ASSESSMENT REPORT

DIAMOND RILLING

ON THE

93E/14W

SMOKE MOUNTAIN PROPERTY

127° 16'W, 53° 53'N

Omineca Mining Division

by

G. Belik

Noranda Exploration Company, Limited (No Personal Liability)

July 19 - August 26, 1974

Department of

Mines and Passalla Resources

ASSESSAR 1 KERUKT

No. 5139

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DIAMOND DRILLING

ON THE

SMOKE MOUNTAIN PROPERTY

INTRODUCTION

The Smoke Mountain property, consisting of 49 mineral claims, covers an area geologically similar to that of 'porphyry deposits' occurring within an area referred to as the Skeena Arch.

Diamond drilling was completed on certain of these claims to determine the cause of a induced polarization anomaly outlined during an earlier geophysical survey.

LOCATION AND ACCESSIBILITY

The Smoke Mountain mineral claims are located within the Whitesail Lake Map, British Columbia, on the south slope of Smoke Mountain. The town of Smithers is about 60 miles to the north.

Access to the property from Smithers is by helicopter. A gravel road, used mainly for access to the Berg copper-moly prospect, passes within 4 miles of the property.

CLAIMS AND OWNERSHIP

Claim Name	Record Number
Smoke 1 - 3	90042 - 90044
Smoke 1 Fr.	90045
CS 1 - 2	113581 -113582
NS 1 - 24	127058 -127081
NS 25 - 34	130086 -130095
NS 1 - 9 Fr.	127082 -127090

All mineral claims are owned by Noranda Exploration Company,
Limited. Smoke 1-3, Smoke 1 Fr. and CS 1-2 are held by option from
Norwich Resources Limited.

MAPS

#1 Location map

#2 Claim map



DIAMOND DRILLING

Seven diamond drill holes, with a total footage of 2,121 feet, were completed on Cs 1, Cs 2, NS 2, NS 4, NS 20 and NS 1 Fr. during the period extending from July 19 to August 26, 1974. Drilling was under contract to H. Allen Diamond Drilling Limited, Box 1397, Merritt, British Columbia. A Longyear 38 drill rig with BQ wireline equipment was used to bore the holes.

Drill core is stored in wooden boxes, placed in a rack at the Noranda campsite located on the CS 1 mineral claim.

G. Belik Geologist.

Table #1

SMOKE MOUNTAIN PROPERTY

DIAMOND DRILL HOLE DATA

Hole	No.	Latitude	Departure	Elevation	Claim	Dip	Bearing	Depth	Start	Finish
D.D.1	4. 74-1	100N	103+90E	44201	CS 1	<u>-48°</u>	270°	3021	28/7/74	30/7/74
D.D.1	H. 74-2	92+79N	100E	45001	NS 2	- 45°	270°	3981	1/8/74	4/8/74
D.D.1	I. 74-3	112+41N	111+23E	44201	CS 2	_49°	268°	347	6/8/74	8/8/74
D.D.1	1. 74 <u>-</u> 4	111+54N	108E	44181	NS 1 Fr.	- 45°	180°	306	9/8/74	11/8/74
D.D.1	1. 74-5	119+78N	113+92E	45201	NS 20	-45°	270°	3201	17/8/74	19/8/74
D.D.	1. 74-6	105+57N	115+07E	44351	CS 2	-45°	90°	250'	20/8/74	21/8/74
D.D.1	i. 74-7	91+39N	116+38E	44601	NS 4	-45°	360°	1981	23/8/74	26/8/74

Day Belik

STATEMENT OF QUALIFICATION

I, Gary Belik of the Town of Smithers, Province of British Columbia do certify that:

- I have been an employee of Noranda Exploration Company,
 Limited since May 1970.
- 2. I am a graduate of the University of British Columbia with a Bachelor of Science Degree in Geology and a Master of Science Degree in Geology.
- 3. I am an Associate Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
- 4. I have held the position of Geologist for Noranda Exploration Company, Limited since May 1970.

Gary Belik

Geologist

NORANDA EXPLORATION COMPANY,

LIMITED

(No Personal Liability)

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NOR	ANDA	EXPLORATI	ON CO.	LTD.				PropertySmoke	Mtn	1000	47	Shee	t No.	1	Hole No	DDH 74-1
		-					_	Project No. 23	N.T.S.	93 E/14	+W	Core	Size: B	વ		
Lat.	100N		Elev.	4420			Di	p _48 °	Collared 28/	7/74		Logg	ed by:	G. Be	lik	20
Dep.	103.9	E	Depth	3021	\\		Ве	aring 270°	Completed 30/	7/74					ASSAYS	3
Footage	e (Rec'y	F	Rock Type/	Alteration		Grap		Mineralization/Stru	cture	% Sulfides	Sample No.	Lt.				
0-45	0%	Overburd	en		e.								*:			
45-50	98	Pale green grained in lopes adjustifications	ntrusiv acent t	e. Qtz-	Se enve- alized			Py as fracture filli seminations. Dissemi magnetite & hematite	nations of	>1						
50-60	98	"		2 11 5 2014	2			Trace Cpy Thin carb & qtz-carb		1.5			571.048			
60-70	99	Progressi	vely mo	" re sili	ceous.			n .	i i	1	otte mes i		5			
7 0 - 77	99	Moderate	q tz- Se	" alterat	ion.			Stockwork of fractur Mineralized with Py	es.	3-4	0) di		
77-80	99	Dark brown hornfels.	n, brec	ciated,	biotite			n n		3				N2		2
80-82	99	Medium gradiorite.						Pyrite as fracture f disseminations.	illings &	71	7 76				200	
82 - 90	98	Pale grey, grained in qtz-Se-can	trusiv	e. Mode	rate			Stockwork of fracturized with Py. Abunda Py, carbonate veinin hematite imparts a p some of the core.	nt dissem. g. Very fine	>5	41					en e

NORA	NDA	EXPLORATI	ON CO	. LTD.			PropertySmoke	Mtn	6		Shee	t No.	1	Hole No.	DDH 74-1
					enedra n		Project No. 23	N.T.S.	93 E/14	+W	Core	Size: B	କ	90	15 20 20
Lat.	100N		Elev.	4420		D	ip _4 8°	Collared	28/7/74		Logg	ed by:	G. Be	lik	110011
Dep.	103.9	E	Depth	3021	11	В	earing 270°	Completed	30/7/74	×"				ASSAYS	
Footage	Rec'y	R	ock Type	Alteration	110	Graphic Log	Mineralization/Struc	eture	% Sulfides	Sample No.	Lt,				
0-45	0%	Overburde	n				٤								
45-50	98	Pale green grained in lopes adja fractures	trusi	ve. Qtz-	Se enve- alized	•	Py as fracture filli seminations. Dissemi magnetite & hematite	nations o							
50-60	98	"		11			Trace Cpy Thin carb & qtz-carb	3	1.5						
60-70	99	Progressi	rely mo	" ore silio	ceous.		u u		1					(9)	
70-77	99	Moderate o	tz-Se	" alterat:	ion.		Stockwork of fracture Mineralized with Py	es.	3-4						ann (2. i-i-
77-80	99	Dark brown hornfels.	, bred	cciated,	biotite		11, 11		3				. 6		* :
80-82	99	Medium grediorite.					Pyrite as fracture f disseminations.	illings &	71						et a s
82-90	98	Pale grey, grained in qtz-Se-can	trusi	re. Mode	rate		Stockwork of fractur ized with Py. Abunda Py, carbonate veinin hematite imparts a p some of the core.	nt dissem	ine >5				4		

Sheet No. 3 Smoke Mtn. Hole No. DDH 74-1 NORANDA EXPLORATION CO. LTD. Property_ Core Size: 93 E/14W BQ Project No. N.T.S. Elev. Collared Lat. Logged by: G. Belik Depth Dep. Bearing Completed ASSAYS Graphic Sample Rock Type/Alteration Rec'y Footage Mineralization/Structure Log Sulfides No. Very fine hematite imparts pink 160-170 envelopes around some fractures. Progressive increase in 11 >2 170-180 matrix carbonate. Pale grey to pale green, altered Stockwork of thin, white, intrusive. Carbonate-rich carbonate veins (>40/ft). Pyrite >3 180-190 matrix & carbonate envelopes as fracture fillings & disadjacent to mineralized seminations. Disseminations of fractures. Weak development of magnetite & hematite. clay? Local brecciation with minor gouge. 190-197 Locally porphyritic. <3 be de Pale brown to pale green, por-Stockwork of carbonate veins 0.1 phyritic intrusive. Carb-clay? -5 mm thick (>10/ft). Pyrite 2 Alteration weakly developed. present as fracture fillings & 197-200 Locally chloritic. disseminations. 99 11 11 200-210 2 ** Sections with mod. Carb-clay? Intense carbonate veining with 210-220 100 24 alteration. local brecciation.

Sheet No. Hole No. DDH 74-3 Smoke Mtn. NORANDA EXPLORATION CO. LTD. Property_ Core Size: 93 E/14W BQ Project No. N.T.S. Dip Collared G. Belik Lat. Logged by: Depth Bearing Dep. Completed ASSAYS Graphic Sample Rock Type/Alteration Lt. Footage Rec'y Mineralization/Structure Sulfides Log No. Very fine hematite imparts pink 50-170 envelopes around some fractures. 2 ** Progressive increase in >2 70-180 matrix carbonate. Pale grey to pale green, altered Stockwork of thin, white, intrusive. Carbonate-rich carbonate veins (>40/ft). Pyrite >3 30-190 matrix & carbonate envelopes as fracture fillings & disadjacent to mineralized seminations. Disseminations of fractures. Weak development of magnetite & hematite. clay? Local brecciation with minor gouge. 90-197 Locally porphyritic. Pale brown to pale green, por-Stockwork of carbonate veins 0.1 phyritic intrusive. Carb-clay? -5 mm thick (>10/ft). Pyrite 2 Alteration weakly developed. present as fracture fillings & 7-200 Locally chloritic. disseminations. 012-00 ** ** 2 Sections with mod. Carb-clay? Intense carbonate veining with 0-220 100 alteration. local brecciation. >4

Sheet No. Hole No. DDH 74-1 Smoke Mtn. NORANDA EXPLORATION CO. LTD. Property___ 93 E/14W Core Size: BQ Project No. 23 N.T.S. Dip Collared Lat. Logged by: G. Belik Dep. Depth Bearing Completed ASSAYS Graphic Sample Rock Type/Alteration Footage Rec'y Mineralization/Structure Lt. Log Sulfides No. 0-230 100 Disseminated hematite. 3 0-240 100 3 0-250 Most Py occurs disseminated. 4 0-260 100 Fractures & veins 30°/core a common orientation. >3 100 Decrease in carb down section. >2 11 Fine hematite imparts a pink Decress in carbonate veining. 100 hue to some of the core. Carb veining (5/ft). Pyrite as fracture fillings (30%) & ₹2 0-290 disseminations (70%). 0-300 ** 2-3

5 DDH 74-1 Hole No. Sheet No. Smoke Mtn. NORANDA EXPLORATION CO. LTD. Property-Project No. 23 93 E/14W Core Size: BQ N.T.S. G. Belik Elev. Dip Collared Lat. Logged by: Dep. Depth Bearing Completed **ASSAYS** Graphic Sample Rock Type/Alteration Rec'y Footage Mineralization/Structure Lt. Log Sulfides No. Porphyritic intrusive. 20% weakly altered plag phenocrysts 300-302 ** 2-3 within a fine-grained, biotitefelds groundmass END OF HOLE - CASING PULLED

Smoke Mtn. Sheet No. 1 Hole No. DDH 74-2 NORANDA EXPLORATION CO. LTD. Property-93 E/14W Core Size: BC 23 Project No. N.T.S. Elev. 4500 92+79 N Dip _45° 1/8/74 Collared Logged by: G. Belik 398* Dep. Depth 100 E Bearing 270° 4/8/74 Completed **ASSAYS** Graphic Rock Type/Alteration Footage Rec'v Sample Mineralization/Structure Lt. Log Sulfides No. 0-30 0% Overburden Medium grained qtz diorite/grano Pyrite as fracture fillings & dis--diorite. 20%-40% mafics altered seminations. Traces of Cpy. Dis-30-40 1 to Cl + Se. Local secondary Kseminated magnetite (0%-1%) & spar, 10% sulphide with thin qtz hematite (0.2%-5%). Local carb-onate veining. 40-50 97 11 11 1.5 50-60 98 11 2 98 60-70 2.5 Pyrite occurs as fracture fillings Mafics altered to Se. Sulphide & dissemination. Minor moly. 99 fractures with qtz envelopes 70-75 2 Traces Cpy more numerous. Medium-grained qtz diorite/grano -diorite. Mafics altered to chlo Pyrite, minor Cpy. -rite (locally sericite). Silici 2 Disseminated hematite. oped. 80 182 locally devel-Pre-mineral porphyritic dyke. HBD (10%) & Plag (20%) phenos 87-90 100 within a dense matrix. HBD alt. Py. minor moly 2 to chlorite. Plage partly saus-uritized. Dyke contact 45°/core.

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NORAL	NDA	EXPLORATI	ON CO. LTD.		Property Smoke A					t No.	2	Hole No	DDH 74-2
	y				Project No. 23		E/14W		-		BQ		
Lat.			Elev.		Dip	Collared		- 127 E-177	Logg	ed by:	G. Bel		
Dep.	T		Depth	+1	Bearing Total Control of the Control	Completed					7	ASSAYS	S T
Footage	Rec'y	F	Rock Type/Alteration	Graphic Log	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.	= -		-	
90-100		altered to cation of m	red intrusive mafics sericite. Silicifi- matrix & vein walls. porphyritic dyke.		Py, traces of Cpy & mo Disseminated hematite.		4						
100-110	95	" 104. <i>5</i> %-106	- porphyritic dyke.		by, traces of Cpy. Disseminated Mag/hemat	ite.	3			×			
110-120	99	" 117 '- 118' -	Porphyritic dyke 45°/core.		n a		3•5						
120-127	99	(15%) alter	ned qtz diorite. Maf red to chlorite sili- adjacent to a few in walls. 123'-123.5' ic dyke.		n n		1.5	Om F o H					
127-137	100	Mafics alte Increase in	ered to sericite. i silicification Porphyritic dyke.		Pyrite occurs as fract & disseminations. trac Disseminated hematite.	es of Cpy.	\$2	1					
137-144	100		ered to Se + Cl. de fractures with des.		Pyrite (mostly dissem) Hematite	-y .w.	3						
144-150	100	30% mafics	ned qtz diorite with (HBD + Bi).		Pyrite, traces Cpy. Dissem. hematite. Minor carbonate veinin	ıg•	1					= 1	
150-160	1000	11	11		Some fractures with he	matite.	0.5	-		5	Ş	*	

Smoke Mtn. Sheet No. Hole No. DDH 74-2 NORANDA EXPLORATION CO. LTD. Property-Core Size: BC 93 E/14W 23 Project No. N.T.S. Elev. 4500 Dip Lat. 92+79 N -45° 1/8/74 Collared Logged by: G. Belik Dep. Depth 398 Bearing 4/8/74 100 E 270° Completed ASSAYS Graphic Rec'y Rock Type/Alteration Sample Footage Mineralization/Structure Lt. Log Sulfides No. 0-30 0% Overburden Medium grained qtz diorite/grano Pyrite as fracture fillings & disseminations. Traces of Cpy. Dis--diorite. 20%-40% mafics altered 1 30-40 to Cl + Se. Local secondary Kseminated magnetite (0%-1%) & spar. 10% sulphide with thin qtz hematite (0.2%-5%). Local carb-onate veining. 97 #1 40-50 1.5 98 50-60 2 98 ** . 2.5 Pyrite occurs as fracture fillings Mafics altered to Se. Sulphide & dissemination. Minor molv. 99 fractures with qtz envelopes 2 70-75

75-87

oped. 00-02 - gouge Pre-mineral porphyritic dyke. HBD (10%) & Plag (20%) phenos

Medium-grained qtz diorite/grano -diorite. Mafics altered to chlo

-rite (locally sericite). Silici

more numerous.

87-90 100 within a dense matrix. HBD alt. to chlorite. Plage partly saus-uritized. Dyke contact 45°/core.

Py. minor moly

Pyrite, minor Cpy.

Disseminated hematite.

Traces Cpy

2

NORAN	IDA	EXPLORAT	ON CO. LTD.		PropertySmo	ke Mtn.	450853		Shee	No.	5	Hole No	DDH 74-2
					Project No. 23	N.T.S. 9	3 E/14	W	Core	Size:	BQ	73	154 - 250 - 250 144 - 250
Lat.		Vi	Elev.	D	ip	Collared			Logg	ed by:	G. Bel	ik	
Dep.			Depth	В	earing	Completed						ASSAY	3
Footage	Rec'y	ı	Rock Type/Alteration	Graphic Log	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				
160 - 165	100	11	H		11 11	12	>1						
165-170		+ Bi partl	ined qtz diorite. HBF y altered to Cl + Se. or silicification.	-	Py, dissem. hematite. Minor carbonate veining	ng (45°/core	a						
170-180	99	11	e" 3 • 11		" Traces of Cpy	Ti di	2						
18 0- 190	100	111	: " U		Minor Py, traces of C	ρÿ	0.5	90 - 1					
190-200	98	Sections w	ith sausuritized plag		Pyrite occurs as fract & disseminations. Trac Disseminated magnetite	es of Cpy.				7(= F 2	100	
200-204	98	203 .7:- 204	' - gouge	4 - 1	11 11	ent in the	₹ 0•5			U	- 3		
204-210	99	20% plag p fine grain altered to fractures	n-grey, porphyritic dy henos within a dark gr ed groundmass. Mafics chlorite. Large sulph with qts envelopes. Up	ey.	Minor pyrite, traces (Disseminated mag/hem. Hinor carbonate veining		<0.5	Y.,			G	U	2
210-220	72	contact 45	°/core.		11 11		> 0. 5			¥			199

		1											597
NORAN	NDA	EXPLORATI	ON CO. LTD.		PropertySmoke	e Mtn.			Shee	t No.	4	Hole No.	DDH 74-2
					Project No. 23	N.T.S.	93 E/	L4W	Core	Size:	BQ		·
Lat.		ž.,-	Elev.	C)ip	Collared			Logg	ed by:	G.	Belik	
Dep.			Depth	E	learing	Completed		7/				ASSAYS	
Footage	Rec'y	R	lock Type/Alteration	Graphic Log	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				
220- 225	99	i. n			u u		0.5						
225-2395	100	altered to	ined qtz diorite. Mafi chlorite. Large sulp- ures with qtz envelope - dark grey, porphyrit ore.		Minor amounts of pyrit Trace of moly. Dissem.	and the second s	0.5						
239.5-2		1	porphyritic dyke. act 45°/core.		Minor Py, traces Cpy Disseminated magnetite	e/hematite.	>0.5						
244-253		Qtz diorit Mafics (20 chlorite.			11	a from all	0.3	- X - 2				>	
253-262	100	Mafics alt	ered to sericite + Cl. nvelopes.		Abundant Py (mainly di Traces of Cpy & moly. Disseminated hematite		3•5						
262-264	100	, II	u .		Minor Fy, traces Cpy. Disseminated magnetite	e/hematite.	°0•5	T.				100	ä
264-270			ark grey porphyritic r contact 80°/core.		u "		0.5				*		g 24 ₀
270-280		в	31		и и		0.5-1			304 314 21			124

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NORAL	NDA	EXPLORAT	TION CO. LTD.			Smoke !	544-547	z BAhr	,		t No. Size:	5	Hole No.	DDH 74-2
Lat.			Elev.		Project No. 23	Coll		3 E/14V			ed by:	BQ	2-14%	
Dep.			Depth		Bearing		pleted			2099		G.	B elik ASSAYS	
Footage	!Rec'y	,	Rock Type/Alteration	Graphi Log	c Mineralization/S			% Sulfides	Sample No.	Lt.				
280-290	100	11	tt s		11	14	**)1			ā			
<u>290-2925</u>	100	Lower con	tact 30°/core.		"	ti		1			B 51			
12.5-255	100	Qtz diorit Mafics alt	e. ered to chlorite.		11	11	1 a. V.	> 1						8
13•5-295	100	Dark grey,	porphyritic dyke.			n		1	es a second					(E)
.95 - 310	100	(Bi + HBD) chlorite +	e. 30%-40% mafics locally altered to sericite. Large sul- s have qtz envelopes.		п	ıı	f	y 0•5						
10-320	100	& plag (15 grey groun	c dyke with HBD (20%) %) phenos within a dmass. HBD altered to Upper contact 40°/cor		Py, traces Cpy. Dissem mag./hem.	V. =	. 0	0.5-1			5			*
i20 – 330	99	,	TT.		11	ıı		>1						11
30 - 340	98		(11)		11	n	l .	>1				5		140

*			9									((*)
NORAN	IDA	EXPLORATION	ON CO. LTD.		Property	Smoke Mtn			Shee	t No.	6	Hole No.	DDH 74-2
		The second secon			Project No. 23	N.T.S.	93 E/	L4W	Core	Size:	E	3 Q	
Lat.		1/2	Elev.	D	ip	Collared			Logg	ed by:	G. E	Belik	
Dep.		ξ ~	Depth	В	earing	Completed	5 728	e		3		ASSAYS	
Footage	Rec'y	R	ock Type/Alteration	Graphic Log	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				(A. 2004) 2
340-343	00	sericite +	e, mafics altered to chlorite. Silicifi- sulphide fracture		Pyrite, traces Cpy. Disseminated hematite.		3						
343-344	99	Porphyritic	dyke 45°/core.		Fyrite, traces Cpy		1.5						
344-350	9 9		e/granodiorite. Mafics chlorite + sericite. cification.		Pyrite, minor Cpy & di hematite. Minor K-spar		١ اد						
350-360	99	"	n		u "		1.5	e 85, 5,		8			
3 60 – 370	100	1 0	11		Hematite also occurs a fillings.	s fracture	>0.5						
370-380	99	year New S	n .		Minor Py, traces Cpy. A few hematite veins.	2800 gr gr 700	<0.5	17-18		0			a
380-3855	99	11 11	" " H		11 11	Mark Market Miles	>0.5						lan E 9
3855-391	3	Pina	, porphyritic dyke. d with 20% chloritize t 25°/core.	d	Pyrite	20 10	3			24	er Es		xe x

DDH 74-2 Smoke Mtn. Sheet No. Hole No. NORÂNDA EXPLORATION CO. LTD. Property-Core Size: 93 E/14W BQ Project No. N.T.S. Dip Collared Elev. Logged by: G. Belik Lat. ASSAYS Depth Bearing Completed Dep. Graphic Sample Rock Type/Alteration Lt. Mineralization/Structure Footage Rec'y Sulfides Log No. Qtz diorite. Mafics altered Pyrite, traces Cpy. 1.5 391-398 99 to chlorite. END OF HOLE - CASING FULLED

2	*	()		***	. 11	***		(· N	5 ²⁰⁰ 5 8		<i>m</i> 35 v.					()	
NORA	NDA	EXPLORATI	ON CO. LT	TD.			Propert Project		Smo	ke Mtn.	93 E	E/14W	27 AND		t No.	1 BQ	Hole N	o. DDH 7	74-3
Lat.	112+4	l N	Elev. 442	201		Dij			Ī		6/8/	774		Logg	ed by:	G. Be	lik		
Dep.	111+2	3 E	Depth 34	7' \		Be	aring 268°			Completed							ASSAY	'S	
Footage	Rec'y	F	lock Type/Alter	ation	Grap Lo		Mi	neralizat	tion/Struct	ure		% Sulfides	Sample No.	Lt.					
0-35	a	Overbu	rden	9					70	7			4						
35-40	70	Grey, fine diorite. hairline of seconda Away from	Intense st Fractures	ockwork o	f lopes	8	Biotite fra plus small a & Cpy also epidote, wit & in qtz ve	amoun occur hin m	ts of in fr agneti	Cpy. Pyractures to veinle	ite with ets	1.5			.20				
3		altered to unit conta	chlorite	. Locally			seminations												5 = 2 2 = 2
40-50	75	"	, N	-			ij m	"	11			3			1				5
50-60	85	**	n	\$ decrease objetes \$60			3	"	51			>3	X	Property La	4				
60-70	95	20%-40% Se Secondary abundant.	econdary E K-spar mo	Bi 🛊				11	'n			;4	ws-r		\$				
70-80	95		11				i)	"1	"	2		4							
80-90	90	Locally ch	" nloritic	(a 5)			i ea	1	31	. gas 		2				Ter .			

+		O .					· · · · · · · · · · · · · · · · · · ·		·)
NORAN	ΙΠΔ	EXPLOBATI	ON CO. LTD.			Property	Smoke	Mtn.				Shee	t No.	2	Hole No	DDH 74-3
NONA						Project No.	23	N.T.S.	93	E/14W		Core	Size: E	SQ.		
Lat.			Elev.		D	ip		Collared				Logg	ed by:	G. Be	lik	
Dep.	,		Depth	<u> </u>	В	earing		Completed			-				ASSAYS	}
Footage	Rec'y	R	lock Type/Alteration		Graphic Log	Mineraliza	ation/Struc	ture		% Sulfides	Sample No.	Lt.				
90–100	95	n		T T		tt	"			3						
100-110	99	**	11	*** # 20.00 ***		· tt	11			4						
110-120	97	**	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			u u	α			5	-					28
120-130	99	Secondary abundant	biotite more	•		, tr	u			4	90 = 00					
130-140	99	n	"			11	11			4 - 5						
140-150	0 99	Biotite al	lterate not a	ıs		with a few gyps	um veir	ıs		2						
150-160	100	Abundant	secondary bio	otite		Numerous magnet veinlets	" ite & F			2				\$22 1	- 1	*
160-164		Contact will lithology	" ith underlyin 45°/core	g		Plus numerous f bleached envelo alteration)		s with		3				550		1000 1 100 9

reconstruction of the committee of the control of t

: e.		<i>C</i>										C ,)
NORAN	IDA	EXPLORATION	ON CO. LTD.		Property Smoke M		5 E/14v		+	t No.	3 BQ	Hole No	DDH 74-3
Lat.			Elev.		Project No. 23	Collared	2/176		Logg	ged by:		Belik	
Dep.			Depth	Е	Bearing	Completed	3.2					ASSAYS	3
Footage	Rec'y	R	ock Type/Alteration	Graphic Log	Mineralization/Struct	ture	% Sulfides	Sample No.	Lt.				
164-171	98	diorite/di	edium green, qtz orite. Mafics altered and/or sericite. Plag completely sausuritize secondary K-spar flood		Pyrite & minor Cpy occ & fracture fillings & seminations. Py & Cpy in magnetite/hematite Veins of gypsum & qtz,	as dis- also occur veinlets.	3	1					
*			s envelopes around 169'-170' breccia		magnetite/hematite.								
171-176	99	intrusive. Plag sausu	reen, fine-grained Mafics chloritized. Writized. Fracture- I secondary biotite		Pyrite & Cpy as fractu & disseminations. Abun gashes filled with car	dant tension	10000						
176-188	99	1) Early b	of alteration evident: biotite alteration be alteration		Pyrite & Cpy developed both stages of alterat		3	3 4 4 3					
188-190	100	diorite. M rite and/o to complet	um-grained diorite/qt Mafics altered to chloor sericite. Plag part cely sausuritized.	ly	Pyrite & minor Cpy as ations & fracture fill few chlorite/gypsum-ch veins with accessory p	ings. A lorite	4						=
		& as envel	K-spar flooding matri- lopes around fractures with fine, felted, biotite.										34 22 - 1 23 ₉
190-200	99	W.	2 11		Plus a few magnetite v	reins with	5				1		sed
200-210		204*=205*	" as 171'-176'	,	. u	13 34	5						

NORA	NDA	EXPLORATI	ON CO. L	.TD.	8			Property	Smok	e Mtn.				Sheet	No.	4	Hole No	DDH 74-3
								Project No.	23	N.T.S.	9	3 E/14	1	Core	Size:	BQ		
Lat.			Elev.			D)ip	2011011		Collared				Logge	ed by:	G. Be	lik	
Dep.			Depth	//	3) 	В	learing			Completed	4		4,				ASSAYS	
Footage	Rec'y	F	Rock Type/Alte	eration		phic og		Mineral	ization/Structi	ıre		% Sulfides	Sample No.	Lt.				
		9		1000								+	=					27332
210-220	100	11	11								ve ve	3						e A
220 – 230	100	n	11					"				7						a 23
	-											3			**	-		
230-240	98	o ₩	, ,					ñ	**			3						
240-250	99	11		the control				11	"		votate to p	>3	and which is					12
250-260	99	,11	5 H	y n				u	. 11			3	-					
260-270	98	n	,					11	"	.54		1.5						an and an
270-280	98	Increase if degree of plag. No s	sausurit	ization o	f			11		ii ii		. 2	1					
280-290	99	/qtz diori in matrix. K-spar flo fractures.	en, mediu ite. Abun Plag sa	m-grained dant seri usuritize	diorii	-	& diss veins. magnet	& Cpy as emination A few he ite vein	ns. Thin ematite 8 s with ch	chlori hemat	te ite/	2				8	,•	
		qtz-serici K-spar)	te envel	opes (pos	t-date	8	pyrit	е & Сру.)

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NORAN	DA	EXPLORATION CO. LTD.	C.	PropertySmoke N	itn.			Shee	t No.	5	Hole No.	DDH 74-3
0 200		¥		Project No. 23 N	.T.S. 9	93 E/14	W	Core	Size:	BQ	72	
Lat.		Elev.	D	ip Col	llared			Logg	ed by:	G. B	elik	
Dep.		Depth	В	earing Cor	mpleted						ASSAYS	
Footage	Rec'y		aphic _og	Mineralization/Structure		% Sulfides	Sample No.	Lt.				
290-300	98	Plus fracture-controlled chlorite flooding matrix		11 11	- x	2	ā					
300-305	97	n n		Plus minor bornite	934 K)	3	U					
305 – 310	80	Same intrusives as from 35'-164' but with less secondary biotite & more chlorite. K-spar flooding matrix & enveloping fractures. Secondary sericite.		Core broken with chloriti surfaces, Py, Cpy. Chlori fractures. Hematite & hem magnetite veins with Py &	tic matite/	2						
310-320	90	н		и и		3	, ,					
320-330	95	Fracture with thin, bleached, sericite envelopes.		n n		1.5						
330-3365	95	Abundant secondary K-spar				1.5						a
336•5-347	95	Same intrusive evident from 188'-305'. Abundant secondary K-spar.		n n		2				18.7		-
عادران سراغ		END OF HOLE		- CASING LEFT IN HOLE		-	1			60 60		#0 X

a an	•	()				2 1 1 177 11.º		****				()
NORAN	NDΔ	· EXPLOBATI	ON CO. LTD.		PropertySmall	oke Mt.			Shee	t No. 1		Hole No	DDH 74-4
NonA	· ·	LAI LONATI	OIL OO. ETD.		Project No. 23	N.T.S.	3 E/14	W	Core	Size:	BQ	50 17.0	
Lat. 1	11 ±	, 54N	Elev. 4418•	D	Pip _45°	Collared 9/8	3/74		Logg	ed by:	Belik		
Dep.	108	E	Depth 306	В	learing 180°	Completed 11,	/8/74		0 22			ASSAYS	17
Footage	Rec'y	R	ock Type/Alteration	Graphic Log	Mineralization/Struct	ture	% Sulfides	Sample No.	Lt.				
0-61	096	Overbu	rden			= G		*					
61-70	99	diorite.	ained diorite/qtz 3 stages of alteration y biotite + HBD altere orite + Se		Pyrite as fracture fi disseminations. A few fractures. Disseminat veins of hematite/mag	chlorite	>6	33. 12.1		Đ¢.			
© ::	,	3) Late st	e - K-spar alteration alphide fractures with tz-Se envelopes.	1		2 20 2750							: :
70-80	99	Secondary	" " Bi more abundant.		11 11		3	NAME TO SE					
80-90	100	a foliation	alignment of Bi impart on 45°/core. 87'-88' n with plag sausuritiz alt. to sericite.		" "		3					=	
90-100		96'-97' as	ndary biotite 87'-88' core soft & shattered		Trace of Cpy	7.77	2						
100-110	99	2	" "		11		⟨2				2		ر الرور
110-120	99		secondary K-spar floodess secondary Bi	ing		9	3					ŕ	

at a princes	Credy Silver	<i>(</i>)	The second of th		()				en le	19 3-4 1 B)		()
NORAN	IDA	EXPLORATION	ON CO. LTD.		PropertySmc	oke Mt.			Shee	t No.	2	Hole No	DDH 74-4
			2 W X		Project No. 23	N.T.S.	93 E/1	4W	Core	Size:	BQ		With the second
Lat.			Elev.		Dip	Collared	6-		Logg	ed by:	G. B	elik	2 7
Dep.	0		Depth	В	earing	Completed						ASSAYS	;
Footage	Rec'y	Ro	ock Type/Alteration	Graphic Log	Mineralization/Struc	eture	% Sulfides	Sample No.	Lt.				
120-122	99		n n		н		3						FI PA
122-130	99	diorite/qt	-grained to porphyri z diorite. Alteratio (+ minor K-spar) e developed 60°/core.	tic on:	Pyrite as fracture for disseminations. Trace Disseminated mag/hem carb veining.	es of Cpy.	4			#			
130-137	96	A second second second second	" " th underlying lithol	ogy		n.	4			-			
137-1425	99	Alteration	mafics alt. to chlo		Pyrite A few qtz-chlorite for	ractures.	2						
		3) Late su	lphide fractures wit z-Se envelopes.	h				2 4 1	**************************************				**************************************
1425-155	99	mafics alte		ag	Traces of Cpy		3					8-4-6-6	
155-164	99	2%-10% second flooding me	ered to chlorite + S ondary Bi. K-spar atrix & as envelopes e fractures.		Pyrite, minor Cpy. Disseminated mag/hem		3	WARTER	-	0		- A	
164-170.	99	Primary man	" " fics altered to Se + secondary K-spar or		Pyrite, traces Cpy. I dusted with bright or Minor carb veining & fractures.	cange hematit	e. 2				è	•	

,		\bigcirc	. 2											
NORAN	ΔΩΝ	EXPLORATION	ON COLT	.D		PropertySmo	ke Mt.			Shee	et No.	3	Hole No	DDH 74-4
14071741	·DA	EXI CONTAIN	JI 00. LI	<u> </u>		Project No. 23	N.T.S. 9	3 E/14		Core	Size:	BQ	ž	
Lat.		15E II	Elev.		0	Pip	Collared	c g		Log	ged by:	G. Be	lik	i sir
Dep.			Depth	1)	В	earing	Completed					A	ASSAYS	5
Footage	Rec'y	Ro	ock Type/Altera	ation	Graphic Log	Mineralization/Stru	cture	% Sulfides	Sample No.	Lt.				
170-180	97	1	condary B	i or K-spar		11	n - x - , ii	<2		The state of the s				
180-190	99	* (a)	" "			Minor qtz veining. A hematite fractures.	" few	72						
190-193	98		" "			11	"	3	*					
193-200	98	1% to 10%	ar. Secti	Bi ons of pale		Pyrite. A few carb veins wit Chlorite veining dis mag/hem.		3	WH F & H					at a
200-210	99		" "			n 40 gr	n.	>2	##************************************	- dai-				
210-220	99	Increase in	n Bi towa			Traces of Cpy	11	2						
220-230	99	1	Bi conten			Trace Cpy	11	2					e	
230 ₇ 23 <u>6</u>	98		n 11			Traces Cpy	¶ ¹	3	•			5		

Smoke Mt. 74-4 Sheet No. 4 Hole No. NORÂNDA EXPLORATION CO. LTD. Property_ 93 E/14W Core Size: BQ 23 Project No. N.T.S. G. Belik Elev. Lat. Collared Logged by: Dep. Depth Bearing Completed ASSAYS Graphic Sample Rec'y Rock Type/Alteration Footage Mineralization/Structure Sulfides No. Grey, fine-grained to porphyritic Core badly broken with many fracture surfaces. Py occurs diorite/qtz diorite. Early Bi alteration with later otz-Se as fracture fillings & dissem-5 inations. Minor Cpy. Disseminated alteration. Otz restricted to mag/hem. thin envelopes around a few fractures. Sericite occurs within atz & in matrix between fractures. Well-defined foliation 20°-40°/core. No mafics. Complete sericite alteration. With a few qtz 245-250 99 Pyrite, traces Cpy 5 envelopes. Contact with underlying 4 lithology 45°/core. 255'-257' - 20% Bi Medium-grained diorite/qtz Pyrite as fracture fillings & diorite. Mafics altered to disseminations. A few gypsum veins 258-260 100 chlorite with 1%-5% secondary Disseminated mag/hem. Bi. Sericitic sections. 11 260-270 100 Traces Cpy 2 Dustings of bright orange 270-280 hematite. 3 11 280-293 97 Minor Bi (more Se) 3 Sections of gouge

The silvery of the silvery	*	Contractive after the contractive of the contractiv	e serviciale de servicia de la companya de la comp La companya de la companya della companya del	Det 63	X = 5×CD:		nas valves na "Times		***		1123	n n	()
NORAI	NDA	EXPLORATI	ON CO. LTD).		Property Smoke	Mt.		MANAGER S	Shee	t No.	5	Hole No	DDH 74-4
V 15 878			9	_ 5		Project No. 23	N.T.S. 93	E/14W		Core	Size:	BQ		10 5 44 50 U.S. 10 10 10 10 10 10 10 10 10 10 10 10 10
Lat.		1.0	Elev.		, D)ip	Collared	-		Logg	ed by:	G. Be	lik	
Dep.			Depth	<u>il</u>	B	earing	Completed						ASSAYS	;
Footage	Rec'y	F	Rock Type/Alteratio	on	Graphic Log	Mineralization/Struct	ure	% Sulfides	Sample No.	Lt.				
293-306	99	imparts a to the sec	qtz-Se alte white to cr ction. Qtz i	ream color is restri-		Pyrite as fracture fi disseminations. Minor qtz veining. Dustings orange hematite.	carb &	3	To .					
			nin envelope • Locally ch											
21 21 21 21 22 22 22 22 22 22 22 22 22 2		*	18 To	END OF HO	LE	CASING PULLED	B		e ²					
12-0-1			31	и		Lile Durch			s were a d) j		×
C <u>u</u>			i i	4) # "				11.00						
		 		n e		22 25 26 26 27		571746						3
24		is G						in.			N TO SERVICE STATE OF THE SERV	*	î	21
tea mess			1			s			U			50		0

NOT	AINDA	EAFLUNA	ATION CO. LTD.		Property		07 P	Alore		et No.	<u> 1</u>	Hole No	No. DDH 74-5
Lat.	119+7	28 N	Elev. 4520*	T	Project No. 23	N.T.S.	93 E/:	14W		Size:	BQ		-
Dep.	113+9		Depth 320'				17/8/74		Logge	ged by:	G. Be	elik	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
700	*1	T	- 11	$-\tau$	Bearing 270°	Completed 19	19/8/74					ASSAYS	S
Footage	ge Rec'y		Rock Type/Alteration	Graphic Log		ture	% Sulfides	Sample s No.	Lt.				
0-52	c	О▼е	erburden			**************************************							
52-60	97	diorite.	reen, medium-grained q Mafics altered to cha lag partly sausuritized with qtz-Se alterationge.	lo-	Pyrite as fracture fil seminations. Minor Cp seminated hematite. A carb veins with drusy	y. 10% dis-	- 2						
60-70	99	a	"		Plus a few slip surface	ces.	3						
70-74	97	with 25%; is restri around so	en porphyritic intrusi Plag phenocrysts. Qt icted to thin envelope ome fractures. Sericit ith qtz, and in the	tz es	Pyrite, trace Cpy	* Y	2	Blanck E 2					
74-80 \$	m. QQ	matrix. 70'-70.5	Gouge		Pyrite as fracture fil disseminations. Disse hematite. A few drusy veins.	eminated	·2						
80 -9 0 *	99	# ** #* #* #	п п		11 (1	% Mercan	5 1					,	
90-100	99 5	abundant a	rusive as above but wire sericite. Qtz occurs ation envelopes around in matrix. Plag		Pyrite, traces Cpy, di hematite. A few qtz-ca & chlorite-lined fract	arb veins	3	=		12	3		S 10 m

			1.24		7 8 8 6 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8					W	(
NORAN	IDA	EXPLORATION CO. LTD.		Property Smoke	Mt.			Shee	t No.	2	Hole No.	DDH 74-5
				Project No. 23	N.T.S. 93	E/14W	1)	Core	Size:	BQ		
Lat.		Elev.		Dip	Collared			Logg	ed by:	G. B	elik	
Dep.		Depth	В	Bearing	Completed						ASSAYS	
Footage	Rec'y	Rock Type/Alteration	Graphic Log	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				
100-107	99	и и				3	5					
107-110	97	Dark grey, fine-grained diorite/ qtz diorite. Alteration: 1) Biotite alteration 2) Later qtz-Se alteration		Pyrite as fracture fi -seminations. Dissemi hem. A few qtz-carb v rite-lined fractures	nated mag/ eins & chlo-	2					. 1	
110-12.5	90	in in		A few hemitite veins.	E E	3						
1215-132	99	Green, chloritic, medium-grained qtz diorite with minor secondary biotite. Plag weakly sausuritize Qtz-Se alteration not evident.		Py, chlorite-lined fradisseminated hematite		اد	e e - 1.2					25
132-140	99	Same intrusive as above but pale green due to qtz-Se alteration. Plag sausuritized. Locally chloritic.		Py, trace Cpy. Disseminations of brinhematite.	ght orange	2						
140-150		142'-143' As 107'-121.5'. Contac 45°/core. 145'-146' chloritic.	t		2 E	> 3		-				
150-161	99	Green, medium-grained, qtz diori Mafics chloritized. Plag partly sausuritized. Sections with weak qtz-Se alteration. Some secondar K-spar.		Pyrite as fracture fildisseminations. Minor Disseminated mag/hem.		3						
161-170-	98	Ав 132°-150°		Py, minor Cpy, dissemmentative. A few carb-	zeolite	٠3				dis		

NORAN	DA	EXPLORATION CO. LTD.		Property Smoke Mt.				Sheet	No.	3	Hole No.	DDH 74-5
in Pi		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Project No. 23 N.T.S.	9	3 E/1	ı	Core	Size:	BQ		
Lat.	in 	Elev.	Di	p Collared				Logg	ed by:	G. B	elik	
Dep.	i i	Depth	Be	aring Complete	ed .					- MARCA - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ASSAYS	\ \
Footage	Rec'y	nock (voe/Aneration	aphic Log	Mineralization/Structure	27322000	% Sulfides	Sample No.	Lt.				
170-180	98	H H		Sections with dustings of brorange hematite.	right	3					2 G en 10	-
180-187	97	п п		11		3						
18 7-1 90	95	thermal chlorite & Sericite.		Pyrite, minor Cpy & moly. Carbonate veining.	er e a	>3	-7 4 . (= -					
190-198	97	Grey-green, fine-grained diorite. Alteration: 1) Early alteration of mafics to chlorite. 2) Later qtz-Se alteration.	•	of hairline fractures minera with Py & Moly. Dissem. of I Cpy & Moly. Dolomitic veins with Cpy & Py. Sections gou	alized P y,	-6						Est. 0.3 MoS ₂ 0.2 Cu
198 – 202	95	Soft, sheared diorite/qtz diorite with a soft sericitic matrix. Gypsum in matrix and as vein fillings. Direction of shear		Pyrite as patches, dissemina & vein & fracture fillings. powdered sulphide present on surfaces.	tions Black					200		a stance at the state of
202-204	99	Undeformed, strongly sericitic qtz diorite.		Patches & disseminations of Stockwork of gypsum veins.	Py.	8						
204-210	96	Green, sausuritized qtz diorite. 30%-40% of core sheared 45°/core (brittle shear yielding gouge). Patches of chlorite.		Py & minor Cpy as fract fill & dissem. 10%-25% dissem hem Stockwork of thin gypsum & g-carb vein (approx. 4/ft).		<3						
210 - 220	97	10% of core sheared.		Minor Moly.		3	40 PS + 10 L					

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NORAN	DA I	EXPLORATION	ON CO. LTD.		98	PropertySmoke	Mt.		9	Sheet		4	Hole No.	DDH 74-5
	75				1	Project No. 23	N.T.S. 9	3 E/1W		Core	Size:	В	ર	
Lat.			Élev.	e e	D)ip	Collared			Logg	ed by:	G. Be	lik	N 0 1 10 100
Dep. ~			Depth		В	Bearing	Completed						ASSAYS	551 72
Footage	Rec'y	R	ock Type/Alteration		aphic _og	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				
220-228	94	Locally se	ricitic. d - silicified			11 11		~3	1			*		
228-230	99	intrusive,	to pale green crackled but earing. Local	without	3	Patches, diss., & fr fillings of Py. Stock & gypcarb veins (> & of unidentified blk, mineral.	work of gyp B/ft). Diss.	. 5						
230-240	×99	ecom H					و خد 3 خد	₂ 1 0	-					1 0 5
240-250	99		n	K (1)		Increased gypsum conf	ent.	9						ega e
250-260	99	Past 256' sausuritiz	green hue due ation (less S	e to Se).		11 11		9						
260-270	99	(11		E of		Local dustings of ora hematite.	unge	10						
270– 280	100	Locally sh	neared 45°/cox	re.		n u	2 1 21 1 1 2	7						
280-290	100	Decrease i	n alteration	&		11 11		8						-

Smoke Mt. Sheet No. NORANDA EXPLORATION CO. LTD. Hole No. DDH 74. Property_ Core Size: BQ 93 E/1W 23 Project No. N.T.S. Lat. Elev. Collared G. Belik Logged by: Dep. Depth Bearing Completed ASSAYS Graphic Sample Footage Rec'y Rock Type/Alteration Mineralization/Structure Lt. Log Sulfides 6 Light green, sericitized intru-Pyrite sive. Sections sausuritized. Stockwork of gypsum & gypsum-300-306 304'-305' sheared 45°/core. carb veins (5/ft). 7 Medium-grained, qtz diorite. Py as patches, dissem, & fracture Mafics chloritized. Plag sausfillings. Gypsum & gypsum-carb 306-320 100 7 urtized. Secondary biotite veining (>3/ft). Disseminated locally evident. hematite. END OF HOLE ---- CASING PULLED

NODA	ND 4	EVDI OD A	TION CO. LTD		Smok	te Mt.			Shee	t No.	1	Hole No.	DDH 74-6
NORAL	NDA I	EXPLORA	TION CO. LTD.		Property Project No. 23		E/IW		1	Size:	BQ		25
Lat. 1	L05+5	7 N	Elev. 4435	1	Dip -45°		8/74		Logg	ged by:	G. Be		*
Dep. 1	115+0	7 E	Depth 2501	1	Bearing 90°	Completed 21/	8/74					ASSAYS	
Footage	Rec'y		Rock Type/Alteration	Graphii Log	Mineralization/Stru	cture	% Sulfides	Sample No.	Lt.				1
0-17	0	Owerk	purden			0 8 4							
17-20	96	diorite/	e-grained to porphyriti qtz diorite. Mafics zed. Plag sausuritized s with bleached serici		Pyrite as fracture f disseminations. Abun disseminated magneti	dant fine,	2						
20-30	90	Green, m	medium-grained qtz diorial with overprint of 1%- modary bio. Locally serve with K-spar. 25'-27' a sheared & chloritized.	-	Pyrite, minor Cpy. Disseminated mag/hem	i.	3	=3					
30-40	97	S 69	Strongly sericitic.		" " " Trace Moly.	drive stru	· : 3.3	50 7 8			8		<0.05% Cu
40-51	95	Increase K-spar	in biotite & content.		" "		1						
51-59	97	ritic di Alterati	ey, fine-grained, porphy corite/qtz diorite. con: 1) Biotite cite (later than Bi)	-	Pyrite as fracture f disseminations. Abun disseminated magneti	dant fine,	3						*
59-71	99	25% seco	rained qtz diorite with ondary bio > 2%-10% sec- k-spar. Plag saus. Local sericitization evident	hy	Pyrite, minor Cpy. Disseminated mag/hem	1.	1						
71-80	98	pervasiv restrict	rusive as above but wit re qtz-Se alteration (que ed to thin envelopes fractures). Locally chl.	tz.	Minor Moly.		2			10		1 .*	

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NORÂN	IDΔ	ΕΧΡΙ ΟΒΔΤ	ION CO. LTI	D .			PropertyS	moke Mt.			Shee	t No. 2	2	Hole No.	DDH 74-6
110111111							Project No. 23	N.T.S. 93	E/1W		Core	Size:	BQ		
Lat.	e e u		Elev.		6 19 5	Di		Collared	e n		Logg	ed by:	G. Be	712	
Dep.			Depth	1/		Ве	aring	Completed	-			l	us De	ASSAYS	
Footage	Rec'y		Rock Type/Alterat	tion	Grap Lo		Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.				
80-95	95	alteration 1) Early	te/granodio m: Bi-Se alter Se-Cl alter	ration.			Pyrite, minor Cpy. D. mag/hem. A few hemat. Hydrothermal chlorite	ite veins.	2	£(-
95-104	98	with a pe	usive as ab rvasive qtz ag partly s	z-Se alte	er-		Pyrite, traces of Cp Dustings of orange he Chlorite-lined fract	ematite.	2				15		2
104-110	99	Mafics ch	rained qtz d l. Secondar fractures. nvelopes (1	y Bi adj	jacent ictures	3	Pyrite, minor Cpy. Di hem/mag. A few hem-ma Hydrothermal epidote.	g veins.	<2						
110-120	99		п п	•			n n		2			₽,			
120-130	99		" "	1			u u		2						
130-140	99	an the ca					n n		1						
140-150	100	Minor bio	" "				n a	· An	1	A. E.S				ā	
150 ₇ 160	100		" "			.0.	п п		<2			10. 10. ²⁰ 10. 10.			*

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		16.5	
evo-	20-07		Use

Smoke Mt. Sheet No. DDH 74-6 Hole No. NORÂNDA EXPLORATION CO. LTD. Property-Core Size: BQ 93 E/1W 23 N.T.S. Project No. Lat. Dip Collared Logged by: G. Belik Depth Dep. Bearing Completed ASSAYS Graphic Sample Footage Rec'y Rock Type/Alteration Mineralization/Structure Lt. Log Sulfides No. 0.05 Cu 0.02 MoS2 160-170 Minor Moly. >1 A few K-spar veins. 170-180 100 1 Sections with good secondary Bi. 2 180-189 Increase in Se towards bottom of section. Same as above lithology but a Pyrite as fracture fillings & pale buff color due to pervasive disseminations. Minor Cpy & 189-200 98 Qtz-Se alteration. Qtz occurs Moly. Gypsum & Gypsum-carb veins >2 (3/ft). as alteration envelopes around fractures (5/ft). Se within qtz envelopes is hydrothermal. Se within matrix occurs as an alteration product. 200-210 100 >2 210-219 100 A few mag-hem veins. 2 Pyrite, traces Cpy. Hem-mag. Less intense alteration. 219-230 100 gypsum & gypsum-carb veins. >3 Disseminations of chlorite.

NORAN	DA	EXPLORATION	ON CO. LTD.			Property	ke Mt.	-01 A -10763		-	t No.		Hole No	DDH
Lat.		3002	Elev.		Di	Project No. 23	N.T.S. 93 E	/1W			Size: B	. Beli	<u></u>	
	p		Depth	· · · · · · · · · · · · · · · · · · ·	-	earing	Completed		-	Logg	ed by. G	• Derr	ASSAYS	3
5/26	Rec'y		ock Type/Alteration		iraphic Log	Mineralization/Stru	cture	% Sulfides	Sample No.	Lt.				
30-240	100	,	, ,			и п		3						
40 - 25 0	100	Mafics chlusome secon	ined qtz dio oritized. Pl dary Bi adja Locally ser	ag saus. cent to		Pyrite, minor Cpy. D hem. A few gypsum & veins.	issem mag/ mag-hem	2						×
N N		,						35	(F)					
		N.	END	OF HOLE	_	- CASING PULLED					±2			8
						Itom B. l. ik							di -	
		2: 1 9: 7 7 1												
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						personal and a second		a la se	53					Ç)
NORAN	IDA	EXPLORATI	ON CO.	LTD.			PropertySt	oke Mt.	* 4 4		Shee	et No.		Hole No	DDH 74-7
	4 4	1 3	1 4 1			1.5	Project No. 23	N.T.S.	93 E/14	al .	Core	Size:	BQ	4	
	1+39		Elev.	4460*		D	45°	Collared	23/8/7	•	Logg	ged by:	G. I	elik	
Dep. 11	6+38	E	Depth	198.	. n	В	earing 360°	Completed	26/8/7					ASSAYS	
Footage	Rec'y	F	Rock Type/Al	teration		Graphic Log	Mineralization/St	ructure	% Sulfides	Sample No.	Lt.				
0-47	a	Overbu	rden	. *1											
47-50	70	Dark brown biotite ho plays a sp 48'-49' Go	ornfels.	Locally	dis-	122	Pyrite as fracture disseminations. Bid along fractures. Lo 45°/core. Slip surf chlorite & talc.	tite common	1						
50-60 _{Es}	. 90			TI .			Carbonate in veins	í	1						
60-70	96	Some fract	tures wi chlorite	th "bleach	hed", s.		er, n		>1	yres there					
70-80	85	•	e Tha	m.			Core broken with ma		1.5						2
80-90	97	A more uni	iform da	" rk grey.			Thin, hem-py, mag fr	actures	2						
90-100	98	a a t		•			Traces Cpy.		1.5			= 2,			
100-102	70	7		u .			, ,		2			÷			

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NÖRÄN	IDA	EXPLORATION CO. LTD.	84	PropertySmaol	ce Mt.			Shee	t No.	2	Hole No	DDH 74-7
		and the second s	_	Project No. 23	N.T.S. 93	5 E/141		Core	Size:	BQ	10 7	
Lat.		Elev.	D	p	Collared	-20.00		Logg	ed by:	G. Be	lik	
Dep.		Depth	Be	earing	Completed						ASSAYS	3
Footage	Rec'y		aphic .og	Mineralization/Struc	ture	% Sulfides	Sample No.	Lt.		RESEARCH PROPERTY.	-	
102-110	85	Uniform, grey-green, fine-grained biotite hornfels. Fractures with sericite-chlorite envelopes. Sections with gouge.		Core broken with many surfaces. Pyrite as i fillings & diss. Thin veins. Slip surfaces	fracture , hem-py-mag	3						
110-120	85	n n				2						
120-130	85	Locally sheared (45°/core).		11 17	Ŷñ.	>3						<u> </u>
130-140		"135=138 No core-fault assumed.		Disseminated mag, tra	ces Cpy.	·24						
140-150	90	Dark grey to green, dense to fine-grained hornfels. A few fractures with "bleached", sericite-chlorite envelopes.		Pyrite, traces Cpy, a diss. mag. Thin mag 8 Core broken with many surfaces. Numerous slw. chl. A few carb ye	mag-py veir fracture		# E					
150-160	75	n a n		tr tr	18 3 1950	1	5 .					
160-170	80	green " "		п	7422.75 x 2 x 4 x 4 x 4 x 4 x 4 x 4 x 4 x 4 x 4	** *>1			4		i	3
170-180	80	172.5-177 Strongly sheared (45°/core) with numerous gash veins.		n n		, ²						

Smoke Mt. Hole No. DDH 74-7 Sheet No. 3 NORANDA EXPLORATION CO. LTD. Property_ 93 E/14W 23 Core Size: BQ N.T.S. Project No. Lat. Elev. Dip Collared Logged by: G. Belik Dep. Depth Bearing Completed ASSAYS Graphic % Rock Type/Alteration Sample Footage Rec'y Mineralization/Structure Lt. Log Sulfides No. 180-190 70 11 190-198 25 193-198 No core - fault assumed <1 END OF HOLE --- CASING PULLED Fra Wille

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COST

PROJECT: Smoke Mtn.

TYPE OF REPORT: Diamond Drilling

(a) Employees: G. Belik, J. Fraser, G. Holland, R. Holland, D. Kroeger Number of days: 111

Dates worked: Between July 19 and August 26/74

(b) Average cost per day \$ 32.41 Total cost \$32.41 X 111

\$3,597.51

(c) Cost of food & accomodation

s. 617.40

- (d) Cost of transportation
 - i. During work period

type: truck

cost:

ii. To and from Claims from within B.C.

cost:

445.09

445.09

- (e) Cost of aircraft
 - i. Fixed wing:

ii. Helicopter:

8,456.78

8,456.78

- (f) Cost of instruments
 - i. Rental:
 - ii. Supplies
- (g) Cost of geochem analysis (details attached):

(h) Cost of report preparation:

150.00

(i) Other: H. Allen Diamond Drilling 24,146.80
Fuel Oil, Naptha etc. 159.10
Lumber & Hardware 190.28
Core Boxes 267.12
Radio Communication 12.95

24,776.25

38,043.03

Between: Noranda Explorations Co. Ltd.,

1050 Davie Street, Vancouver 5, B.C.

(Hereinafter referred to as the "COMPANY" of the First Part.)

And: H. Allen Diamond Drilling Ltd.,

Box 1397, Merritt, B.C.

(Hereinafter referred to as the "CONTRACTOR" of the Second Part.)

A . THE CONTRACTOR COVENANTS AND AGREES:

- 1. That all holes shall be drilled with BQ wireline equipment providing a core approximately 1 7/16" in diameter.
- 2. That the Contractor shall use his best endeavour to complete all holes according to the wishes of the Company, but should rock conditions prevent successful completion of the hole, the Contractor is not obliged to complete the same, but shall be paid for such incomplete holes at contract rates for the completed footage.
- Contractor will supply water at his expense up to a distance of 2000 ft. or a vertical lift of 200 ft. Supplying water beyond these limits to be re-negotiated.

B. THE COMPANY COVENANTS AND AGREES:

- 1. That payment for the herein described work shall be \$10.00 per foot for core drilling and \$12.00 per foot for drilling overburden.
- The Contractor will at his expense deliver the drilling equipment, and men to the take off point.
- 3. From the take off point and until the drill is set up the Contractor may charge wages for the crew to the Company at union rates plus 15%.
- 4. When moving the equipemnt from one location to another the Contractor will charge union rates plus 15%.
- 5. Should the drill crew become stranded or unable to work due to the shortage of helicopter transportation the Contractor may charge 8 hours per day/man standby time for the crew. The intension of this clause is to protect the Contractor against lost time resulting from weather conditions not permitting the operation of aircraft when such aircraft is required for moves or regular supply flights.
- 6. The Contractor will pay his crew standby time should there be a delay due to mechanical breakdown on the drill equipment. During such breakdowns there will be no charge to the Company for the standby time.

TELEPHONE 378-4494

P.O. BOX 1397 MERRITT, B.C.

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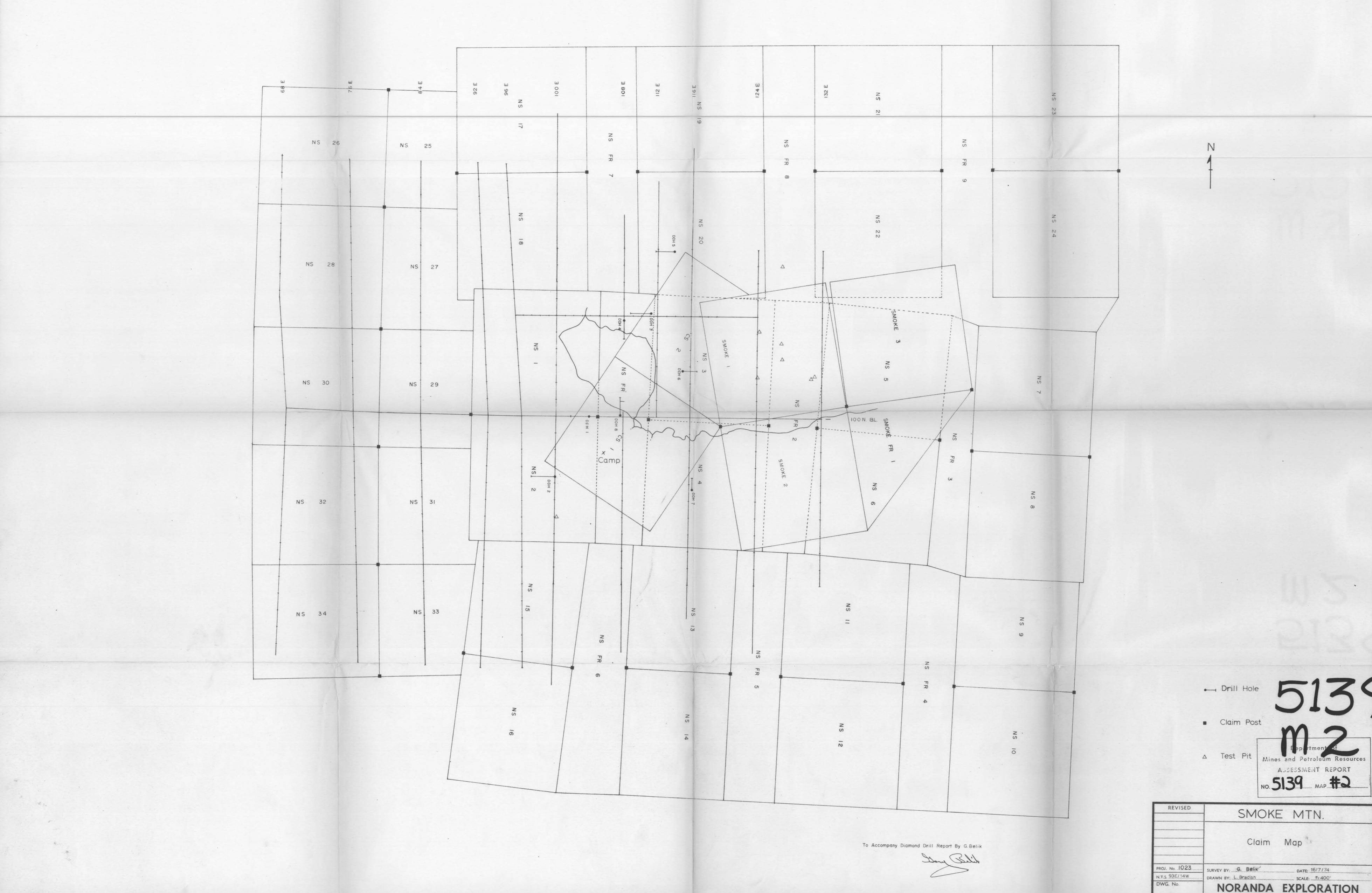
Contract - Smithers Area continued:

- 7. Upon completion of the work the Contractor will send in his trucks to pick up the equipment at his expense.
- 8. The Company will supply a camp and beard for the drill crew at no cost to the Contractor.
- 9. Cost of air transportation charged to the Company.
- 10. Cementing drill holes will be charged to the Company at cost plus 10%. Cost of labour being union rates. Cost of equipent rental during cementing \$20.00 per day.
- 11. Casing which is non-recoverable will be charged to the Company.

IN WITNESS WHEREOF these presents have been executed by the parties hereto, this 25 day of May, A.D. 1974.

NORANDA EXPLORATIONS CO. LTD.

H. ALLEN DIAMOND DRILLING LTD.



REVISED	SMOKE	E MTN.
	Claim	Map
PROJ. No. 1023	SURVEY BY: G. Belik	DATE: 16/7/74
N.T.S. 93E/14W	DRAWN BY: L. Bradish	SCALE: 7= 400'
DWG. No.	NORANDA OFFICE: SMITHER	EXPLORATION