



010

**INITIAL REPORT
GEOCHEMICAL SURVEY**

**VERMILION LAKE OPTION
PROJECT 437**

NTS 52 C/10

**PREPARED BY:
Francis T. Manns Ph.D.
Senior Geologist
Orofino Resources Limited
MARCH 2, 1986**



52C10NE0007 2.13012 BAD VERMILION LAKE

010C

TABLE OF CONTENTS

SECTION	PAGE
1.0 INTRODUCTION	1
2.0 SUMMARY	1
3.0 RECOMMENDATIONS	3
4.0 LOCATION ACCESS AND PHYSIOGRAPHY	3
5.0 REGIONAL GEOLOGY	3
6.0 ECONOMIC GEOLOGY - PRODUCING MINE	4
7.0 FORMER PRODUCERS	4
8.0 PROPERTY GEOLOGY	6
9.0 HUMUS GEOCHEMISTRY	7
10.0 REFERENCES	10

LIST OF FIGURES

NUMBER	PAGE
1 CLAIM MAP	2
2 LOCATION MAP	5
3 HUMUS GEOCHEMISTRY	IN POCKET

TABLES

I RANKING OF GEOCHEMICAL ANOMALIES	8
II SPOT GEOCHEMICAL ANOMALIES	9

APPENDICES

I HUMUS ANALYSES	
II STATEMENT OF QUALIFICATIONS	
III TECHNICAL DATA STATEMENT	

1.0 INTRODUCTION

The Vermilion Lake Option (Fig. 1) is located 5 km south of Mine Centre in northwestern Ontario. The history of mineral exploration in the Mine Centre area dates to the 1880's when a gold rush in northern Minnesota spilled over into the Rainy Lake-Seine River area. In 1882, the Canadian Pacific Railway first provided easy access to the region. At that time it was necessary to have mining lands surveyed prior to title and since a baseline, Niven's baseline, was available, virtually all the land between Mine Centre and the Seine River was covered by surveyed mining locations. Many of these still exist today as patented mining claims (Wood *et al.*, 1980a&b).

The Vermilion Lake Option claims constitute a contiguous 25 claim block that lies between two groups of patented claims. The southern border adjoins the Foley Mine, the Stages property, and the Russell C. Cone properties. The northern boundary abuts against the Decca and Manhattan prospects (Beard and Garratt, 1974). Despite a long history of mineral exploration the Mine Centre area has yet to produce a major mine. However, this may be more a function of the tight land situation than the true mineral potential. Moreover, with gold prices as they are it may be again feasible to mine at Mine Centre provided an adequate reserve is discovered using current techniques.

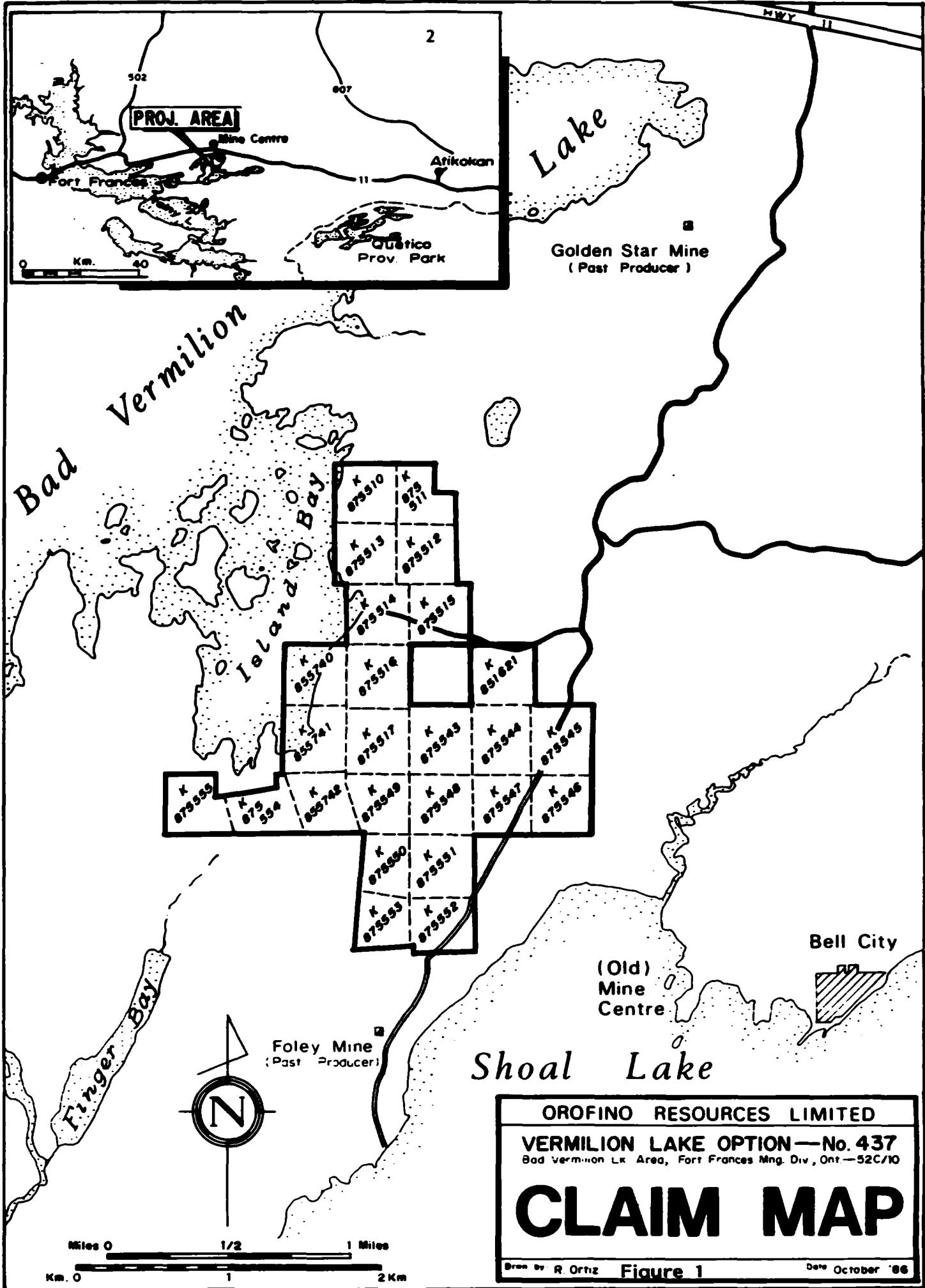
2.0 SUMMARY

This report concerns 23 of the 25 claims of the Vermilion Lake option. Surveys for two claims, K-875555 and K-875554, have not yet been prepared. 20 man days assessment are required for these by 1 July 1987.

Approximately 40 km of lines were cut. 1,066 humus samples for gold were taken.

The humus geochemistry averaged 2.4 ± 2.4 ppb standard deviation for 1066 samples. This means that values >7 ppb have a 95% probability of being anomalous and values >9 ppb have a 99% probability of being anomalous. Approximately 2.5% of the population are anomalous.

Several narrow linear trends are present striking and branching northward across the claims. Three lobate areas of anomalous gold values are also present. The largest of these is at the south end of Claim K-875552 adjacent to and on strike with the Russel Cone Family 'Mine'. The soil anomalies are outlined on Figure 3. The humus target priorities are displayed in Table 1, Section 10.0.



3.0 RECOMMENDATIONS

Soil geochemistry has certainly delineated a number of areas that will require prospecting for veins. It is critical at this time

- 1) to map the positions, orientations and dimensions of surface veins and
- 2) to undertake a preliminary screening by assaying the veins.

An unknown number of 1880's vintage prospect pits are present on the property and these must also be mapped and sampled.

A shear zone has been suggested striking northward from patented Claim FF-5152. Therefore the foliation of the tonolite should be mapped at every opportunity. This mapping should be as 'homogeneous' as possible with measurements from all claims.

Preparation must be directed toward an orientation diamond drilling program of 1,500 feet in the fall of 1987.

4.0 LOCATION ACCESS AND PHYSIOGRAPHY

Mine Centre is located on highway 11, 269 km west of Thunder Bay and 63 km east of Fort Frances, Ontario. The Claims lie 5 km south of the CPR and Highway 11 on the Shoal Lake Road, a gravel road in good condition.

Thirty-five percent of the region is estimated to be covered by water of the Hudson Bay watershed. Lakes and rivers provide easy access to those portions of the region not otherwise reached by road. Local relief is generally less than 60 m. The cover is generally black spruce, white spruce, balsam, fir, poplar, white birch, red pine, white pine, jack pine, hemlock, cedar, elm and scrub oak. The second growth over the Vermilion Lake Option varies but tends toward the trash hardwoods with dense hazel undergrowth. The property consists of a gently undulating broad ridge.

Beaver ponds are present which will probably provide an adequate supply of water for diamond drilling. The claims also cover a portion of Bad Vermilion Lake. Bad Vermilion Lake would likely be the source of water for the proposed drilling program if beaver ponds do not suffice.

5.0 REGIONAL GEOLOGY

Mine Centre District lies between two major east-west striking faults. The Quetico Fault lies to the north and the Seine River Fault lies to the south. The map pattern indicates that the Quetico and Seine River Faults were right-lateral faults and the

15 km wide belt between containing the Mine Centre District was rotated clockwise between the faults (Fig.2).

The local conglomerate filled basin between the faults is interpreted to be contemporaneous with faulting as is an ultramafic anorthosite dome underlying Bad Vermilion Lake and the gold and sulphide mineralized trondjhemite - tonolite laccolith overlying the batholith (Poulsen, 1984a). Poulsen does not agree with the writer's interpretation of an anorthosite dome, contending that the trondjhemite underlies the anorthosite and the tonolite overlies it (Poulsen, 1987, oral communication).

The anorthosite-trondjhemite complex is the unroofed remnant of an extremely differentiated magma chamber for a magma that found its way from the mantle through the weak zone between the two faults. The ultramafic batholith and the tonolite are in contact along what has been called the Finger Bay Shear zone, one of several shear zones which strike northeast from the Seine River Fault toward the Quetico Fault.

The top of contact of the tonolite with the Seine Conglomerate is reported to be an angular unconformity (Poulsen, 1984a).

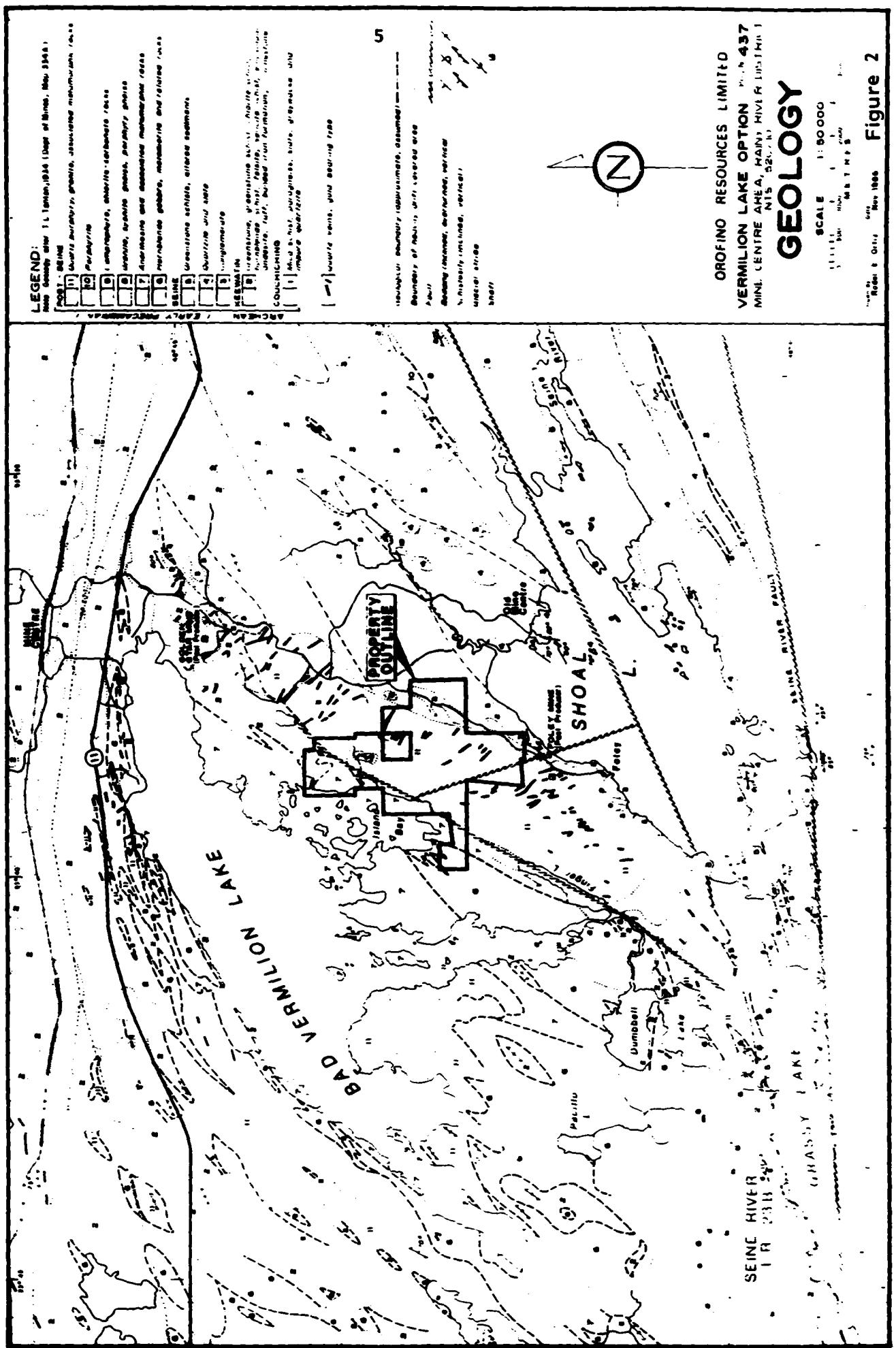
Above the tonolite the conglomerate is sheared as well, also in a northeast strike direction. Both sheared contacts are represented on the 25 Claim Vermilion Lake Option. A third shear zone was noted by Poulsen (1984b). This zone strikes north from the Russell C. Cone 'Mine' into the centre of the Vermilion Lake Option Claims.

The volcanic rocks in the basin range from mafic to felsic and are reported to be older than the batholith and laccolith. However, common sense dictates that the Bad Vermilion Intrusive Complex represents the volcanic centre and the basinal volcanics have suffered selective unroofing such that only the earliest volcanics are preserved. An Iron Formation chemical metasediment strikes east-west north of and parallel to the Seine River Fault.

6.0 ECONOMIC GEOLOGY - PRODUCING MINE

THE OLIVE MINE: The Olive Mine, west of Mine Centre on the Quetico Fault, has produced at last account, 3,572 oz Au and 342 oz Ag from 7,255 T. Production is seasonal from a 3 TPD mill with 2 men working a 2 ft. vein in metasediments.

A dewatering and rehabilitation project is planned during 1987 by Noront Resources to earn 60% interest in the project from HSK Minerals (NM, 22 December 1986).



7.0 FORMER PRODUCERS

THE GOLDEN STAR MINE: The Golden Star Mine, 2.5 km north of the Vermilion Lake option has produced 10,758 oz Au and 34 oz Ag from 19,345 T. There are 10,000 T of reserves @ 0.45 and 35,000 T of tailings @ 0.15 reported though the tailings may have been reworked recently. Production occurred during 1898-1901, 1934, 1938 and 1941. The most recent reserve estimate dates from 1939.

The Golden Star lies only 300 m north of the end of the tonolite intrusive and is reported to be hosted in veins in felsic metavolcanics. It lies close to the conglomerate contact.

THE FOLEY MINE: The Foley Mine is 400 m south of the Vermilion Lake Option. The Foley has produced 855 oz Au and 149 oz Ag from 5,568 T from two veins in a felsic intrusive (The Bonanza, 3.5 ft wide, azimuth north; The North Jumbo, 4-5 ft wide, azimuth nw). Reserves are estimated at 6,000 T @ 0.15 opt Au above 400 ft. The Foley Mine also lies close to the conglomerate contact.

During the fall of 1984, Royal Gold and Silver mined and milled 800 Tons of material from the surface trace of one of the Foley veins and some hammer mill tailings from the Russell C. Cone Mine. The ore was milled at their 75 TPD mill near the Vermilion Lake Option and had a gross value of \$30,000.

THE RUSSELL C. CONE MINE: The mineralization is hosted in a pair of quartz veins separated by a sheared horse of tonolite country rock. The pair consists of a sulphide-bearing vein (py-sph-ga) and a quartz vein. The sulphide-poor quartz vein averages about 18" in width. About 1,000 oz of gold are reported taken from an open cut on this vein during a highgrading operation by Russell Cone Sr. and family between 1949 and 1959.

The Cone family is still living on the property and had optioned the Vermilion Lake Option of Orofino to Mine Centre Gold Ventures and Royal Gold and Silver Corporation. The family still holds approximately 30 claims to the north and south of the Vermilion Lake Option.

8.0 PROPERTY GEOLOGY

There are three types of exploration targets on the Vermilion lake Option. These are:

- 1) Prominent Quartz Veins
- 2) The Finger Bay Shear Zone
- 3) Recessive Shear Zones

These targets are currently being assessed by building a database on a complete grid cut over the property. This grid, in excess of 40 km, has been utilized to map the humus geochemistry for gold.

and for geophysical (EM and Magnetometer) surveys. During the summer field season the grid will be used to locate prominent quartz veins and old prospect pits.

Strike extensions of the prominent veins have never been explored by diamond drilling. These veins are our initial targets. The prominent veins are well known to be narrow, erratically mineralized and locally high grade.

We propose to evaluate the potential strike extension of the known veins where they may be recessively weathered. However, the program we envisage should also determine whether there are other larger hidden targets in shear zones underlying recessive areas along 1) the projection of the Finger Bay fault and 2) a proposed shear zone (Poulsen, 1984b) that cuts northward and downward stratigraphically across the centre of the Vermilion Lake Option (Fig. 2).

The combination of grid geochemistry and geophysics should permit target selection to be ranked quantitatively therefore explored in a cost efficient and hopefully unbiased fashion.

9.0 HUMUS GEOCHEMISTRY

Samples of the 'A' horizon were taken every 100 feet and packed in kraft sample bags for fire assay/DC plasma analysis by Bondar-Clegg Laboratories in Ottawa, Ontario.

Figure 3 shows the distribution of 1,066 humus samples which were collected. The mean and standard deviation of the values were calculated. 27 values greater than 13 ppb were deleted from the population and the statistics recalculated to reiterate the 'normalized' mean and standard deviation.

Sample values below detection limit of <2 ppb were taken to be 1 ppb; sample values <1 ppb were taken to be 0.5 ppb. This is considered to be a conservative method yielding both higher background and anomalous values than simply substituting a zero value. It is beyond the scope of this report to attempt to justify the method rigorously.

Twelve spatially coherent anomalies are displayed on Figure 3. In addition, several linear arrays that constitute single or two value anomalies on each line trend northerly across the property. These anomalies will be investigated during the summer field season of 1987. A provisional ranking of coherent anomalies based solely on quantitative analysis is presented in Table I. One of the goals of the field program is to attempt to add geological data to discriminate potential drilling targets.

Table I: RANKING OF GEOCHEM ANOMALIES

PROJECT 437

Anom.	Au mean ppb	s.d. hits	Anom.	Length ft.	Width ft.	Au Rank	Size Rank	RxR	Target Priority
S-3	30	26	5	2200	50	1	2.1	2.1	2
S-1	22	48	5	2400	200	1.4	1	1.4	1
S-11	14	5	2	900	50	2.1	3.3	6.9	5
S-7	12	4	3	300	50	2.5	5.6	14.0	11
S-10	12	9	5	2200	50	2.5	2.1	5.2	3
S-5	11	7	3	600	50	2.7	4.0	10.8	9
S-4	10	6	2	700	50	3.0	3.7	11.1	10
S-12	9	1	2	350	50	3.3	5.2	17.2	12
S-2	8	5	11	2500	50	3.8	1.96	7.4	6
S-9	8	4	3	1800	50	3.8	2.3	8.7	8
S-8	8	2	4	2300	50	3.8	2.04	7.8	7
S-6	7	6	6	700	300	4.2	1.5	6.3	4

Mean 1066 Samples = 3.5 ± 12 ppb

Mean 1039 Samples = 2.4 ± 2.4 ppb

Ranking of the humus anomalies as target priorities was done to differentiate between the soil anomalies. The results are shown in Table I.

Au rank was established with the highest anomaly average ranked number 1. The absolute value of the highest mean was then divided by each of the other values to determine a percentage ranking

Size ranking was established in a similar manner by dividing the size of the largest anomaly by each other anomaly in turn to establish a percentage ranking. As this represents an area of anomaly, the square root was taken to reduce the effect. Target priority was determined by the ranking of the product of the Au rank and the Area rank.

TABLE II: SINGLE SPOT ANOMALIES
PROJECT 437

LINE	STATION	Au ppb
32S	2+00W	52
56S	34+00W	25
32N	18+00W	24
4N	12+00W	22
56S	18+00W	17
4N	BL20W	15
4S	16+00W	14
7N	BL20W	12
36S	11+00W	11
20N	2+00W	11
24S	11+00W	9
24S	4+00W	9
28S	15+00W	8
20N	9+00W	8
36S	8+00W	7

Table II is a listing of single spot anomalies as determined statistically. These may represent significant gold targets in spite of their relative size with respect to other anomalies. One must always keep the narrow vein target in perspective with regard to the coarseness of the sample grid. Each of these spot anomalies should be prospected and soil or humus samples taken.

10.0 REFERENCES

Beard, R.C. and G.L. Garratt

1976:Gold deposits of the Kenora-Fort Frances Area:
Districts of Kenora and Rainy River; Mineral
Deposits Circular 16, Ministry of Natural
Resources, Ontario Department of Mines.

Poulsen, K.H.

1984a:The geological setting of mineralization in the
Mine Centre-Fort Frances Area, District of Rainy
River;Ontario Geological Survey Open File Report
5512.

1984b:Archean tectonics and mineralization at Rainy
Lake, northwestern Ontario; Ph.D.Thesis, Queen's
University.

Tanton, T.L.

1934:Mine Centre Area, Rainy River District, Map 334A

Wood, J., Dekker, J., Jansen, J.G., Keay, J.P. and Panagapko, D.

1980a:Mine Centre Area (Eastern Half), District of
Rainy River;Ontario Geological Survey Preliminary
Map P.2202, Geological Series, Scale 1:15,840 or
1/4 inch to 1/4 mile, Geology 1976, 1977.

1980b:Mine Centre Area (Western Half); OGS Preliminary
Map P.2201.

APPENDIX I

Bondar-Clegg & Company Ltd.
5420 Carling Rd.
Ottawa, Ontario
Canada K1J 4X5
Phone: (613) 749-2220
Telec: 053-4233



Geochemical
Lab Report

REPORT: 016-5598 (COMPLETE)

REFERENCE INFO:

CLIENT: OROFINO RESOURCES LTD.
PROJECT: NONE

SUBMITTED BY: OROFINO
DATE PRINTED: 24-DEC-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	233	1 PPB	AQUA REGIA	FireAssay/IC Plasma
2	TestWt Au Test Weight	10	0.01 gm		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ORGANIC OR HUMUS	233	-10	233	SIEVE -10	233

REMARKS: < MEANS LESS THAN

REPORT COPIES TO: G. HARPER
J.A. SOLEN

INVOICE TO: G. HARPER

60

REPORT: 016-5598

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT	AU	TestWt	SAMPLE NUMBER	ELEMENT	AU	TestWt
	UNITS	PPB	gm		UNITS	PPB	gm
L52S JS86-165-41+6SW		3		4	L60S SS86-198-21W	3	
L52S JS86-166-41W		2		5	L60S SS86-197-20W	2	
L52S JS86-167-40W		2		6	L60S SS86-196-19W	<1	
L52S JS86-168-39W		5		7	L60S SS86-195-18W	<1	
L52S JS86-169-38W		4		8	L60S SS86-194-17W	2	
L52S JS86-170-37W		5		9	L60S SS86-193-14+50W	4	
L52S JS86-171-36W		3		10	LO SS86-525-10+50W	3	
L52S JS86-172-35W		5		11	LO SS86-526-10W	1	
L52S JS86-173-34W		2		12	LO SS86-527-9+50W	<1	
L52S JS86-174-33W		3		13	LO SS86-528-9W	<1	
L52S JS86-175-32W		5		14	LO SS86-529-8+50W	2	
L52S JS86-176-31W		2		15	LO SS86-530-8W	6	
L52S JS86-177-30W		<1		16	LO SS86-531-7+50W	20	9.00
L52S JS86-178-29W		<1		17	LO SS86-532-7W	1	
L52S JS86-179-29W		1		18	LO SS86-533-6+50W	<1	
L52S JS86-180-27W		3		19	LO SS86-534-6W	<1	
L52S JS86-181-26W		1		20	LO SS86-535-5+50W	<1	
L52S JS86-182-25W		6		21	LO SS86-536-5W	<1	
L52S JS86-183-24W		3		22	LO SS86-537-4+50W	<1	
L52S JS86-184-23W		<1		23	LO SS86-538-4W	<1	
L52S JS86-185-22W		2		24	LO SS86-539-3W	<1	
L52S JS86-186-21W		<1		25	LO SS86-540-2W	<1	
L52S JS86-187-20W		5		26	LO SS86-541-1W	<1	
L52S JS86-188-19W		3		27	LO SS86-542-0+50W	<2	9.00
L52S JS86-189-18W		3		28	LO SS86-543-0W	<1	
L52S JS86-190-17W		2		29	LO SS86-544-0+50S	<1	
L52S JS86-191-16W		1		30	LO SS86-545-1S	5	
L52S JS86-192-15W		6		31	LO SS86-546-1+50S	5	
L52S JS86-210-33W		<1		32	LO SS86-547-0S	4	
L60S SS86-209-32W		4		33	LO SS86-548-0+50S	2	
L60S SS86-208-31W		1		34	LO SS86-549-0S	5	
L60S SS86-207-31W		1		35	LO SS86-550-2+50S	4	
L60S SS86-206-31W		1		36	LO SS86-551-0S	2	
L60S SS86-205-30W		1		37	LO SS86-552-0S	4	
L60S SS86-204-27W		2		38	LO SS86-553-0S	1	
L60S SS86-203-26W		1		39	LO SS86-554-0S	2	
L60S SS86-202-25W		<1		40	LO SS86-555-0S	4	
L60S SS86-201-24W		1		41	LO SS86-556-0S	5	
L60S SS86-200-23W		2		42	LO SS86-557-0S	2	7.00
L60S SS86-199-22W		1		43	LO SS86-558-0S	2	9.00

REPORT: 016-5598

PROJECT: NONE

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g
LO SS86-559-12S		6	4.00		BLO JS86-438-2S	<1	
LO SS86-560-13S		4	5.00		BLO JS86-437-3S	2	
LO SS86-561-14S		2	3.00		BLO JS86-436-5S	<1	
LO SS86-562-14+50S		1			BLO JS86-435-6S	<1	
LO SS86-563-15S		2			BLO JS86-434-7S	<1	
LO SS86-564-15+50S		1			BLO JS86-433-9S	<1	
LO SS86-565-16S		<1			BLO JS86-432-10S	2	
LO SS86-566-16+50S		2			BLO JS86-431-11S	1	
LO SS86-567-17S		5			BLO JS86-430-13S	<1	
LO SS86-568-17+50S		2			BLO JS86-429-14S	<1	
LO SS86-569-18S		2			BLO JS86-428-15S	1	
LO SS86-570-18+50S		2			BLO JS86-427-17S	1	
LO SS86-571-19S		5	8.00		BLO JS86-426-18S	17	
LO SS86-572-19+50S		3			BLO JS86-425-19S	5	
LO SS86-573-20S		4			BLO JS86-424-21S	7	
LO SS86-574-20+50S		3			BLO JS86-423-22S	4	
LO SS86-579-21S		1			BLO JS86-422-23S	3	
LO SS86-580-21+50S		3			BLO JS86-421-25S	3	
LO SS86-581-22S		<1			BLO JS86-420-26S	2	
LO SS86-582-20+50S		2			BLO JS86-419-27S	2	
LO SS86-583-23S		3			BLO JS86-418-29S	2	
LO SS86-584-23+50S		5			BLO JS86-417-30S	1	
LO SS86-585-24S		3			BLO JS86-416-31S	1	
LO SS86-586-24+50S		1			BLO JS86-415-33S	1	
LO SS86-587-25S		<1			BLO JS86-414-34S	<1	
LO SS86-587-25+50S		1			BLO JS86-413-35S	1	
LO SS86-589-26S		2			BLO JS86-412-37S	<1	
LO SS86-590-26+50S		2			BLO JS86-411-38S	<1	
LO SS86-591-27S		1			BLO JS86-410-39S	<1	
LO SS86-592-27+50S		<1			BLO JS86-409-40S	1	
LO SS86-593-28S		1			BLO JS86-408-41S	1	
LO SS86-594-28+50S		1			BLO JS86-407-42S	1	
LO SS86-595-29S		1			BLO JS86-406-43S	1	
LO SS86-596-29+50S		1			BLO JS86-405-44S	1	
LO SS86-597-30S		1			BLO JS86-404-45S	1	
LO SS86-598-30+50S		1			BLO JS86-403-46S	1	
LO SS86-599-31S		2			BLO JS86-402-47S	1	
LO SS86-600-31+50S		2			BLO JS86-401-48S	1	
BLO JS86-440-0S		2			BLO JS86-400-49S	1	
BLO JS86-439-1S		1			BLO JS86-400-50W	1	
					L44 JS86-410-2N	1	
					L44 JS86-410-2-50S	1	8.00
					L44 JS86-144-7N	3	
					L44 JS86-445-1-50N	<1	
					L44 JS86-446-6N	3	8.00

REPORT: 016-5598

PROJECT: NONE

PAGE 3

SAMPLE NUMBER	ELEMENT	AU	TestWt	SAMPLE NUMBER	ELEMENT	AU	TestWt
		PPB	g			PPB	g
L4W SS86-447-5+50S		1		L4W SS86-497-25S		2	
L4W SS86-448-5N		3		L4W SS86-488-26S		<1	
L4W SS86-449-4+50N		3		L4W SS86-489-27S		3	
L4W SS86-450-4N		3		L4W SS86-490-27+50S		2	
L4W SS86-451-3N		<1		L4W SS86-491-38S		2	
L4W SS86-452-2N		2		L4W SS86-492-28+50S		2	
L4W SS86-453-1N		2		L4W SS86-493-29S		1	
L4W SS86-454-BLO		2		L4W SS86-494-29+50S		3	
L4W SS86-455-1S		1		L4W SS86-495-30S		2	
L4W SS86-456-2S		2		L4W SS86-496-30+50S		<1	
L4W SS86-457-3S		1		L4W SS86-497-31S		2	
L4W SS86-458-4S		<1		-L56S JS86-211-35+50W		3	
L4W SS86-459-5S		3		L56S JS86-212-35W		2	
L4W SS86-460-6S		2		L56S JS86-213-34W		25	
L4W SS86-461-7S		2		L56S JS86-214-33W		3	
L4W SS86-462-8S		1		L56S JS86-215-32W		3	
L4W SS86-463-9S		2		L56S JS86-216-31W		4	
L4W SS86-464-10S		<1		L56S JS86-217-30W		3	
L4W SS86-465-11S		2		L56S JS86-218-29W		3	
L4W SS86-466-12S		<1		L56S JS86-219-28W		4	
L4W SS86-467-13S		1		L56S JS86-220-27W		4	
L4W SS86-468-14S		2		L56S JS86-221-26W		5	
L4W SS86-469-14+50S		<1		L56S JS86-222-25W		2	
L4W SS86-470-15S		1		L56S JS86-223-24S		2	
L4W SS86-471-15+50S		<1		L56S JS86-224-23W		<1	
L4W SS86-472-16S		2		L56S JS86-225-22W		2	
L4W SS86-473-16+50S		<1		L56S JS86-226-21W		2	
L4W SS86-474-17S		1		L56S JS86-227-20W		2	
L4W SS86-475-17+50S		2		L56S JS86-228-19W		2	
L4W SS86-476-18S		2		L56S JS86-229-18W		2	
L4W SS86-477-18+50S		1		L56S JS86-230-17W		2	
L4W SS86-478-19S		1		L56S JS86-231-16W		2	
L4W SS86-479-19+50S		1		-L56S JS86-232-15W		2	
L4W SS86-480-20S		3					
L4W SS86-481-20+50S		5					
L4W SS86-482-21S		2					
L4W SS86-483-21+50S		2					
L4W SS86-484-22S		7					
L4W SS86-485-23S		5					
L4W SS86-486-24S		3					

Bondar-Clegg & Company Ltd.
5420 Carling Rd.
Ottawa, C.
Canada K1J 8X5
Phone: (613) 749-2220
Tele: 053-1233



Geochemical
Lab Report

REPORT: 016-5903 (COMPLETE)

REFERENCE INFO:

CLIENT: OROFINO RESOURCES LTD.
PROJECT: NONE

SUBMITTED BY: OROFINO RES.
DATE PRINTED: 14-JAN-87

ORDER	ELEMENT	NUMBER OF SAMPLES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	As	165	1 PPM	AQUA REGIA	FireAssay/ICP Plasma

SAMPLE TYPES	NUMBER	SIEVE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ORGANIC OR HUMUS	165	-10	165	SIEVE -10	165

INVOICE TO: G. HARPER

437

$$\frac{101}{165} = 61\%$$

438

$$\frac{64}{165} = 39\%$$

R

REPORT: C16-5903

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	SAMPLE NUMBER	ELEMENT UNITS	AU PPB
JS86-833-L12N-1W		1	JS86-873-L20N-12W		18
JS86-834-L12M-0		4	JS86-874-L20N-11W		1
JS86-835-L12M-3E		2	JS86-875-BL10W-16W		<1
JS86-836-L12M-4E		1	JS86-876-BL10W-17W		2
- JS86-837-L12M-5E		1	JS86-877-BL10W-19W		2
JS86-838-L16W-3E		2	JS86-878-BL10W-19W		<2
JS86-839-L16W-2E		1	JS86-879-BL10W-20W		<1
JS86-840-L16W-1E		<1	JS86-880-BL10W-21W		<2
JS86-841-L16W-0		2	JS86-881-BL10W-22W		<2
JS86-842-L16W-1W		3	JS86-883-BL10W-23W		<1
JS86-843-L16N-2W		<1	JS86-884-L28N-11W		<2
JS86-844-L16N-3W		<2	JS86-885-L28N-12W		<1
JS86-845-L15N-4W		<1	JS86-886-L28N-13W		2
JS86-846-L15N-5W		<1	JS86-887-L28N-14W		<2
JS86-847-L15N-6W		2	JS86-889-L28N-15W		<1
JS86-848-L15N-7W		<1	JS86-890-L28N-16W		<1
JS86-849-L15N-8W		<1	JS86-890-L28N-17W		3
JS86-850-L15N-9W		<1	JS86-891-L28N-18W		<1
JS86-851-BL10W-24W		2	JS86-892-L28N-19W		<1
JS86-852-L28N-11W		<1	JS86-893-L28N-20W		<1
JS86-853-L14N-12W		4	JS86-894-L28N-21W		2
JS86-854-L28N-13W		<1	JS86-895-L28N-22W		<1
JS86-855-L28N-14W		<1	- JS86-896-L28N-22AFCW		<5
JS86-856-L28N-15W		<1	JS86-897-L28N-23W		<1
JS86-857-L28N-16W		<1	JS86-898-L28N-13W		<1
JS86-858-L28N-17W		<1	JS86-899-L28N-14W		<1
JS86-859-L28N-18W		2	JS86-900-L28N-15W		<1
JS86-860-L28N-19W		<1	JS86-901-L28N-16W		<1
JS86-861-L28N-20W		2	JS86-902-L28N-17W		<1
JS86-862-L28N-21W		<1	JS86-903-L28N-18W		<1
JS86-863-L28N-22W		<1	JS86-904-L28N-19W		<1
JS86-864-L28N-23W		<1	JS86-905-L28N-20W		<1
JS86-865-L28N-24W		<1	JS86-906-L28N-21W		<1
JS86-866-L28N-25W		4	JS86-907-L28N-22W		<1
JS86-867-L28N-26W		<1	JS86-908-L28N-23W		<1
JS86-868-L28N-27W		<1	JS86-909-L28N-24W		<1
JS86-869-L28N-28W		<1	JS86-910-L28N-25W		<1
JS86-870-L28N-29W		<1	JS86-911-L28N-26W		<1
JS86-871-L28N-30W		<1	JS86-912-L28N-27W		<1
JS86-872-L28N-31W		<1	JS86-913-L28N-28W		<1

REPORT: CIS-5903

PROJECT: NONE

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	AU PPS	SAMPLE NUMBER	ELEMENT UNITS	AU PPS
JS86-914-L20N-6W	g	<1	SS86-839-BL0-15W	g	<1
JS86-915-L20N-5W	g	2	SS86-840-BL0-17W	g	1
JS86-916-L20N-4W	g	<1	SS86-841-BL0-18W	g	2
JS86-917-L20N-3W	g	<1	SS86-941-BL0-19+50W	g	<1
JS86-918-L20N-2W	g	11	SS86-843-BL0-19W	g	2
JS86-919-L20N-1W	g	2	SS86-844-BL0-19+50W	g	<1
JS86-920-L20N-0	g	1	SS86-845-BL0-20+50W	g	<1
JS86-921-L20N-1E	g	<1	SS86-846-BL0-21W	g	<1
JS86-922-L20N-2E	g	2	SS86-847-BL0-21+50W	g	<1
JS86-923-L20N-3E	g	4	SS86-948-BL0-22W	g	<1
JS86-924-L20N-4E	g	<1	SS86-849-BL0-22+50W	g	<1
SS86-810-BL0-23E	g	<1	SS86-850-BL0-23W	g	<1
SS86-811-BL0-22E	g	<1	SS86-851-BL0-23+50W	g	22
SS86-812-BL0-21E	g	<1	SS86-852-BL0-24+50W	g	2
SS86-813-BL0-19E	g	<1	SS86-853-BL0-25W	g	2
SS86-814-BL0-16E	g	<1	SS86-854-BL0-25+50W	g	<1
SS86-815-BL0-17E	g	<1	SS86-855-BL0-26W	g	2
SS86-816-BL0-15E	g	<1	SS86-856-BL0-26+50W	g	2
SS86-817-BL0-14E	g	<1	SS86-857-BL0-27W	g	<1
SS86-818-BL0-13E	g	<1	SS86-858-BL0-27+50W	g	<1
SS86-819-BL0-11E	g	<1	SS86-859-BL0-28+50W	g	2
SS86-820-BL0-10E	g	<1	SS86-860-BL0-29W	g	<1
SS86-821-BL0-9E	g	<1	SS86-861-BL0-29+50W	g	<1
SS86-822-BL0-8E	g	<1	SS86-862-BL0-30W	g	<1
SS86-823-BL0-6E	g	<1	SS86-863-BL0-30+50W	g	<1
SS86-824-BL0-5E	g	<1	SS86-864-BL0-31W	g	<1
SS86-825-BL0-3E	g	<1	SS86-865-BL0-31+50W	g	<1
SS86-826-BL0-2E	g	<1	SS86-866-BL0-32W	g	<1
SS86-827-BL0-1E	g	<1	SS86-867-BL0-32+50W	g	<1
SS86-828-BL0-1W	g	<1	SS86-868-BL0-33W	g	<1
SS86-829-BL0-0	g	<1	SS86-869-BL0-33+50W	g	<1
SS86-830-BL0-1	g	<1	SS86-870-BL0-34W	g	<1
SS86-831-BL0-2	g	<1	SS86-871-BL0-34+50W	g	<1
SS86-832-BL0-3	g	<1	SS86-872-BL0-35W	g	<1
SS86-833-BL0-4	g	<1	SS86-873-BL0-35+50W	g	<1
SS86-834-BL0-5	g	<1	SS86-874-BL0-36W	g	<1
SS86-835-BL0-6	g	<1	SS86-875-BL0-36+50W	g	<1
SS86-836-BL0-10	g	<1	SS86-876-BL0-37W	g	<1
SS86-837-BL0-11	g	<1	SS86-877-BL0-37+50W	g	<1
SS86-838-BL0-12	g	<1	SS86-878-BL0-38W	g	<1
SS86-839-BL0-13	g	<1	SS86-879-BL0-38+50W	g	<1
SS86-840-BL0-14	g	<1	SS86-880-BL0-39W	g	<1
SS86-841-BL0-15	g	<1	SS86-881-BL0-39+50W	g	<1

Bondar-Clegg & Company Ltd.
5420 Caron Rd.
Ottawa, ON
Canada K2B 5S5
Phone: (613) 749-2220
Tele: 053-1233



Geochemical
Lab Report

REPORT: A13-5903

PROJECT: 4042

PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	Au PPB
SS86-879-BL0-18S		2
SS86-880-BL0-19S		3
SS86-881-BL0-21S		1
SS86-882-BL0-22S		1
SS86-883-BL0-23S		<1

5 - 438

5 - 438

Bondar-Clegg & Company Ltd.
5420 Caron Rd.
Ottawa, Ontario
Canada K2B 5S5
Phone: (613) 749-2230
Tele: 053-1231



Geochemical
Lab Report

REPORT: 016-5597 (COMPLETE)

REFERENCE INFO:

CLIENT: OROFINO RESOURCES LTD.
PROJECT: NONE

SUBMITTED BY: OROFINO
DATE PRINTED: 24-DEC-96

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	257	1 PPB	AQUA REGIA	FireAssay/ICP Plasma
2	TestWt Au Test Weight	8	0.01 gm		

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ORGANIC OR HUMUS	258	-10	258	SIEVE -10	257

REMARKS: < MEANS LESS THAN
SAMPLE L365 JS86-467-23W NOT RECEIVED

REPORT COPIES TO: G. HARPER

INVOICE TO: G. HARPER

I.A. SOLEN

A handwritten signature, likely belonging to G. Harper or I.A. Solen, is located in the bottom right corner of the page.

REPORT: 016-5537

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g
L4S JS86-385-2W		14		L12S JS86-352-2W		<1	
L4S JS86-386-1W		3		L12S JS86-353-1W		1	
L4S JS86-387-BLO		2		L12S JS86-354-BLO		<1	
L4S JS86-388-1E		1		L12S JS86-355-1E		2	
L4S JS86-389-2E		<1		L12S JS86-356-2E		7	
L4S JS86-390-3E		<2	7.00	L12S JS86-357-3E		3	
L4S JS86-391-4E		1		L12S JS86-359-4E		4	
L4S JS86-392-5E		1		L12S JS86-359-5E		2	
L4S JS86-393-6E		<1		L12S JS86-360-6E		2	
L4S JS86-394-7E		<1		L12S JS86-361-7E		4	
L4S JS86-395-8E		<1		L12S JS86-362-8E		2	
L4S JS86-396-9E		1		L12S JS86-363-9E		2	
L4S JS86-397-10E		2		L12S JS86-364-10E		2	
L4S JS86-398-11E		2		L12S JS86-365-11E		1	
L4S JS86-399-12E		1		L12S JS86-366-12E		3	
L4S JS86-400-13E		3		L20S JS86-534-1W		3	
L4S JS86-401-14E		1		L20S JS86-533-1W		2	
L4S JS86-402-15E		2		L20S JS86-532-1W		2	
L4S JS86-403-16E		1		L20S JS86-531-1W		2	
L4S JS86-404-16+8SE		1		L20S JS86-530-1W		1	
L8S JS86-384-3W		1		L20S JS86-529-1W		2	
L8S JS86-385-2W		2		L20S JS86-528-1W		2	
L9S JS86-382-1W		9		L20S JS86-527-1W		2	
L9S JS86-381-BLO		4		L20S JS86-526-1W		2	
L9S JS86-381-1E		2		L20S JS86-525-1W		2	
L8S JS86-379-2E		2		L20S JS86-524-9W		2	
L8S JS86-378-3E		2		L20S JS86-523-8W		2	
L8S JS86-377-4E		3		L20S JS86-521-7W		2	
L8S JS86-376-5E		3		L20S JS86-521-1W		2	
L8S JS86-375-6E		1		L20S JS86-520-5W		2	
L8S JS86-374-7E		1		L20S JS86-519-4W		2	
L8S JS86-373-6E		<1		L20S JS86-518-3W		2	
L8S JS86-372-9E		2		L20S JS86-517-2W		2	
L8S JS86-371-10E		<1		L20S JS86-516-1W		2	
L8S JS86-370-11E		<1		L20S JS86-515-9W		2	
L8S JS86-369-12E		<1		L24S JS86-464-4EW		2	
L8S JS86-368-13E		<1		L24S JS86-463-4EW		2	
L8S JS86-367-14E		2		L24S JS86-463-4SW		2	
L12S JS86-350-4W		2		L24S JS86-462-4EW		2	
L12S JS86-351-3W		1		L24S JS86-461-4IW		2	

REPORT: 016-5597

PROJECT: NONE

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g
L245 JS86-460-40W		4		L245 JS86-327-BLO		3	
L245 JS86-459-39W		4		L245 JS86-328-1E		5	
L245 JS86-458-38W		4		L245 JS86-329-2E		3	
L245 JS86-457-37W		4		L245 JS86-330-3E		5	
L245 JS86-456-36W		4		L245 JS86-331-4E		3	
L245 JS86-455-35W		4		L245 JS86-332-5E		1	
L245 JS86-454-34W		3		L245 JS86-333-6E		3	
L245 JS86-453-33W		3		L245 JS86-334-7E		2	
L245 JS86-452-32W		3		L245 JS86-335-8E		1	
L245 JS86-451-31W		2		L245 JS86-336-9E		7	
L245 JS86-450-30W		4		L245 JS86-337-10E		7	
L245 JS86-449-29W		2		L245 JS86-338-11E		6	
L245 JS86-448-28W		4		L245 JS86-339-12E		1	
L245 JS86-447-27W		2		L245 JS86-340-13E		2	
L245 JS86-446-26W		15		L245 JS86-341-14E		2	
L245 JS86-445-25W		2		L245 JS86-342-15E		<1	
L245 JS86-444-24W		9		L245 JS86-343-16E		1	
L245 JS86-443-23W		4		L245 JS86-344-17E		5	
L245 JS86-442-22W		3		L245 JS86-345-18E		2	
L245 JS86-441-21W		2		L245 JS86-346-19E		4	
L245 JS86-367-20W		6		L245 JS86-347-20E		5	
L245 JS86-308-19W		2		L245 JS86-348-21E		3	
L245 JS86-309-18W		3		L245 JS86-349-22E		1	
L245 JS86-310-17W		2		L245 JS86-357-40W		4	
L245 JS86-311-16W		3		L245 JS86-368-39W		2	
L245 JS86-312-15W		1		L245 JS86-369-38W		3	
L245 JS86-313-14W		5		L245 JS86-370-37W		2	5.40
L245 JS86-314-13W		2		L245 JS86-371-36W		1	
L245 JS86-315-12W		3		L245 JS86-372-35W		1	
L245 JS86-316-11W		9		L245 JS86-373-34W		2	
L245 JS86-317-10W		1		L245 JS86-374-33W		3	5.12
L245 JS86-318-9W		2		L245 JS86-375-32W		1	
L245 JS86-319-8W		1		L245 JS86-376-31W		1	
L245 JS86-320-7W		1		L245 JS86-377-30W		1	
L245 JS86-321-6W		1		L245 JS86-378-29W		2	
L245 JS86-322-5W		2		L245 JS86-379-28W		1	
L245 JS86-323-4W		3		L245 JS86-380-27W		1	
L245 JS86-324-3W		2	5.30	L245 JS86-381-26W		2	
L245 JS86-325-2W		5		L245 JS86-382-25W		1	
L245 JS86-326-1W		5		L245 JS86-383-24W		1	7.01

REPORT: 016-5397

PROJECT: NONE

PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt g#	SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt g#
L28S JS86-284-23W		<1		L32S JS86-249-16W		1	
L28S JS86-285-22W		2		L32S JS86-248-15W		1	
L28S JS86-286-21W		5		L32S JS86-247-14W		<1	
L28S JS86-287-20W		3		L32S JS86-246-13W		2	
L28S JS86-288-19W		1		L32S JS86-245-12W		1	
L28S JS86-289-18W		2		L32S JS86-244-11W		<1	
L28S JS86-290-17W		2		L32S JS86-243-10W		1	
L28S JS86-291-16W		1		L32S JS86-242-9W		1	
L28S JS86-292-15W		1		L32S JS86-241-8W		<1	
L28S JS86-293-14W		6		L32S JS86-240-7W		1	
L28S JS86-294-13W		6		L32S JS86-239-6W		2	
L28S JS86-295-12W		2		L32S JS86-238-5W		1	
L28S JS86-296-11W		3		L32S JS86-237-4W		1	
L28S JS86-297-10W		<1		L32S JS86-236-3W		1	
L28S JS86-298-9W		<1		L32S JS86-235-2W		52	
L28S JS86-299-8W		<1		L32S JS86-234-1W		1	
L28S JS86-300-7W		1		L32S JS86-233-BLO		<1	
L28S JS86-301-6W		<1		L32S JS86-111-9E		3	
L28S JS86-302-5W		<1		L32S JS86-110-9E		<1	
L28S JS86-303-4W		1		L32S JS86-109-10E		<1	
L28S JS86-304-3W		1		L32S JS86-108-11E		<1	
L28S JS86-305-2W		1		L32S JS86-107-12E		<1	
L28S JS86-306-1W		<1		L32S JS86-106-13E		<1	
L28S JS86-306-25W		1		L32S JS86-105-14E		<1	
L28S JS86-305-30W		5		L32S JS86-104-15E		<1	
L28S JS86-264-31W		3		L32S JS86-103-16E		1	
L28S JS86-263-30W		3		L32S JS86-102-17E		1	
L28S JS86-262-29W		2	0.71	L32S JS86-101-18E		1	
L28S JS86-261-28W		5		L32S JS86-100-19E		1	
L28S JS86-260-27W		2		L32S JS86-473-35W		1	
L28S JS86-259-26W		1		L32S JS86-472-34W		1	
L28S JS86-258-25W		2		L32S JS86-471-33W		1	
L28S JS86-257-24W		1	0.71	L32S JS86-470-32W		1	
L28S JS86-256-23W		2		L32S JS86-469-31W		1	
L28S JS86-255-22W		2	0.71	L32S JS86-468-30W		1	
L28S JS86-254-21W		1		L32S JS86-473-29W		1	
L28S JS86-253-20W		2		L32S JS86-472-28W		1	
L28S JS86-252-19W		1		L32S JS86-471-27W		1	
L28S JS86-251-18W		1		L32S JS86-470-26W		1	
L28S JS86-250-17W		<1		L32S JS86-469-25W		1	

Bondar-Clegg & Company Ltd.
5420 Cangate Rd.
Ottawa, Ontario
Canada K1B 5S5
Phone: (613) 749-2230
Telex: 053-1233



Geochemical
Lab Report

REPORT: 016-5597

PROJECT: NONE

PAGE 4

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	TestWt g
L36S JS86-468-24W		1					
L36S JS86-467-23W							
L36S JS86-466-22W		9					
L36S JS86-465-21W		7					
L36S JS86-86-5E		3					
L36S JS86-87-6E		1					
L36S JS86-88-7E		2					
L36S JS86-89-8E		1					
L36S JS86-90-9E		<1					
L36S JS86-91-10E		<1					
L36S JS86-92-11E		11					
L36S JS86-93-12E		<1					
L36S JS86-94-13E		<1					
L36S JS86-95-14E		<1					
L36S JS86-96-15E		1					
L36S JS86-97-16E		1					
L36S JS86-98-17E		<1					
L36S JS86-99-18E		1					

Bondar-Clegg & Company Ltd.
5420 Carling Rd.,
Ottawa, Ontario,
Canada K1Z 5S9
Phone: (613) 749-2220
Tele: 053-1233



Geochemical
Lab Report

REPORT: 016-5455 (COMPLETE)

REFERENCE INFO:

CLIENT: OROFINO RESOURCES LTD.
PROJECT: NONE

SUBMITTED BY: ORGEC INC
DATE PRINTED: 16-DEC-86

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	85	1 PPM	ACQUA REGIA	FireAssay/DC Plasma
SAMPLE TYPES	NUMBER	SIZE FRACTIONS		NUMBER	SAMPLE PREPARATIONS NUMBER
ORGANIC OR HUMUS	85	-10		95	SIEVE -10 85

REPORT COPIES TO: G. HARPER

INVOICE TO: G. HARPER

(P)

HUMUS FIRE ASSAY/D.C. PLASMA

REPORT: 016-5455

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT	AU	SAMPLE NUMBER	ELEMENT	AU
	UNITS	PPB		UNITS	PPB
JS 86-61-L36S-30W	24		JS 86-45-L40S-5W	1	
JS 86-62-L36S-19W	7		JS 86-44-L40S-4W	41	
JS 86-63-L36S-18W	3		JS 86-43-L40S-3W	3	
JS 86-64-L36S-17W	5		JS 86-42-L40S-2W	3	
JS 86-65-L36S-16W	2		JS 86-41-L40S-1W	53	
JS 86-66-L36S-15W	1		JS 86-40-L40S-0W	19	
JS 86-67-L36S-14W	1		JS 86-39-L40S-1E	12	
JS 86-68-L36S-13W	6		JS 86-38-L40S-2E	15	
JS 86-69-L36S-12W	1		JS 86-37-L40S-3E	7	
JS 86-70-L36S-11W	1		JS 86-36-L40S-4E	5	
JS 86-71-L36S-10W	1		JS 86-35-L40S-5E	3	
JS 86-72-L36S-9W	1		JS 86-34-L40S-6E	4	
JS 86-73-L36S-8W	7		JS 86-33-L40S	3	
JS 86-74-L36S-7W	4		JS 86-32-L40S-8E	4	
JS 86-75-L36S-6W	5		JS 86-31-L40S-9E	2	
JS 86-76-L36S-5W	2		JS 86-30-L40S-10E	1	
JS 86-77-L36S-4W	1		JS 86-29-L40S-11E	4	
JS 86-78-L36S-3W	3		JS 86-28-L40S-12E	3	
JS 86-79-L36S-2W	4		JS 86-27-L40S-13E	1	
JS 86-83-L36S-2W	1		JS 86-26-L40S-14E	1	
JS 86-80-L36S-1W	1		JS 86-25-L40S-15E	1	
JS 86-81-L36S-0W	1		JS 86-24-L40S-16E	1	
JS 86-82-L36S-1E	1		JS 86-23-L40S-17E	1	
JS 86-84-L36S-3E	1		JS 86-22-L40S-3W	2	
JS 86-85-L36S-4E	1		JS 86-21-L40S-5W	3	
JS 86-60-L40S-0L00W	1		JS 86-20-L40S-4W	1	
JS 86-59-L40S-19W	1		JS 86-19-L40S-2W	22	
JS 86-58-L40S-18W	1		JS 86-18-L40S-1W	11	
JS 86-57-L40S-17W	1		JS 86-17-L40S-0W	1	
JS 86-56-L40S-16W	1		JS 86-16-L40S-10W	11	
JS 86-55-L40S-15W	1		JS 86-15-L40S-9W	1	
JS 86-54-L40S-14W	1		JS 86-14-L40S-8W	1	
JS 86-53-L40S-13W	1		JS 86-13-L40S-7W	1	
JS 86-52-L40S-12W	1		JS 86-12-L40S-6W	1	
JS 86-51-L40S-11W	1		JS 86-11-L40S-5W	1	
JS 86-50-L40S-10W	1		JS 86-10-L40S-4W	1	
JS 86-49-L40S-9W	1		JS 86-9-L40S-3W	1	
JS 86-48-L40S-8W	1		JS 86-8-L40S-7W	1	
JS 86-47-L40S-7W	1		JS 86-7-L40S-6W	1	
JS 86-46-L40S-6W	1		JS 86-6-L40S-5W	1	

Bondar-Clegg & Company Ltd.
5420 Canoeck Rd.
Ottawa, Ontario
Canada K1G 4S5
Phone: (613) 749-2220
Tele: 053-3233



Geochemical
Lab Report

REPORT: 016-5455

PROJECT: NONE

PAGE 3

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	SAMPLE NUMBER	ELEMENT UNITS	AU PPB
JS 86-18-L44S-11E		1			
JS 86-19-L44S-12E		<1			
JS 86-20-L44S-13E		<1			
JS 86-21-L44S-14E		<1			
JS 86-22-L44S-15E		<1			

Bondar-Clegg & Company Ltd.
5420 Carling Rd.
Ottawa, Ontario
Canada K1Z 1K5
Phone (613) 749-2220
Telec 053-1233



Geochemical
Lab Report

REPORT: 016-5900 (COMPLETE)

REFERENCE SHEET

CLIENT: CHUFIND RESOURCES LTD.
PROJECT: NONE

SUBMITTED BY: DRIPPING RES.
DATE PRINTED: 14-JAN-87

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au Gold	300	1 PPB	AQUA REGIA	FireAssay/ICP Plasma
2	TestWt Au Test Weight	300	0.01 gm		
SAMPLE TYPES	NUMBER	SIEVE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
ORGANIC OR HUMUS	300	-10	300	SIEVE -10	300

REMARKS: < MEANS LESS THAN

REPORT COPIES TO: G. HARPER

INVOICE TO: G. HARPER

AC

REPORT# 016-5900

SAMPLE NUMBER	ELEMENT	UNITS	PPB	TESTWT	PPM	TESTWT	PPB	TESTWT
JS86-535-BLD-1N		2						
JS86-536-BLD-2N		<1						
JS86-537-BLD-3N		10						
JS86-538-BLD-4N		<1						
JS86-539-L4N-1W		<1						
JS86-540-L4N-2W		3						
JS86-541-L4N-3W		<1						
JS86-542-L4N-4W		1						
JS86-543-L4N-5W		<1						
JS86-544-L4N-6W		3						
JS86-545-L4N-7W		34						
JS86-546-L4N-8W		5						
JS86-547-L4N-9W		<1						
JS86-548-L4N-10W		<1						
JS86-549-L4N-11W		<1						
JS86-550-L4N-12W		27	6.00					
JS86-551-L4N-13W		<2	6.00					
JS86-552-L4N-14W		<1						
JS86-553-L4N-15W		<1						
JS86-554-L4N-16W		<2	6.00					
JS86-555-L4N-17W		<1						
JS86-556-L4N-18W		<1						
JS86-557-L40S-21W		1						
JS86-558-L40S-22W		1						
JS86-559-L40S-23W		1						
JS86-560-L40S-24W		2	0.00					
JS86-561-L40S-25W		1						
JS86-562-L40S-26W		2						
JS86-563-L40S-27W		2						
JS86-564-L40S-28W		2						
JS86-565-L40S-29W		2						
JS86-566-L40S-30W		1						
JS86-567-L40S-31W		1						
JS86-568-L40S-32W		2						
JS86-569-L40S-33W		2						
JS86-570-L40S-34W		1						
JS86-571-L40S-35W		2						
JS86-572-L40S-36W		1						
JS86-573-L40S-37W		1						
JS86-574-L32S-42W		1						
JS86-575-L32S-41W		2						
JS86-576-L32S-40W		1						
JS86-577-L32S-39W		2						
JS86-578-L32S-38W		2						
JS86-579-L32S-37W		1						
JS86-580-L32S-36W		1						
JS86-581-L32S-35W		2						
JS86-582-L32S-30		1						
JS86-583-L32S-1E		3						
JS86-584-L32S-2E		1						
JS86-585-L32S-3E		2						
JS86-586-L32S-4E		1						
JS86-587-L32S-5E		2						
JS86-588-L32S-6E		2						
JS86-589-L32S-7E		2						
JS86-590-BL20-2W		12						
JS86-591-BL20-3W		2						
JS86-591-BL20-5W		11						
JS86-594-BL20-4W		15						
JS86-595-BL20-6		2						
JS86-596-BL20-8		5						
JS86-597-BL20-14		1						
JS86-598-BL20-16		2						
JS86-599-BL20-18		1						
JS86-600-BL20-20		1						
JS86-601-BL20-22		2						
JS86-602-BL20-24		1						
JS86-603-BL20-26		1						
JS86-604-BL20-28		1						
JS86-605-BL20-30		1						
JS86-606-BL20-32		1						
JS86-607-BL20-34		1						
JS86-608-BL20-36		1						
JS86-609-BL20-38		1						
JS86-610-BL20-40		1						
JS86-611-BL20-42		1						
JS86-612-BL20-44		1						
JS86-613-BL20-46		1						
JS86-614-BL20-48		1						
JS86-615-BL20-50		1						
JS86-616-BL20-52		1						
JS86-617-BL20-54		1						
JS86-618-BL20-56		1						
JS86-619-BL20-58		1						
JS86-620-BL20-60		1						
JS86-621-BL20-62		1						
JS86-622-BL20-64		1						
JS86-623-BL20-66		1						
JS86-624-BL20-68		1						
JS86-625-BL20-70		1						
JS86-626-BL20-72		1						
JS86-627-BL20-74		1						
JS86-628-BL20-76		1						
JS86-629-BL20-78		1						
JS86-630-BL20-80		1						
JS86-631-BL20-82		1						
JS86-632-BL20-84		1						
JS86-633-BL20-86		1						
JS86-634-BL20-88		1						
JS86-635-BL20-90		1						
JS86-636-BL20-92		1						
JS86-637-BL20-94		1						
JS86-638-BL20-96		1						
JS86-639-BL20-98		1						
JS86-640-BL20-100		1						
JS86-641-BL20-102		1						
JS86-642-BL20-104		1						
JS86-643-BL20-106		1						
JS86-644-BL20-108		1						
JS86-645-BL20-110		1						
JS86-646-BL20-112		1						
JS86-647-BL20-114		1						
JS86-648-BL20-116		1						
JS86-649-BL20-118		1						
JS86-650-BL20-120		1						
JS86-651-BL20-122		1						
JS86-652-BL20-124		1						
JS86-653-BL20-126		1						
JS86-654-BL20-128		1						
JS86-655-BL20-130		1						
JS86-656-BL20-132		1						
JS86-657-BL20-134		1						
JS86-658-BL20-136		1						
JS86-659-BL20-138		1						
JS86-660-BL20-140		1						
JS86-661-BL20-142		1						
JS86-662-BL20-144		1						
JS86-663-BL20-146		1						
JS86-664-BL20-148		1						
JS86-665-BL20-150		1						
JS86-666-BL20-152		1						
JS86-667-BL20-154		1						
JS86-668-BL20-156		1						
JS86-669-BL20-158		1						
JS86-670-BL20-160		1						
JS86-671-BL20-162		1						
JS86-672-BL20-164		1						
JS86-673-BL20-166		1						
JS86-674-BL20-168		1						
JS86-675-BL20-170		1						
JS86-676-BL20-172		1						
JS86-677-BL20-174		1						
JS86-678-BL20-176		1						
JS86-679-BL20-178		1						
JS86-680-BL20-180		1						
JS86-681-BL20-182		1						
JS86-682-BL20-184		1						
JS86-683-BL20-186		1						
JS86-684-BL20-188		1						
JS86-685-BL20-190		1						
JS86-686-BL20-192		1						
JS86-687-BL20-194		1						
JS86-688-BL20-196		1						
JS86-689-BL20-198		1						
JS86-690-BL20-200		1						
JS86-691-BL20-202		1						
JS86-692-BL20-204		1						
JS86-693-BL20-206		1						
JS86-694-BL20-208		1						
JS86-695-BL20-210		1						
JS86-696-BL20-212		1						
JS86-697-BL20-214		1						
JS86-698-BL20-216		1						
JS86-699-BL20-218		1						
JS86-700-BL20-220		1						
JS86-701-BL20-222		1						
JS86-702-BL20-224		1						
JS86-703-BL20-226		1						
JS86-704-BL20-228		1						
JS86-705-BL20-230		1						
JS86-706-BL20-232		1						
JS86-707-BL20-234		1						
JS86-708-BL20-236		1						
JS86-709-BL20-238		1						
JS86-710-BL20-240		1						
JS86-711-BL20-242		1						
JS86-712-BL20-244		1						
JS86-713-BL20-246		1						
JS86-714-BL20-248		1						
JS86-715-BL20-250		1						
JS86-716-BL20-252		1						
JS86-717-BL20-254		1						
JS86-718-BL20-256		1					</td	

Bondar-Clegg & Company Ltd.
5420长安
Ottawa, C
Canada K1J 5C5
Phone (613) 749-2220
Telec 053-3233



Geochemical
Lab Report

REPORT: 016-5900

PROJECT: VENE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	Testwt g	SAMPLE NUMBER	ELEMENT UNITS	AU PPB	Testwt g
JS86-615-L16S-40W		<1		JS86-655-L16S-3E		5	
JS86-616-L16S-39W		4		JS86-656-L16S-3W		5	
JS86-617-L16S-38W		1		JS86-657-L16S-1W		2	
JS86-618-L16S-37W		7		JS86-658-L16S-BLO		2	
JS86-619-L16S-36W		4		JS86-659-L16S-1E		<1	
JS86-620-L16S-35W		9		JS86-660-L16S-2E		1	
JS86-621-L16S-34W		6		JS86-661-L16S-3E		10	
JS86-622-L16S-33W		8		JS86-662-L16S-4E		3	
JS86-623-L16S-32W		5		JS86-663-L16S-5E		5	
JS86-624-L16S-31W		3		JS86-664-L16S-6E		6	
JS86-625-L16S-30W		3		JS86-665-L16S-7E		4	
JS86-626-L16S-29W		5		JS86-666-L16S-8E		1	
JS86-627-L16S-28W		5		JS86-667-L16S-9E		2	
JS86-628-L16S-27W		4		JS86-668-L16S-1CE		3	
JS86-629-L16S-26W		3		JS86-669-L16S-10+60E		<1	
JS86-630-L16S-25W		3		JS86-670-L16S-1E		3	
JS86-631-L16S-24W		5		JS86-671-L20S-2E		2	
JS86-632-L16S-23W		3		JS86-672-L20S-3E		2	
JS86-633-L16S-22W		5		JS86-673-L20S-4E		1	
JS86-634-L16S-21W		1		JS86-674-L20S-5E		3	
JS86-635-L16S-20W-BLO		10	6.00	JS86-675-L20S-6E		<1	
JS86-636-BL20-17S		3		JS86-676-L20S-7E		4	6.00
JS86-637-BL20-18S		3		JS86-677-L20S-8E		<1	
JS86-638-BL20-19S		2		JS86-678-L20S-9E		<1	
JS86-639-L16S-19W		4		JS86-679-L20S-10E		<1	
JS86-640-L16S-18W		1		JS86-680-L16S-11E		<1	
JS86-641-L16S-17W		16	6.00	JS86-681-L16S-12E		<1	
JS86-641-L16S-16W		19	7.00	JS86-682-L16S-13E		<1	
JS86-643-L16S-15W		6		JS86-683-L16S-14E		<1	
JS86-644-L16S-14W		5		JS86-684-L16S-15E		<1	
JS86-645-L16S-13W		10		JS86-685-L16S-16E		<1	
JS86-646-L16S-12W		1		JS86-686-L16S-17E		<1	
JS86-647-L16S-11W		1		JS86-687-L16S-18E		<1	
JS86-648-L16S-10W		1		JS86-688-L16S-19E		<1	
JS86-649-L16S-9W		2		JS86-689-L16S-20E		<1	
JS86-650-L16S-8W		1		JS86-690-L16S-21E		<1	
JS86-651-L16S-7W		3		JS86-691-L16S-22E		<1	
JS86-652-L16S-6W		1		JS86-693-L16S-23E		<1	
JS86-653-L16S-5W		10		JS86-694-L16S-24E		<1	
JS86-654-L16S-4W		2		JS86-695-L16S-25E		<1	

REPORT: JIG-5900

PROJECT: NONE

PAGE 5

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt g	SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt g
JS86-695-L28N-1E		3		JS86-735-L4S-17W		<1	
JS86-696-L28N-2E		3		JS86-736-L4S-15W		14	
JS86-697-L28N-3E		2		JS86-737-L4S-15W		<1	
JS86-698-L28N-4E		2	9.00	JS86-738-L4S-14W		<1	
JS86-699-L28N-5E		1		JS86-739-L4S-13W		<1	
JS86-700-L32N-5+7E		1		JS86-740-L4S-12W		<1	
JS86-701-L32N-7+7E		1		JS86-741-L0-13W		<1	
JS86-702-L32N-7E		2	9.00	JS86-742-L0-14W		<1	
JS86-703-L32N-6E		<1		JS86-743-L0-15W		3	4.00
JS86-704-L32N-5E		<1		JS86-744-L0-16W		<1	
JS86-705-L32N-4E		1		JS86-745-L0-17W		<2	6.00
JS86-706-L32N-3E		<1		JS86-746-L0-18W		<1	
JS86-707-L32N-2E		<1		JS86-747-L0-19W		<1	
JS86-708-L32N-1E		1		JS86-748-L0-21W		<2	9.00
JS86-709-L32N-0		<2	8.00	JS86-749-L0-22W		1	
JS86-710-L32N-1W		1		JS86-750-L0-23W		20	
JS86-711-L32N-2W		3	9.00	JS86-751-L0-24W		4	8.00
JS86-712-L32N-3W		1		JS86-752-L0-25W		<1	
JS86-713-L32N-4W		2	9.00	JS86-753-L0-26W		<1	
JS86-714-L32N-5W		<1		JS86-754-L0-27W		<1	
JS86-715-L32N-6W		2	5.00	JS86-755-L0-28W		3	
JS86-716-P110W-23W		2		JS86-756-L0-29W		<1	
JS86-717-L4S-36W		2		JS86-757-L0-30W		<1	
JS86-718-L4S-25W		<1		JS86-758-L0-31W		<1	
JS86-719-L4S-34W		2		JS86-759-L0-32W		3	
JS86-720-L4S-33W		2		JS86-760-L0-33W		<1	
JS86-721-L4S-32W		1		JS86-761-L0-34W		<1	
JS86-722-L4S-31W		2		JS86-762-L0-35W		<1	
JS86-723-L4S-30W		2	5.00	JS86-763-L0-36W		<1	
JS86-724-L4S-29W		<1		JS86-764-L0-37W		<1	
JS86-725-L4S-28W		2		JS86-765-L0-38W		<1	
JS86-726-L4S-27W		2		JS86-766-L0-39W		<1	
JS86-727-L4S-26W		2		JS86-767-L0-40W		<1	
JS86-728-L4S-25W		2		JS86-768-L0-41W		<1	
JS86-729-L4S-24W		2		JS86-769-L0-42W		<1	
JS86-730-L4S-23W		2		JS86-770-L4S-43W		<1	
JS86-731-L4S-22W		3	4.00	JS86-771-L4S-44W		<1	1.00
JS86-732-L4S-31W		1		JS86-772-L4S-45W		<1	
JS86-733-L4S-19W		<1		JS86-773-L4S-46W		<1	
JS86-734-L4S-18W		2		JS86-774-L4S-47W		<1	

REPORT: 016-5900

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt gm	SAMPLE NUMBER	ELEMENT UNITS	AU PPB	TestWt gm
JS86-774-L20S-41W		<1		JS86-813-L40N-17W		7	8.00
JS86-775-L20S-40W		<1		JS86-814-L40N-16W		<2	
JS86-776-L20S-39W		<3	4.00	JS86-815-L40N-15W		<2	7.00
JS86-777-L20S-38W		<2	8.00	JS86-816-L40N-14W		<2	9.00
JS86-778-L20S-37W		<3	4.00	JS86-817-BL10W-41N		1	
JS86-779-L20S-36W		<2	7.00	JS86-818-BL10W-42N		<1	
JS86-780-L20S-35W		<2	9.00	JS86-819-BL10W-43N		<1	
JS86-781-L20S-34W		<2	9.00	JS86-820-BL10W-44N		3	
JS86-782-L20S-33W		22	5.00	JS86-821-BL10W-45N		1	
JS86-783-L20S-32W		<1		JS86-822-L4N-25N		<1	
JS86-784-L20S-31W		<2	6.00	JS86-823-L4N-24N		<1	
JS86-785-L20S-30W		<2	9.00	JS86-824-L4N-23N		3	8.00
JS86-786-L20S-29W		<2	6.00	JS86-825-L4N-22N		1	
JS86-787-L20S-28W		<1		JS86-826-L4N-21N		<1	
JS86-788-L20S-27W		4	4.00	JS86-827-L4N-20N		<1	
JS86-789-L20S-26W		<1		JS86-828-L12N-9N		<1	
JS86-790-L20S-25W		1		JS86-829-L12N-8N		<1	
JS86-791-L20S-24W		<3	4.00	JS86-830-L12N-7N		<1	
JS86-792-L20S-23W		1		JS86-831-L12N-6N		<1	
JS86-793-L20S-22W		2		JS86-832-L12N-5N		<1	
JS86-794-L20S-21W		<2	2.00				
JS86-795-L20S-20W		2					
JS86-796-BL10W-25N		<1					
JS86-797-BL10W-24N		1					
JS86-798-BL10W-23N		<2	3.00				
JS86-800-BL10W-22N		<3	7.00				
JS86-801-BL10W-23N		<2	7.00				
JS86-802-BL10W-31N		<1					
JS86-803-BL10W-30N		3	8.00				
JS86-804-BL10W-34N		<2	7.00				
JS86-805-BL10W-21N		1	2.00				
JS86-806-BL10W-20N		1	5.00				
JS86-807-BL10W-19N		1					
JS86-808-BL10W-18N		3					
JS86-809-BL10W-17N		<1					
JS86-810-BL10W-16N		1					
JS86-811-BL10W-15N		<1					
JS86-812-BL10W-14N		2					
JS86-813-BL10W-13N		3					

Bondar-Clegg & Company Ltd.
5420 Canoeck Rd.
Ottawa, Ontario
Canada K2B 5S5
Phone: (613) 749-2230
Tele: 053-1233



Geochemical
Lab Report

REPORT: 012-1905 (COMPLETE)

REFERENCE INFO:

CLIENT: CROFTING RESOURCES LTD.
PROJECT: NONE

PRINTED BY: CROFTING
DATE PRINTED: 14-JAN-87

ORDER	ELEMENT	NUMBER OF ANALYSIS	LOWE'S DESCRIPTION	EXTRACTION	METHOD
1	Au	148	100%	ACIDIC REFLX	FireAssay/DC Plasmas

SAMPLE TYPES	NUMBER	SIEVE PREPARATION	NUMBER	SAMPLE PREPARATIONS	VOLUME
ORGANIC OR HUMUS	148	-10	148	SIEVE -10	148

MANUFACTURE: BON-A-C. MANUFACTURED:

A handwritten signature, possibly belonging to a lab technician or supervisor, is located in the bottom right corner of the page.



REPORT: 017-0005

PROJECT: NONE

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	AU PPB	SAMPLE NUMBER	ELEMENT UNITS	AU PPB
+ JS-86-925 L24N-5E	g/t	0.1	JS-86-936 L28N-13W	g/t	0.1
+ JS-86-926 L24N-4E	g/t	0.1	JS-86-937 L24N-12W	g/t	0.2
+ JS-86-927 L24N-3E	g/t	0.1	JS-86-938 L28N-11W	g/t	0.2
+ JS-86-928 L24N-2E	g/t	0.2	JS-86-939 B112W-5N	g/t	0.1
+ JS-86-929 L24N-1E	g/t	0.1	JS-86-940 B112W-5N	g/t	0.3
+ JS-86-930 L24N-0	g/t	0.1	+ JS-86-971 B112W-7N	g/t	0.1
+ JS-86-931 L24N-1W	g/t	0.1	+ JS-86-972 B112W-8N	g/t	0.2
+ JS-86-932 L24N-2W	g/t	0.2	+ JS-86-973 L12S-4NW	g/t	0.2
+ JS-86-933 L24N-3W	g/t	0.1	+ JS-86-974 L12S-4NW	g/t	0.2
+ JS-86-934 L24N-4W	g/t	0.1	+ JS-86-975 L12S-3NW	g/t	0.2
+ JS-86-935 L24N-5W	g/t	0.1	+ JS-86-976 L12S-3NW	g/t	0.2
+ JS-86-936 L24N-5E	g/t	0.2	+ JS-86-977 L12S-3NW	g/t	0.2
+ JS-86-937 L24N-7W	g/t	0.2	+ JS-86-978 L12S-3NW	g/t	0.3
+ JS-86-938 L24N-6W	g/t	0.2	+ JS-86-979 L12S-3NW	g/t	0.4
+ JS-86-939 L24N-6W	g/t	0.1	+ JS-86-980 L12S-3NW	g/t	0.2
+ JS-86-940 L12S-11W	g/t	0.0	+ JS-86-981 L12S-3NW	g/t	0.3
+ JS-86-941 L12S-10W	g/t	0.0	+ JS-86-982 L12S-3NW	g/t	0.2
+ JS-86-942 L12S-11W	g/t	0.0	+ JS-86-983 L12S-3NW	g/t	0.1
+ JS-86-943 L12S-10W	g/t	0.0	+ JS-86-984 L12S-3NW	g/t	0.2
+ JS-86-944 L12S-10W	g/t	0.0	+ JS-86-985 L12S-3NW	g/t	0.4
+ JS-86-945 L12S-10W	g/t	0.0	+ JS-86-986 L12S-3NW	g/t	0.3
+ JS-86-946 L12S-9W	g/t	0.0	+ JS-86-987 L12S-3NW	g/t	0.2
+ JS-86-947 L12S-10W	g/t	0.0	+ JS-86-988 L12S-3NW	g/t	0.1
+ JS-86-948 L12S-10W	g/t	0.0	+ JS-86-989 L12S-3NW	g/t	0.1
+ JS-86-949 L12S-10W	g/t	0.0	+ JS-86-990 L12S-3NW	g/t	0.1
+ JS-86-950 L24N-10W	g/t	0.0	+ JS-86-991 L12S-3NW	g/t	0.0
+ JS-86-951 L24N-9W	g/t	0.0	+ JS-86-992 L12S-3NW	g/t	0.0
+ JS-86-952 L24N-10W	g/t	0.0	+ JS-86-993 L12S-3NW	g/t	0.0
+ JS-86-953 L24N-10W	g/t	0.0	+ JS-86-994 L12S-3NW	g/t	0.0
+ JS-86-954 L24N-10W	g/t	0.0	+ JS-86-995 L12S-3NW	g/t	0.0
+ JS-86-955 L24N-10W	g/t	0.0	+ JS-86-996 L12S-3NW	g/t	0.0
+ JS-86-956 L24N-10W	g/t	0.0	+ JS-86-997 L12S-3NW	g/t	0.0
+ JS-86-957 L24N-10W	g/t	0.0	+ JS-86-998 L12S-3NW	g/t	0.0
+ JS-86-958 L24N-10W	g/t	0.0	+ JS-86-999 L12S-3NW	g/t	0.0
+ JS-86-960 L24N-10W	g/t	0.0	+ JS-86-1000 L12S-3NW	g/t	0.0

REPORT: 017-0005

PROJECT: 1001

PAGE: 3

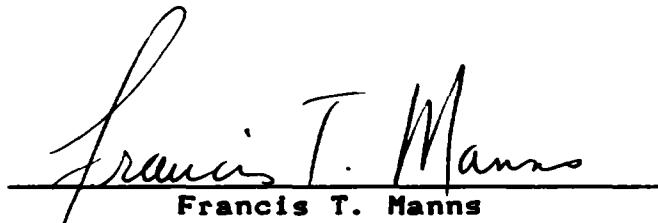
SAMPLE NUMBER	ELEMENT UNITS	AU PPB	SAMPLE NUMBER	ELEMENT UNITS	AU PPB
JS-86-1006 L8S-1SW	2		JS-86-1040 L8S-1SW	7	
JS-96-1007 L8S-1SW	<2		JS-86-1047 L8N-C-SW	3	
JS-86-1008 L8S-1SW	2		JS-86-1048 L8N-C-SW	3	
JS-96-1009 L8S-1SW	<1		JS-96-1049 L8N-C-SW	2	
JS-86-1010 L8S-2SW	<1		JS-86-1050 L8S-2SW	2	
JS-96-1011 L8S-2SW	4		JS-86-1051 L8S-2SW	1	
JS-86-1012 L8S-2SW	1		JS-86-1052 L8S-2SW	1	
JS-86-1013 L8S-24W	2		JS-86-1053 L8S-3LO	4	
JS-86-1014 L8S-25W	2		JS-96-1054 L8S-3SW	1	
JS-86-1015 L8S-26W	<1		JS-96-1055 L8S-3SW	1	
JS-86-1016 L8S-27W	2		JS-86-1056 L8S-3SW	4	
JS-96-1017 L8S-3SW	1		JS-86-1057 L8S-3SW	4	
JS-86-1018 L8S-3SW	<1		JS-86-1058 L8S-3SW	4	
JS-86-1019 L8S-36W	2		JS-86-1059 L8S-3SW	1	
JS-86-1020 L8S-31W	<1		JS-86-1060 L8S-3SW	3	
JS-96-1021 L8S-32W	<1		JS-86-1061 L8S-3SW	1	
JS-96-1022 L8S-33W	1		JS-96-1062 L8S-3SW	4	
JS-96-1023 L8S-34W	<2		JS-96-1063 L8S-3SW	7	
JS-96-1024 L8S-35W	<1		JS-96-1064 L8S-3SW	5	
JS-96-1025 L8S-36W	<1		JS-96-1065 L8S-3SW	5	
JS-86-1026 L8S-37W	2		JS-96-1066 L8S-3SW	2	
JS-96-1027 L8S-38W	1		JS-96-1067 L8S-3SW	2	
JS-96-1028 L8S-39W	2		JS-96-1068 L8S-3SW	2	
JS-96-1029 L8S-40W	<1		JS-96-1069 L8S-3SW	2	
JS-96-1030 L8S-41W	1		JS-96-1070 L8S-3SW	1	
JS-96-1031 L8N-1SW	2		JS-96-1071 L8N-1SW	2	
JS-96-1032 L8N-11W	2		JS-96-1072 L8N-1SW	1	
JS-96-1033 L8N-9W	2		JS-96-1073 L8N-1SW	1	
JS-96-1034 L8N-8W	2		JS-96-1074 L8N-1SW	1	
JS-96-1035 L8N-7W	2				
JS-96-1036 L8N-6W	2				
JS-96-1037 L8N-5W	2				
JS-96-1038 L8N-4W	2				
JS-96-1039 L8N-3W	2				
JS-96-1040 L8N-2W	2				
JS-96-1041 L8N-1W	2				
JS-96-1042 L8N-0W	2				
JS-96-1043 L8N-1SW	2				
JS-96-1044 L8N-11SW	2				
JS-96-1045 L8N-1SW	2				

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, Francis T. Manns, have been active in exploration geology since 1972. I received both my Bachelor and Master of Arts in Geology from Temple University, Philadelphia, Pennsylvania. I received my Ph.D. in Geology from the University of Toronto in 1981. I have specialized in carbonate-hosted base metal deposits with particular emphasis on sedimentary facies and stratigraphy in the Canadian Cordillera.

Since 1980, I have been employed in the mining industry full-time and been actively involved in gold exploration for Orofino Resources Limited and Northgate Exploration Limited since 1982. I have authored several technical assessment reports and in house reports on gold exploration properties in Ontario for Orofino.



A handwritten signature in black ink, appearing to read "Francis T. Manns". Below the signature is a horizontal line, and underneath that line is the printed name "Francis T. Manns".

APPENDIX III

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken K851621, K855740, K855741, K855742, K875510, K875511,
K875512, K875513, K875514, K875515, K875516, K875517, K875543, K875544, K875545, K875547,
K875548, K875549, K875550, K875551, K875552, K875553, K875546

Total Number of Samples 1066
Type of Sample Humus
(Nature of Material)
Average Sample Weight 250 gm
Method of Collection Grub Hoe

Soil Horizon Sampled A - Horizon
Horizon Development Normal
Sample Depth 3-10 cm
Terrain Low ridge

Drainage Development Poor
Estimated Range of Overburden Thickness
0-3 metres

ANALYTICAL METHODS

Values expressed in: per cent
 p. p. m.
 p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____ **Au**

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method

Reagents Used

Field Laboratory Analysis

Extraction Method -

Analytical Method -

Reagents Used

SAMPLE PREPARATION

(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

Drying, crushing, screen - 10

Commercial Laboratory (1066 **tests)**

Name of Laboratory Bondar-Clegg Ltd.

Extraction Method Aquaregia

Analytical Method Fire Assay/DC Plasma

Reagents Used

General

General



Ministry of
Northern Development
and Mines

Ontario
Proj. 7

Mining Act

Report of Work
(Expenditures, Subsection 77(19))

DOCUMENT No.
W8901-287



S2C1ENE8887 2-13812 BAD VERMILION LAKE

900

RECEIVED

Type of Work Performed ASSAYS	Mining Division KENORA	Township or Area Bad Vermilion Lk. - G2665	
Recorded Holder OROFINO RESOURCES LIMITED	DEC 27 1989	Prospector's Licence No. T-931	
Address P.O. Box 143, 1 First MINING LANDS SECTION Toronto, Ontario M5X 1C7		Telephone No. (416) 362-6683	
Work Performed By OROFINO RESOURCES LIMITED			
Name and Address of Author (of Submission)			
			Date When Work was Performed Expt: 15 10 86 To: 03 03 87 Day Mo. Yr. Day Mo. Yr.

All the work was performed on Mining Claim(s): Indicate no. of days performed on each claim. *See Note No. 1 on reverse side				Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	
				See Attached								
Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	
Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	Mining Claim	No. of Days	
Instructions Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).				Calculation of Expenditure Days Credits Total Expenditures \$ 7,226.00				Total Days Credits 481				Total Number of Mining Claims Covered by this Report of Work 9

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Mining Claim		Expend. Days Cr.									
Prefix	Number	Prefix	Number	Prefix	Number	Prefix	Number	Prefix	Number	Prefix	Number
K	875510	40	K	875543	40						
K	875511	40									
K	875512	40									
K	875513	40									
K	875514	40									
K	875515	40									
K	875516	40									
K	875517	40									

Total Number of Days Performed	Total Number of Days Claimed	Total Number of Days to be Claimed at a Future Date
481	360	121

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.	Date Dec. 14, 1989	Recorded Holder or Agent (Signature) Shirley P. Decker
--	------------------------------	--

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.		
Name and Address of Person Certifying Dr. Francis T. Manns, c/o Orofino Resources Limited, P.O. Box 143, 1 First Cdn. Pl., Ste. 2701 ONTARIO GEOLOGICAL SURVEY	Telephone No. (416) 362-6683	Date Dec. 14, 1989

For Office Use Only		Received Stamp	
Total Days Cr. Recorded 360	Date Recorded Dec 18/89	Mining Reporter RECEIVED	NORA MINING DIV SERIALS D DEC 18 1989 101112123456 PM
Date Approved as Recorded 7 March 90	Provincial Manager, Mining Lands W. L. Clark	875510	

LIST OF VERMILION LAKE CLAIMS

PROJ.	CLAIM
637	K-851621 K-855740 K-855741 K-855742 K-875510- K-875511- K-875512- K-875513- K-875514✓ K-875515- K-875516- K-875517- K-875543✓ K-875544 K-875545 K-875546 K-875547 K-875548 K-875549 K-875550 K-875551 K-875552 K-875553 K-875554 K-875555

*23 claims
21 days each*

~~K-875554~~ } NO SAMPLES COLLECTED
~~K-875555~~ ON THESE 2 CLAIMS

Count:

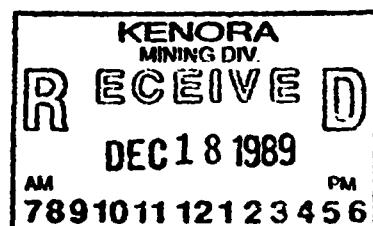
*25
23*

Count:

25 23

P. Necker

Sheriey





Ministry of
Northern Development
and Mines

Ontario
Proj.

17

Mining Act

**Report of Work
(Expenditures, Subsection 77(19))**

**DOCUMENT No.
W8901-287**

Instructions

- Please type or print.
- Refer to Subsection 77(19), the Mining Act for assessment work requirements and maximum credits allowed under this Subsection.
- Technical Reports, maps and proof of expenditures in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Orof.

Type of Work Performed

ASSAYS

Mining Division
KENORA

Township or Area
Bad Vermilion Lk. - G2665

Recorded Holder

OROFINO RESOURCES LIMITED

2.13012

Prospector's Licence No.
T-931

Address

P.O. Box 143, 1 First Cdn. Pl., Ste. 2701, Toronto, Ontario M5X 1C7

Telephone No.
(416) 362-6683

Work Performed By

OROFINO RESOURCES LIMITED

Name and Address of Author (of Submission)

Date When Work was Performed
Report:
15 10 86 **03 03 87**
Day Mo. Yr. Day Mo. Yr.

All the work was performed on Mining Claim(s):
Indicate no. of days performed on each claim.
*See Note No. 1 on reverse side

See Attached

Mining Claim	No. of Days								
--------------	-------------	--------------	-------------	--------------	-------------	--------------	-------------	--------------	-------------

--	--	--	--	--	--	--	--	--	--

Mining Claim	No. of Days								
--------------	-------------	--------------	-------------	--------------	-------------	--------------	-------------	--------------	-------------

--	--	--	--	--	--	--	--	--	--

Instructions				Calculation of Expenditure Days Credits				Total Number of Mining Claims Covered by this Report of Work			
--------------	--	--	--	---	--	--	--	--	--	--	--

Total days credits may be distributed at claim holder's choice. Enter number of days credits per claim in the expenditure days credit column (below).				Total Expenditures \$ 7,226.00				Total Days Credits 15 = 481				9			
---	--	--	--	--	--	--	--	--	--	--	--	----------	--	--	--

Mining Claims (List in numerical sequence). If space is insufficient, attach schedules with required information

Prefix	Number	Expend. Days Cr.	Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
			Prefix	Number		Prefix	Number		Prefix	Number	
K	875510	40	K	875543	40						
K	875511	40									
K	875512	40									
K	875513	40									
K	875514	40									
K	875515	40									
K	875516	40									
K	875517	40									

RECEIVED

JAN 6 1990

MINING LANDS SECTION

Total Number of Days Performed	Total Number of Days Claimed	Total Number of Days to be Claimed at a Future Date
481	360	121

Certification of Beneficial Interest *See Note No. 2 on reverse side

I hereby certify that, at the time the work was performed, the claims covered in this report of work were recorded in the current recorded holder's name or held under a beneficial interest by the current recorded holder.	Date: Dec. 14, 1989	Recorded Holder or Agent (Signature) <i>Shirley P. Decker</i>
--	----------------------------	--

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.	
--	--

Name and Address of Person Certifying Dr. Francis T. Manns, c/o Orofino Resources Limited, P.O. Box 143, 1 First Cdn. Pl., Ste. 2701, Toronto, Ontario M5X 1C7	Telephone No. (416) 362-6683	Date Dec. 14, 1989	Certified By (Signature) <i>Francis T. Manns</i>
--	--	------------------------------	---

For Office Use Only

Total Days Cr. Recorded 360	Date Recorded Dec 18/89	Mining Recorder <i>Scott Rintell</i>	Received Stamp
Date Approved as Recorded	Provincial Manager, Mining Lands		NORA MING DIV SERIAL D DEC 18 1989 1011 1212 3456 875510

LIST OF VERMILION LAKE CLAIMS

PROJ.	CLAIM
637	

- K-851621
- K-855740
- K-855741
- K-855742
- K-875510 ✓
- K-875511 ✓
- K-875512 ✓
- K-875513 ✓
- K-875514 ✓
- K-875515 ✓
- K-875516 ✓
- K-875517 ✓
- K-875543 ✓
- K-875544 ✓
- K-875545 ✓
- K-875546 ✓
- K-875547 ✓
- K-875548 ✓
- K-875549 ✓
- K-875550 ✓
- K-875551 ✓
- K-875552 ✓
- K-875553 ✓

~~K-875554~~
~~K-875555~~} No SAMPLES COLLECTED
 ON THESE 2 CLAIMS

Count:

~~25~~
 23

Count:

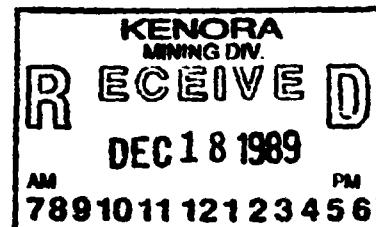
~~25~~
 23

DOCUMENT No.
W8901-287

23 claims
 - 21 days each

P. Necker

Shirley





P.O. BOX 143, 1 FIRST CANADIAN PLACE, TORONTO, CANADA M5X 1C7 TELEPHONE: (416) 362-6683 TELEX: 06-217766

2.13012

RECEIVED

JULY 10 1990

STATEMENT OF EXPENDITURES

PROJECT # 637

BAD VERMILION LAKE AREA

MINING LANDS SECTION

<u>Report #</u>	<u># Samples</u>	<u>Invoice #</u>	<u>Amount</u>	<u>Cheque #</u>
016-5455	85	122255	\$ 578.00	1386
016-5597	257	122493	1,786.10	1424
016-5598	233	122488	1,584.40	1424
016-5900	300	122770	2,040.00	1431
016-5903	165	122781	1,122.00	1431
017-0005	<u>148</u>	122790	<u>1,006.40</u>	1431
	1,188		\$8,116.90	

Of the above 1,066 Samples were plotted on attached map.

Bondar-Clegg	1,066 Analyses for Au	@ 6.00	\$ 6,396.00
	1,066 Sample Preparation	@ .80	<u>852.80</u>
			\$ 7,248.80

\$15.00 expended = one man-day

\$7,248.80 + 15.00 = 483.25 man-days

Technical Report, Invoice and Proof of Payment attached.

Work Performed on Claims:

K-851621 K-855740-42 incl. K-875510-17 incl.
k-875543-53 incl.

Bell & Craig & Company Ltd.
5420 Carling Rd.,
Ottawa, Ontario,
Canada K1J 8V2
Phone: (613) 235-1233
Telex: 053-123.

OROFINO RESOURCES LTD.
G. HARPER
BOX 143, 1ST CANADIAN PL.
TORONTO, UNTARIO
M5X 1C7

Invoice : 122255, Page 1

Date : 16-DEC-86

Report No: 916-5455

Project : NONE

Project References

85 Analyses of Gold at \$ 6.00 \$ 510.00
Subtotal \$ 510.00 \$ 510.00

Sample Preparation

85 Samples of SIEVE #4-10 at \$ 0.80 \$ 68.00
Subtotal \$ 68.00 \$ 68.00

Invoice Total: \$ 578.00 Cdn

437-023

Approved
F.J. Mann
12/19/86

**THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED**

**OROFINO RESOURCES
LIMITED**
TORONTO, CANADA

00000000000000000000000000000000

December 29 19 86

PAY

\$ 3,190.00

OROFINO RESOURCES LIMITED

TO **Bonfar Clegg & Co. Ltd.**
THE ORDER OF
OF **5420 Canotek Road**
Ottawa, Ontario
K1J 2X5

THE TORONTO-DOMINION BANK
55 KING ST. W. & BAY ST.
TORONTO, M5K 1A2 CANADA

PER _____

PER _____

NOT NEGOTIABLE

OROFINO RESOURCES LIMITED - REMITTANCE ADVICE

PLEASE DETACH BEFORE DEPOSITING

438-023	2,590	80				
438-026	21	20				
437-023	578	00				

FILE COPY

Banff-Ore & Company Ltd.
5000 Carling Avenue
Ottawa, Ontario
Canada K1J 8X5
Phone: (613) 743-4230
Tele: 053-323*

OROFINO RESOURCES LTD.
G. HARPER
BOX 143, 1ST CANADIAN FL.
TORONTO, ONTARIO
MSX 1C7

Invoice : 122488, Page 1

Date : 24-DEC-86

Report No: 016-5598

Project : NONE

Reference:

233 Analyses of Gold at \$ 6.00 \$ 1398.00
10 Analyses of Au Test Weight at \$ 0.00 \$ 0.00
Subtotal \$ 1398.00 \$ 1398.00

Sample Preparation

233 Samples of SIEVE -10 at \$ 0.80 \$ 186.40
Subtotal \$ 186.40 \$ 186.40

Invoice 440
1584.40 Cdn

Approved
January 1986
Francis H. Mann

THIS IS A PROFESSIONAL SERVICE
ACCOUNT DUE WHEN RENDERED

OROFINO RESOURCES LTD.
G. HARPER
BOX 145, 1ST CANADIAN PL.
TORONTO, ONTARIO
M5X 1C7

Invoice : 122489, Page 1

Date : 24-DEC-86

Report No: 016-5599

Project : NONE

References

214 Analyses of Gold	at \$ 6.00	\$ 1284.00
2 Analyses of Au Test Weight	at \$ 0.00	\$ 0.00
Subtotal		\$ 1284.00
		\$ 1284.00

Sample Preparation

214 Samples of SIEVE -10 at \$ 0.80 \$ 171.20
Subtotal \$ 171.20 \$ 171.20

Invoice Total: \$ 1455.20 Cdn

119 1237

Approved
7 January 1986
Francis F. Marano

**OROFINO RESOURCES
LIMITED**

TORONTO, CANADA

PAY

TO
HE
DER
DF
L
Bonduar Clegg & Co. Ltd.
5420 Canotek Road
Ottawa, Ontario
K1J 8X5

THE TORONTO-DOMINION BANK
58 KING ST. W. & BAY ST.
TORONTO. M5K 1A2 CANADA

\$ 5,988.10

OROFINO RESOURCES LIMITED

PER

PER

NONNEGOTIABLE

OROFINO RESOURCES LIMITED - REMITTANCE ADVICE

PLEASE DETACH BEFORE DEPOSITING

437-023	1,188	86				
438-023	4,779	24				

FILE COPY

Boggs-Clegg & Company Ltd.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 2B0
Phone: (613) 220-0532

OREFINING RESOURCES LTD.
G. HARPER
BOX 143, 1ST CANADIAN FL.
TORONTO, ONTARIO
M5X 1C7

Invoice : 122781, Page 1

Date : 14-JAN-87

Report No: 010-5903

Project : NONE

Reference:

165 Analyses of Gold	at \$ 6.00	\$ 990.00	
Subtotal		\$ 990.00	\$ 990.00
Sample Preparation			
165 Samples of SIEVE -10	at \$ 0.80	\$ 132.00	
Subtotal		\$ 132.00	\$ 132.00
Invoice Total:			\$ 1122.00 Cdn

Approved 1/19/87
Francis T. Means

MURRAY & COMPANY LTD.
5420 Canotek Rd.,
Ottawa, Ontario,
Canada K1J 8X5
Phone: (613) 745-2220
Telex: 053-37

URUFINO RESOURCES LTD.
H. HARPER
Box 143, 1ST CANADIAN PL.
TURONIUS, ONTARIO
M5A 1C7

Invoice # 1P2270, Page 3

Date 14-JAN-87

Report No: 016-5960

Project: NIMH

Reference:

300 Analyses of Gold	at \$ 6.00	\$ 1800.00
53 Analyses of Au Test Weight	at \$ 0.00	\$ 0.00
Subtotal		\$ 1800.00
		\$ 1800.00

sample Preparation		
400 Samples of SIEVE -10	at \$ 0.80	\$ 240.00
Subtotal		\$ 240.00
		\$ 240.00

Invoice Total: \$ 2040.00 Cdn

437-023
Approved
17 January 1986,
Francis T. Manso

**THIS IS A PROFESSIONAL SERVICE
ACCOUNTS DUE WHEN RENDERED**

Birdsill Corp & Company Ltd.
5420 Cannock Rd.,
Oshawa, Ontario,
Canada K1J 8X3.
Phone: (643) 20
Tele: 053-32.

OROFINO RESOURCES LTD.
G. HARPER
BOX 143, 1ST CANADIAN PL.
TORONTO, ONTARIO
M5X 1C7

Invoice : 122790, Page 1

Date : 14-JAN-87

Report No: 017-0005
Project : NONE
Reference:

148 Analyses of Gold at \$ 6.00 \$ 888.00
Subtotal \$ 888.00 \$ 888.00

Sample Preparation
148 Samples of SIEVE -10 at \$ 0.80 \$ 118.40
Subtotal \$ 118.40 \$ 118.40

Invoice Total: \$ 1006.40 Cdn

437-023

Approved 1/19/87
Franci T. Manns.

**THIS IS A PROFESSIONAL SERVICE.
ACCOUNTS DUE WHEN RENDERED!**

**OROFINO RESOURCES
LIMITED**
TORONTO, CANADA

0001431

JANUARY 29 1967

PAY

\$ 4,168.46

OROFINO RESOURCES LIMITED

TO Bondar-Clegg & Co. Ltd.
THE 5420 Canotek Road
ORDER OF OTTAWA, Ontario
LK1J 8X5
THE TORONTO-DOMINION BANK
55 KING ST. W. & BAY ST.
TORONTO, M5K 1A2 CANADA

PER _____

PER _____

~~NOT NEGOTIABLE~~

OROFINO RESOURCES LIMITED - REMITTANCE ADVICE

PLEASE DETACH BEFORE DEPOSITING

437-023	3,730	82				
438-023	437	58				

FILE COPY



RECEIVED
JULY 09 1980

MINING LANDS SECTION

P. Manns

Figure — 3 —

PROSPECTORS of CANADA
for OROFINO RESOURCES LTD.
SOIL-HUMUS SAMPLING
ANALYSIS (Au-PPB)
$\bar{x}_{\text{base}} = 3.5 \pm 12 \text{ ppb}$
27 ANOMALOUS VALUES DELETED (2.5%)
$\bar{x}_{\text{base}} = 2.4 \pm 2.4 \text{ ppb}$
3 σ anomaly = 10 ppb
2 σ anomaly = 7 ppb
Scale: 1 inch = 200 feet



200

