

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 92.08.28

ASSESSMENT REPORT 21893

MINING DIVISION: Omineca

PROPERTY: Lost Marble  
LOCATION: LAT 55 07 30 LONG 125 45 05  
UTM 10 6111943 324562  
NTS 093N04W  
CLAIM(S): Lost Marble 1-2  
OPERATOR(S): Noranda Ex.  
AUTHOR(S): Liskowich, M.W.;Kraft, T.;Myers, D.E.  
REPORT YEAR: 1991, 24 Pages  
COMMODITIES  
SEARCHED FOR: Limestone  
KEYWORDS: Triassic, Takla Group, Greywackes, Mudstones, Limestones  
WORK  
DONE: Prospecting  
PROS 50.0 ha  
Map(s) - 2; Scale(s) - 1:2500, 1:25 000

LOG NO:	DEC 04 1991	RD.
ACTION:		
FILE NO:		

ASSESSMENT REPORT  
GEOLOGY AND GEOCHEMISTRY

LOST MARBLE PROPERTY

LOST MARBLE 1 AND 2 CLAIMS  
Record Numbers 242631 and 242632

OMINECA MINING DIVISION  
BRITISH COLUMBIA

NTS 093 N 04W

Latitude 55 degrees 07.5 minutes N  
Longitude 125 degrees 45 minutes W

Work Performed:  
27 August 1991

NORANDA EXPLORATION COMPANY, LIMITED  
(NO PERSONAL LIABILITY)  
3A-1750 Quinn Street  
Prince George, B.C.  
V2N 1X3  
Phone 604-562-0022

Report by:

Mark Liskowich, Tom Kraft, Del Myers  
Project Geologists

20 November 1991

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

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21,893

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#### SUMMARY

The Lost Marble claims are located 33 km (89 km by existing roads) NE of the Bell Mine open pit. The limestone beds found on the claims may provide a suitable source for acid-neutralizing rock for pollution control at the mine site.

One day of work was spent mapping and soil sampling a base line on the claims. Access was difficult because of muddy road conditions. It is expected that access from the Babine Lake area will improve as logging in the area continues, particularly south of Natowite Lake and east of Tochcha Lake.

Two outcrops of limestone with mudstone lenses were mapped and sampled (181532, 8.1% calcium). An impure limestone 190 m to the west (181535, 30.0%) also indicates potentially useful acid neutralizing rock.

The eastern most soil sample (181526), taken at the No. 1 post, was anomalous in gold (70 ppb).

Additional mapping and sampling is required to evaluate the grade and tonnage of limestone deposits on the property. The possibility of Au skarn mineralization should also be investigated by prospecting and further soil sampling.

## INTRODUCTION

### PURPOSE

This report describes work done 27 August 1991 on the Lost Marble property. The Lost Marble property was staked in 1990 to cover an area of limestone, of potential use to the Bell Mine on Newman Peninsula. Skarn, syngenetic, or vein mineralization may also exist on the claims.

### LOCATION, PHYSIOGRAPHY, AND ACCESS

The claims are located 33 km ENE of the Bell Mine and 12 km W of the Leo Creek camp on the B.C. Rail NW extension. (Figures 1 and 2)

Mature fir and spruce trees form the forest covering the claims, while devil's club and willows are common along the edges of the small ponds on the claim.

The topography consists of gently rolling hills with elevations varying from 850-950 metres above sea level.

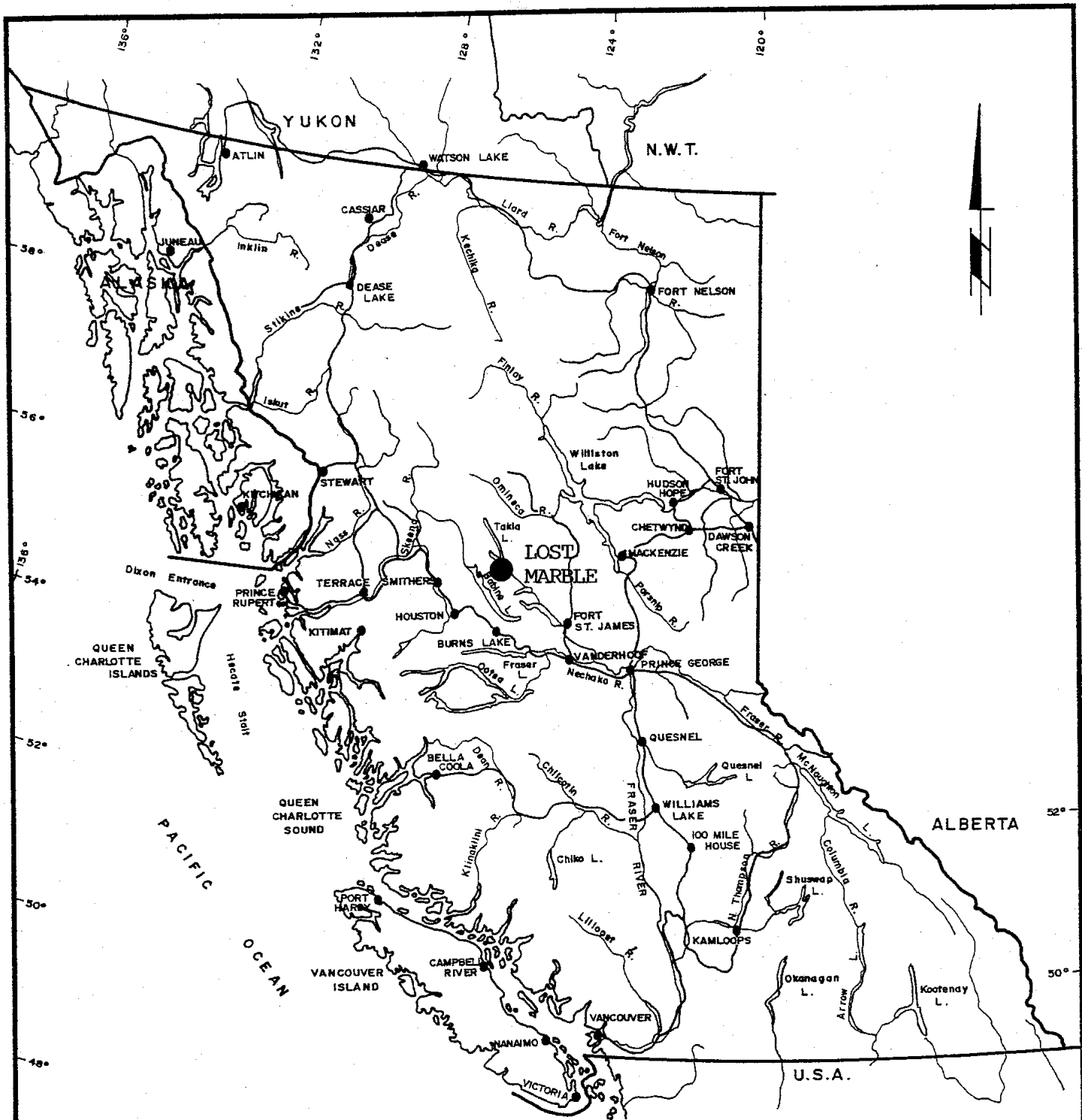
The claims were accessed from Noranda's Bell Mine, which lies 12 kilometres north of the town of Granisle. Access to the mine from Granisle was on the Bell Mine barge across Babine Lake. From the Bell Mine, gravel logging roads (Hagan to Jinx to Hautete to '900') were used. A gravel road, west from kilometre 916 on the 900 road, crossed the Lost Marble claims at KM 3.

### PROPERTY

The property (Figure 3) consists of two contiguous 2-post claims. The claims are as follows:

Claim	Record No.	Owner	Expiry Date *
Lost Marble 1	242631	Noranda Minerals	August 29, 1994
Lost Marble 2	242632	Noranda Minerals	August 29, 1994

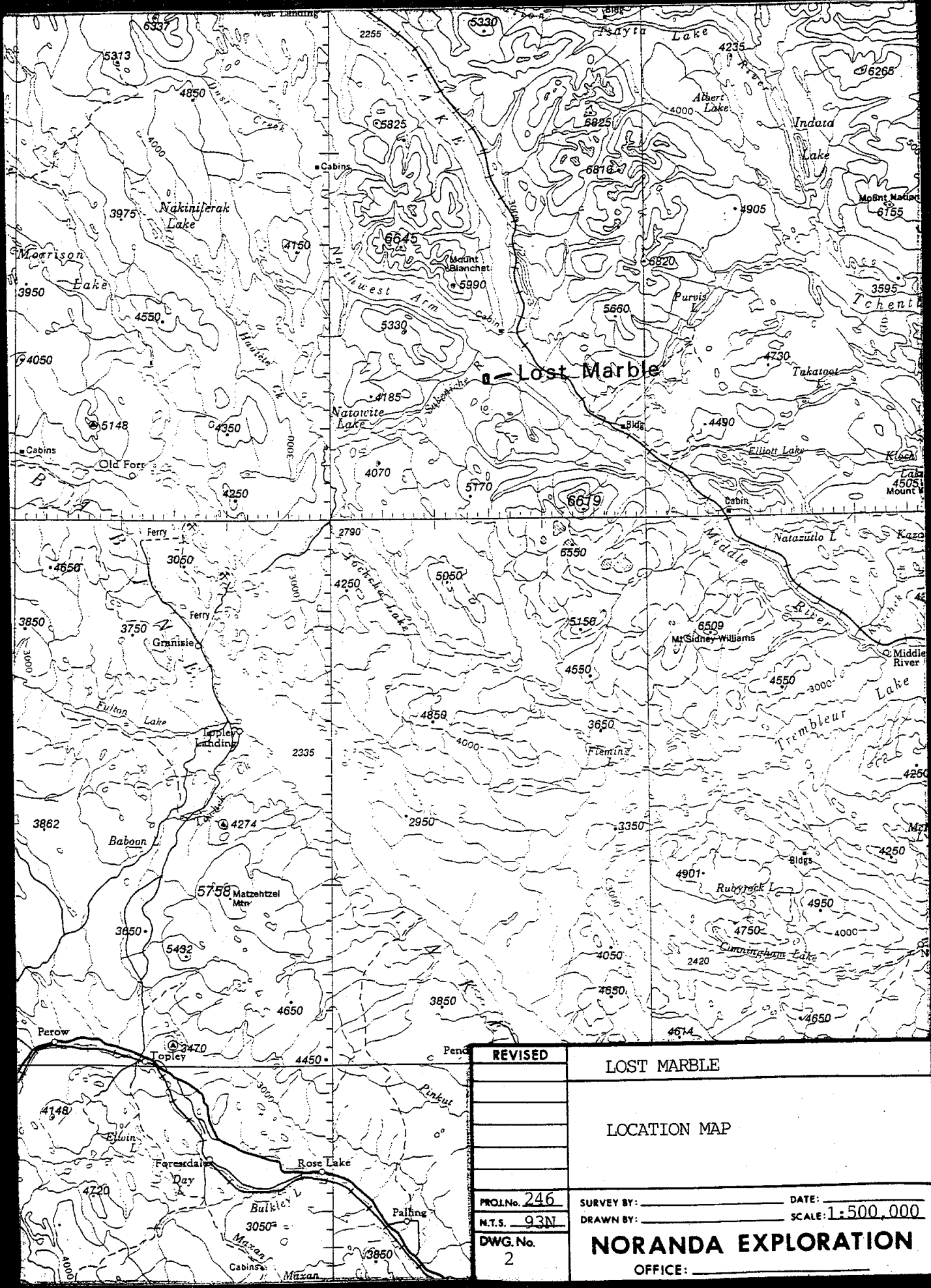
\* upon acceptance of this report



0 100 200 KILOMETRES  
SCALE : 1 : 8,000,000

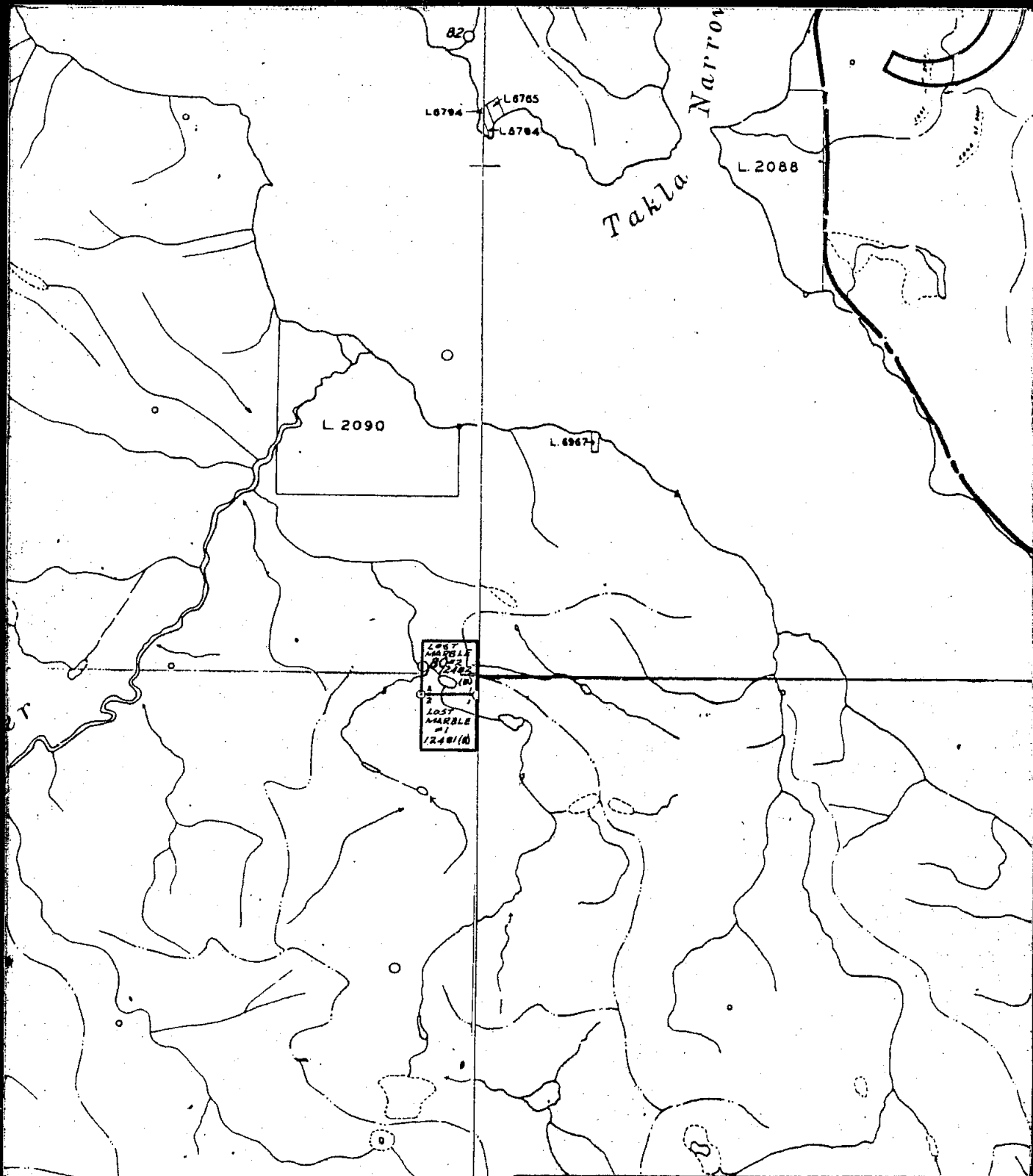
REVISED	LOST MARBLE	
	LOCATION MAP	
PROJ. No. 246	SURVEY BY: DEM Jr	DATE: 25 Nov 91
N.T.S. 93N	DRAWN BY: S.K.B.	SCALE: 1 : 8,000,000
DWG. No. 1	<b>NORANDA EXPLORATION</b>	
	OFFICE: PRINCE GEORGE, B.C.	

VANCAL 11927



REVISED	LOST MARBLE	
	LOCATION MAP	
PROJ. No. 246	SURVEY BY: _____	DATE: _____
M.T.S. 93N	DRAWN BY: _____	SCALE: 1:500,000
DWG. No. 2	<b>NORANDA EXPLORATION</b>	
	OFFICE: _____	





REVISED	LOST MARBLE	
	CLAIM MAP	
PROJ. No. 246	SURVEY BY: DEM Jr.	DATE: Nov 91
N.T.S. 93N4	DRAWN BY:	SCALE: 1:50,000
DWG. No.	<b>NORANDA EXPLORATION</b>	
3	OFFICE: Prince George, BC	

## REGIONAL GEOLOGY

The geology of the southwest shore of Takla Lake consists of predominantly Paleozoic and Mesozoic sedimentary, volcanic and intrusive rocks belonging to the Intermontane Belt.

A broad belt of Paleozoic sedimentary rocks belonging to the Cache Creek Group (units 2 and 3 of Armstrong, 1946), lies to the east of Takla Lake in the north, and surrounds the south end of the lake. These rocks are a conformable succession of interbedded sedimentary and volcanic rocks and their metamorphic equivalents. The strata are closely folded in a general northwestern direction.

Rocks of the Takla Group (units 4 and 5, *ibid*) comprise 1500 metres of Triassic and Jurassic interbedded volcanic and sedimentary rocks. These lie to the west.

Omineca intrusions (unit 6) of Jurassic or Cretaceous age, comprised of granodiorite and quartz diorite, intrude both Cache Creek and Takla rocks in the area.

Upper Cretaceous sedimentary rocks belonging to the Sustut group (unit 7) overlie the Takla volcanics.

Ultramafics (unit 8) of unknown age are found both SE and NW of Takla Lake.

The Pinchi Fault, some 38 km ENE of the Lost Marble claims, is a major northwest trending structure and marks the boundary between the Cache Creek rocks to the west and Takla group rocks to the east. The Pinchi Fault Zone represents a thrust fault which uplifted Permian rocks on the west relative to Mesozoic rocks on the east. (Armstrong, 1946).

## PREVIOUS WORK

There are no previous assessment reports in the area of the Lost Marble claims. The nearest mineral showings are NW of the Sakeniche River, 10 km W of the claims.

#### WORK UNDERTAKEN

Two men spent 27 August 1991 driving to the property, geological mapping, and rock and soil sampling.

The purpose of the work was to prospect for copper skarn mineralization, and limestone rock which might be used to neutralize acid rock drainage at the Bell Mine.

The claim location line was re-flagged and chained. Soil samples were taken at 100 metre stations with a grub-hoe from a depth of 15 to 20 centimetres.

The soil samples were sent to Noranda's Laboratory in Vancouver for analysis.

Multielement analysis was performed on the samples by Inductively Coupled Plasma emission spectroscopy (ICP). The analytical procedure consisted of obtaining a 0.2 gram sample which is digested with a 3 ml HClO<sub>4</sub>/HNO<sub>3</sub> (4:1) at 203 degrees C for four hours, then diluted to 11 ml with water. The instrument used for the emission spectroscopy was the Leeman PS3000. The analysis of Au was performed on a 10 gram sample digested with aqua-regia and determined by atomic absorption emission spectroscopy. The lowermost detection limit for Au was 5 ppb.

The five rock samples were sent to Acme Analytical Laboratories Ltd. in Vancouver for analysis.

The analytical procedure used for the rock samples is also by Inductively Coupled Plasma emission spectroscopy (ICP), where a .500 gram sample is digested with 3 ml HCL-HNO<sub>3</sub>-H<sub>2</sub>O at 95 degrees for one hour then diluted to 10 ml with water. The analysis of Au was performed on a 10 gram sample by leach/AA. The lowermost detection limit for Au is 3 ppm.

Rock sample descriptions and results are outlined in Appendices 4 and 5, respectively.

## RESULTS

Based on experience in the area, thresholds of greater than or equal to 100 ppm Cu, and greater than or equal to 10 ppb Au were chosen.

A total of six soil samples were taken. The soils samples have a yellow-brown colour, are comprised of 80% sand and 20% fines. The horizon sampled is the B horizon that represents an unstratified glaciolacustrine till which is prevalent throughout the Babine-Takla Lake region.

One sample, 181526, was anomalous in gold (70 ppb Au). All of the soils are below threshold (100 ppm) in copper. The highest value was 46 ppm Cu. (Figure 5)

Prospecting was done along the base line. A variety of sedimentary rocks including mudstone, greywacke, calcareous greywacke, and limestone were mapped. (Figure 5) Trace amounts of disseminated pyrite were found within the greywacke. A total of five grab samples were taken from each rock type for analysis.

Results (Appendix 5) show that all of the samples have low copper and gold. The highest copper value is 69 ppm and the highest gold value is 9 ppb.

Limestone and calcareous greywackes contain high concentrations of calcium (sample 181532 8.17% Ca; sample 181535 30.00% Ca). This undoubtedly reflects high contents of calcite in the samples.

### CONCLUSIONS

Prospecting and mapping confirmed the existence of limestone and calcareous greywacke rock units on the Lost Marble 1 and 2 claims.

One soil sample taken at the No. 1 Post for the claims was anomalous in Au (70 ppb).

### RECOMMENDATIONS

1. Mineable reserves and suitability of the calcite-rich rocks should be further investigated.
2. Additional mapping, prospecting, and soil geochemical sampling should be done to delineate the Au soil anomaly.

REFERENCES

- BCMEMPR, 1986. Revised Mineral Inventory Maps, 93K, 1:250,000.  
BCMEMPR, Victoria, B.C.
- ARMSTRONG, J.E., 1946. Map 844A, Takla, 1:253,440. GSC, Ottawa,  
Ontario.

APPENDIX 1.

List of Field Personnel, 1991, Lost Marble property

Name, Address	Position	Dates worked on claims	Man days
Mark Liskowich Regina, Saskatchewan	Geologist	27 Aug. 91	1
Mike Sutherland Prince George, B.C.	Field Assistant	27 Aug. 91	1

APPENDIX 2.

Statements of Costs, Lost Marble property,  
27 September 1991

Total Costs	
Field Personnel, 2 person-days @ \$160	\$ 320
Food and accommodation, 2 person-days @ \$40	80
Vehicle costs, 1 day @ \$60	60
Equipment and supplies, 2 person days @ \$8	16
Laboratory analyses, 11 samples at \$ 15	165
Report preparation, 1 person-day @ \$ 160	160
Management, 0.5 person-days @ \$ 250	125
Total	----- \$ 926

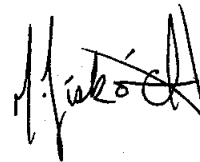


APPENDIX 3. Statement of Qualifications

I, Mark Liskowich of the City of Regina, , in the Province of Saskatchewan, do hereby certify:

1. That I am a graduate of the University of Regina, Regina Saskatchewan holding a B.Sc. degree in Geology.
2. That I have been practising my profession as a professional since my graduation in April, 1989.
3. That I worked as a geological assistant for three seasons between June, 1986 and August 1988.
4. That the opinions, conclusions and recommendations contained herein are based on field work and library research.

Mark W. Liskowich B.Sc.



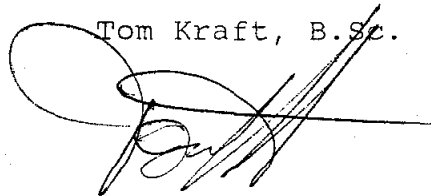
Noranda Exploration Co. Ltd  
(No Personal Liability)  
October 16, 1991

APPENDIX 3. Statement of Qualifications

I, Tom Kraft, of the City of Smithers, B.C., in the Province of British Columbia, do hereby certify:

1. That I am a graduate of Carleton University, Ottawa, Ontario and hold a B.Sc. (Hon.) degree in Geology.
2. I have been practising my profession as a professional for the past seven years.
3. That the opinions, conclusions and recommendations contained herein are based on field work and library research.

Tom Kraft, B.Sc.



Noranda Exploration Company Ltd.  
(no personal liability)  
October 31, 1991

APPENDIX 3. Statements of Qualifications

Relevant Training

B.Sc. (1970) Pennsylvania State University  
University Park, Pa., USA  
Geological Sciences

M.Sc. (1973) University of Toronto  
Toronto, Ontario, Canada  
Geochemistry

Relevant Experience

1973 - 1980 Exploration and Mine Geologist  
Cominco Ltd.  
Vancouver and Yellowknife

1980 - 1982 Exploration Geologist  
Noranda Exploration Co., Ltd.  
Yellowknife, N.W.T.

1982 - 1983 Exploration Geologist  
Noranda Exploration Co., Ltd.  
Smithers, B.C.

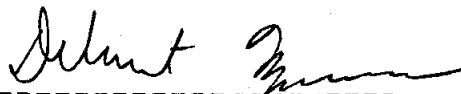
1983 - Exploration Geologist  
Noranda Exploration Co., Ltd.  
Prince George, B.C.

Professional Affiliations

Fellow, Geological Association of Canada

Member, Association of Professional Engineers,  
Geologists, and Geophysicists of the Northwest  
Territories

Member, Canadian Institute of Mining and Metallurgy



Delbert E. Myers, Jr.  
Senior Project Geologist  
20 November 1991

APPENDIX 4. Sample reports  
(in numerical order)

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93N/4W

AREA / PROPERTY Lost Marble Claims

Collection DATE August 27/91

GCI #

SAMPLE REPORT

Lab Code:

PROJECT 246

SAMPLE NO.	LOCATION & DESCRIPTION outcrop / float	% SULPHIDES	TYPE material	WIDTH m	ppm						SAMPLED BY	
					opp	Au						
181532	Grey - Blue Limestone - interbedded with lenses of pale yellow mudstone - outcrop on both sides of the road. - grab sample - 200 m. west of L. Marble / post no. 1	-	grab	rock	9	40						M.L.
181533	Greywacke - grab sample - trace pyrite - outcrop - sample 340 m. west of Lost Marble / post No. 1	tr.	rock	grab	4	38						M.L.
181534	Calcareous greywacke - dirty (impure) - green colour - grab sample from 390 m. west of Lost Marble / post No. 1	-	rock	grab	3	69						M.L.

report by:

G = GEOCHEM

A = ASSAY



APPENDIX 5. Analysis Reports  
(in chronological order)

Lab reports: 9109-056  
9110-015A

# NORANDA VANCOUVER LABORATORY

## Geochemical Analysis

Project Name & No.: BEL AIRBORNE - 246

Geol.: T.K.

Date received: OCT. 07

LAB CODE: 9110-015A

Material: 32 SOILS

Sheet: 1 of 1

Date completed: OCT. 15

(Soils only)

Remarks: \* Sample screened @ - 35 MESH (0.5 mm)

□ Organic, A Humus, S Sulfide

Au - 10.0 g sample digested with aqua-regia and determined by A.A. (D.L. 5 PPB)

ICP - 0.2 g sample digested with 3 ml HClO<sub>4</sub>:HNO<sub>3</sub> (1:1) at 203 °C for 4 hours diluted to 11 ml with water. Leeman PS3000 ICP determined elemental contents.

N.B. The major oxide elements and Ba, Be, Ce, La, Li, Ga are rarely dissolved completely from geological materials with this acid dissolution method.

T.T. No.	SAMPLE No.	Au ppb	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sr ppm	Ti %	V ppm	Zn ppm
2	14100N-10300E	5	0.6	4.59	3	331	0.9	5	1.01	0.2	46	14	51	382	4.32	0.33	25	23	0.44	1292	1	0.07	28	0.13	7	60	0.17	117	161
3	10400	5	0.2	2.75	3	223	0.5	5	0.47	0.2	33	8	51	48	3.09	0.21	16	12	0.24	506	1	0.05	12	0.12	5	48	0.22	99	86
4	10450	5	0.2	3.40	6	236	0.6	5	0.72	0.2	36	12	50	37	3.82	0.22	15	18	0.43	958	1	0.06	20	0.08	6	59	0.18	109	105
5	10500	5	0.6	3.88	9	243	1.0	5	1.54	1.1	56	15	42	269	4.02	0.25	26	22	0.36	1135	2	0.06	25	0.15	15	57	0.15	105	277
6	14100N-10600E	5	0.2	3.21	9	165	0.5	5	0.21	0.2	26	9	56	33	4.26	0.20	13	18	0.38	375	1	0.05	18	0.10	5	45	0.19	112	151
7	14100N-10700E	5	0.2	3.88	2	442	0.9	5	0.87	2.0	69	8	44	61	2.22	0.21	31	18	0.30	248	2	0.06	21	0.10	8	63	0.17	80	256
8	10800	5	0.4	3.15	65	233	0.6	5	0.51	1.3	34	9	55	77	3.30	0.20	16	20	0.34	664	2	0.06	18	0.09	14	54	0.17	101	400
9	10900	5	0.2	2.35	6	137	0.3	5	0.16	0.2	25	5	59	18	3.01	0.18	13	10	0.20	265	1	0.05	10	0.07	5	44	0.18	109	58
10	11000	5	0.2	5.03	2	373	1.1	5	0.42	0.2	51	15	52	92	4.01	0.27	24	26	0.61	852	1	0.07	31	0.07	7	58	0.13	109	113
11	14100N-11100E	5	0.2	3.55	2	230	0.6	5	0.31	0.2	27	14	49	45	3.79	0.18	12	19	0.44	356	1	0.05	21	0.04	2	48	0.17	110	81
12	14300N-10300E	5	0.2	2.94	17	207	0.6	5	0.24	0.2	26	13	43	30	3.75	0.18	12	15	0.50	1216	1	0.05	21	0.11	12	36	0.13	85	178
13	10400	5	0.2	2.99	9	171	0.4	5	0.26	0.2	24	7	40	32	4.36	0.14	12	15	0.30	417	1	0.05	15	0.08	8	39	0.17	115	134
14	10500	5	0.4	3.86	9	286	1.0	5	1.93	1.2	44	11	41	233	3.55	0.27	22	23	0.39	1594	4	0.06	25	0.19	7	63	0.14	97	221
15	10600	5	0.2	2.86	11	194	0.4	5	0.21	0.4	27	8	53	26	4.16	0.18	13	17	0.36	357	1	0.05	15	0.06	6	47	0.18	103	121
16	14300N-10700E	5	0.8	3.30	9	180	0.9	6	1.69	1.5	51	12	38	225	3.37	0.16	21	16	0.27	910	6	0.05	18	0.11	8	54	0.16	101	133
17	14300N-10800E	5	0.2	2.93	12	174	0.4	5	0.19	0.3	27	7	50	24	4.17	0.19	14	14	0.30	414	2	0.06	12	0.09	10	47	0.21	129	138
18	14300N-10900E	5	0.4	3.15	10	189	0.7	5	0.83	0.8	43	8	54	41	2.89	0.21	19	18	0.25	281	1	0.06	16	0.08	8	55	0.15	90	119
19	176359	5	0.2	1.78	7	385	0.4	5	1.75	1.2	39	7	45	41	1.94	0.36	11	8	0.21	1728	1	0.04	12	0.21	8	63	0.09	61	203
20	176360	5	0.2	2.86	6	166	0.4	5	0.19	0.3	32	9	63	23	3.12	0.23	14	16	0.23	275	1	0.04	15	0.06	9	46	0.12	98	80
21	176361	5	0.2	3.58	2	260	0.5	5	0.28	0.2	36	12	64	38	3.53	0.25	16	22	0.28	549	1	0.05	20	0.07	6	57	0.16	110	107
22	176362	5	0.2	3.41	4	230	0.7	5	0.32	0.2	39	11	66	47	3.53	0.30	17	16	0.41	401	1	0.05	29	0.05	3	63	0.15	87	77
23	176363	5	0.2	5.39	2	497	1.0	5	0.46	0.2	43	14	38	71	4.38	0.64	19	25	0.57	701	1	0.09	39	0.08	10	82	0.16	114	164
24	176364	5	0.2	5.77	4	357	1.1	5	0.54	0.2	48	22	40	35	5.07	0.71	21	27	0.61	1960	1	0.11	30	0.10	12	91	0.16	117	117
25	176365	5	0.2	3.20	10	321	0.7	5	0.58	0.2	45	18	67	43	3.90	0.42	18	16	0.42	1099	1	0.07	41	0.08	7	71	0.14	87	99
26	176366	5	0.2	3.69	12	300	0.8	5	0.77	0.2	45	21	55	57	4.25	0.49	18	20	0.56	1234	1	0.07	45	0.08	10	74	0.14	100	116
27	176367	5	0.2	4.96	2	338	0.9	5	1.14	0.2	53	27	55	65	4.28	0.61	19	24	0.67	1384	1	0.08	52	0.09	13	89	0.15	115	187
28	181526	70	0.2	2.51	3	189	0.6	5	0.65	0.2	43	10	51	28	3.00	0.30	16	12	0.50	474	1	0.05	21	0.06	6	72	0.18	93	64
29	181527	5	0.2	2.49	5	185	0.6	5	1.03	0.8	51	11	53	24	2.86	0.21	16	14	0.41	1351	2	0.05	20	0.06	6	77	0.17	85	97
30	181528	5	0.2	3.03	8	331	0.8	5	6.99	0.3	48	12	49	38	3.11	0.65	13	17	1.10	461	6	0.05	22	0.07	5	176	0.11	119	69
31	181529	5	0.2	2.78	4	216	0.6	5	0.83	0.2	39	11	42	46	3.32	0.30	18	12	0.61	681	1	0.07	21	0.07	3	88	0.19	98	70
32	181530	5	0.2	3.22	2	183	0.6	5	0.57	0.2	35	11	41	33	3.29	0.22	14	11	0.54	375	1	0.05	21	0.06	2	74	0.21	96	79
33	181531	5	0.2	3.11	3	187	0.6	5	0.88	0.4	32	14	58	20	3.99	0.23	13	14	0.57	1225	1	0.06	18	0.24	6	98	0.23	121	132

10/18/91

11:14

NORANDA VANCOUVER



GEOCHEMICAL ANALYSIS CERTIFICATE

Bell Ashborne (P)

Noranda Exploration Co. Ltd. PROJECT 9105-054 246

File # 91-4378

1050 Davie St., Vancouver BC V6E 1M6

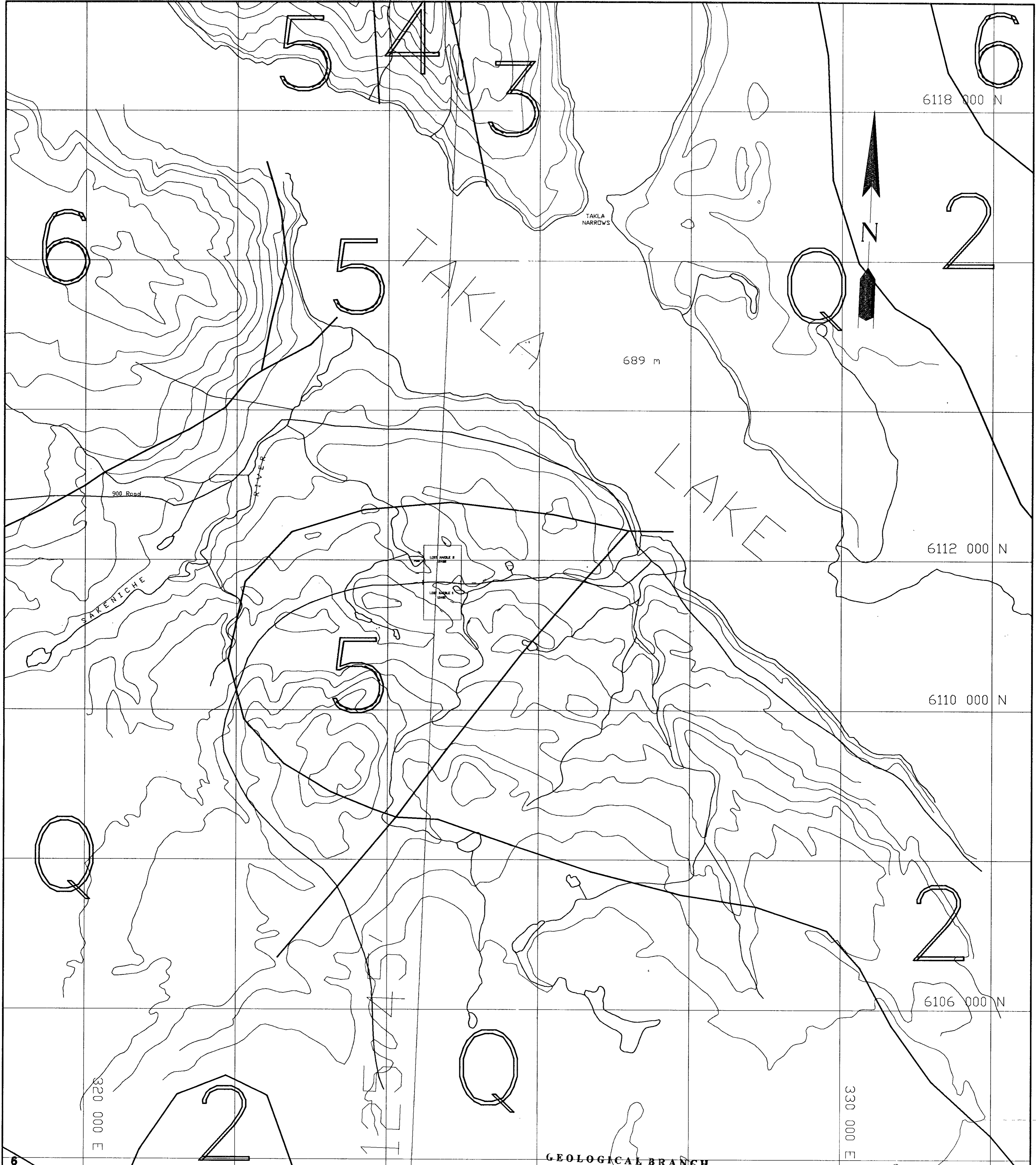
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
181532	1	40	3	51	1	6	11	941	3.12	2	5	ND	4	307	4	2	2	55	8.17	.030	3	8	1.61	105	.01	4	.79	.01	.13	1	9
181533	1	38	4	60	1	12	20	1010	4.51	7	5	ND	1	83	1.7	2	2	106	1.59	.029	2	13	2.07	59	.22	5	3.45	.16	.08	1	4
181534	1	69	2	83	1	13	19	688	4.26	2	8	ND	1	78	1.0	2	2	118	1.11	.055	2	14	1.50	67	.30	5	3.03	.16	.08	1	3
181535 181536	1	46	2	71	1	9	18	895	4.80	2	5	ND	1	53	1.3	2	2	78	1.45	.052	2	14	1.93	43	.13	4	3.42	.08	.07	1	2
181536 181535	1	4	6	9	1	4	1	108	.35	5	5	ND	1	436	.7	2	2	6	30.00	.016	2	5	.84	24	.01	2	.12	.01	.02	1	2
181551	1	25	6	64	1	23	15	412	3.79	10	8	ND	1	95	.2	2	2	57	.88	.089	13	14	1.08	142	.04	3	1.52	.10	.09	1	4
181552	1	43	2	73	1	35	17	869	6.34	3	5	ND	1	94	.7	2	2	155	.77	.105	14	30	.75	132	.06	4	1.47	.11	.09	1	5
181553	1	33	2	74	1	23	14	815	3.62	2	5	ND	1	97	.3	2	2	91	.95	.126	13	19	.28	101	.04	3	.82	.13	.09	1	2
181554	1	42	2	69	1	23	18	592	5.98	3	5	ND	1	95	.5	2	2	72	1.90	.104	10	14	.22	49	.10	2	.82	.11	.10	1	1
181555	1	37	2	68	1	26	15	667	3.97	2	5	ND	1	127	.8	2	2	75	1.13	.111	13	26	.32	88	.09	4	1.05	.17	.11	1	1
181556	1	30	4	49	1	14	12	509	4.44	2	5	ND	1	90	.3	2	2	63	1.19	.112	11	15	.71	78	.09	3	.87	.08	.21	1	2
181557	1	22	2	154	1	17	10	1337	4.98	5	7	ND	1	145	.8	2	2	86	2.80	.117	12	21	1.60	90	.08	4	.73	.15	.12	1	2
181558	1	22	2	37	1	15	8	673	2.30	3	5	ND	1	95	.3	2	2	75	1.57	.139	14	24	.64	91	.03	2	.66	.13	.08	1	2
181559	25	29	6	34	1	5	3	63	1.26	13	5	ND	2	28	.3	2	2	24	.17	.052	34	6	.27	445	.12	2	.55	.09	.41	1	2
181560	7	35	5	414	1	79	32	677	4.64	32	5	ND	1	89	.2	2	2	79	.57	.111	13	32	.21	120	.08	4	.83	.14	.11	1	1
181561	1	25	2	139	1	52	24	426	4.17	7	5	ND	1	103	.4	2	2	101	.79	.117	11	31	.62	94	.14	5	.90	.19	.13	1	1
181562	1	34	2	82	1	44	21	424	3.86	194	5	ND	1	88	.4	2	2	49	.42	.129	13	21	.13	71	.02	2	.80	.11	.09	1	3
181563	5	29	9	91	1	9	3	521	2.38	13	5	ND	1	9	.2	2	2	8	.08	.034	29	7	.02	51	.01	5	.33	.01	.20	1	3
181564	1	25	2	63	1	22	11	7005	2.88	4	5	ND	4	87	.9	2	3	72	5.86	.090	14	26	1.06	114	.12	2	.94	.15	.17	1	2
RE 181560	6	34	7	389	1	75	31	818	4.43	31	7	ND	1	90	.2	2	2	77	.73	.108	12	30	.23	114	.09	3	.85	.15	.12	1	2
181565	1	35	2	71	1	60	29	947	3.23	17	7	ND	1	118	.5	2	2	87	1.90	.118	10	37	1.39	57	.09	3	.85	.18	.09	1	2
181566	1	29	2	68	1	13	6	121	4.43	48	5	ND	1	86	.8	2	2	82	.58	.127	10	31	.24	56	.06	4	.76	.17	.10	1	5
181567	21	29	2	71	1	14	9	311	2.46	8	5	ND	1	87	.5	2	2	102	.82	.117	9	18	.51	50	.05	3	1.04	.15	.11	1	4
181568	1	78	61	102	4	53	40	402	10.41	15	5	ND	1	34	1.9	2	11	67	.60	.109	2	43	1.09	28	.06	2	1.44	.06	.09	1	24
STANDARD C/AU-R	17	58	38	127	7.2	67	30	1001	3.96	39	19	7	35	52	17.8	16	18	56	.48	.094	37	60	.84	170	.08	33	1.85	.06	.14	11	530

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MM FE SR CA P LA CR NG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB. - SAMPLE TYPE: ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: SEP 11 1991

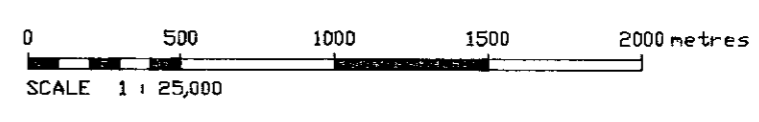
DATE REPORT MAILED: Sept 18/91.

SIGNED BY: C. King, D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS.



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

21,893



LEGEND

- 50 m contour
- Lake
- Road
- Stream
- UTM coordinate (Zone 10)
- Meridian

Cenozoic

- Quaternary
- Q** Unconsolidated sediments

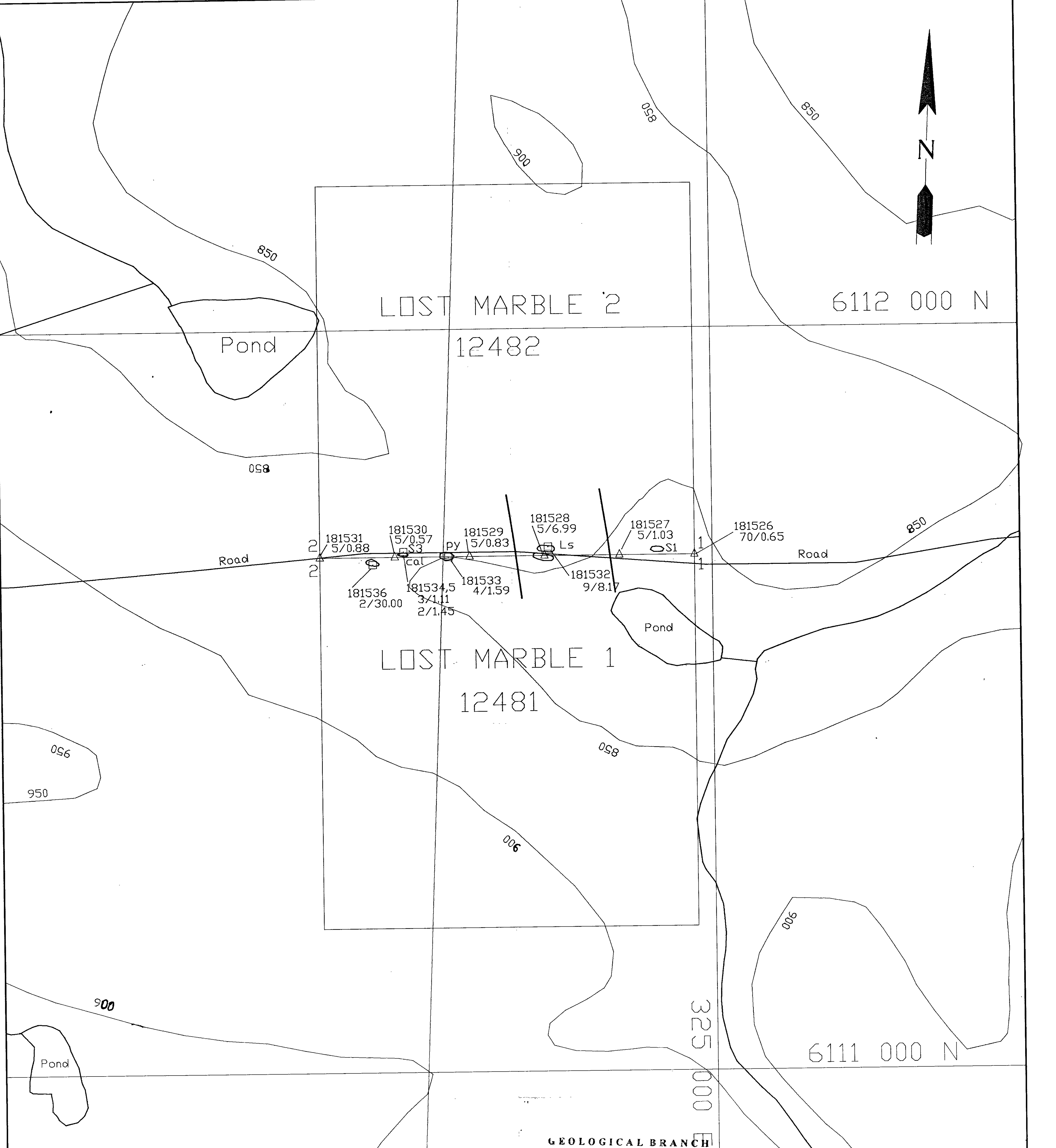
Mesozoic

- JURASSIC OR CRETACEOUS
- UPPER JURASSIC OR LOWER CRETACEOUS
- OMINECA INTRUSIONS
- 6** *Granodiorite, quartz diorite, diorite, minor granite, syenite, gabbro, pyroxenite*
- TRIASSIC AND JURASSIC
- UPPER TRIASSIC AND LATER
- TAKLA GROUP
- 4** *Upper Triassic shale, greywacke, conglomerate, tuff, and limestone*
- 5** *Upper Triassic and Jurassic andesitic and basaltic flows, tuffs, breccias, and agglomerates, interbedded conglomerate, shale, greywacke, limestone, and coal*

Paleozoic

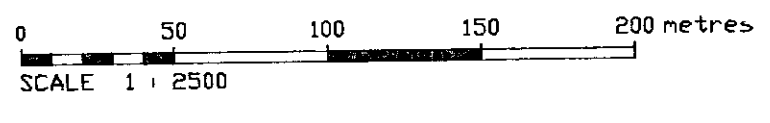
- PERMIAN AND(?) EARLIER
- CACHE CREEK GROUP
- Greenstone (andesitic flows, tuffs, and breccias with minor basic intrusive rocks), chlorite and hornblende schists, minor argillite and chert. May include some Takla group (5)*
- 2** *Argillaceous quartzite, chert, argillite, slate, greywacke, conglomerate, minor greenstone and limestone, related schists in part older than 1*

REVISED	LOST MARBLE		
	REGIONAL GEOLOGY		
	(from GSC Map 844A, Armstrong, 1946)		
PROJ. No. 246	SURVEY BY: ML	DATE: 22 Nov 91	
N.T.S. 093N04	DRAWN BY: TK,DEM Jr	SCALE: 1:25,000	
DWG. No. 4	NORANDA EXPLORATION		
	OFFICE: PRINCE	GEORGE	B.C.



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

# 21,893



### LEGEND

- 50 m contour
- Lake
- Road
- Stream
- UTM coordinate (Zone 10)
- Meridian
- Outcrop
- Soil sample Sample # Au ppb/Ca%
- Rock sample Sample # Au ppb/Ca%
- Contact

- Lithologies
- Ls Limestone, grey-blue, with interbedded lenses of pale yellow mudstone
  - S1 Mudstone
  - S3 Greywacke, calcareous greywacke, green to gray, with some limestone interbeds, orange rusty colors
- Abbreviations
- cal calcareous
  - py pyrite

REVISED	LOST MARBLE	
	Geology and Geochemistry	
PROJ. No. 246	SURVEY BY: ML	DATE: 22 Nov 91
N.T.S. 093N04	DRAWN BY: TK,DEM Jr	SCALE: 1:2500
DWG. No. 5	<b>NORANDA EXPLORATION</b>	
	OFFICE: PRINCE GEORGE B.C.	