GEOLOGY AND SOIL GEOCHEMISTRY REPORT ON THE JOE DANDY PROPERTY OLIVER, BRITISH COLUMBIA

> Latitude: 49° 10' N Longitude: 119° 36' W NTS: 82E/4E

FOR

YURIKO RESOURCES CORP. 202-1768 West 3rd Avenue Vancouver, British Columbia V6J 1K4

Prepared By

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0 0 Reginald L. Faulkner, B.Sc., M.A.Sc. F.G.A. 6

> FAIRBANK ENGINEERING LIMITED Vancouver, B.C.

April, 1990 (Work dates May 22, 1989 - April 20, 1990)

> SUB-RECORDER RECEIVED

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SUMMARY

A limited exploration program of line cutting, soil sampling and geological mapping was undertaken by Fairbank Engineering Ltd. on the Joe Dandy property for Yuriko Resources Corp. Between May 22 and October 18, 1989, 5.75 line kilometres of line was emplaced on the Smuggler grid and 14.2 line kilometres of line was emplaced on the Tinhorn grid. The new grids represent extensions of the old grids located in 1987.

Six hundred soil samples were taken on the Tinhorn grid and one hundred seventy eight soil samples were taken on the Smuggler grid. Of the seven hundred seventy eight soil samples taken, three hundred eighty six were analyzed for gold, silver, arsenic and antimony at Min-En Laboratories, April 6 to 12, 1990.

The objective of the soil surveys was to geochemically trace extensions of the Tinhorn and Smuggler vein systems. This objective was not achieved as the geochemical results gave scattered point highs for gold and relatively uninteresting distributions of values for silver, arsenic and antimony.

1. INTRODUCTION

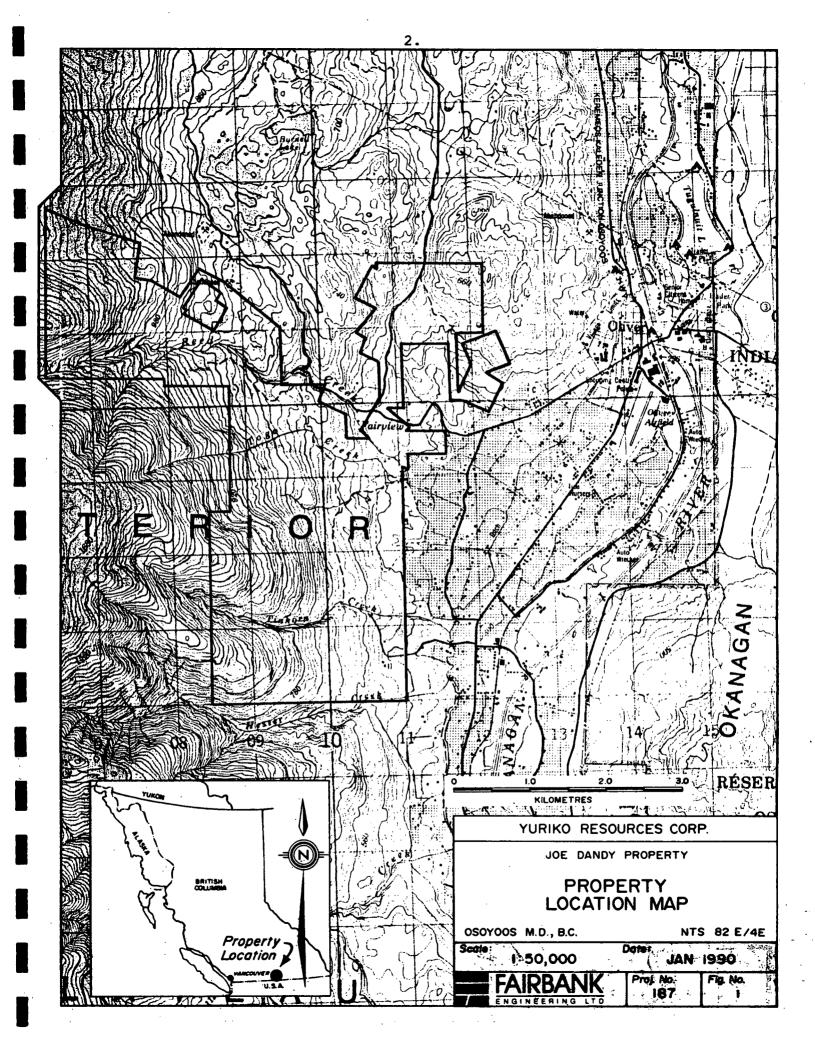
This report summarizes a program of mineral exploration (May 22, 1989 to April 20, 1990) conducted on the Joe Dandy property, Fairveiw Mining Camp, Oliver, British Columbia. The exploration program was undertaken by Fairbank Engineering Limited on behalf of Yuriko Resources Corporation.

As the initial stage of a larger exploration program the field work consisted of line cutting, soil sampling and geological mapping.

1.1 Location, Access and Topography

The Joe Dandy property lies approximately 5 kilometres east - southeast of Oliver, British Columbia, within the Osoyoos Mining Division. It is approximately centered at latitude 49° 10' north, longitude 119° 36' west on NTS map sheet 82E/4E (Figure 1).

Access to the property from Highway 97 is eastward via 7th Avenue from Oliver. 7th Avenue lends into Fairveiw Road which continues eastward to Cawston. From Fairveiw Road various gravel and dirt roads give access to the western, eastern and southern portions of the property.



Elevations on the Joe Dandy property range from 300 m. a.s.l. in the east to 1500 m. a.s.l. in the west. The steeper upper elevations are intermittently forested with pine, fir and spruce. The lower elevations consist of undulating semi-arid grasslands. Seasonal drainages on the property are Tinhorn, Reed and Togo Creeks.

1.2 Joe Dandy Property

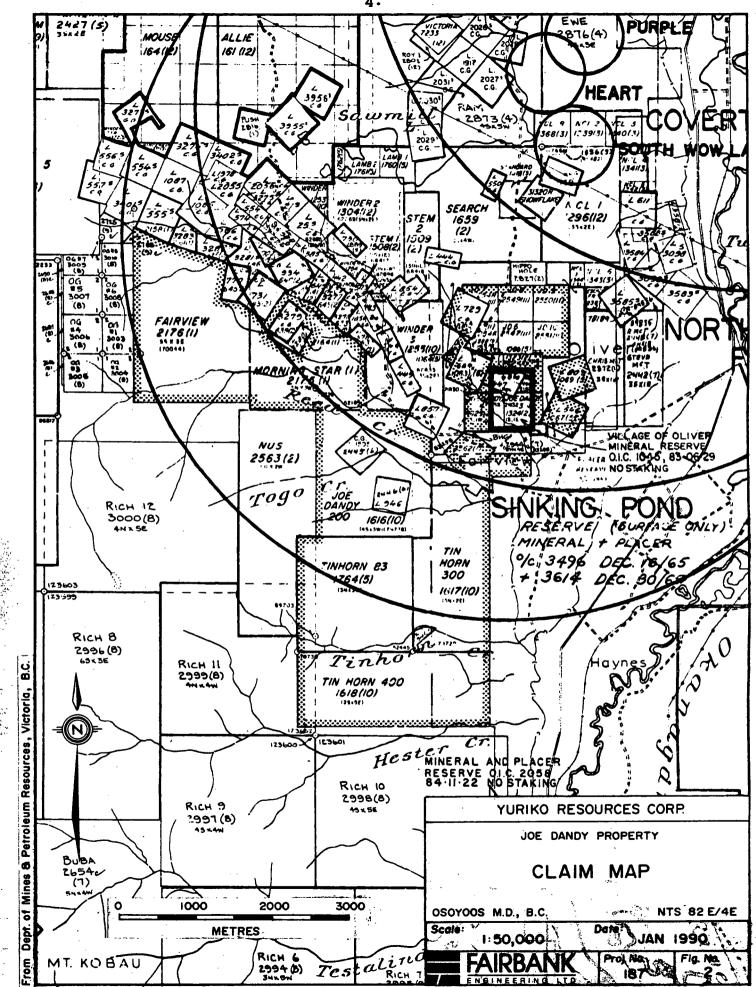
The Joe Dandy property consists of 9 reverted crown grants, 10 modified grid claims and 7 2 post mineral claims (Figure 2). These claims cover the old Tinhorn, Smuggler and Joe Dandy veins and underground workings. They are optioned by Yuriko Resources Corporation from Messrs. L. Reichert and K. George of RR #1, Keremeos, British Columbia. Table 1 summarizes the pertinent claim information.

TABLE 1 CLAIM DATA

Name	Lot	Record	Area	Expiry	Owner
	No.	No.	Ha.	Date	
Atlas	664	1063	20.59	06/05/91	L. Reichert
Belmont Fr.	837	1064	4.45	06/05/91	L. Reichert
Comstock	729 447	1065	20.90	06/05/91*	L. Reichert
Joe Dandy Gilpin Fr.	838	1066 1066	8.34	06/05/91*	L. Reichert
Rob Roy	546	1067	2.97 20.90	06/05/91*	L. Reichert
St. John	803	1067	20.90	06/05/91* 06/05/91*	L. Reichert
Joe Dandy #1	803	1322	1 unit	03/02/92	L. Reichert L. Reichert
Joe Dandy #2		1323	1 unit	03/02/92	L. Reichert
Joe Dandy #3		1323	1 unit	03/02/92	L. Reichert
Joe Dandy #4		1325	1 unit	03/02/92	L. Reichert
			12 unit		
Joe Dandy 200 Tin Horn 300				18/10/90	K. George
			10 unit	18/10/90	K. George
Tin Horn 400			10 unit	18/10/90	K. George
Tin Horn 83		1764	9 unit	18/05/91*	K. George & L. Reichert
Morning Star		2175	9 unit	21/01/91*	K. George
Fairview		2176	15 unit	21/01/91*	K. George
Dominion	1595	2445	20.90	02/06/91*	L. Reichert
Powis	946	2446	20.84	02/06/91*	L. Reichert
JD 5		2546	20.90	18/11/90	K. George
JD 6	,	2547	20.90	18/11/90	K. George
JD 7		2548	20.90	18/11/90	K. George
JD 8		2549	20.90	18/11/90	K. George
JD 9		2550	20.90	18/11/90	K. George
JD 10		2551	20.90	18/11/90	K. George
Jail House		2562	20.90	21/01/91*	L. Reichert

* On acceptance of this report

3.



4.

1.3 History and Work

Claims were located in the Fairview Mining Camp as early as 1882 making it one of the oldest mining camps in British Columbia. By 1908 the camp was inactive and many of the claims had been abandoned. Revival of interest in the camp occurred in the 1930's and 1940's and again in the 1960's and mid-1970's.

The Tinhorn veins had two years of recorded production, 1898 and 1942 (B.C.E.M.P.R. Min Dep Files). A total of 274 tonnes of ore were mined producing 1400 gm. of gold and 467 gm. of silver (302 tons, 45 oz. of gold and 15 oz. of silver) giving an average grade of 5.11 gm. per tonne gold (0.15 oz. per ton gold) and 1.70 gm. per tonne silver (0.05 oz. per ton silver).

Two levels of underground workings occur on the Tinhorn veins. The lower level consists of approximately 55 metres of tunneling and two shafts. The upper level has a main drift of about 30 metres and three adits of unknown length.

Production from the Smuggler veins occurred intermittently between 1895 and 1973. Production records show 137 tonnes of ore mined between 1939 and 1973 yielded 2643 gm. of gold, 3763 gm. of silver, 93 kg. of lead and 174 kg. of zinc (151 tons, 84 oz. of gold, 120 oz. of silver, 205 lb. of lead and 383 lb. of zinc) (B.C.E.M.P.R. Min Dep Files). The average grades were 19.29 gm. per tonne gold (0.56 oz. per ton gold), 27.47 gm. per tonne silver (0.79 oz. per ton silver), less than 0.1% lead and 0.13% zinc.

The underground workings on the Smuggler veins consist of a 61 metre shaft with drifting on the 15 metre, 31 metre and 61 metre levels. The 61 metre level includes a 115 metre crosscut to the surface.

There is no recorded production from the Joe Dandy vein, though approximately 610 metres of tunneling on two levels and 2 shafts averaging about 18 metres deep have been described (B.C.E.M.P.R. Ministry of Mines Annual Reports).

In 1983 VLF - EM and magnetometer surveys were undertaken on the Fairview and Morning Star claims by Strato Geological Engineering Ltd. on behalf of Paymaster Resources Ltd (Englund, 1983). The report concluded that the surveys indicated a number of conductors and geological contacts that warrant followup detailed geological mapping, soil sampling and geophysical surveys. Lawrence Mining Corporation did a program of soil sampling over the Tinhorn, Smuggler and Joe Dandy underground workings in 1984 (Wells, 1984). Gold anomalies up to 3000 ppb in soils have been identified over each of the three workings. These anomalies were not followed up.

Surface exploration work was done by Shangri-La Minerals Limited in 1987 on behalf of Yuriko Resources Corporation. This program consisted of prospecting, underground and surface rock sampling, soil sampling, geological mapping, magnetometer surveys and limited Crone Shootback EM and Induced Polarization surveys. The target areas were the Smuggler, Tinhorn and Joe Dandy veins with limited work on the Fairview and Morning Star claims (Di Spirito, 1987).

In 1989 Fairbank Engineering Ltd. undertook a limited exploration program of line cutting and geological mapping on the Joe Dandy property. This program occurred between May 22 and October 18, 1989 under the supervision of R. Faulkner and A. Pratt. The work was performed by R. Faulkner geologist, A. Pratt field supervisor, S. MacDonald geologist and field technicians S. Courte, J. Perry and J. Twomey.

2. LINE CUTTING

Approximately 17.9 line kilometres of new grid were emplaced and 2.0 line kilometres of old grid reflagged in two grids on the Joe Dandy property. The Smuggler and Tinhorn grids respectively cover portions of the Joe Dandy 200 and Tin horn 83 mineral claims (Figure 4).

The base lines of the 1987 Smuggler and Tinhorn grids (Di Spirito, 1987) were reflagged and picketted every 25 metres. Each of these base lines were subsequently extended 1 kilometre to the northwest.

On the Smuggler grid 4.75 line kilometres of new grid has been emplaced. From the base line at 100 metre separations eight lines running approximately 500 metres to the west (relative) were flagged with 25 metre stations.

The Tinhorn grid had 13.2 line kilometres of new grid emplaced. Four lines 50 metres apart and ten lines 100 metres apart with all lines extending 500 metres east and west (relative) were flagged with 25 metre stations.

As the initial stage of the exploration program the grids are the foundation over which soil sampling, geophysical surveys and geological mapping will take place.

3. GEOLOGY

3.1 Regional Geology

Within the Intermountain Tectonic Belt and the Quesnellia terrane the Joe Dandy property lies on the west side of the Okanagan River Valley. The valley as an expression of a major tectono-stratigraphic break separates high-grade metamorphic rocks of the Okanagan metamorphic complex to the east from low-grade metasedimentary and metavolcanic rocks to the west (Figure 3).

The area between the Similkameen and Okanagan River Valleys is dominated by the post-Devonian to pre-Cretaceous Kobau Group rocks. They are highly deformed, low-grade metamorphic quartzite, phyllite, schist, greenstone and marble.

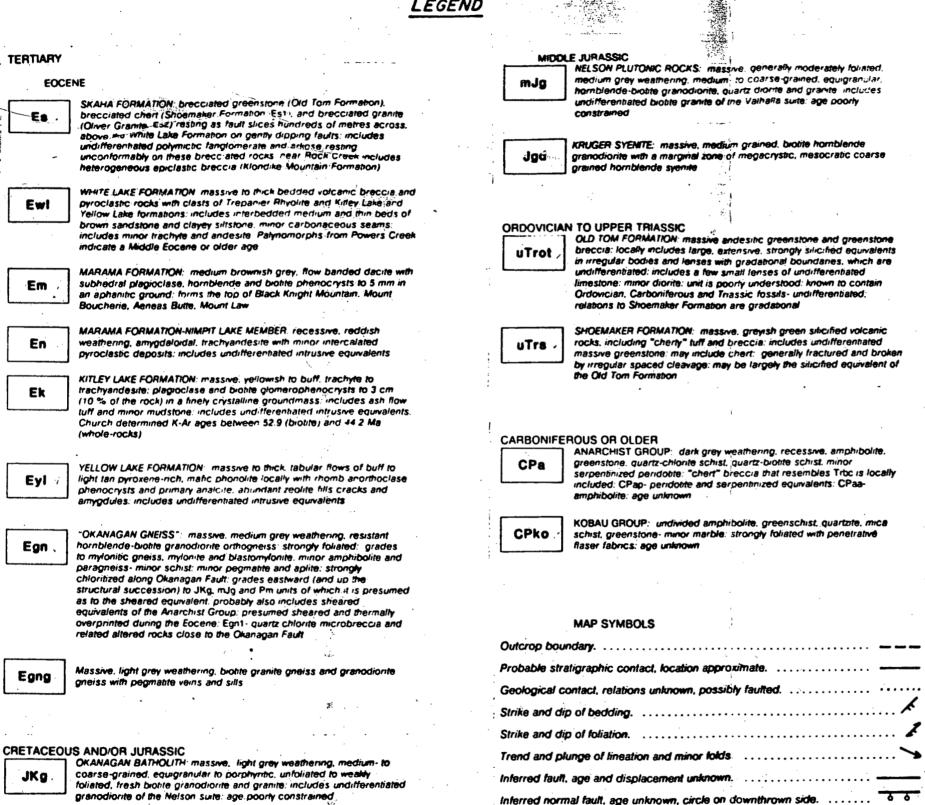
In the area of the property Kobau Group rocks are Oliver granite intruded by the and the Fairview granodiorite. The Oliver pluton is approximately 155 Ma. old and is dominated by porphyritic biotite granite and The Fairview granodiorite is a quartz monzonite phases. foliated hornblende-bearing granodiorite with weakly 1989). This chlorite alteration common (Mader et al, older than 111 Ma., intrusion is and but its age compositional relationship with the Oliver pluton is not known.

Auriferous veins occur in both the metasediments/volcanics and the intrusives. They primarily occur in a wedge of Kobau Group rocks between the Oliver granite and the Fairview granodiorite adjacent and parallel with the granodiorite contact. The veins are concordant with the regional foliation striking northwesterly and dipping to the northeast. Veins in the intrusives are areally limited and not as abundant. The veins are believed to be of mesothermal origin.

3.2 Property Geology

Limited geological mapping was undertaken in 1989. The objective of the mapping was to delineate the contact between the Fairview granodiorite and the Kobau rocks. Most of the mapping was done on the Joe Dandy 200 mineral claim and the Powis and Dominiom reverted Crown Grants (Figure 4).

LEGEND



RESERVE 400 ണ ANARCHIST GROUP: dark grey weathering, recessive, amphibolite. serpentinized peridoble: "chert" breccia that resembles Troc is locally included: CPap- peridotite and serpentinized equivalents: CPaa-KOBAU GROUP: undivided amphibolite. greenschist, quartzite, mica schist, greenstone- minor marble: strongly foliated with penetrative 49°00'-

to foliation.

Slide- inferred fault in metamorphosed rocks, roughly parallel

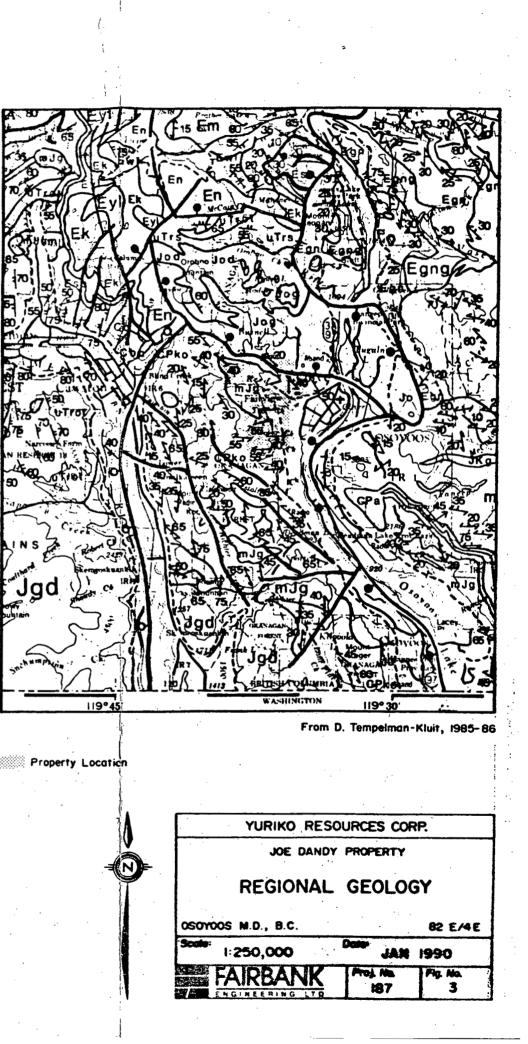
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OLIVER PLUTON: massive, unfoliated, medium grained porphyritic biotite granite with weakly foliated, equigranular hornblende granodiorite along the southern border, includes Jod, brotite-hornblende diorite agmatite

and Jog, massive garnet-muscovite granite; age poorly constrained



The contact between the intrusives and the metasediments/volcanics is difficult to delineate as the outcrop on the Joe Dandy 200 claim occupies less than 15% of the Granodiorite and lesser amounts of granite surface area. exposed rocks with the dominate the metasediments resessively weathering and only being exposed in creek beds and on cliff faces.

The intrusives well with are jointed chloritic Jointing predominantly strikes to the northeast alteration. with dips steep to the northwest, less dominant jointing strike northwest and dip steeply to the northeast. There appears to be a gradual increase in the amount of chlorite and epidote alteration going from the northeast to the Carbonate enrichment and southwest. sausseritization of the intrusives was also noted.

Two gabbroic dykes up to 5 metres wide, cut the intrusives. the dykes trend between 122° and 155° and are traceable for over 60 metres. One of the dykes contained approximately 1% pyrite as euhedral grains to 3 millimetres in diameter.

Narrow quartz veins cut the intrusives and the metasediments. Veining in the intrusives strike between 080° and 130° and dip steeply to the north or south. Less than 5 centimetres in width, these veins often have sericitic selvages and contained tourmaline. A 5 centimetre wide tourmaline vein was noted striking 095° and dipping 67° to the north. These veins were traceable only for a short distance, usually less than 2 metres. A 10 to 15 centimetre wide quartz vein was mapped along the southeast bank of Togo Hosted by quartzite the banded white quartz vein is Creek. exposed for 6.5 metres with a strike of 028° and a dip of 61° to the southeast. The vein contained iron carbonate and euhedral pyrite grains were noted. The selvage of the vein was sericitized and the envelope was locally carbonate enrich.

4. SOIL GEOCHEMISTRY

The soil survey was undertaken to geochemically trace any northwest extensions of the Tinhorn and Smuggler vein systems.

Soil was taken from the B horizon (six to twelve inches deep) at twenty five metre intervals along the flagged grids using a mattock and placed in kraft paper sample bags. They were stored in plastic bags in cardboard boxes in a warm dry place for months prior to analysis. Upon authorization to analyze the samples it was found that the kraft sample bags had deteriorated and that only a portion of the samples were recoverable. Of the seven hundred seventy eight samples taken, three hundred eighty six were analyzed at Min-En (Mineral Environment) Laboratories Limited, 705 West 15th Street North Vancouver, British Columbia.

The soil samples were analyzed for gold, silver, arsenic and antimony using the methodologies detailed in Appendix A. The results (are tabulated in Appendix B with gold and silver plotted on Figure 5 and arsenic and antimony plotted on Figure 6.

4.1 Tinhorn Grid

Of the six hundred samples taken on the Tinhorn grid, three hundred fifteen were analyzed. Because of the storage problems, samples from lines 250N, 350N, 700N and 800N were not recoverable. Approximately 50% of the samples from lines 400N and 500N were lost. From the other lines a few samples were not able to be analyzed.

Gold and silver geochemical values for the Tinhorn grid are plotted on Figure 5. No contouring of the plotted results has been done because of the limited number and scattered point sources of high gold and silver values. Three gold results are greater than 20 ppb Au 400N, 325E 130 ppb Au (fine assay 920ppb); 900N, 100E-150 ppb Au; and 1400N, 375E-95 ppb Au. There are two silver values greater than 1.0 ppm Ag 400N, 325E-1.9 ppm Ag; and 600N, 400E-1.2 ppm Ag.

Figure 6 shows plotted arsenic and antimony results for the Tinhorn grid. No contouring was undertaken because of the limited number of odd scattered point sources of slightly anomalous values. There are 8 samples with values greater than 25 ppb arsenic, the highest being 78 ppm As. The highest antimony result is 5ppm Sb which is only 5 times the detection limit.

There are two locations where multi-element anomalies occur, 900N 100E with the highest gold result (150 ppb Au) and highest arsenic value (78 ppm Ag) and 400N, 325E where gold is 130 ppb Au and the highest silver value of 1.9 ppm Ag occurs. There does not appear to be any trends nor anomalous zones that would suggest a geochemical trace of the extension of the Tinhorn vein.

4.2 Smuggler Grid

On the Smuggler Grid soil samples from lines 600N, 700N and 800N were chosen for analysis. Sixty three samples were geochemically analyzed for gold, silver, arsenic and antimony. Previous work suggested that the vein system may trend west northwest, therefore this soil sampling should geochemically trace any extension. The results are plotted on Figures 5 and 6. A fairly uniform distribution occurs for the four elements. Highest values are 45 ppb Au at 700N, 475W, 0.5 ppm Ag at scattered sample sites, 8 ppm As at 700N, 125W and 4 ppm Sb at 600N, 200W. No anomalous zones or trends are noted.

5. DISCUSSION AND CONCLUSIONS

The proposal of the 1989 exploration program on the Joe Dandy property was to locate diamond drill targets for the 1990 field season. A soil sampling survey was undertaken and geological mapping initiated. Subsequent events limited the scope of the exploration program.

The limited exploration program cursorily examined only a small portion of the whole property. Soil geochemistry was unable to trace extensions of the Tinhorn or Smuggler vein systems. Only four scattered gold point anomalies were found to occur with weak to no anomalies occurring for silver, arsenic and antimony.

Possible reasons for these poor results are steep slopes, ground water movement, thick accumulations of alluvium or glacial till or the occurence of underlying barren intrusive rock. The latter explaination maybe particularly appropriate for the Smuggler grid as limited geological mapping suggests it is underlain by Fairview granodiorite.

From work completed it is concluded that any extension of the Tinhorn and Smuggler veins are limited by the occurrence of the intrusive. Furthermore, the work completed has not allowed any targets to be located for diamond drilling.

It is possible that additional work may be able to define diamond drill targets. Continued geological mapping is recommended to determine the intrusive, sediment/volcanic contact and possibly locate any quartz veins that may be exposed. VLF-EM and magnetometer surveys may assist in defining the lithological contacts and potentially find extensions to the known vein systems.

Future work should target potential vein systems subparallel to the lithological contact. It is possible that the Tinhorn vein and Smuggler vein are exposed portions of a discontinuous vein subparallel to the contact.

6. **BIBLIOGRAPHY**

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- Wells, R.A., 1984. "Assessment Report on the Joe Dandy Claim Group in the Osoyoos Mining Division Geochemical Soil Report." Lawrence Mining Corp. April 19,1984. Assessment Report 12, 189.

7. STATEMENT OF QUALIFICATIONS

I, Reginald L. Faulkner of #302 - 1475 West 11th Avenue, Vancouver, British Columbia hereby certify that:

- 1. I am an exploration geologist and a graduate of the University of British Columbia, with a B.Sc. in Physical Geography/Geology in 1974 with additional course work in Geology in 1977-79 and 1982-83.
- 2. I obtained a M.A.Sc. from the University of British Columbia in Mining and Mineral Process Engineering in 1988, emphasizing mineral economics.
- 3. I am a Fellow of the Geological Association of Canada.
- 4. I have practiced as a geologist since 1979 for companies, including RIOCANEX, Vancouver, B.C.; Denison Mines Limited, Vancouver, B.C., Duval International Corporation, Vancouver B.C.; Trigg, Woollett, Olsen Consulting Limited, Edmonton, Alberta; Terra Mines Limited, Edmonton, Alberta, and Fairbank Engineering Limited, Vancouver, B.C.
- 5. The details of this report are based on work done by Fairbank Engineering from May 22 to October 18, 1989.

1kner, B.Sc. M.A.Sc.

January 1990

8. STATEMENT OF COSTS

Jan.22, 1990 Statement of Work

<u>Wages</u>

R.	Faulkner	3 days	e	\$350/day	1050	
A.	Pratt			240/day	1080	
s.	Courte	4.5 days	6	232/day	1044	
J.	Perry	3 days	6	200/day	600	
	-	-		· •	3774	\$3774

Room & Board

15 Mondays @ \$50/Monday 750 \$ 750

Truck

Rental		8 \$60/day	300
Fuel	5 days	@ \$10/day	50
		_	350

Miscellaneous

Consumables

<u>\$ 26</u>

\$350

\$4900

Total Costs May 6 Tobe

April 20, 1990 Statement of Work

Soil Chemistry

Analyses 386 soil samples @ \$14.95/sample prep, Au, Ag, As, Sb analyses April 9 to 13, 1990 Min. En. Laboratories

\$5770.70

Total Costs

\$5770.70

Appendix A

Geochemical Analytical Methods

5

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

GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Gold 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 and pulverized by ceramic plated pulverizer.

A suitable sample weight 5.0 or 10.0 grams are pretreated with HNO_3 and $HClO_4$ mixture.

After pretreatments the samples are digested with <u>Aqua Regia</u> solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 0.005 ppm (5ppb). 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

8 . A. A. M.

ANALYTICAL PROCEDURE REPORTS FOR ASSESSMENT WORK

PROCEDURES FOR, Cu, Mo, Cd, Pb, Mn, Ni, Ag, 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 sediment 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, and HC10, mixture.

After cooling samples are diluted to standard volume. The solutions are analysed 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 -N₂O gas mixture directly or indirectly (depending on the sensitivity and detection limit required) on these sample solutions.

Background corrections for Pb, Ag, Cd upon request are completed.

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

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

PROCEDURE FOR ARSENIC:

Samples are processed by Min-En Laboratories Ltd., at 705 West 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 HN03 and HC104 mixture.

After cooling samples are diluted to standard volume. 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.

Appendix B

Soil Geochemical Results



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS · ASSAYERS · ANALYSTS · GEOCHEMISTS

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 367 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical</u> Analysis Certificate

0V-0319-SG1

Company: FAIRBANK ENGINEERING

Date: APR-12-90

Project: JOE DANDY Atta:

Æ AL PRATT

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-10-90 by ALAN PRATT.

Sampl Numbe		AU-WET PPB	AG PPM	AS PPM	SB PPM	
	0N-000E	5	0.3	6	2	
	0N-025W	5	0.4	5	1	
	0N-050W	5	0.4	6	1	
	0N-075W	5	0.2	6	1	
SM-60	0N-100W	5	0.3	5	2	
SM-60	ON-125W	10	0.3	6	1	
	0N-150W	5	0.3	4	1	
	0N-175W	5	0.3	4	1	
	0N-200₩	5	0.4	6	4	
SM-60	0N-225W	5	0.5	5	1	
SM-60	 0N-250W	5	0.3	6	. 1	
SM-60	0N-275₩	10	0.3	5	2	
SM-60	0N-300W	5	0.5	3	1	
SM-60	0N-325W	10	0.3	4	1	
SM-6 0	0N-350W	5	0.4	5	1	
SM-60	 0N-375W	15	0.2	5		
SM-60	0N-400W	5	0.3	5	1	
	ON-425W	5	0.2	4	2	
SM-60	0N-450W	5	0.4	2	1	
SM-60	0N-475W	5	0, 3	4	1	
 SM-60		 5	0.3	4	 1	
	0N-000E	5	0.4	5	1	
	0N-025W	5	0.2	5	1	
	0N-050W	5	0.2	5	2	
	0N-075W	5	0.3	5	1	
·		- میں بہتر ہیں بعد بعد عبد میں میں میں میں ہیں ہے۔				
	0N-100W	.5	0.3	7	1	
-	ON-125W	5	0.3	8	1	
	ON-150W	10	0.3	5	2	
	ON-175W	5	0.4	4	1	
SM-70	0N-200W	5	0.3	4	1	

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHÓNE: (705) 264-9996

<u>Geochemical Analysis</u> <u>Certificate</u>

0V-0319-SG2

Company:	FAIRBANK	ENGINEERING
Project:	JOE DANDY	
Attn:	AL PRATT	

Date: APR-12-90 Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-10-90 by ALAN PRATT.

Sample Number	AU-WET PPB	AG PPM	AS	SB	
SM-700N-225W	5	0.4	4	3	
SM-700N-250W	5	0.3	5	1	
SM-700N-275W	5	0.5	3	1	
SM-700N-300W	5	0.2	3	1	
SM-700N-325W	5	0.3	4	2	
SM-700N-350W	5	0.4	4	1	
SM-700N-375W	5	0.2	3	1	
SM-700N-400W	5	0.2	3	2	
SM-700N-425W	5	0.4	2	1	
SM-700N-450W	5	0.5	4	1	
SM-700N-475W	45	0.3		3	
SM-700N-500W	5	0.4	6	1	
SM-BOON-000E	5	0.3	5	1	
SM-800N-025W	5	0.2	3	1	
SM-800N-050W	5	0.2	2	1	· · · · · 2
SM-800N-075W	5	0.4	4	1	
SM-800N-100W	5	0.3	3	1	
SM-800N-125W	10	0.3	3	1	
SM-800N-150W	10	0.4	4	1	
SM-800N-175W	5	0.4	5	1	
SM-800N-200W	10	0.2	3	2	
SM-800N-225W	5	0.4	4	1	
SM-800N-250W	5	0.2	3	1	
SM-800N-275W	5	0.3	4	1	
SM-800N-300W	5	0.4	5	1	
SM-800N-325W		0.3	3	1	
SM-800N-350W	10	0.5	4	1	
SM-800N-375W	5	0.4	4	2	
SM-BOON-400W	5	0.2	1	1	
SM-800N-425W	5	0.2	1	1	

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33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis Certificate</u>

0V-0319-SG3

Company:	FAIRBANK	ENGINEERING
Project:	JOE DANDY	. ,
Atta:	AL PRATT	

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 3 SOIL samples submitted APR-10-90 by ALAN PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
SM-800N-450W	5	0.2	4	1	
SM-800N-475W	5	0.2	3	1	
SM-800N-500W	5	0.2	3	2	

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Analysis Certificate 0V-0308-SG1 <u>Geochemical</u>

- 2

Company: FAIRBANK ENGINEERING LTD المجرية والموسومة

LABORATORIES

Date: APR-12-90

**** Project: JOE DANDY Atta:

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 24 SOIL samples submitted APR-06-90 by A.PRATT.

					· .	
eria N	Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
	TH-500N-25W	5	0.4	10	1	
	TH-500N-50W	10	0.4	13	1	
-1 -1 -1	TH-500N-75W	5	0.3	11	1	
	TH-500N-100W	5	0.4	3	1	
-	TH-500N-125W	5	0.4	4	1	
0.5	entron e d e la companya de la <u>companya de la companya de la companya de la companya de la companya de la comp</u> Notas			تخبيخ حصافات		*
₿ Lina i Ciri	TH-500N-150W	5	0.5	8	1	
	TH-500N-200W	5	0.3	10	2	
	TH-500N-250W	5	0.3	5	1	
	TH-500N-300W	10	0.4	/	1	
e.	TH-500N-350W	5	0.4	12	3	
	TH-500N-400W	10	0.3	14	1	
	TH-500N-450W	5	0.2	5	3	
i fan e	- TH-500N-500W	10	0.2	6	. 1	
S.	TH-600N-500E	5	0.2	2	4	
	TH-600N-450E	5	0.2	1	1	
			1	er (* 1997) 1999 20 - Ser (* S		
	TH-600N-400E	5	1.2	10	1	
•	TH-600N-350E	5	0.2	15	3	
	TH-600N-300E	5	0.2	10	5- 1	
	TH-600N-250E	5	0.3	9	2	
Marina	TH-600N-200E	10	0.2	9	1	
					प्रदेशित प्रतिसम्बद्धाः उ	ی ہے جاتا ہے ج
 	TH-600N-150E	5	0.2	6	2	
Sec.	TH-600N-125E	5	0.4 0.2	11		
	TH-600N-100E	5		. 8	<u>ک</u>	
	TH-600N-075E	10	0.4	. 7	1	

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate OV-0308-SG2

		7 8 8		••••		Date: APR-12	
:	Company: FAIRBANK ENGINEERING Project: JOE DANDY	LID				VANCOUVER, B.C.	
177 - 177 1832 - 173	Attn: AL PRATT			иру 15 гніл	DHAK CAURD.	VHNLUUVEA, D.L.	
(9. s.r.,			
:	He hereby certify the follow	wing Ge	ochemical A	nalysi	s of 24	SOIL sam	les

submitted APR-06-90 by A.PRATT,

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM		
TH-600N-050E	5	0.5	8	2		
TH-600N-025E	· • 5	0.4	7	1	ಸ್ಟ್ ಪ್ರಾರಂಭವರ್ ಎಂಗ್ರೆಸ್ ಎಂಗ್ರೆಸ್ ಸಾಮಾರ್ಯವ್ರವಾಗು ಸಾಮಾನ್ಯಗಳು ಎಂಗ್ರೆಸ್ ಪ್ರಾ	
TH-600N-000E	5	0.4	13	1		
TH-600N-25W		0.4	12	1	· · · · · · · · · · · · · · · · · · ·	
TH-600N-50W	د موسودی <u>سال کند موجد مانده کن</u>	0.6	17 	1 <u></u>		
TH-600N-75W	5	0.4	11 age age and a set of the set o	1		
TH-600N-100W	5	0.2	12	1		
TH-600N-125W	5	0.4	14	1	· .	
TH-600N-150W	5	0.3	9	1		
TH-600N-200W	10	0.4	29	1		
TH-600N-250W	5	0.8	14	2	ها ها این بالا این را این این ها این می این ها این این این این این این این این این ای	چین جے۔ فارد علیہ کا کہ کہ
TH-600N-300W	5	0.4	8	1		
TH-600N-350W	5	0.2	9	1	A	
TH-600N-400W	5	0.2	12			
TH-600N-450W	5	0.2	9	1. 772500 - 7616	and and the second s	
TH-600N-500W	اليكيم	0.4		3	antanananananananananananananan ara ara ara	
TH-900N-500E	5	0.2	12	1	and the second	• •
TH-900N-450E	5	0.2		3		
TH-900N-400E	5	0.2	8	1		
TH-900N-350E	10	0.3	12	1	a the second of the second	
TH-900N-300E	10	0.2	6	1		
TH-900N-250E	20	0.6	13	an, stations, s 1.	ی ادامه می میدادی است از این است. ا	• .
	10		ii.	i i		الم الم
TH-900N-200E						

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Certified by

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Date: APR-12-90

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867

TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate 0V-0308-SG3

Company: FAIRBANK ENGINEERING LTD

Project: JOE DANDY

1.1

Attai

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

Ne hereby certify the following Geochemical Analysis of 24 SOIL samples submitted APR-06-90 by A.PRATT.

	Sample Number	-WET PPB	AG PPM	AS PPM	SB PPM	n an	
	TH-900N-100E	150	0.8	78	2	ning tan kanang kan	
, partipas era	TH-900N-050E	10 10	0.3 0.5	8 15		·····	
ingen er T	TH-900N-50W	5	0.4	16	2		
199726	TH-900N-100W	5	0.2	14	1		<u></u>
-25-25. 	TH-900N-150W	5	0.2	21	2		
	TH-900N-200W	5	0.2	7	1		
	TH-900N-250W - TH-900N-300W -	5 10 /	0.3 0.2	7 12	1		
į,	TH-900N-350W	10	0.2	7	1		
	TH-900N-400W	5	0.3	10	1		
i Frank - •	TH-900N-500W	5	0.2	11	2		
. Corp	TH-1100N-500E	· 5	0.3	9		والمجلسون فلنشبخ المناجع	
	TH-1100N-400E		0.2 0.3	5	n Vierannieche in . 1		· · ·
				ی در این این <u>این در این در م</u> اهدها			
	TH-1100N-350E	5	0.3	6	1		
	TH-1100N-300E	5	0.4	4	2	the state	
101	TH-1100N-250E TH-1100N-200E	5 10	0.4 0.3	5	3	· .	
	TH-1100N-150E	5	0.2	9	2		
					and the second		
	TH-1100N-100E	5	0.2	8	<u>1</u> , .		
	TH-1100N-050E	5	0.2 0.2	9	3		
	TH-1100N-50W	5 15	0.2		1	an a	
		· · · · · · · · · · · · · · · · · · ·					· · ·

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. 50X 967 TIMMINS, INITARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Certificate OV-0308-SG4

Company: FAIRBANK ENGINEERING LTD

AL PRATT

Date: APR-12-90

Projecti JOE DANDY

Geochemical Analysis

Copy 1: FAIRBANK ENGRG., VANCOUVER, B.C.

Ne hereby certify the following Geochemical Analysis of 24 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM		ne ma
TH-1100N-100W	5	0.4	13	<u>.</u> 1		
TH-1100N-150W	10	0.3	13	1		
TH-1100N-200W	5	0.1	8	1		· · ·
TH-1100N-250W	5	0.3	5	1		
TH-1100N-300W	5 	0.6	13	1	في و الم	
TH-1100N-350W	5	0.3	12	1		
TH-1100N-400W	5	0.4	11	3		
TH-1100N-450W	5	0.4	9	2		,
TH-1100N-500W	10	0.4	18	2		
TH-1300N-500E	5	0.3	4	1		
TH-1300N-450E	5	0.2	5	1		
TH-1300N-400E	5	0.2	4	1		
TH-1300N-350E		0.3	3	1		
TH-1300N-300E	10	0.4	4	2		
TH-1300N-250E	5 <u>************************************</u>	0.4	2	1		
TH-1300N-200E	5	0.3	4	2		,
TH-1300N-150E	5	0.3	3	2		
TH-1300N-100E	10	0.2	2	1		
TH-1300N-050E	5	0.2	3	1		
TH-1300N-150W	S.	0.3	6	1		
TH-1300N-200W	5	0.2	7	1		
TH-1300N-250W	5	1.0	38	1		
TH-1300N-300W	10	0.2	14	2		
TH-1300N-350W	5	0.3	13	1		

*SAMPLE TH1100N-175W COULD NOT BE SALVAGED.

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2 C 1 J

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical</u> Analysis Certificate 0V-0308-SG5

Company:		FA	IRBANK	ENGINEERING	LTD
Project:		JO	EDANDY		
Attn:	2	AL	PRATT	ر فکو	

Date: APR-12-90 Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

	Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	AU-FIRE PPB	
	TH-1300N-450W	10	0.8	21	1	n , naparanu un l'aller e als a l'ante de l'ante de la servata dans a señera	nerse versternenskonersky policier (* 1994) 1977 - State State (* 1997) 1977 - State (* 1994)
	TH-1300N-500W	5	0.6	14	1		
	TH-400N-025W	10	0.5	15	1		
	TH-400N-050W	5	0.2	5	1		
· · · · · ·	TH-400N-075W	5	0.4	9	1		
	TH-400N-100W		0.3	11	1		
	TH-400N-125W	5	0.3	9	2		
	TH-400N-150W	5	0.3	9	2		
	TH-400N-225W	5	0.2	10	1		
	TH-400N-250W	5	0.4	17	1		
	TH-400N-275W	10	0.3	30	1		
	TH-400N-300W	10	0.3	14	3		
	TH-400N-325W	5	0.4	10	1		
	TH-400N-350W	5	0.4	8	2		
	TH-400N-375W	5	0.3	7	5		
		ه چه هه هه بنوه بنو سه منه و د و د و و و و و و			ند جبه بود ووه خند حک خته هنه هنه که	یہ سے بناہ جب سے میں سے سے بات ملب س	د من
•	TH-400N-400W	10	0.4	6	1		
	TH-400N-425W	5	0.5	12	1		
	TH-400N-450W	10	0.3	9	2		
	TH-400N-475W	5	0.3	11	1		
960	TH-400N-500W	5	0.2	9	1		
	TH-400N-125E	5	0.4	7	1		چود مشار این مرد برد. هرد هم هم هو برای می ورد می می این می می این این این این این این این این این ای
1	TH-400N-150E	5	0.3	8	1		
N	TH-400N-300E	5	0.2	6	3		
	TH-400N-325E	130	1.9	22	3	920	
-प्रत्यूचा 	TH-400N-350E	5	0.2	5	1		
	TH-400N-425E		0.3	 7	2	ند هی دری های میلاد مید ایند دند. ایند وی باند های ایند ایند ایند ایند ایند ایند ایند ا	میں ہے ہے اور اور خان کا کر دور یہ ہے جب کر اگر کا کا ک
-#	TH-400N-475E	5	0.2	6	1		
	TH-400N-500E	5	0.4	6	ī		
	TH-500N-175E	5	0.4	8	1		
	TH-500N-225E	5	0.4	9	3		
5.C.				-	-		

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SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS - ASSAYERS - ANALYSTS - GEOCHEMISTS VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER B.C. CANADA V7M 1T2

TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621 TIMMINS OFFICE:

33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis Certificate</u> OV-0308-SG6

Company:FAIRBANK ENGINEERING LTDProject:JOE DANDYAttn:AL PRATT

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PP M	AS PPM	SB PPM	
TH-500N-275E	5	0.4	13	2	
TH-500N-325E	10	0.4	8	1	
TH-500N-425E	5	0.3	11	1	
TH-500N-475E	5	0.2	9	1	
TH-600N-175W	5	0.5	15	1	
TH-600N-225W	5	0.3	6	3	· · · · · · · · · · · · · · · · · · ·
TH-600N-325W	5	0.2	9	1	
TH-600N-375W	10	0.4	12	1	
TH-600N-425W	5	0.4	11	1	
TH-600N-475W	5	0.4	13	1	
TH-600N-325E	5	0.6	22	1	
TH-600N-375E	20	0.9	33	2	
TH-600N-475E	10	0.3	6	3	
TH-900N-025E	5	0.3	7	1	
TH-900N-075E	5	0.3	6	1	
TH-900N-125E		0.4	 14	2	
TH-900N-175E	10	0.4	12	1	
TH-900N-225E	5	0.3	11	1	
TH-900N-275E	5	0.3	11	2	
TH-900N-325E	5	0.3	13	1	
TH-900N-375E	10	0.2	8	1	
TH-900N-425E	5	0.3	19	1	
TH-900N-475E	5	0.3	5	1	-
TH-900N-025W	5	0.4	12	2	
TH-900N-075W	5	0.4	8	1	
TH-900N-125W	 15	0.5	12	 1	
TH-900N-175W	10	0.4	7	1	
TH-900N-225W	5	0.3	7	1	
TH-900N-275W	5	0.3	, 7	1	
TH-900N-325W	5	0.3	5	2	

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VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis</u> <u>Certificate</u>

0V-0308-SG7

Company:		ENGINEERING	LTD
Project:	JOE DANDY	- ·	
Attn:	AL PRATT		

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
TH-900N-375W	5	0.3	8	3	و این ها این می ها ها دی مار مارد این کار این مرد برای این ها در مرد می می ها و با برای می مرد می ها ها مرد می
TH-900N-425W	5	0.4	6	1	
TH-900N-475W	10	0.4	7	1	
SM-975N-325W	10	0.3	6	1	
SM-975N-350W	5	0.3	5	2	
SM-975N-375W	5	0.4	6	1	
SM-975N-400W	5	0.4	5	1	
SM-975N-425W	5	0.3	5	1	
SM-975N-450W	5	0.3	5	1	
SM-975N-475W	5	0.4	5	1	
SM-975N-500W	5	0.3	6	· 1	
TH-1000N-000E	10	0.4	7	3	
TH-1000N-025E	10	0.4	8	1	
TH-1000N-050E	5	0.4	8	1	
TH-1000N-075E	5	0.2	8	1	
TH-1000N-100E	5	0.3	10	1	
TH-1000N-125E	5	0.3	9	1	
TH-1000N-150E	5	0.4	14	2	
TH-1000N-200E	5	0.7	22	1	
TH-1000N-225E	. 5	0.5	13	3	
TH-1000N-250E	5	0.4	 6	 2	
TH-1000N-300E	10	0.3	5	2	
TH-1000N-325E	5	0.3	4	1	
TH-1000N-350E	5	0.2	2	3	
TH-1000N-375E	5	0.3	4	3	
TH-1000N-400E	10	0.2	4	1	
TH-1000N-425E	5	0.3	4	2	
TH-1000N-450E	5	0.2	3	1	
TH-1000N-475E	5	0.3	4	- 1	
TH-1000N-500E	5	0.4	5	- 1	

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis Certificate</u>

0V-0308-SG8

Company:	FAIRBANK	ENGINEERING	LTD
Project:	JOE DANDY	· · · · · · ·	
Attn:	AL PRATT		

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
TH-1000N-025W	5	0.5	6	1	
TH-1000N-050W	10	0.3	6	1	
TH-1000N-075W	5	0.3	10	1	
TH-1000N-100W	5	0.3	8	2	
TH-1000N-125W	5	0.2	13	1	
TH-1000N-150W	<u>-</u> 5	0.3	5	1	
TH-1000N-175W	5	0.3	7	2	
TH-1000N-200W	5	0.2	6	3	
TH-1000N-225W	5	0.2	4	1	
TH-1000N-250W	5	0.2	4	1	
TH-1000N-275W		0.2	5	1	
TH-1000N-300W	5	0.3	4	1	
TH-1000N-325W	5	0.4	5	1	
TH-1000N-350W	5	0.5	6	1	
TH-1000N-375W	5	0.3	5	3	
TH-1000N-400W	10	0.2	6	1	
TH-1000N-425W	5	0.2	7	2	
TH-1000N-475W	10	0.3	6	1	
TH-1000N-445W	5	0.4	6	3	
TH-1000N-450W	5	0.3	8	*	
TH-1000N-500W	5	0.4		 1	
TH-1100N-025W	5	0.3	6	1	
TH-1100N-075W	- 5	0.2	7	1	
TH-1100N-125W	10	0.3	11	1	
TH-1100N-175W	5	0.4	10	1	
TH-1100N-225W	 5	0.2	7	1	
TH-1100N-325W	5	0.2	, 9	1	
TH-1100N-375W	5	0.3	10	- 1	
TH-1100N-425W	5	0.3	6	1	
TH-1100N-475W	5	0.4	7	1	
		····			

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VANCOUVER OFFICE:

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

0V-0308-SG9

Company:	FAIRBANK	ENGINEERING	LTD
Project:	JOE DANDY		
Attn:	AL PRATT		

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
TH-1100N-025E	10	0.4	6	3	
TH-1100N-075E	5	0.4	5	1	
TH-1100N-125E	5	0.5	7	4	
TH-1100N-175E	5	0 .4	5	1	
TH-1100N-225E	5	0.3	4	1	
TH-1100N-275E	5	0.4	5	1	
TH-1100N-325E	10	0.2	4	2	
TH-1100N-375E	5	0.3	5	1	
TH-1100N-425E	5	0.4	4	1	
TH-1100N-475E	5	0.4	6	1	
TH-1200N-000E	 5	0.7	10	1	
TH-1200N-025E	10	0.3	7	1	
TH-1200N-050E	5	0.3	5	1	
TH-1200N-075E	20	0.3	7	2	
TH-1200N-100E	5	0.3	5	1	
TH-1200N-125E	5	0.3		 1	
TH-1200N-150E	5	0.4	5	1	
TH-1200N-175E	5	0.2	4	2	
TH-1200N-200E	5	0.3	5	2	
TH-1200N-225E	5	0.4	5	1	
TH-1200N-250E	10	0.4	6	1	
TH-1200N-275E	ŝ	0.4	5	1	
TH-1200N-300E	5	0.4	5	1	
TH-1200N-325E	10	0.2	3	- 1	
TH-1200N-350E	5	0.2	6	- 3	
TH-1200N-375E	5	0.4	4	. 1	
TH-1200N-400E	5	0.5	4	1	
TH-1200N-425E	5	0.5	5	1	
TH-1200N-450E	5	0.4	6	1	
TH-1200N-475E	10	0.3	3	1	

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VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS. ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

Geochemical Analysis Certificate

Company: FAIRBANK ENGINEERING LTD Project: JOE DANDY Attn: AL PRATT Date: APR-12-90

0V-0308-SG10

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

Ne hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

Sample	AU-WET	AG	AS	SB	
Number	PPB	PPM	PPM	PPM	
TH-1200N-500E	5	0.5	8	1	
TH-1200N-025W	5	0.3	7	2	
TH-1200N-050W	10	0.3	9	1	
TH-1200N-075W	5	0.4	22	4	
TH-1200N-100W	5	0.2	8	1	
TH-1200N-125W	5	0.2	13	1	
TH-1200N-150W	5	0.4	12	3	
TH-1200N-175W	5	0.3	21	1	
TH-1200N-200W	5	0.4	16	1	
TH-1200N-225W	5	0.2	8	1	
TH-1200N-250W	5	0.4	7	2	
TH-1200N-275W	10	0.2	10	1	
TH-1200N-300W	5	0.2	9	1	
TH-1200N-325W	5	0.2	11	1	
TH-1200N-350W	5	0.3	17	2	
TH-1200N-375W	5	0.5	17	1	
TH-1200N-400W	5	0.4	8	1	
TH-1200N-425W	10	0.5	12	1	
TH-1200N-450W	5	0.3	10	1	
TH-1200N-450W	5	0.2	9	1	
TH-1200N-500W	5	0.3	13	2	
TH-1300N-025W	5	0.2	9	1	
TH-1300N-175W	10	0.3	6	1	
TH-1300N-225W	5	0.4	9	2	
TH-1300N-275W	5	0.5	18	1	
TH-1300N-325W	5	0.4	17	2	
TH-1300N-425W	5	0.3	12	2	
TH-1300N-025E	5	0.2	4	1	
TH-1300N-075E	5	0.3	4	1	
TH-1300N-125E	10	0.3	4	1	

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TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis Certificate</u>

0V-0308-SG11

Company:	FAIRBANK	ENGINEERING	LTD
Project:	JOE DANDY		
Attn:	AL PRATT		

Date: APR-12-90 Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C. -

He hereby certify the following Geochemical Analysis of 30 SOIL samples submitted APR-06-90 by A.PRATT.

TH-1300N-150E-A 10 0.4 6 1 TH-1300N-175E 15 0.2 6 3 TH-130N-275E 5 0.4 12 1 TH-130N-375E 5 0.2 6 1 TH-130N-375E 5 0.2 4 1 TH-130N-425E 5 0.3 6 1 TH-1400N-025E 10 0.3 5 3 TH-1400N-025E 10 0.1 3 1 TH-1400N-025E 5 0.2 4 1 TH-1400N-025E 5 0.2 4 1 TH-1400N-025E 5 0.2 4 1 TH-1400N-125E 5 0.2 4 1 TH-1400N-125E 5 0.3 5 1 TH-1400N-125E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-225E 5 0.3 5 1 TH-1400N-300E 5 0.3 5 1 TH-	Sample Number	AU-WET PPB	AG PPM	AS FPM	SB PPM	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1300N-150E-A	10	0.4		1	
TH-1300N-275E 5 0.2 6 1 TH-1300N-325E 5 0.2 5 1 TH-1300N-375E 5 0.2 4 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-475E 5 0.3 6 1 TH-1400N-025E 10 0.3 5 3 TH-1400N-075E 5 0.2 4 1 TH-1400N-075E 5 0.2 4 1 TH-1400N-075E 5 0.2 4 1 TH-1400N-100E 5 0.3 6 1 TH-1400N-175E 5 0.2 10 1 TH-1400N-175E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-275E 5 0.3 6 4 TH-1400N-275E 5 0.4 5 1 TH-1400N-275E 5 0.4 5 1 TH-1400N-375E 95 0.4 4 1 TH-	TH-1300N-175E	15	0.2	6	3	
TH-1300N-325E S 0.2 5 1 TH-1300N-375E 5 0.2 4 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-425E 10 0.3 5 3 TH-1400N-050E 10 0.1 3 1 TH-1400N-050E 5 0.2 4 1 TH-1400N-050E 5 0.2 4 1 TH-1400N-050E 5 0.2 4 1 TH-1400N-100E 5 0.3 6 1 TH-1400N-125E 5 0.4 1 1 TH-1400N-175E 5 0.3 5 1 TH-1400N-205E 10 0.7 14 1 TH-1400N-275E 5 0.3 5 1 TH-1400N-275E 5 0.4 5 1 TH-1400N-375E 9 0.3 5 1 TH-1400N-375E 5 0.4 4 1 TH-14	TH-1300N-225E	5	0.4	12	1	
TH-1300N-375E 5 0.2 4 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-425E 5 0.3 6 1 TH-1300N-025E 10 0.3 5 3 TH-1400N-025E 10 0.1 3 1 TH-1400N-050E 5 0.2 4 1 TH-1400N-102E 5 0.3 6 1 TH-1400N-125E 5 0.4 15 1 TH-1400N-150E 5 0.3 5 1 TH-1400N-175E 5 0.3 5 1 TH-1400N-250E 10 0.7 14 1 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 5 0.4 5 1 TH-1400N-350E 5 0.3 5 1 TH-1400N-350E 5 0.3 5 1 TH-1400N-350E 5 0.4 4 1 TH		5	0.2	6	1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1300N-325E	5	0.2	5	1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1300N-375E	5	0.2	4		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1300N-425E	5	0.3	6	1	
TH-1400N-050E 10 0.1 3 1 TH-1400N-075E 5 0.2 4 1 TH-1400N-100E 5 0.3 6 1 TH-1400N-125E 5 0.2 10 1 TH-1400N-150E 5 0.6 15 1 TH-1400N-175E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 10 0.3 5 1 TH-1400N-375E 5 0.4 5 1 TH-1400N-325E 10 0.3 5 1 TH-1400N-325E 5 0.5 7 5 TH-1400N-425E 5 0.4 4 1 TH-1400N-425E 5 0.5 7 5 TH-1400N-425E 5 0.2 5 1	TH-1300N-475E	5	0.3	6	1	
TH-1400N-075E 5 0.2 4 1 TH-1400N-100E 5 0.3 6 1 TH-1400N-125E 5 0.2 10 1 TH-1400N-125E 5 0.4 15 1 TH-1400N-175E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-225E 5 0.3 6 4 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 5 0.4 5 1 TH-1400N-325E 10 0.3 5 1 TH-1400N-325E 10 0.3 5 1 TH-1400N-325E 5 0.4 4 1 TH-1400N-375E 95 0.4 4 1 TH-1400N-425E 5 0.5 7 5 TH-1400N-425E 5 0.2 5 1 TH-1400N-475E 5 0.2 4 1	TH-1400N-025E	10	0.3	5	3	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1400N-050E	10	0.1	3	. 1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1400N-075E	5	0.2	4		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1400N-100E	5			1	
TH-1400N-175E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-225E 5 0.3 6 4 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 5 0.4 5 1 TH-1400N-300E 10 0.3 5 1 TH-1400N-300E 10 0.3 5 1 TH-1400N-300E 5 0.3 5 1 TH-1400N-300E 5 0.3 5 1 TH-1400N-375E 95 0.4 4 1 TH-1400N-400E 5 0.4 4 1 TH-1400N-425E 5 0.5 7 5 TH-1400N-450E 5 0.2 5 1 TH-1400N-450E 5 0.2 5 1 TH-1400N-450E 5 0.2 4 1 TH-1400N-025W 5 0.4 7 1	TH-1400N-125E	5	0.2	10	1	
TH-1400N-175E 5 0.3 5 1 TH-1400N-200E 10 0.7 14 1 TH-1400N-225E 5 0.3 6 4 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 20 0.2 4 1 TH-1400N-250E 5 0.4 5 1 TH-1400N-300E 10 0.3 5 1 TH-1400N-300E 10 0.3 5 1 TH-1400N-300E 5 0.3 5 1 TH-1400N-300E 5 0.3 5 1 TH-1400N-375E 95 0.4 4 1 TH-1400N-400E 5 0.4 4 1 TH-1400N-425E 5 0.5 7 5 TH-1400N-450E 5 0.2 5 1 TH-1400N-450E 5 0.2 5 1 TH-1400N-450E 5 0.2 4 1 TH-1400N-025W 5 0.4 7 1	TH-1400N-150E	5	0.6	15	1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1400N-175E	5			1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	TH-1400N-200E	10	0.7	14	1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TH-1400N-225E				4	
TH-1400N-300E 10 0.3 5 1 TH-1400N-325E 10 0.3 5 2 TH-1400N-325E 5 0.3 5 1 TH-1400N-350E 5 0.3 5 1 TH-1400N-375E 95 0.4 4 1 TH-1400N-400E 5 0.4 4 1 TH-1400N-425E 5 0.5 7 5 TH-1400N-425E 5 0.2 5 1 TH-1400N-425E 5 0.2 5 1 TH-1400N-450E 5 0.2 5 1 TH-1400N-450E 5 0.2 4 1 TH-1400N-450E 5 0.2 4 1 TH-1400N-025W 5 0.4 7 1	TH-1400N-250E	20			1	
TH-1400N-325E100.352TH-1400N-350E50.351TH-1400N-375E950.441TH-1400N-400E50.441TH-1400N-425E50.575TH-1400N-450E50.251TH-1400N-475E50.241TH-1400N-450E50.241TH-1400N-450E50.21TH-1400N-450E50.21TH-1400N-450E50.21TH-1400N-450E50.21TH-1400N-500E100.210TH-1400N-025W50.47	TH-1400N-275E	5	0.4	5	1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TH-1400N-300E	10	0.3	5	1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TH-1400N-325E	10	0.3	5	2	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TH-1400N-350E	5	0.3	5	1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	TH-1400N-375E	95	0.4		1	
TH-1400N-425E 5 0.5 7 5 TH-1400N-450E 5 0.2 5 1 TH-1400N-475E 5 0.2 4 1 TH-1400N-500E 10 0.2 10 1 TH-1400N-025W 5 0.4 7 1		5		4	1	
TH-1400N-475E50.241TH-1400N-500E100.2101TH-1400N-025W50.471		5		7	5	
TH-1400N-475E50.241TH-1400N-500E100.2101TH-1400N-025W50.471	TH-1400N-450E	5	0.2	5	1	
TH-1400N-500E 10 0.2 10 1 TH-1400N-025W 5 0.4 7 1					1	
TH-1400N-025W 5 0.4 7 1				10	1	
					1	
					1	

100 Certified by_

MIN-EN LABORATORIES



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS VANCOUVER OFFICE:

705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEX: VIA U.S.A. 7601067 • FAX (604) 980-9621

TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 367 TIMMINS, ONTARIO CANADA P4N 7G7 TELEPHONE: (705) 264-9996

<u>Geochemical Analysis Certificate</u>

0V-0308-SG12

Company:	FAIRBANK	ENGINEERING	LTD
Project:	JOE DANDY		
Atta:	AL PRATT		

Date: APR-12-90

Copy 1. FAIRBANK ENGRG., VANCOUVER, B.C.

Ne hereby certify the following Geochemical Analysis of 19 SOIL samples submitted APR-06-90 by A.PRATT.

Sample Number	AU-WET PPB	AG PPM	AS PPM	SB PPM	
TH-1400N-075W	10	0.4	3	1	
TH-1400N-100W	5	0.1	1	1	
TH-1400N-125W	5	0.4	10	2	
TH-1400N-150W	5	0.5	6	3	
TH-1400N-175W	5	0.2	10	1	
TH-1400N-200W	5	0.3	8	 1	
TH-1400N-225W	5	0.8	40	2	
TH-1400N-250W	5	0.5	14	2	
TH-1400N-275W	5	0.4	10	4	
TH-1400N-300W	10	0.4	9	1	
TH-1400N-325W	5	0.3		1	
TH-1400N-350W	5	0.2	8	1	
TH-1400N-375W	10	0.2	7	2	
TH-1400N-400W	5	0.3	7	1	
TH-1400N-425W	5	0.2	6	1	
TH-1400N-450W	5	0.3	12	1	
TH-1400N-475W	5	0.2	6	1	
TH-1400N-500W	5	0.3	9	1	
TH-1400N-000E/W	5	0.3	3	5	

