OPAP 1

010

REPORT PROJECT 3

OP91-427 & 428

December, 1991

Project 3 of OPAP submissions of Earl J. Lalonde (OP91-428) and Fred Q. Barnes (OP91-427), covering the townships of Osway, Mallard and Huffman, Porcupine Mining Division was undertaken in the field between 16 June and 27 September, 1991. The southwest corner of contiguous Eric Township was covered as part of the Project 3 and a one day examination of iron formation and related base metal occurrences in Blamey and Cunningham townships, 30 km to the west was made as a guide to possible occurrences in Project 3 area.

All work was of a prospecting nature. The expected targets were, firstly gold, and secondly base metals as found at the old Shunsby property in central north Cunningham township.

Prospecting is hampered by heavy overburden over much of the area, and exceptionally thick moss cover on outcrops. These features favour the forest industry which is the main employer in the district. As a consequence of the thick moss cover, a good deal of outcrop stripping was required on traverse lines, and particularly to expose rusty and siliceous zones along strike, once found.

Initially, prospecting was undertaken over outcrop areas adjacent to navigable water courses, motor roads and old roads which allowed easy access. The prospecting difficulties, as outlined above, however, finally altered our approach from primarly one of easy access to one of selecting potential trends and zones as interpreted from known showings and bedrock geology.

This latter approach, adopted in September, was much more fruitful in the end by our discovery of a mineralized quartz-carbonate zone with significant auriferous sulphides. Unfortunately, the discovery was made in the final few days of our venture when we were forced to suspend operations. Staking and additional work along the discovery zone is warranted for 1992. The confidentiality of this information is therefore of prime importance in our 1992 prospecting plans.

Location and Access

The area covered was Project 3 of the 1991 OPAP submission and covered parts of Osway (G3243), Mallard (G1171), Huffman (G3232) and Eric townships, Porcupine Mining Division, Sudbury District.

The all-weather road system is shown on the Provincial Topographical Series, at a scale of 1:100,000, on Gogama (41P/NE) Ridout (41O/NE) covering Project 3, and Chapleau (41O/NW). An east-west private (Eddy Co.) gravel road connects Highway 144 to Highway

667 at Sultan. It passes Project 3 to the south where two roads, in Edith Township trend northerly in the area. These are the Cordes Creek road which accesses Esther, northwestern Osway, and Mallard townships, ending at Rush Lake; and the Jerome Mine road which corsses Fingal and southern Osway townships, ending at the Jerome Mine on the south shore of Opeepeesway Lake. The Cordes Creek road has been upgraded by the Eddy Co. to a haul road for cutting in southeast Mallard, southwest Eric and northwest Huffman townships.

Geology

Five geological series maps are available for Project 3 area. Map 1949-2 of Osway by W.W. Moorhouse; P2369 Jerome west of Osway and Esther, P2370 Jerome East of Huffman and Arbutus both by G.M. Siragusa; Map 2503 Cunningham and Garnet, Map 2504 Benton and Mallard both by G.M. Siragusa. Although we would disagree with both authors as to rock types and contacts locally because of our more detailed examinations and strippings, we found the geological records of great value. The Moorhouse interpretation of contacts in Osway we found in general more accurate than that of the subsequent geological work. Access to much of Osway township and the number of active mining companies in the area were both greater at the time of the Moorhouse survey.

We feel the geology, both lithologic and structural is much simpler and open than the recorded data suggest because of lateral facies changes and initial dips. In general however, Project 3 is underlain by mafic and intermediate volcanic rocks, trending northwest and steeply dipping to the southwest, a picture presented by both published authors. We would agree that there is far more waterlain material present in parts of the section than indicated and more now-volcanic detritus.

Work Done

All work done was of a prospecting nature with much moss stripping in general traversing along roads, trails, shorelines and inland from these access points. Trenching and pitting for samples was along mineralized zones which were located from blazed, chained and flagged compass lines. Thirty-three samples were taken as grabs and line chips described under Sample List. All assaying was done by Activation Laboratories Ltd., using neutron activation analysis. The package consisted of analyses for gold and thirty-four other elements. Certificates af analysis along with detection limits are attached to the Sample List.

Trenching and pitting along, or measured from, chained compass lines are located on separate plans. A General Map of Project 3 shows the areas prospected, chained compass lines, and sample locations.

A daily log of prospecting activities is attached as Prospecting Daily Log.

Expenditures

Project 3 time estimate was 136 man days whereas approximately 70 man days were spent. A breakdown of costs as estimated and approximate actual is given in Table I

The higher than estimated cost per man day is primarily the result of mileage costs. The extra mileage resulted from better than expected road access which meant few camp moves, and more frequent-than planned-returns home due to a decision to sell out in southern Ontario and move north.

A breakdown of expenditures is given on the attached Detailed List of Expenditures by participant.

Results and Recommendations

Although numerous quartz-carbonate veins were found and some sampled, assay results were not significant although well above background levels. Some waterlain sediments within the basic volcanic section are carbonaceous and rusty weathering. At points where quartz stringers permeate these beds, higher gold values were returned from the samples, such as 26105 through 26107. These occurrences are local however, and are not believed to be part of any through-going structural system. The origin of the gold is unknown. An example of this stratified type of mineralization is that at Vichaw Lake within the intermediate volcanic suite and just below the clastic sediments, more accurately shown on the Moorhouse map. These occurrences would appear to have little economic significance (SEE detailed sample map Vichaw Lake).

Of greater importance is mineralization associated with through-going structural features, although, again, apparently related to a specific volcanic unit and following the lithologic trend. More sulphide mineralization is found in this type, and quartz and carbonate veining is widespread and undoubtedly introduced. Gold values are much higher even though sub-economic in the samples we were able to recover from pits (SEE detailed sample plan Wiener Lake).

This latter type of occurrence is similar to that of the Polfrog Explorations discovery, Denomme-Ross et al, of Foleyet. The Polfrog prospect is a kilometre east of the Opeepeesway River in south Mallard township on the south side of the Rush Lake road.

Iron formation appears to be poorly developed in the Opeepeesway Lake area and no base metals were found related thereto (Shunsby type).

It is recommended that claims be staked at Wiener Lake and further work done. The Wiener Lake discovery was made two days prior to departure and pitting was only begun on the day of departure from the area. Work should consist of mapping, magnetometer and VLF surveys and prospecting, followed up with

E10:

READY

	A	B	C	D	E	F	G	H
1			o	TABLE1				
2								
3		o	Estimate		Actual			
4		Total	Man Day	Total	Man Day	Samples/MD		
5	Time	13600	100	7000	100			
6	Mileage	1020	7.5	1882	27.68	Est/Act		
7	Assay	2829	20.8	512	7.53	0.88		
8	Supplies	1986	14.6	1450	21.32	0.49		
9	TOTAL	19435	142.9	10844	156.53			
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

4-Dec-91 10:42 AM

NUM

backhoe trenching where warranted, along with sampling.

Further reconnaissance prospecting should also be undertaken in the general area to find other mineralized zones. Checking for iron formation should be made at the appropriate stratigraphic position in order to find base metals, giving due regard to the observations of Siragusa in his Garnet Lake report.

M1: READY

	H	I	J	K	L	M	N	O
1				SAMPLE LIST				
2								
3		O Sample	Type	Rock	Mineral	PPBAu		
4		26105	Grab	Sed	carb	257		
5		26106	G	Schist	qtzcarb	21		
6		26107	Chip1Ft	Sed	carb	25		
7		26108	G	Tuff	carb	25		
8		26109	G	BIF	none	6		
9		26110	G	BIF	none	6		
10		26111	G	Jerome	qtzcarb	11100		
11		26112	G	SedSchist	vqtz	5		
12		26113	G	same	none	5		
13		26114	G	same	vqtz	5		
14		26115	G	same	Fe	5		
15		26116	G	same	FeBrown	10		
16		26117	G	Schist	qtz	5		
17		26118	G	SedSchist	carb	5		
18		26119	G	Schist	carbRust	16		
19		26120	C1.5Ft	same	same	9		
20		26121	G	same	same	22		

28-Dec-91 11:20 AM NUM

M40: READY

	H	I	J	K	L	M	N	O
21		26122	G	same	same	14		
22		26123	G	SedSchist	same	5		
23		26124	G	Tuff	none	5		
24		26125	G	Schist	qtzRust	151		
25		26126	G	same	same	5		
26		26127	G	same	Py	68		
27		26128	G	Gabbro	qtzPy	5		
28		26129	G	Schist	sameCarb	17		
29		26130	G	same	qtz	50		
30		26131	G	same	qtz	5		
31		26132	G	same	qtzcarbPy	37		
32		26133	G	same	qtzPbCuPy	174		
33		26134	G	same	qtzcarb	5		
34		26135	G	same	samePy	5		
35		26136	G	same	qtzPy	385		
36		26137	G	same	same	4520		
37								
38								
39								
40								

28-Dec-91 11:20 AM NUM

63.6297

ACTLABS ACTIVATION LABORATORIES LTD

Invoice No.: 3226
Work Order: 3225
Invoice Date: 15-OCT-91
Date Submitted: 30-SEP-91
Your Reference: NONE
Account Number: 398

E.J. LALONDE
BOX 116
CAPREOL, ONT.
P0M 1H0
ATTN: E.J. LALONDE

CERTIFICATE OF ANALYSIS

INAA package, elements and detection limits:

AU	5.	PPB	AG	5.	PPM	AS	2.	PPM	BA	100.	PPM
BR	1.	PPM	CA	1.	%	CO	5.	PPM	CR	10.	PPM
CS	2.	PPM	FE	0.02	%	HF	1.	PPM	HG	1.	PPM
IR	5.	PPB	MO	5.	PPM	NA	500.	PPM	NI	50.	PPM
RB	30.	PPM	SB	0.2	PPM	SC	0.1	PPM	SE	5.	PPM
SN	0.01	%	SR	0.05	%	TA	1.	PPM	TH	0.5	PPM
U	0.5	PPM	W	4.	PPM	ZN	50.	PPM	LA	1.	PPM
CE	3.	PPM	ND	5.	PPM	SM	0.1	PPM	EU	0.2	PPM
TB	0.5	PPM	YB	0.05	PPM	LU	0.05	PPM			

CERTIFIED BY :

DR. ERIC H. HOFFMAN

$

Activation Laboratories Ltd. Work Order: 2839 Report: 2837

Sample description	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	MO PPM	NA PPM	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SN %
26105	257	<5	37	440	<1	4	27	430	5	3.82	2	<1	<5	<5	9210	360	36	0.6	13	<5	<0.01
26106	21	<5	3	190	<1	<1	7	81	<2	1.95	3	<1	<5	<5	31300	100	37	0.7	3.5	<5	<0.01
26107	25	<5	5	360	<1	<1	22	190	7	5.18	3	<1	<5	<5	21500	140	33	1.1	19	<5	<0.01

Activation Laboratories Ltd. Work Order: 2839 Report: 2837

Sample description	SR %	TA PPM	TH PPM	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
26105	<0.05	<1	1.6	<0.5	<4	67	9	17	10	1.7	0.7	<0.5	1.14	0.20	39.36
26106	<0.05	<1	8.3	3.7	<4	<50	5	11	<5	1.2	0.4	<0.5	2.82	0.52	32.43
26107	<0.05	<1	4.3	1.8	<4	61	25	42	20	3.9	1.3	0.8	2.04	0.35	27.40

Sample description	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	MO PPM	NA PPM	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SN %
26108	25	<5	4	150	<1	3	20	170	<2	4.09	4	<1	<5	<5	24800	<50	38	0.4	15	<5	<0.01
26109	6	<5	<2	<100	<1	2	<5	34	<2	26.1	<1	<1	<5	<5	<500	<50	<30	<0.2	0.4	<5	<0.01
26110	6	<5	71	<100	<1	<1	10	120	<2	14.6	2	<1	<5	<5	<500	<50	<30	<0.2	3.5	<5	<0.01
26111	11100	<5	51	510	<1	4	13	160	3	2.64	1	<1	<5	460	3790	<50	62	32	6.5	<5	<0.01

Activation Laboratories Ltd. Work Order: 2951 Report: 2950

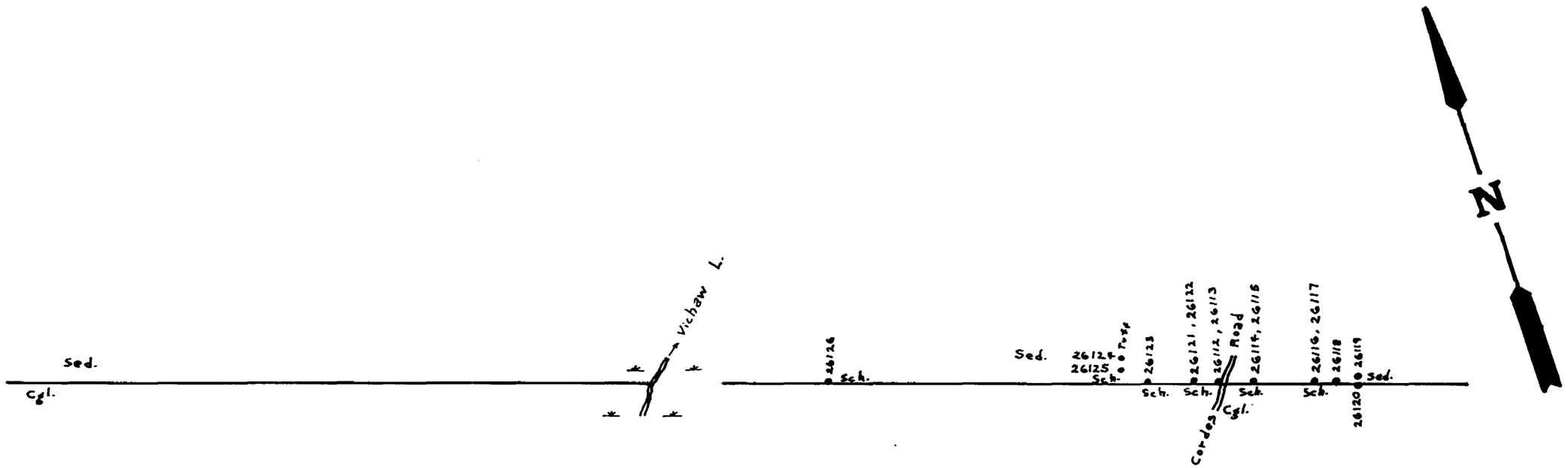
Sample description	SR %	TA PPM	TH PPM	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
26108	<0.05	<1	2.6	<0.5	<4	302	17	39	14	3.3	1.1	<0.5	1.84	0.34	26.79
26109	<0.05	<1	<0.5	<0.5	<4	101	2	4	<5	0.3	0.2	<0.5	0.52	0.13	50.63
26110	<0.05	<1	1.1	<0.5	<4	101	9	20	6	1.4	0.7	<0.5	1.10	0.19	36.34
26111	<0.05	<1	2.1	2.2	13	78	18	33	18	2.4	0.7	<0.5	0.65	0.16	37.29

Activation Laboratories Ltd. Work Order: 3225 Report: 3226

Sample description	SR %	TA PPM	TH PPM	U PPM	W PPM	ZN PPM	LA PPM	CE PPM	ND PPM	SM PPM	EU PPM	TB PPM	YB PPM	LU PPM	Mass g
26112	<0.05	<1	0.7	<0.5	<4	<50	5	13	5	1.2	0.4	<0.5	0.76	0.17	28.32
26113	<0.05	<1	2.1	<0.5	<4	129	18	41	15	3.3	0.8	<0.5	1.72	0.35	26.07
26114	<0.05	<1	1.9	<0.5	<4	<50	19	43	24	2.7	0.7	<0.5	0.47	0.17	24.94
26115	<0.05	<1	2.6	<0.5	<4	119	16	39	14	2.6	0.6	<0.5	1.29	0.24	23.35
26116	<0.05	<1	2.2	<0.5	<4	<50	21	51	28	4.2	1.4	<0.5	2.12	0.38	25.70
26117	<0.05	<1	<0.5	<0.5	<4	<50	2	5	<5	0.5	<0.2	<0.5	0.29	0.08	27.08
26118	<0.05	1	1.9	<0.5	<4	75	17	41	17	3.8	1.1	<0.5	2.19	0.45	31.77
26119	<0.05	<1	2.1	1.6	<4	139	18	42	20	3.7	1.2	<0.5	2.41	0.41	34.35
26120	<0.05	<1	1.9	<0.5	<4	116	21	50	26	4.3	1.4	<0.5	2.42	0.41	33.37
26121	<0.05	<1	0.9	<0.5	<4	<50	7	16	6	1.4	0.4	<0.5	0.73	0.14	32.39
26122	<0.05	2	1.8	<0.5	8	142	19	45	21	4.4	1.3	<0.5	2.38	0.44	23.16
26123	<0.05	<1	2.1	<0.5	<4	120	19	52	27	4.4	1.3	<0.5	2.33	0.51	25.33
26124	<0.05	<1	1.3	<0.5	<4	76	16	43	16	2.6	0.9	<0.5	0.64	0.08	26.38
26125	<0.05	<1	1.3	<0.5	<4	52	11	30	16	2.3	0.7	<0.5	1.03	0.23	28.02
26126	<0.05	<1	1.1	<0.5	<4	167	9	23	<5	2.5	1.0	<0.5	2.24	0.49	25.95
26127	<0.05	<1	<0.5	<0.5	<4	696	8	20	10	2.6	0.9	<0.5	2.32	0.42	30.68
26128	<0.05	<1	<0.5	<0.5	<4	<50	4	10	10	1.9	1.5	<0.5	2.65	0.46	31.88
26129	<0.05	<1	<0.5	<0.5	<4	<50	3	10	<5	1.1	0.6	<0.5	1.19	0.19	36.74
26130	<0.05	<1	0.6	1.0	<4	<50	4	10	5	1.0	0.3	<0.5	0.93	0.17	34.31
26131	<0.05	<1	<0.5	<0.5	<4	76	1	5	6	0.7	<0.2	<0.5	0.92	0.20	30.72
26132	<0.05	<1	1.2	<0.5	<4	516	6	18	15	2.7	1.5	<0.5	3.90	0.75	29.11
26133	<0.05	<1	0.8	2.0	47	8340	4	14	<5	2.2	0.9	<0.5	3.21	0.56	35.58
26134	<0.05	<1	<0.5	<0.5	<4	308	<1	<3	<5	0.1	<0.2	<0.5	0.18	<0.05	30.93
26135	<0.05	<1	8.8	3.3	<4	<50	66	150	66	11	3.2	<0.5	2.22	0.44	31.02
26136	<0.05	<1	<0.5	<0.5	<4	<50	2	4	<5	0.3	<0.2	<0.5	0.12	<0.05	33.08
26137	<0.05	<1	<0.5	<0.5	4	<50	<1	<3	<5	0.3	<0.2	<0.5	0.91	0.19	38.06

Activation Laboratories Ltd. Work Order: 3225 Report: 3226

Sample description	AU PPB	AG PPM	AS PPM	BA PPM	BR PPM	CA %	CO PPM	CR PPM	CS PPM	FE %	HF PPM	HG PPM	IR PPB	MO PPM	NA PPM	NI PPM	RB PPM	SB PPM	SC PPM	SE PPM	SN %
26112	<5	<5	9	210	<1	2	10	340	<2	1.81	1	<1	<5	<5	7150	<50	<30	0.6	6.1	<5	<0.01
26113	<5	<5	30	270	<1	<1	37	680	<2	5.58	3	<1	<5	<5	11600	320	<30	1.5	21	<5	<0.01
26114	<5	<5	13	660	<1	<1	8	200	4	1.72	3	<1	<5	<5	20200	<50	58	0.8	6.8	<5	<0.01
26115	<5	<5	21	370	<1	<1	34	810	2	5.70	3	<1	<5	<5	7720	370	<30	1.3	21	<5	<0.01
26116	10	<5	12	<100	<1	4	19	200	<2	4.21	4	<1	<5	<5	25700	<50	<30	0.6	17	<5	<0.01
26117	<5	<5	3	180	<1	<1	<5	260	<2	1.36	<1	<1	<5	<5	4030	<50	<30	0.3	2.3	<5	<0.01
26118	<5	<5	9	<100	<1	4	20	130	<2	4.37	3	<1	<5	<5	24900	<50	<30	<0.2	15	<5	<0.01
26119	16	<5	13	140	<1	3	19	150	<2	4.58	4	<1	<5	<5	23600	<50	<30	0.4	16	<5	<0.01
26120	9	<5	7	<100	<1	4	22	160	<2	5.46	4	<1	<5	<5	21100	260	<30	0.3	17	<5	<0.01
26121	22	<5	89	<100	<1	<1	8	180	<2	2.11	1	<1	<5	<5	5900	<50	<30	0.7	7.0	<5	<0.01
26122	14	<5	130	230	<1	<1	30	360	3	6.27	5	<1	<5	<5	18800	<50	43	1.7	19	<5	<0.01
26123	<5	<5	130	200	<1	<1	32	390	3	6.65	5	<1	<5	<5	20500	<50	<30	1.7	20	<5	<0.01
26124	<5	<5	7	550	<1	<1	8	120	2	2.07	3	<1	<5	<5	40600	<50	45	0.6	5.3	<5	<0.01
26125	151	<5	71	290	<1	<1	17	450	3	3.29	2	<1	<5	<5	6900	140	<30	0.9	12	<5	<0.01
26126	<5	<5	26	380	<1	1	37	280	7	7.50	2	<1	<5	<5	5090	<50	64	0.9	35	<5	<0.02
26127	68	<5	<2	<100	<1	2	33	190	<2	18.3	1	<1	<5	<5	2050	<50	<30	<0.2	32	<5	<0.01
26128	<5	<5	<2	250	<1	6	38	240	<2	9.30	<1	<1	<5	<5	7150	<50	<30	<0.2	37	<5	<0.01
26129	17	<5	6	140	<1	2	19	160	<2	3.99	<1	<1	<5	<5	4020	<50	<30	<0.2	12	<5	<0.01
26130	50	<5	<2	<100	<1	<1	13	290	<2	2.79	1	1	<5	<5	5100	<50	<30	<0.2	8.0	<5	<0.01
26131	<5	<5	<2	<100	1	<1	19	410	<2	3.49	<1	<1	<5	<5	4210	<50	<30	<0.2	16	<5	<0.01
26132	37	<5	<2	<100	<1	2	26	220	2	9.45	2	<1	<5	26	19400	<50	<30	<0.2	47	<5	<0.02
26133	174	<5	79	<100	<1	<1	52	130	3	6.27	3	<1	<5	13	17300	<50	<30	2.3	33	<5	<0.01
26134	<5	<5	4	<100	<1	<1	<5	410	<2	0.71	<1	<1	<5	<5	1300	<50	<30	0.2	1.8	<5	<0.01
26135	<5	<5	<2	1200	<1	6	24	130	6	6.04	5	<1	<5	<5	34300	<50	65	<0.2	21	<5	<0.01
26136	385	<5	<2	<100	<1	<1	<5	290	<2	0.86	<1	<1	<5	61	1680	<50	<30	<0.2	1.1	<5	<0.01
26137	4520	<5	3	<100	<1	<1	<5	140	<2	2.65	1	<1	<5	150	8790	<50	<30	<0.2	2.2	<5	<0.01



GEOLOGY & SAMPLE LOCATIONS

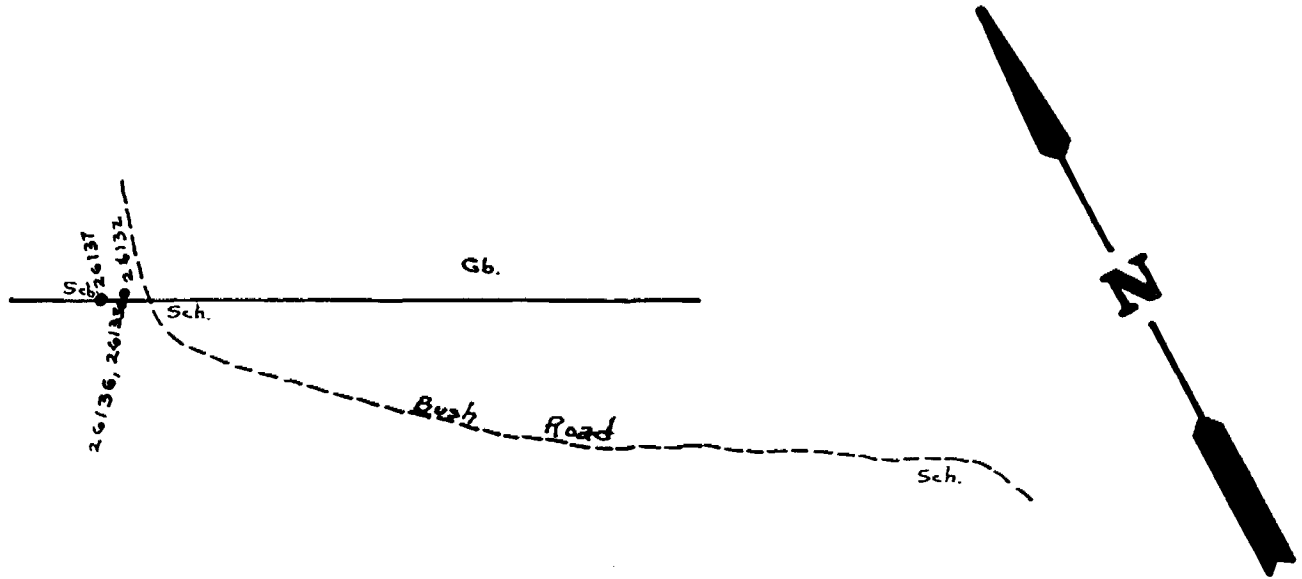
SCALE

1 : 4000 or 1in. = 333.3 ft.

(A)

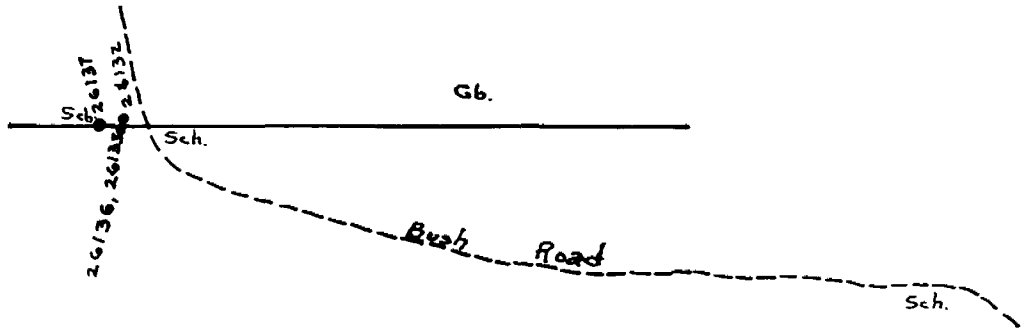
Symbols

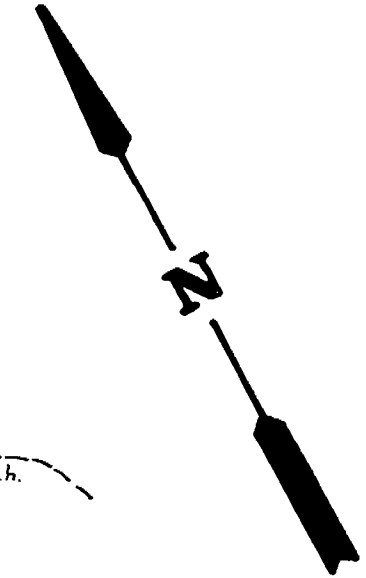
T.	Tuff
Gb.	Gabbro
Sch.	Schist
Sed.	Sediments
Cgl.	Conglomerate
I.F.	Iron Formation
Sl.	Siltstone
Ss.	Sandstone
• 26106	Sample Location
◪	Mine Shaft



GEOLOGY & SAMPLE LOCATIONS

SCALE





GEOLOGY & SAMPLE LOCATIONS

SCALE

1 : 4000 or 1in.= 333.3ft.

(B)

OPEEPEESWAY – RICE LAKES AREA

GEOLOGY & SAMPLE LOCATIONS

Scale 1:20,000

1000 Metres 0 1000 2000 Metres

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10,000 Feet

BENTON

MALLARD

ERIC

FRATER

OSWAY

HUFFMAN

POTIER

FINGAL

ARBUTUS

Woman River

Creek

Opeepeesway River

Mallard Lake

Rae Lake

Rice Lake

Wenakoshi Lake

Rice Lake

Rice Lake

Rice Lake

Rice Lake

Rice River

Rice River

Little Rush River

Satterly Creek

Vichaw

Satterly Lake

Lake

North Arm

Northwest Arm

Eastern Route

Opeepeesway Lake

Manella Point

Cordes River

Ramsey Creek

Edge Lake

Boundary Lake

East Arm

Little Rice Lake

Huffman Lake

200

41089NE166 63.6257 HUFFMAN