MAP No.

115 N 15

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MINING DISTRICT: Dawson Mining District

TYPE OF WORK: Geological

REPORT FILED UNDER: Esso Minerals Canada

DATE PERFORMED: Aug. 12-13, 18-19, 1986 DATE FILED: August 3, 1987

LOCATION	
LAT.	63° 59' N
LONG.	140° 32'W

AREA: Sixty-Mile River, Big Gold Creek

CLAIM NAME & NO. DELIA 1-6 YA87688-693
WENDY 1-9 YA88114-122

VALUE $ 6,000.00	
WORK DONE BY:	P.J. McGuigan
WORK DONE FOR:	Esso Minerals Canada
DATE TO GOOD STANDING	REMARKS: #14 PER

1986 EXPLORATION PROGRAM

GEOLOGICAL MAPPING AND SAMPLING

ON THE

DELIA AND WENDY QUARTZ CLAIMS, YUKON TERRITORY

NTS 115N/15
Latitude: 63°59'N
Longitude: 140°32'W

by:
Paul J. McGuigan

for:
ESSO MINERALS CANADA
1600 - 409 Granville Street
Vancouver, B.C.
V6C 1T2

June 10, 1987

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This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 6000.00.

D D Emond

for Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

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A. RECOMMENDATIONS

The Delia-Wendy Claims should be further explored. The recommended target is an epithermal-style, gold-bearing sulphide-rich and silicified stockwork within Tertiary andesite. The following work is recommended.

- The Conner's placer operation should be re-visited in 1987 and any new pits should be mapped and tied into the No. 1 posts of the Delia 3 and 4.

- Outcrops on the nearby valley walls should be geologically mapped.

- Orientation surveys using ground magnetic and induced polarization techniques should be conducted on the Delia claims. Induced polarization might be a useful technique if proper electrode contact can be made on the placer tailings heaps.

B. INTRODUCTION

B.1 Location and Access

The Delia and Wendy claims are located in the Sixty Mile River area, Yukon near latitude 63°59'N, longitude 140°32'W (NTS 115N/15). Access to the claims is via a good seasonal road, along Big Gold Creek from the top of the World Highway.

B.2 Ownership

The Delia and Wendy Quartz claims are owned by Erwin Kreft of Whitehorse, Yukon. See Appendix 1 for the list of claims and status. Map 1 shows the location.

B.3 History

Prospecting and sampling of bedrock exposures within active placer mining pits by Erwin Kreft resulted in the discovery of gold-bearing, pyritic and altered andesites. The Delia and Wendy claims were staked to cover bedrock mineralized areas in the Conners placer mining area.

B.4 1986 Exploration Program

The Delia-Wendy claims were mapped and sampled on August 12,13,18 and 19, 1986. Work was done by Paul J. McGuigan and Keenan Dom, geologists employed by Esso Minerals Canada. Bedrock exposures in Conner's North Pit (1986) were flagged, the geology mapped and 16 rock samples taken. Bedrock in two pits, located to the south of Conner's North Pit, was prospected and 10 rock samples taken. All work was done on the Delia 1,2,3 and 4 claims.

The mapping and sampling program cost $6,110.82, exclusive of the cost of mobilization to Dawson City. See Appendix 2 for the cost statement. Appendix 3 is the statement of qualifications of Paul J. McGuigan.

B.5 Sampling and Analytical Procedures

A metric grid was laid out in order to locate the sampling in the Conner's placer pits relative to the Delia claim posts. The grid baseline (0+00W) is oriented along true azimuth 015°. The ordinate point is 5+00N, 0+00W. The No. 1 posts of Delia 3 (Tag number YA 87690) and Delia 4 (Tag number YA 87691) are located at grid L5+70N, 1+53W. The posts are standing in an area of placer tailings and are not likely to be disturbed in the near future by the placer operations.

Sampling was conducted on bedrock exposures. Care was taken to avoid contamination by the presumed gold-bearing, basal gravel. Channel samples were taken of soft, altered bedrock at the sampling rate of 1-2 kg per metre. Chip samples were taken at the rate of .5 to 1 kg per metre of sample.

Rock samples were analyzed by Min-En Laboratory in North Vancouver, B.C. Gold and silver were analyzed by fire assay and atomic absorption finish. Barium, copper, molybdenum, lead and zinc were determined through inductively coupled argon plasma (ICP) procedure. Mercury, arsenic, and antimony were determined using geochemical techniques. See Appendix 4 for the description of the analytical procedures.

C. GEOLOGICAL SETTING OF THE SIXTY MILE RIVER AREA

The Sixty Mile River area is located within the Yukon cataclastic terrane. Most of the area is underlain by Nasina Series rocks of Paleozoic and Precambrian age. An erosional remnant of rocks which are correlative with Tertiary Mt. Nansen group is centered near the confluence of Big Gold Creek and Sixty Mile River. The Mt. Nansen group rocks consist of interdigitated calc-alkaline volcanic rocks and fluviate sedimentary rocks (Glasmacher, 1985). One outcrop of Quaternary alkali-olivine basalt has been mapped in the area. Quaternary alluvium occurs in terraces and on valley bottoms of the Sixty Mile area.

Bedrock-hosted mineralization in the area includes a gold occurrence in Tertiary volcanics near the confluence of Big Gold Creek and Sixty Mile River. The occurrence contains epithermal-style alteration and mineralization (Glasmacher, 1985). Bedrock consists of Tertiary andesites in the Delia claim area. Pyritic, clay altered and silicified andesites on Delia 1,2 and 4 contain traces of gold-silver mineralization.

Quaternary sediments in the Sixty Mile River, Miller Creek, Big Gold Creek, and others, contain economic deposits of placer gold. Glasmacher (1985) describes the deposits and inferred the main source to be vein mineralization in the Tertiary calc-alkaline volcanics.

D. RESULTS OF 1986 EXPLORATION

D.1 Quaternary Sediments and Placer Gold Deposits

The Delia Quartz claims are located on the floodplain of the Sixty Mile River. The claims are completely covered by alluvium ranging in thickness from 2 to 6 metres. The alluvium consists mostly of coarse sand and gravel, with much lesser amounts of silt and clay. Clasts are mostly of Nasina Series rocks, with lesser andesite volcanics, and rare quartz veins.

Much of the sediment along the main axis of the Sixty Mile River has been worked to bedrock by placer mining dredges. In 1986, undisturbed Quaternary sediment over the Delia claims was being mined by the Conner's placer operation. The current placer mining method consists of dozer stripping of the upper layers of alluvium (and organic material), followed by pushing of the basal alluvium (1 to 2 m thick) into large capacity sluice boxes. Tailings are stacked by a front-end loader. In mid-August of 1986, the placer miners had temporarily exposed bedrock in three pits. The pits were situated on the Delia 1, 2 and 4 claims. No other bedrock exposures are known on the Delia claims.

The basal alluvium within the August 1986 Conner's pits mostly consists of sandy gravel. However, the basal alluvium contains a discontinuous, 10 to 100 cm thick, muddy gravel which lies

directly on bedrock. The gravel consists of Nasina Series rock clasts and andesite clasts in a matrix of distinctive white (kaolinitic?) mud. Hollows in the irregular bedrock surface are commonly filled with the whitish gravel. The placer miners have made a thorough effort to scrape the hollows clean and it is assumed the whitish gravel is gold-bearing.

D.2 Geology of the Delia Claims

Bedrock is not exposed on the Delia claims, except where temporarily uncovered by the placer miners. During mid-August, 1986 three pits were available for bedrock sampling. The Conner's 'North Pit' is situated on the southwest corner of Delia 4. It contained the best mineralized bedrock exposures and was sampled and geologically mapped (see Map 2). The two other pits are situated on Delia 1 and 2. Those pits were prospected and sampled only.

The pits on the Delia claims contain strongly fractured and altered andesite flows and minor andesite breccia. They are similar to the andesites described in Glasmacher (1985) and are correlated with Mt. Nansen group. In the Delia exposures, the andesites are massive, often plagioclase and pyroxene porphyritic flows.

The Conner's 'North Pit' contains complexly fractured, faulted, altered and mineralized andesite flows. The sequence is intruded by late andesite dykes. Pervasive early-stage epidote-chlorite alteration is widespread. Strong mid-stage fracturing and faulting contains weak to intense clay (kaolinite?)-pyrite alteration. The 'North Pit' is cut by a fault zone at least 50 m wide. Gouge within the fault consists of finely comminuted andesite which has strong to intense clay alteration. Only the western edge of the fault is exposed; its attitude is $020^{o}/90^{o}$. The fault forms the eastern edge of the Sixty Mile River valley and is oriented sub-parallel to the regional scale (Sixty Mile River) lineament.

In the Conner's 'North Pit', the mid-stage clay alteration is followed by a stage of fracturing and pyrite-galena-sphalerite-chalcopyrite mineralization. The sulphide mineralization mostly consists of very fine grained pyrite. The fine grained sulphides occur as fracture coatings and very fine, irregular, veinlets. The fine veinlets cut both andesite and the clay-altered fault gouge. Veinlet walls in andesite and fault gouge are silicified to widths of up to 20 cm. In the fault gouge, silicification re-cements the comminuted andesite. Locally, small vugs remain from the silicification and sulphide mineralization. The vugs are typically lined with coarse pyrite and minor amounts of coarse galena, sphalerite and chalcopyrite.

Late-stage pyroxene porphyritic andesite dykes intrude the clay-altered gouge areas of the 'North Pit' area. The dykes are weakly chlorite-epidote altered and contain small patches of late-stage clay alteration. The dykes exhibit contact relationships which clearly indicate they are later than the mid-stage clay-pyrite alteration and the sulphide veining and silicification.

Prospecting and sampling of the southern pits on Delia 1 and 2 showed widespread chlorite-epidote alteration and clay-pyrite alteration. Pyrite veinlets, similar to those at the 'North Pit', are common. However, no significant amounts of silicification were seen. Also, no late-stage dykes were seen.

D.3 Sampling and Rock Geochemistry Results

Fire assays and geochemical determinations indicate the mid-stage altered and sulphide-veined andesites and fault gouge are moderately anomalous. The highest gold assay was from a .5 m

channel sample of pyritic clay and silicified andesite. The sample contains 1.8 g/t gold and 30.5 g/t silver (see Table 1). The highest gold values correlate closely with elevated values in silver, lead, mercury, arsenic and antimony. To a lesser degree, copper, zinc and molybdenum also correlate with gold.

D.4 Discussion of Results

The 1986 exploration work within the three available pits indicate a large area of strongly fractured, altered and sulphide mineralized andesite is present on the Delia claims. The strongest mineralization occurs in the 'North Pit' near and within a major north-northeast trending fault zone. Economic widths or grades of gold mineralization were not found. However, elevated values of gold and other metals correlate with a promising alteration suite. Similar alteration and host bedrock situated 5 km to the northeast at the Cogasa placer operation, also contain anomalous gold.

A laterally extensive alteration is indicated by the results of the Delia mapping and by studies by Glasmacher (1985). One possible axis for the alteration and mineralization is along the bottom of the Sixty Mile River valley. Prospecting and sampling of the trend would be difficult due to the overburden. Exploration methods recommended are as follows:

- Periodic site visits to the active placer operations and sampling of exposed bedrock.

- Airborne and ground magnetic surveys to delineate possible magnetic-low trends which might correspond to alteration.

- Induced polarization surveys. Both the chargeability and resistivity data should be useful.

Soil and alluvium geochemistry are not likely to be useful in selecting exploration targets, due to the depth of overburden and the degree of contamination by the placer operations.

E. BIBLIOGRAPHY

Glasmacher, V. (1985) - Geology, Petrography and Mineralization in the Sixty Mile River Area, Yukon Territory, Canada - Translation - Thesis, Rhenish Westphalian Technical University, Aachen, West Germany.

Paul J. H'Gugan

TABLE 1
DELIA-WENDY CLAIMS - NTS 115N/15 - COMPILATION OF SAMPLING RESULTS

		ASSAY		GEOCHEM					ICP			
LOCATION	SPL/TYPE	Au (g/t)	Ag (g/t)	Hg (ppb)	As (ppm)	Sb (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Ba (ppm)	Mo (ppm)	COMMENTS NOTE: All SPLS of bedrock, after cleaning surface clay/gravel
Conners North Pit												
L5+30N 0+06E	6GR-046/1m Chan.	.01	2.5	480	10	1	33	64	206	333	1	Grey,clay altered gouge trending 020°/70°W
L5+30N 0+10E	6GR-047/1m Chan.	.04	2.0	195	8	1	35	38	241	204	2	Sandy,clay altered gouge,fresh disseminated pyrite
L5+40N 0+01E	6GR-048/5m Chan.	.03	1.9	155	15	1	19	30	289	84	1	Sandy,clay altered gouge,fresh disseminated pyrite
L5+50N 0+11E	6GR-049/1m Chan.	.11	2.0	625	27	4	329	68	198	62	1	Pyrite disseminated in sandy grey rock
L5+50N 0+11E	6GR-050/1m Chan.	.05	1.2	520	38	2	359	72	430	49	1	Grey, clay altered gouge
L5+50N 0+03E	6GR-051/1m Chan.	.18	2.2	100	29	14	202	65	407	80	2	Clay, altered
L5+50N 0+03E	6GR-052/Selected	.11	3.0	200	19	11	453	120	391	63	2	Chalcedonic-pyrite vein cuts silic. andesite
L5+60N 0+11E	6GR-053/1m Chan.	.07	4.0	130	25	22	97	296	502	104	28	Black sooty pyrite veinlets in propylitically altered andesite
L5+60N 0+11W	6GR-054/1m Chan.	.01	2.5	105	10	13	16	76	246	114	1	Pyrite-clay altered andesite
L5+46N 0+16W	6GR-055/1m Chan.	.01	1.8	195	84	13	33	161	454	91	1	Silicified & cut by quartz-calcite-pyrite vein
L5+46N 0+23W	6GR-056/1m Chan.	.01	2.6	130	14	3	15	71	118	140	1	Pyritic clay rubble and sand
L5+32N 0+12W	6GR-057/.5m Chan.	1.80	30.5	720	95	7-	120	3806	78	146	3	Pyritic,yellow clay (next to partly silicified andesite)
L5+33N 0+9W	6GR-058/1.5m Chip	.98	27.8	1420	400	54	341	1821	1341	114	82	Pyrite veinlets in silicified, clay altered andesite
L4+89N 0+50W	6GR-059/1m Chan.	.10	3.5	80	25	12	14	176	24	122	1	Yellow and grey clay
L5+08N 0+02W	6GR-060/1m Chan.	.04	2.2	70	3	31	35	77	132	122	2	Light grey clay
L5+50N 0+03W	6GR-061/Selected	.05	4.3	210	55	18	134	200	731	98	2	Spl from small pit containing abundant coarse
L6+35N 0+06W	6GR-066/1.5m Chan	.01	2.3	80	15	6	31	142	162	137	3	Pyritic porphyritic andesite + blue clay
L6+28N 0+09W	6GR-067/.5m Chan.	.01	2.0	40	8	6	37	49	164	435	3	Granular to fine blue clay with diss. py.
L6+38N 0+09W	6GR-069/2m Chan.	.22	1.5	240	15	13	36	62	214	121	2	Blue-grey clay w/chalcedony veins, irreg py blebs
L5+53N 0+15E	6GR-070/0.5m Chan	.02	2.0	70	10	10	190	61	308	110	2	Blue clay zone (trend 260°) patchy finely disseminated pyrite
Middle Pit	6GR-062	.03	6.4	60	24	34	96	292	346	100	1	Breccia dyke in weathered andesite 124°/80°
	6GR-063	.41	34.5	4500	1140	178	122	2798	1646	93	20	Pyrite clay alt. volc. in south pit
Southern Pit												
2+00N 3+95W	6GR-071/1m Chan.	.04	2.1	100	6	1	24	35	263	54	2	Blue clay zone, no visible mineralization
1+95N 4+21W	6GR-072/1.5m Chan	.03	2.2	70	33	1	11	71	171	126	1	Blue-grey and whitish clay alt. zone
2+05N 4+30W	6GR-073	.01	1.4	70	4	1	264	54	139	56	2	Moderately kaolinite alter. feldspar porphyry with minor py. blebs
On Top of the World Highway	6GR-065	.04	2.1	55	9	11	12	79	77	235	1	Fresh andesite lapilli tuff with sub-angular fragments of pyroxenes, no sulphides

APPENDIX 1

LIST OF QUARTZ CLAIMS AND OWNERSHIP

Claim Name	Tag No.	Staked	Anniversary Date
DELIA 1	YA87688	August, 1985	August 15, 1987
DELIA 2	YA87689	August, 1985	August 15, 1987
DELIA 3	YA87690	August, 1985	August 15, 1987
DELIA 4	YA87691	August, 1985	August 15, 1987
DELIA 5	YA87692	August, 1985	August 15, 1987
DELIA 6	YA87693	August, 1985	August 15, 1987
WENDY 1	YA88114	August, 1986	August 5, 1987
WENDY 2	YA88115	August, 1986	August 5, 1987
WENDY 3	YA88116	August, 1986	August 5, 1987
WENDY 4	YA88117	August, 1986	August 5, 1987
WENDY 5	YA88118	August, 1986	August 5, 1987
WENDY 6	YA88119	August, 1986	August 5, 1987
WENDY 7	YA88120	August, 1986	August 5, 1987
WENDY 8	YA88121	August, 1986	August 5, 1987
WENDY 9	YA88122	August, 1986	August 5, 1987

APPENDIX 2
COST STATEMENT - 1986 EXPLORATION

Delia - Wendy Quartz Claims, Yukon Territory
Period: August 11 to 20, 1986

Field Labour:			
P. McGuigan:	six days at $315.00	$1,890.00	
K. Dom:	six days at $135.00	810.00	$2,700.00
Accommodation:			
Hotel:	six days at $65.00	$ 390.00	
Meals:		247.60	637.60
Transportation:			
Vehicle: (owned)	six days at $35.00	$ 210.00	
Fuel for vehicle:		288.23	
Air Freight - sample shipment:		252.96	751.19
Supplies:			
Hardware, groceries, misc.		$ 125.53	125.53
Analyses:			
Min-En Laboratories Ltd. 26 samples at $32.75		$ 851.50	851.50
Office and Report Preparation:			
Consulting - Paul McGuigan - two days @ $380.00/day		$ 760.00	
Drafting - Kirk Simpson - one day @ $235.00/day		235.00	
Reproduction costs: maps & reports		50.00	1,045.00
TOTAL EXPENDITURES			$6,110.82

Paul J. McGuigan

Paul J. McGuigan

2887B

APPENDIX 3

STATEMENT OF QUALIFICATIONS

I, Paul J. McGuigan, of North Vancouver, B.C. do hereby certify that:

1. I graduated with a Bachelor of Science (Honors) Degree in Geology from the University of British Columbia in 1974.

2. I have been employed since that time as an exploration geologist in minerals. During the period 1976 to 1986 I was employed by Esso Resources Canada Limited, mostly in British Columbia and the Yukon.

3. Since 1986 I have been a consulting geologist, based in Vancouver, B.C.

Paul J. McGuigan

Paul J. McGuigan

APPENDIX 4

ANALYTICAL PROCEDURES

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag,Al,As,B,Bi,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Mo,
Na,Ni,P,Pb,Sb,Sr,Th,U,V,Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sedimint samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formated by routing computer dotline print out.

RECOMMENDED PROCEDURE FOR FIRE ASSAY GOLD AND SILVER

Samples are dried at 120°F and after being crushed on a primary crusher to ¼ inch size they are crushed on a secondary crusher to minus 10 mesh before being split on Jone's riffle. (In accordance with Gy's statistical rules).

At the splitting a 500 gram subsample is obtained which is pulverized to minus 100 mesh. After that the sample is mixed, rolled and quartered.

The assay is carried out on a one half assay ton sample, fire assayed at 1750°C with appropriate fluxes.

The lead bottom is than cupeled. (The silver bid can be weighed and the amount calculated, but it's accuracy is questionable.) Than the small bid is dissolved in aqua regia and analysed on the atomic absorption instrument for gold.

Results can be reported either in oz/ton 0.001 sensitivity or gram per metric ton upon request.

In every batch of 20 samples we have one in house natural standard.

For silver a completely separate assay is preferred on a 5.000 gram of subsample, where the sample is dissolved in aqua regia with a chemical separation and filtering. The amount of silver is determined by Atomic Absorption instrumentation.

MERCURY ANALYTICAL PROCEDURE FOR ASSESSMENT FILING

1.000 gram sample digested with Nitric and Sulphuric Acid. Than further oxidized with 30% H_2O_2 while heating and repeating the oxidizing steps.

After cooling and diluting to suitable volume the solution to refine the oxidation procedure 5% $KMNO_4$ is added in the titrating manner until pink color is obtained.

Mercury is realized by reducing solution into the Flameless Atomic Absorption Chamber and measured in comparing samples with known standards.

PHONE 980-5814

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15th STREET
NORTH VANCOUVER, B.C.
CANADA

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR Mo, Cu, Cd, Pb, Mn, Ni, Ag, Zn, As, F

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc, Silver, Cadmium, Cobalt, Nickel and Manganese are analysed using the CH_2H_2-Air flame combination but the Molybdenum determination is carried out by C_2H_2-N_2O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

For Arsenic analysis a suitable aliquote is taken from the above 1 gram sample solution and the test is carried out by Gutzit method using Ag $CS_2N(C_2H_5)_2$ as a reagent. The detection limit obtained is 1. ppm.

Fluorine analysis is carried out on a 200 milligram sample. After fusion and suitable dilutions the fluoride ion concentration in rocks or soil samples are measured quantitatively by using fluorine specific ion electrode. Detection limit of this test is 10 ppm F.

PHONE: (604) 980-5814 or 988-4524

TELEX: 04-352828

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

Geochemical Samples for Antimony Processed By Min-En Laboratories Ltd., At The Above Address Employing The Following Procedure.

Sample Preparation: After drying the samples at 120°F soils and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

Analysis: 1.000 gram of the prepared samples are weighed into 25x200 mm pyrex test tubes.

Add 2 ml of conc HNO_3 and 5 ml of conc HCl and heat it at low temperature and slowly increase it to 150°F and let it digest for 30 minutes.

After the initial digestion increase temperature to 250°F for 3 hours. After digestion dilute to suitable volume and take a 5 ml aliquote for extraction into a clean test tube.

Add 5 ml H_2O and 10 ml of Methyl-Isobutyl-Ketone, cap it and shake it for 30 seconds. Read organic phase on Atomic Absorption Spectrophotometric against a suitably prepared standards.

ppm can be obtained from digest reading or graph can be prepared from the set of standards.

APPENDIX 5

ANALYTICAL RESULTS

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of ASSAY

Company:ESSO MINERALS CANADA
Project:MD-02
Attention:PAUL MCGUIGAN

File:6-685/P1
Date:AUGUST 27/86
Type:ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON
6GR 045	20.1	0.59	.01	0.001
6GR 046	2.5	0.07	.01	0.001
6GR 047	2.0	0.06	.04	0.001
6GR 048	1.9	0.06	.03	0.001
6GR 049	2.0	0.06	.11	0.003
6GR 050	1.2	0.04	.05	0.001
6GR 051	2.2	0.06	.18	0.005
6GR 052	3.0	0.09	.11	0.003
6GR 053	4.0	0.12	.07	0.002
6GR 054	2.5	0.07	.01	0.001
R 055	1.8	0.05	.01	0.001
6GR 056	2.6	0.08	.01	0.001
6GR 057	30.5	0.89	1.80	0.053
6GR 058	27.8	0.81	.98	0.029
6GR 059	3.5	0.10	.10	0.003
6GR 060	2.2	0.06	.04	0.001
6GR 061	4.3	0.13	.05	0.001
6GR 062	6.4	0.19	.03	0.001
6GR 063	34.5	1.01	.41	0.012
6GR 064	2.0	0.06	.02	0.001
6GR 065	2.1	0.06	.04	0.001
6GR 066	2.3	0.07	.01	0.001
6GR 067	2.0	0.06	.01	0.001
6GR 069	1.5	0.04	.22	0.006
6GR 070	2.0	0.06	.02	0.001
6GR 071	2.1	0.06	.04	0.001
6GR 072	2.2	0.06	.03	0.001
6GR 073	1.4	0.04	.01	0.001
6GR 074	394.0	11.49	.06	0.002

Certified by _____

MIN-EN LABORATORIES LTD.

MIN-EN LABORATORIES LTD.

Specialists in Mineral Environments

705 West 15th Street North Vancouver, B.C. Canada V7M 1T2

PHONE:(604)980-5814 OR (604)988-4524 TELEX:VIA USA 7601067 UC

Certificate of GEOCHEM

Company:ESSO MINERALS CANADA
Project:MD-02
Attention:PAUL MCGUIGAN

File:6-685/P1
Date:SEPT.3/86
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number	HG PPB	AS PPM	SB PPM
6GR-045	41000	50	26
6GR-046	480	10	1
6GR-047	195	8	1
6GR-048	155	15	1
6GR-049	625	27	4
6GR-050	520	38	2
6GR-051	100	29	14
6GR-052	200	19	11
6GR-053	130	25	22
6GR-054	105	10	13
6 -055	195	84	13
6GR-056	130	14	3
6GR-057	720	95	70
6GR-058	1420	400	54
6GR-059	80	25	12
6GR-060	70	3	31
6GR-061	210	55	18
6GR-062	60	24	34
6GR-063	4500	1140	178
6GR-064	65	17	12
6GR-065	55	9	11
6GR-066	80	15	6
6GR-067	40	8	6
6GR-069	240	15	13
6GR-070	70	10	10
6GR-071	100	6	1
6GR-072	70	33	1
6GR-073	70	4	1
6GR-074	4000	2	3240
16451	1900	5	3

Certified by _____

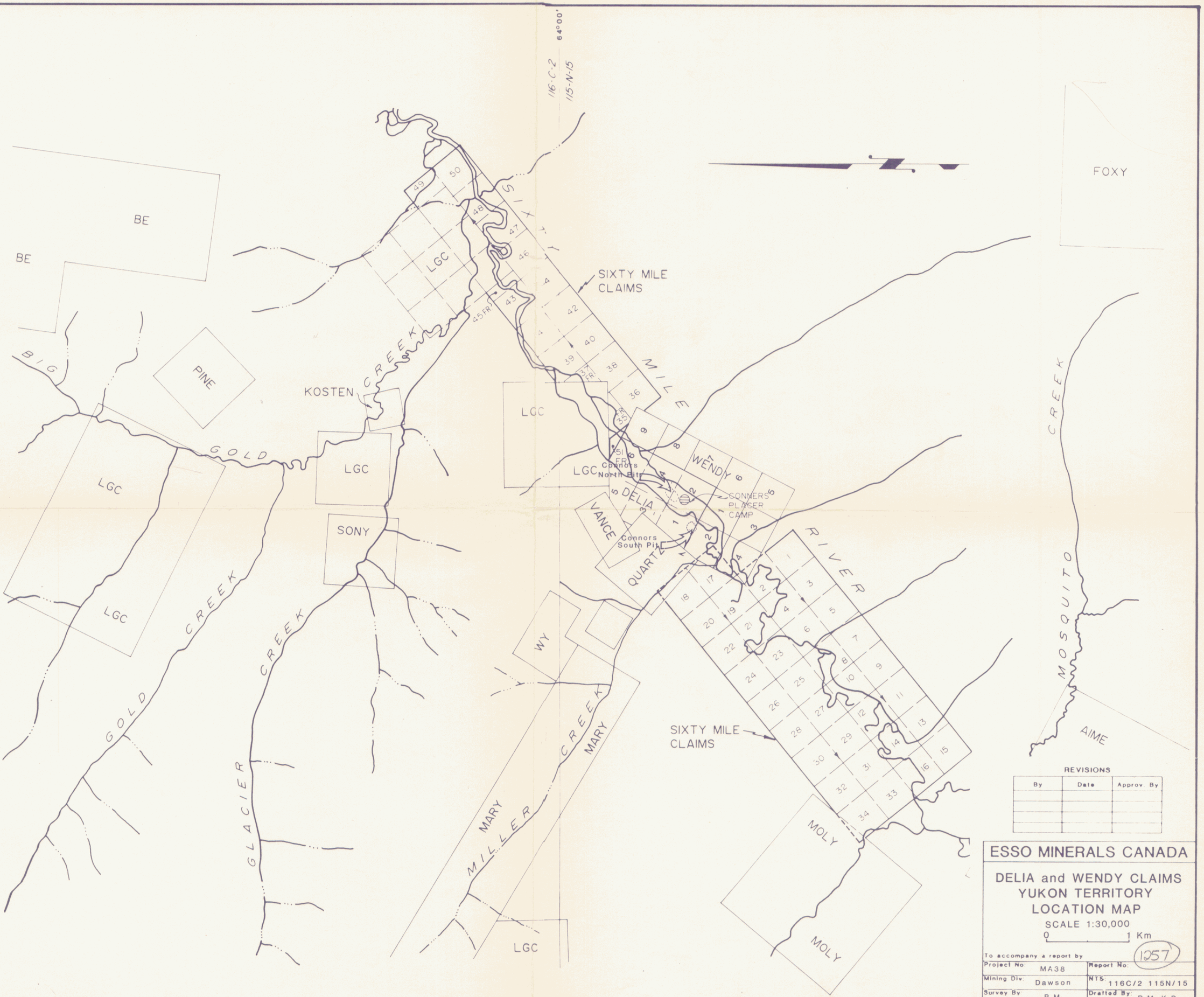
MIN-EN LABORATORIES LTD.

COMPANY: ESSO MINERALS CANADA — MIN-EN LABS ICP REPORT — FILE NO: 6-685/P1+2

PROJECT NO: MD-02 — 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

ATTENTION: PAUL MCGUIGAN — (604)980-5814 OR (604)988-4524 — * TYPE ROCK GEOCHEM * — DATE:SEPT 3, 1986

(VALUES IN PPM)	BA	CU	MO	PB	ZN
6GR-045	162	14	1	2511	8757
6GR-046	333	33	1	64	206
6GR-047	204	35	2	38	241
6GR-048	84	19	1	30	289
6GR-049	62	329	1	68	198
6GR-050	49	359	1	72	430
6GR-051	80	202	2	65	407
6GR-052	63	453	2	120	391
6GR-053	104	97	28	296	502
6GR-054	114	16	1	76	246
6GR-055	91	33	1	161	454
6GR-056	140	15	1	71	118
6GR-057	146	120	3	3806	78
6GR-058	114	341	82	1821	1341
6GR-059	122	14	1	176	24
6GR-060	122	35	2	77	132
6GR-061	98	134	2	200	731
6GR-062	100	96	1	292	346
6GR-063	93	122	20	2798	1646
6GR-064	62	8	1	103	72
6GR-065	234	12	1	79	77
6GR-066	137	31	3	142	162
6GR-067	435	37	3	49	164
6GR-069	121	36	2	62	214
6GR-070	110	190	2	61	308
6GR-071	54	24	2	35	263
6GR-072	126	11	1	71	171
6GR-073	56	264	2	54	139
6GR-074	65	2451	1	59245	23044
16451	58	22	1	755	152
16452	48	6	2	321	27
16453	51	2	1	59	13
16454	59	2	1	106	8
16455	74	2	1	23	7
16456	82	3	2	23	10
16457	51	2	2	19	7
16458	71	3	2	27	13



REVISIONS

By	Date	Approv. By

ESSO MINERALS CANADA

DELIA and WENDY CLAIMS
YUKON TERRITORY
LOCATION MAP

SCALE 1:30,000
0 1 Km

To accompany a report by 1257

Project No: MA38	Report No:
Mining Div: Dawson	NTS: 116C/2 115N/15
Survey By: P.M.	Drafted By: P.M., K.D.
Date: June 26, 1987	Map No: 1

091734

Placer Tailings

Edge of Pit

COVERED

Contact Between Clay Altered Fault Gouge and Andesite

Intense Clay altered Zone w. late Pyroxene Porphry Andesite Dykes (dykes slightly propylitic)

6+40N

6GR066

6GR069

6GR067

DELIA 4

Road

Scale 0 10 20 Meters

Placer Tailings

Ditch

tailings. piles

Bluish Pyritic Clay cut by Propylitic Andesite Dykes

Road.

Drainage

6+00N

placer tailings piles

Py. Kaol. And.

CLAY ALTERED FAULT ZONE

COVERED

General Trend of Clay alteration Zones and Tertiary Porpyhritic Andesite Dykes

0°-040°/90°

5+50N

Pyritic Kaolinized Andesite

6GR054

6GR053

Clay Zone

Intense Clay Alteration Zone

LCP For Delia 3 And 4

84 metres

6GR050

6GR070

chalcedony, vugs, py.

6GR051 6GR052 6GR049

chalcedony vein coarse vuggy py.

6GR056

Pyritic Sericitized Andesite

dyke

Claim Boundary

placer

6GR048

silicified fractures, py.

clay/dyke contact

tailings

6GR057 6GR058

Intense Clay Alteration Zone

6GR046 6GR047

Edge of Pit

piles

Pyritic Yellow Clay

30.5G/ton Ag, 1.80G/ton Au, 3805PPM Pb

0.5m

Pyritic Veinlets in Silicious Andesite

27.8G/ton Ag, 1.0G/ton Au, 1821PPM Pb, 1341PPM Zn, 400PPM As, 54PPM Sb 1420PPB HG

0.5 m

6GR060

SCALE 1:500

0 25 m

DELIA 2

5+00N

BL0E

Flagged Baseline (metric)

6GR059

Edge of Pit

ESSO MINERALS CANADA

DELIA CLAIMS YUKON TERRITORY CONNORS NORTH PIT GEOLOGY and SAMPLE LOCATIONS

1256

Project No. 138	Mining Div. Dawson
NTS 115N/15	Drawn By P.M., K.D.
Date June 1987	Map No 2

091734