND	ND	Yttrium	(3)	ND	ND	ND
Lead	(2)	M	M	M	Zinc	(4)	T	T	T
Lithium	(4)	TL	T	TL	Zirconium	(4)	T	TL	TL
		ND	ND	ND			T	T	T

LEGEND

Key To Symbols

H - 10% plus L - 0.1-1%
 MH - 5-15% TL - 0.05-0.5%
 M - 1-10% T - 0.01-0.1%
 LM - 0.5-5% FT - 0.01% or less
 ND - Not detected

*Sensitivity
(limit of detection)

1- 0.0005-0.001%
 2- 0.001-0.005%
 3- 0.005- 0.01%
 4- 0.01 - 0.05%
 5- 0.05 - 0.1%

Note: Better sensitivities can be obtained with special techniques, if and when required.

X-RAY ASSAY LABORATORIES LIMITED

CERTIFIED BY

DATE June 26/73

X-RAY ASSAY LABORATORIES

LIMITED

45 LESMILL ROAD

DON MILLS ONTARIO

446-5755

Certificate of Analysis

NO. 9847

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TO. Duval International Corporation,
Ste.906, 11 Adelaide St.W.,
Toronto, Ont.

RECEIVED June 21/73

INVOICE NO. 9847

SAMPLE(S) OF 1 Rock
 23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration	Element	Sens*	Concentration	2207	2208	2209
Antimony	(4)	ND	Manganese	(1)	L	L	LM	
Arsenic	(4)	ND	Mercury	(4)	ND	ND	ND	
Beryllium	(2)	ND	Molybdenum	(3)	ND	ND	ND	
Bismuth	(2)	ND	Nickel	(1)	FT	FT	FT	
Cadmium	(4)	ND	Silver	(1)	ND	FT	ND	
Cerium	(5)	TL	Tantalum	(5)	ND	ND	ND	
Columbium	(4)	ND	Thorium	(3)	T	FT	T	
Chromium	(4)	ND	Tin	(2)	ND	FT	ND	
Cobalt	(3)	ND	Titanium	(2)	T	L	T	
Copper	(1)	FT	Tungsten	(4)	ND	ND	ND	
Gallium	(2)	ND	Uranium	(3)	ND	ND	ND	
Germanium	(1)	ND	Vanadium	(2)	ND	FT	ND	
Iron	(2)	M	Yttrium	(3)	T	T	T	
Lead	(2)	T	Zinc	(4)	TL	TL	TL	
Lithium	(4)	ND	Zirconium	(4)	ND	TL	T	

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less

ND - Not detected

*Sensitivity
(limit of detection)

- 1- 0.0005-0.001%
- 2- 0.001-0.005%
- 3- 0.005- 0.01%
- 4- 0.01 - 0.05%
- 5- 0.05 - 0.1%

Note: Better sensitivities can be obtained with special techniques, if and when required.

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X-RAY ASSAY LABORATORIES

LIMITED

45 LEGSMILL ROAD

DON MILLS ONTARIO

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Certificate of Analysis

NO. 9847

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TO. Duval International Corporation,
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Toronto, Ont.

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INVOICE NO. 9847

SAMPLE(S) OF

1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration	Element	Sens*	Concentration
Antimony	(4)	ND ^{Hg-2210} ^{As-2211} ^{As-2212}	Manganese	(1)	LM ²²¹⁰ ²²¹¹ ²²¹²
Arsenic	(4)	ND	Mercury	(4)	ND
Beryllium	(2)	ND	Molybdenum	(3)	ND
Bismuth	(2)	ND	Nickel	(1)	FT
Cadmium	(4)	ND	Silver	(1)	ND
Cerium	(5)	L	Tantalum	(5)	ND
Columbium	(4)	T	Thorium	(3)	T
Chromium	(4)	ND	Tin	(2)	ND
Cobalt	(3)	ND	Titanium	(2)	T
Copper	(1)	FT	Tungsten	(4)	ND
Gallium	(2)	FT	Uranium	(3)	ND
Germanium	(1)	ND	Vanadium	(2)	ND
Iron	(2)	ND	Yttrium	(3)	T
Lead	(2)	M	Zinc	(4)	TL
Lithium	(4)	ND	Zirconium	(4)	T

LEGEND

Key To Symbols

H - 10% plus L - 0.1-1%
MH - 5-15% TL - 0.05-0.5%
M - 1-10% T - 0.01-0.1%
LM - 0.5-5% FT - 0.01% or less
ND - Not detected

*Sensitivity
(limit of detection)

1- 0.0005-0.001%
2- 0.001-0.005%
3- 0.005- 0.01%
4- 0.01 - 0.05%
5- 0.05 - 0.1%

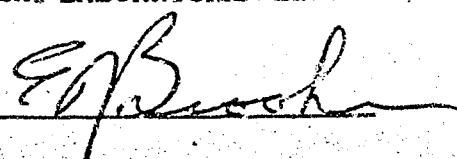
Note: Better sensitivities can be obtained with special techniques, if and when required.

X-RAY ASSAY LABORATORIES LIMITED

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June 26/73

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X-RAY ASSAY LABORATORIES

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45 LESMILL ROAD

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TO. Duval International Corporation,
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INVOICE NO. 9847

SAMPLE(S) OF 1 Rock
23 S.Cores

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration			Element	Sens*	Concentration		
		HOLE 3	HOLE 4	HOLE 5			2213	2214	2215
Antimony	(4)	ND	ND	ND	Manganese	(1)	LM	LM	LM
Arsenic	(4)	ND	ND	ND	Mercury	(4)	ND	ND	ND
Beryllium	(2)	ND	ND	ND	Molybdenum	(3)	FT	ND	ND
Bismuth	(2)	ND	ND	ND	Nickel	(1)	FT	FT	FT
Cadmium	(4)	ND	ND	ND	Silver	(1)	ND	ND	ND
Cerium	(5)	L	TL	TL	Tantalum	(5)	ND	ND	ND
Columbium	(4)	T	ND	ND	Thorium	(3)	T	T	T
Chromium	(4)	ND	ND	ND	Tin	(2)	ND	ND	ND
Cobalt	(3)	ND	ND	ND	Titanium	(2)	T	T	TL
Copper	(1)	FT	FT	FT	Tungsten	(4)	ND	ND	ND
Gallium	(2)	ND	ND	ND	Uranium	(3)	ND	ND	ND
Germanium	(1)	ND	ND	ND	Vanadium	(2)	ND	ND	ND
Iron	(2)	MH	MH	M	Yttrium	(3)	ND	FT	T
Lead	(2)	TL	T	T	Zinc	(4)	L	T	T
Lithium	(4)	ND	ND	ND	Zirconium	(4)	T	T	T

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less
ND - Not detected	

*Sensitivity
(limit of detection)

1-	0.0005-0.001%
2-	0.001-0.005%
3-	0.005-0.01%
4-	0.01-0.05%
5-	0.05-0.1%

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TO. Duval International Corporation,
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SAMPLE(S) OF 1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration	Element	Sens*	Concentration
Antimony	(4)	ND	Manganese	(1)	2216
Arsenic	(4)	ND	Mercury	(4)	2217
Beryllium	(2)	ND	Molybdenum	(3)	2218
Bismuth	(2)	ND	Nickel	(1)	ND
Cadmium	(4)	ND	Silver	(1)	FT
Cerium	(5)	L	Tantalum	(5)	FT
Columbium	(4)	T	Thorium	(3)	FT
Chromium	(4)	ND	Tin	(2)	ND
Cobalt	(3)	ND	Titanium	(2)	ND
Copper	(1)	FT	Tungsten	(4)	ND
Gallium	(2)	ND	Uranium	(3)	ND
Germanium	(1)	ND	Vanadium	(2)	ND
Iron	(2)	MH	Yttrium	(3)	ND
Lead	(2)	TL	Zinc	(4)	ND
Lithium	(4)	ND	Zirconium	(4)	T

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less
ND - Not detected	

*Sensitivity
(limit of detection)

1- 0.0005-0.001%
2- 0.001-0.005%
3- 0.005- 0.01%
4- 0.01 - 0.05%
5- 0.05 - 0.1%

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SAMPLE(S) OF 1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration	Element	Sens*	Concentration
Antimony	(4)	ND	Manganese	(1)	2219
Arsenic	(4)	ND	Mercury	(4)	2220
Beryllium	(2)	ND	Molybdenum	(3)	2221
Bismuth	(2)	ND	Nickel	(1)	L
Cadmium	(4)	ND	Silver	(1)	L
Cerium	(5)	L	Tantalum	(5)	ND
Columbium	(4)	T	Thorium	(3)	ND
Chromium	(4)	ND	Tin	(2)	ND
Cobalt	(3)	ND	Titanium	(2)	ND
Copper	(1)	FT	Tungsten	(4)	ND
Gallium	(2)	ND	Uranium	(3)	ND
Germanium	(1)	ND	Vanadium	(2)	ND
Iron	(2)	MH	Yttrium	(3)	ND
Lead	(2)	T	Zinc	(4)	ND
Lithium	(4)	ND	Zirconium	(4)	ND

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less
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(limit of detection)

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3 - 0.005- 0.01%
4 - 0.01 - 0.05%
5 - 0.05 - 0.1%

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SAMPLE(S) OF 1 Rock
23 S.Core

SUBMITTED TO US SHOW RESULTS AS FOLLOWS:

Element	Sens*	Concentration	Element	Sens*	Concentration	No Tac
Antimony	(4)	ND	ND	Manganese	(1)	L
Arsenic	(4)	ND	ND	Mercury	(4)	ND
Beryllium	(2)	ND	ND	Molybdenum	(3)	FT
Bismuth	(2)	ND	ND	Nickel	(1)	FT
Cadmium	(4)	ND	ND	Silver	(1)	ND
Cerium	(5)	TL	TL	Tantalum	(5)	ND
Columbium	(4)	ND	ND	Thorium	(3)	TL
Chromium	(4)	ND	ND	Tin	(2)	ND
Cobalt	(3)	ND	ND	Titanium	(2)	T
Copper	(1)	FT	FT	Tungsten	(4)	ND
Gallium	(2)	ND	ND	Uranium	(3)	ND
Germanium	(1)	ND	ND	Vanadium	(2)	ND
Iron	(2)	MH	H	Yttrium	(3)	ND
Lead	(2)	T	T	Zinc	(4)	TL
Lithium	(4)	ND	ND	Zirconium	(4)	T

LEGEND

Key To Symbols

H - 10% plus	L - 0.1-1%
MH - 5-15%	TL - 0.05-0.5%
M - 1-10%	T - 0.01-0.1%
LM - 0.5-5%	FT - 0.01% or less
ND - Not detected	

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2-	0.001-0.005%
3-	0.005-0.01%
4-	0.01-0.05%
5-	0.05-0.1%

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