Diamond Drilling

Area MC VICAR LAKE Report Nº 20

Work performed by: NEW JERSEY ZINC EXPL. CO.

Claim Nº	Hole Nº	Footage	Date	Note
KRL.62576	1	152'	June/71	(1)
	2	150'	June/71	(1)
	3	134'	June/71	(1)
	4	156'	June/71	(1)
	5	107'	June/71	(1)
TOTAL	5 DH	699 FT		

Notes: (1) 185/71

020

REPORT ON DIAMOND DRILLING

ON

LANG LAKE GROUP

(cls. KRL-62563 - 65 incl. 62570--75, 77, 82 - 84, 87 - 89 incl.)

N.T.S. 52 O/11

McVicar Lake Area

Red Lake Mining Division

North-West, Ontario.

for

New Jersey Zinc Exploration Co. (Canada) Ltd.,

by

D. Bartlett B.Sc.

July 5, 1971

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MAPS - In Pocket

Drill Plan - Scale 1" = 100'
Drill Plan - Scale 1" = 400'

Drill Sections - Holes 1 to 5 - Scale 1" = 20'

LOCATION AND ACCESS

The Lang Lake groups consist presently of 15 claims in the McVicar Lake area, Red Lake Mining Division, Northwest Ontario. Access is via aircraft from Pickle Lake, located 52 miles due west.

PREVIOUS WORK

The claims comprising the group are part of the original group optionned by New Jersey Zinc in September, 1968. Work on the claims thus far consists of geochemical, geophysical and geological surveys in addition to prospecting and trenching.

Work on the claims prior to their acquisition by New Jersey Zinc consisted of similar surveys except geochemical in addition to two diamond drill holes totalling 435' by Kerr-Addison Gold Mines Limited. Assays of the best mineralization varied from a high of .96 copper across 3.2' to a low of .13% copper across 5.0' and from .08% Ni. across 3.2' (same sample as above) to 0.26% Ni. across 5 feet. Disseminated sulphides, mainly pyrrhotite with some chalcopyrite and occasional bands of massive pyrrhotite from ½ to 8" in core length, which are considered to be responsible for the anomaly.

DIAMOND DRILLING

During the period June 7th - June 28th, 699 feet were drilled in 5 holes using New Jersey Zinc's portable GW-15 Winkie drill. All holes were drilled north except hole 4 which was drilled at 45° east of north. The holes were inclined at 60° and varied in depth from 107 to 156 feet.

The location of the holes is shown on the accompanying drill plan.

The first 3 holes were drilled to test the possible southward dip of the surface showing an E.M. conductor on L4+00E - 5+30S. Similarily holes 4 and 5 were drilled to test the west and east extensions of the conductor and associated surface showings.

GEOLOGY

The claim group has been mapped by S. C. Farquharson an independant consultant engaged by New Jersey Zinc during the summer of 1969.

He summari_es the geology as Keewatin greenstones in which the lava flows and tuffs of intermediate composition predominate over the sediments. The greenstones have been intruded by a mass of diorite of variable composition.

The drilling conducted probed surface showings and a coincident E.M. anomaly along the north diorite-volcanic contact. Minor granodiorite and quartz-feldspar dykes as well as gabbroic phases of the diorite occur.

The main showing at 5+30S on L4E consists of pyrite-pyrrhotite-chalcopyrite mineralization of a highly fractured and sheared diorite-volcanic contact. A steep dip to the south-east is indicated from nearby outcrops and a north-west trending fault between lines 0 and 4E is apparant from geological and geophysical evidence.

The general description of rock types encountered in drill core are given below:

DIORITE

The diorite most often seen is grey to green, medium to coarse grained and extremely resistant to breakage. In places the rock has undergone metamorphism with resulting amphibolitization talcification, silicification and carbonatization. Numerous volcanic inclusions or dykes occur throughout the section, although the upper unit is generally diorite.

In places the quartz content approaches 5%, the rock becoming a quartz diorite. Micro faulting of the quartz veins occurs throughout the section.

Sulphide mineralization in the form of pyrite, pyrrhotite and chalcopyrite occurs in fractures and in narrow veinlets.

GABBRO

The gabbro here is distinguished from the diorite only in its visible amount of mafic minerals. It shows the same metamorphic effects, grain size etc., except the colour is a darker grey-green with less apparent feldspar. Numerous andesite lenses occur within this unit with sharp intrusive contacts. The orientation of these contacts indicates a steep dip between 30 to 50°.

A five foot section of a magnetite banded gabbro occurs in hole 1. These are dipping moderately to the south as indicated by contact relationships. Pyroxene crystals up to ½" across occur with the magnetite, although some show varying degrees of alteration.

Pyrrhotite and minor chalcopyrite occur in fractures in the gabbro.

ANDESITE

The andesite seen in drill core is a dark green, fine to medium grained (the latter near intrusive contacts) chloritic rock. It is often porphyritic with augens of feldspar showing various degrees of orientation. Tuffaceous lenses make up part of this unit which is often veined with carbonate and quartz. The andesite occurs in lenses of variable widths throughout the diorite and gabbro and is the host rock of the better mineralized copper-nickel section. The sulphides occur mainly along fractures, although disseminated chalcopyrite was seen in a few instances.

DACITE

Dacite occurs only near the upper part of hole 2 and is fine grained, grey-green and slightly altered. This 16' section is in sharp contact with the overlying and underlying diorite and is barren of sulphides.

DYKES

Narrow aplite dykes of granodiorite and quartz feldspar composition occur throughout the holes.

SUMMARY AND CONCLUSIONS

The results indicate that narrow widths of economic grade copper and nickel do occur along the diorite-gabbro-andesite contact, although the overall grade in three of the holes is sub-economic at the present time. Also, the widths

indicated are probably not true widths as the trend of the mineralization is difficult to determine due to the irregularity of the contact zone and the nature of the sulphide mineralization.

Hence, although the overall results do not warrant a full scale drilling program it should be noted that the drilling only probed the contact to a vertical depth of about 100 feet.

An attempt, therefore, should be made to find a partner to share the cost of deepening hole 1 and drilling another hole a hundred feet or so to the south of hole 1. If this is met with little success the property should be dropped.

Derek Bartlett, B.Sc.

NEW JERSEY ZINC EXPLORATION COMPANY (CANADA) LTD.

PLEASE ADDRESS REPLY TO

603 Royal Trust Bldg.
116 Albert Street
Ottawa, Ontario K1P 5G

CERTIFICATE

I, Derek Bartlett of the Town of Val d'Or, Province of Quebec, hereby certify that:

1) I am a geologist residing at 124 Self Avenue, Apartment 11, Val d'Or, Quebec

2) I am a graduate of the University of New Brunswick, Fredericton, New Brunswick

3) The accompanying drill logs and report are based on my personal field observations.

Derek Bartlett, BSc.

DATED AT: Val d'Or, Quebec

THIS 15th DAY of SEPTEMBER, 1971

ASSESSMENT WORK BREAKDOWN

1. FIELD WORK

Type of Work	Name & Address	Dates Worked	Number of 8 hour days
Winkie Diamond Drill	Jean B. Verreault Amos, Quebec	June 7 - 28	21
	Guy Belliveau Lamotte, Quebec	June 7 - 28	21

2. CONSULTANTS

Name & Address	Dates Worked (specify in field or office)	Number of 8 hour days

3. DRAUGHTSMAN, TYPING, OTHERS (specify)

Name & Address	Type of Work	Dates Worked	Number of 8 hour days

TOTAL 8 HOUR TECHNICAL DAYS _____

4. LINE-CUTTING

Name	Address	Dates Worked	Number of 8 hour days

TOTAL 8 HOUR LINE-CUTTING DAYS _____

ASSESSMENT WORK BREAKDOWN

1. Type of Survey _____

2. Township or Area _____

3. Numbers of Mining Claims Traversed by Survey _____

_____

_____

_____

_____

4. Number of Miles of Line Cut _____ Flown _____

*5. Number of Stations Established _____

*6. Make and type of Instrument Used _____

*7. Scale Constant or Sensitivity _____

*8. Frequency Used and Power Output _____

9. Summary of Assessment Credits (details on reverse side)

Total 8 hour Technical Days (Include Consultants, Draughting etc.) _____

Total 8 hour Line-Cutting Days _____

Calculation

_____	x 7 =	_____	+	_____	=	_____	÷	_____	=	_____
Technical				Line-cutting				Number of claims		Assessment credits per claim

The dates listed on this form represent working time spent entirely within the limits of the above listed claims ☐ Check
If otherwise, please explain _____

_____

Dated: Sept. 15, 1971 Signed: Wayne R. Gunter

Note: (A) * Complete only if applicable.
(B) Complete list of names, addresses and dates on reverse side.
(C) Submit separate breakdown for each type of survey.
(D) Submit in duplicate.

DIAMOND DRILL RECORD

PROPERTY Flat Lake, N.W. Ontario.

SHEET NUMBER 1

HOLE NUMBER 1-LL-71

TOTAL DEPTH 150'

CO-ORDINATES COLLAR

LOCATION Red Lake Min. ~~Div.N.W.Ont.~~

LAT. 6S DEP. Line 4E

LOGGED BY D. Bartlett

ELEVATION COLLAR

DATE BEGUN June 8, 1971

BEARING Mag. North

DATE FINISHED June 11/71

ANGLE -60°

LOG FORM NO. 1

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
0	3.5	3.5			CASING
3.5	12.0	8.5			DIORITE - light to medium grey with white feldspar mottling, medium grained, major minerals feldspar pyroxene and hornblende. Minor quartz veining and narrow (∠2") hornfelsic metagabbro lenses near base. Gradational contact with lower unit. Quartz veins near top of unit indicates steep dip to north. Minor pyrite and iron staining. Quartz contact of rock up to 5% in places and rock approaches a quartz diorite in places.
12.0	31.8	19.8			HORNFELSIC DIORITE - light to dark grey, to grey black, fine to medium grained, alteration variable, quartz veining. Highly altered, finer grained and porphyritic (feldspar phenocrysts) basic volcanic lense from 26.0'-28.0'. Quartz veining here at 35°-40° to core axis. This unit appears older than above unit as discordant (intrusive contacts) can be seen. Pyrite & speck of chalco at 14.0'. At 17.0' carbonate stringers at 45° to core axis.
31.5	36.0	4.5	A 1659	Cu, Ni	METAGABBRO - grey, fine to medium cxlline, altered pyroxene. Quartz veining from 32.0'-34.6' - chalco in fractures, 2" massive pyrite section from 31.5'-31.9'. At 33.0' pyrite and alignment of quartz crystals at 45° to core axis. Basic volcanic lenses from a few inches to 2

PROPERTY Flat Lake, N.W. Ontario. DIAMOND DRILL RECORD SHEET NUMBER 2

HOLE NUMBER 1-LL-71

Log Form No. 2A

CORE FOOTAGE FROM	CORE FOOTAGE TO	CORE FOOTAGE LENGTH	CORE SAMPLE NO.	ASSAY	DESCRIPTION
					or 3 feet show intrusive contacts. Chalcopyrite. At 38' graphite stringers at 50-60° to core axis.
36.0	41.0	5.0	A 1660	Cu Ni	SAME AS ABOVE - very minor chalco and pyrite, lighter in colour chan above carbonate veining. ∠.2% Cu.
41.0	46.0	5.0	A 1661	Cu Ni	META SEDIMENTS META ANDESITE - dark green, chloritic, finer grained, upper 1' same as above, carbonate and quartz veining from 42.8-43.7', massive pyrite, pyrrhotite, minor chalcopyrite - 80% sulphide; Some narrow siliceous granodiorite dykes.
46.0	48.0	2.0	A-1662	Cu Ni	SAME AS ABOVE SAME AS ABOVE - Same, - last 2" - massive pyrite. Chalco in thin veinlets at various orientations. 0.7-1% Cu.
48.0	53.0	5.0	A-1663	Cu Ni	METAGABBRO METAGABBRO - same, coarse grained, altered, mottled appearance, porphyritic and tuffaceous meta volcanic (andesitic) inclusion near base of unit. Latter at 45° to core axis. Siliceous near base. Pyrite lenses ½" wide parallel to core axis.
53.0	58.0	5.0			GRANODIORITE - volcanic (altered) lenses, minor pyrite. At 56.0' above volcanic phenocrystic lenses at 35°-45° to core axis.
58.0	63.0	5.0	A-1664	Cu Ni	SAME - upper most foot - volcanic lense, minor chalco-pyrite in fractures.
63.0	74.0	11.0			GABBRO - Same, Hornblende crystals.
74.0	79.0	5.0	A-1665	Cu Ni	SAME - At 75.8' changing to a siliceous breccia with gabbro-diorite and basic volcanic fragments. Chalcopyrite in upper 1.8' and in fractures from there below. From 79.0'-79.8' - quartz veining.

PROPERTY Flat Lake, N. W. Ontario. DIAMOND DRILL RECORD

SHEET NUMBER 3

HOLE NUMBER LL - 1 - 71

Log Form No. 2A

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
79.0	84.0	5.0	A-1666	Cu Ni Au Ag	SAME - 30% sulphide some chalcopyrite, 5% pyrite and pyrrhotite others.
84.0	88.0	4.0	A-1667	Cu Ni	ANDESITE - Dark green - hard, fine grained, hypabassal, minor chalcopyrite and pyrite. Some quartz and feldspar augens at 20°-30° to core axis. Gradational contact into diorite-gabbro below. From 84.0'-86.0' - .8-1% Cu.
88.0	93.0	5.0	A-1668	Cu Ni	DIORITE - mottled, coarse grained, chalco in fractures and veinlets at 60° to core axis. Hornblende crystals.
93.0	100.0	7.0	A-1669	Cu Ni	SAME - darker, gabbroic
100.0	105.0	5.0	A-1670	Cu Ni Zn Pb	BANDED GABBRO - dark grey bands, green grey mafics, Magnetite in bands. Pyroxene bands ½"-2" wide at 60-80° to core axis. Highly altered - rock has gneissic appearance. Bands undulating, .7% Cu.
105.0	110.0	5.0	A-1671	Cu Ni	ANDESITE - from 106.7-106.9 qtz-feldspar dyke. From 106.9-108.5 fine grained metadiorite. Chalcopyrite throughout.
110.0	113.0	3.0	A-1672	Cu Ni	ANDESITE - as from 100.0-105.0 - chalcopyrite throughout
113.0	118.0	5.0	A-1673	Cu Ni	ANDESITE - recrystalized in places - fine to medium grained, grey-green - specks of chalcopyrite, minor pyrite - could be altered diorite. Coarse grained inclusion pyroxene rich
118.0	123.0	5.0	A-1674	Cu Ni	ANDESITE - Same
123.0	130.0	7.0			ANDESITE
130.0	135.0	5.0	A-1675	Cu Ni	METAGABBRO - Same, altered, 2-2" pyrrhotite lenses, chalcopyrite, coarse grained
135.0	140.0	5.0	A-1676	Cu Ni Ag Au	ANDESITE - finer grained - chalcopyrite

PROPERTY Flat Lake, N.W. Ontario. DIAMOND DRILL RECORD

SHEET NUMBER 4

HOLE NUMBER LL-1-71

Log Form No. 2A

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
140.0	145.0	5.0	A-1677	Cu Ni	SAME - Some Chalcopyrite
145.0	152.0	7.0	A-1678	Ag, Au Cu, Ni	SAME - Some Chalcopyrite last 2' - 0.8% Cu.

L.W. Bartlett

PROPERTY Flat Lake, N.W. Ontario

DIAMOND DRILL RECORD

SHEET NUMBER 1

HOLE NUMBER 2 - LL 71

TOTAL DEPTH 150.0' CO-ORDINATES COLLAR

LOCATION Red Lake Min. Div. NW Ontario LAT. 6S DEP. 4+50E

LOGGED BY D. Bartlett ELEVATION COLLAR

DATE BEGUN June 12/71 BEARING Mag. North

DATE FINISHED June 14/71 ANGLE -60°

LOG FORM NO. 1

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
0	5.5	5.5			OVERBURDEN - Casing to 6'
5.5	23.3	17.8			DIORITE - grey-green to blue, altered to soapstone, S plane at 15°-25° to core axis. 1' of nodular pyrite (¼"-1") conglomerate in a basic pyritic groundmass. Minor pyrite and quartz vaining
23.3	39.5	16.2			DACITE - green, carbonate and quartz veins, fine grained, altered. (Contact with altered diorite below at 10°-15° to core axis.
39.5	53.0	13.5			DIORITE - Same as previous, but less alteration, some volcanic inclusions. Chalcopyrite speck at 47.2'. From 51.2'-52.1' volcanic inclusions (porphyritic) at 10-30° to core axis. From 52.5'-53.0' - quartz feldspar vein.
53.0	58.0	5.0	A-1679	Cu Ni	DIORITE - Same as before, but fresher and coarser grained, less alteration. At 59.5' and 60.2' pyrite and pyrrhotite veining, trace chalcopyrite . From 60.2'-63.0' quartz and feldspar veining and sulphides with copper. From here downward good hornblende crystals.
58.0	63.0	5.0	A-1680	Cu Ni	SAME
63.0	68.0	5.0	A-1681	Cu Ni	SAME - In places rock loses mottled texture, more alteration
68.0	71.0	3.0	A-1682	Cu Ni	SAME
71.0	88.0	17.0			SAME - At 73.0' and 75.0' - 1" to 3" volcanic inclusions, some quartz veins.

PROPERTY Flat Lake, N.W. Ontario. DIAMOND DRILL RECORD

SHEET NUMBER 2

HOLE NUMBER 2 - LL - 71

Log Form No. 3A

CORE FOOTAGE FROM	TO	LENGTH	CORE SAMPLE NO.	ASSAY	DESCRIPTION
88.0	93.0	5.0	A-1695	Cu Ni	SAME - quartz feldspar lenses, 15-70% sulphides, some chalcopyrite. Banding at 40-60° to core axis.
93.0	97.0	4.0	A-1684	Cu Ni	SAME - Blebs of chalcopyrite at 94.0'
97.0	100.0	3.0	A-1685	Cu Ni	SAME - Minor chalcopyrite
100.0	105.0	5.0	A-1686	Cu Ni Ag Au	Chalcopyrite in stringers parallel to core axis and in clots. Quartz-feldspar, and volcanic inclusions give rock brecciated appearance.
105.0	110.0	5.0	A-1687	Cu Ni	ANDESITE - minor chalcopyrite in fractures, chloritic, highly altered.
110.0	115.0	5.0	A-1688	Cu Ni	SAME - from 110.2-111.5 unaltered. Mottled gabbro, minor chalcopyrite.
115.0	120.0	5.0	A-1689	Ag, Au Cu Ni	SAME - 4" lenses of pyrrhotite and pyrite, Cu - .8 - 1.2% mainly in fractures.
120.0	125.0	5.0	A-1690	Cu Ni	SAME - Some chalcopyrite, siliceous
125.0	130.0	5.0	A-1691	Cu Ni	SAME - Some chalcopyrite, siliceous
130.0	134.0	4.0			SAME - pyrite only
134.0	138.0	4.0	A-1692	Cu Ni	SAME - more schistose, chalcopyrite veinlet at 145.0' at 35° to core axis.
138.0	142.0	4.0	A-1693	Cu Ni	SAME - At 138.5' chalcopyrite stringers at 10° to 45° to core axis also in irregular fractures. From 138.5'-139.5' - gabbro dyke.
142.0	146.0	4.0			SAME - hornfelsic in places, minor pyrite.
146.0	150.0	4.0	A-1694	Cu Ni	SAME - minor chalcopyrite, slightly siliceous, banding at various angles to core axis.

L L Gardiner

PROPERTY Flat Lake, N.W. Ontario. **DIAMOND DRILL RECORD** SHEET NUMBER 1

HOLE NUMBER 3-LL-71

TOTAL DEPTH 134.0' CO-ORDINATES COLLAR

LOCATION Red Lake Min. Div ~~NW Ontario~~ LAT. 6S DEP. L 3+50E

LOGGED BY D. Bartlett ELEVATION COLLAR

DATE BEGUN June 14/71 BEARING Mag North ~~Mag. North~~

DATE FINISHED June 21/71 ANGLE -60°

LOG FORM NO. 1

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
0	10.0	10.0			CASING AND OVERBURDEN - About 2' of boulders, mostly granite and diorite.
10.0	16.2	6.2			DACITE - green - fine grained, siliceous, rusty from 10.0'-11.0' siliceous veins (quartz veins) dioritic inclusions, and tuffaceous in places.
16.2	18.0	1.8			ANDESITE - more basic than above, similar. (quartz veins and brecciated diorite inclusions) tuffaceous bands from 17.0 - 17.5' at 45° to core axis, offsetting of quartz veins.
18.0	31.0	13.0			DIORITE - green-grey, coarse grained volcanic inclusions, (quartz veining 22.3'-23.0' and 28.0'-29.8'). From 26.0' - 26.4' quartz and andesite veining at 30° to core axis.
31.0	39.6	8.6			ANDESITE - green, fine grained, quartz and diorite inclusions irregular and brecciated. Upper contact with diorite at 60°. Minor iron staining and pyrite.
39.6	59.2	19.6			DIORITE - Some andesite inclusions from 47.2-48.8'.
59.2	65.0	5.8			ANDESITE - same, lower 1' tuffaceous, feldspar augens in banding at 60-70° to core axis. Pyrite in quartz vein at 61'.
65.0	95.8	30.8			DIORITE - same volcanic inclusions etc. Minor pyrite in top 2", small blob of chalcopyrite and pyrite at 73.4'. Volcanic inclusions from (76.5-77.5').
95.8	96.8	1.0			QUARTZ-FELDSPAR DYKE - pink feldspar, milky quartz, extremely hard.

PROPERTY Flat Lake, N.W. Ontario. DIAMOND DRILL RECORD

SHEET NUMBER 2

HOLE NUMBER 3-LL-71

Log Form No. 2A

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
96.8	111.0	14.2			ANDESITE - green, hard, feldspar phenocrysts, no preferentia alignment, diorite (small) inclusions, minor pyrite, altered chloritic.
111.0	117.0	6.0			QUARTZ-FELDSPAR DYKE - red tinge same as previous dyke, diorite, inclusions from 112.8'-113.8' and volcanic inclusions from 115.2'-116.5', the basal contact of latter at 15° to core axis.
117.0	125.0	8.0			ANDESITE - same, diorite inclusions from 119.5' - 121.0' also quartz feldspar inclusions. Specks of chalcopyrite and pyrite at 122.0'
125.0	134.0	9.0			QUARTZ-FELDSPAR DYKE - hard, small 3" andesite inclusions. Andesite contacts at low angle (∠25°) to core axis, brecciated, blocky. 1 bit - 1.5' quartz feldspar.

W. J. Bartlett

PROPERTY Flat Lake, N.W. Ontario

DIAMOND DRILL RECORD

SHEET NUMBER 1

HOLE NUMBER 4-LL-71

TOTAL DEPTH 156.0'

CO-ORDINATES COLLAR

LOCATION Red Lake Min. Div. NW Ontario

LAT. 4+95S DEP. 1+92E

LOGGED BY D-Bartlett

ELEVATION COLLAR

DATE BEGUN June 21/71

BEARING 45° East of Mag. North

DATE FINISHED June 24/71

ANGLE 60°

LOG FORM NO. 1

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
0	4.0	4.0			ANDESITE - altered, grey, medium grained, dioritic inclusions basal contact gradational, recrystallization evident in resultant coarser grain size.
4.0	56.5	52.5			DIORITE - typical, 50% dark material with white mottling, coarse grained, white feldspar phenocrysts up to ½" across in places, quartz veins, siliceous, minor pyrite, massive, tough to break, volcanic inclusions, especially near base, an large hornblende crystals scattered throughout. Minor feldspar, and quartz inclusions.
56.5	66.0	9.5			ANDESITE - Same as unit one, dioritic inclusions, pyrite and recrystallization, hornfelsic, speck of chalcopyrite at 59.0' More sulphides near base of unit. At 65.0' and 72.0' core broken up, sulphides. Pyrrhotite at 63.0'. Pyrite veinlet parallel to core axis and at 35° to core axis. Pyrite at 65.0'.
66.0	70.0	4.0	A-1696	Cu Ni	ANDESITE - same, more sulphides. Speck of chalcopyrite? Siliceous Quartz veining.
70.0	76.0	6.0			ANDESITE-DIORITE HYBRID - mixture slightly more volcanic material sulphides near base. From 70.0'-70.8'- quartz feldspar dyke.
76.0	80.0	4.0	A-1697	Cu Ni	ANDESITE - Same
80.0	85.0	5.0			ANDESITE - Same

PROPERTY Flat Lake, N.W. Ontario — DIAMOND DRILL RECORD

SHEET NUMBER 2

HOLE NUMBER 4-LL-71

Log Form No. 2A

CORE FOOTAGE FROM	CORE FOOTAGE TO	CORE FOOTAGE LENGTH	CORE SAMPLE NO.	ASSAY	DESCRIPTION
85.0	101.5	16.5			DIORITE - hybrid with andesite, latter as inclusions.
101.5	105.0	3.5			ANDESITE - semi-gradational contact with above at 10°.
105.0	110.0	5.0	A-1698	Au Ag Cu	ANDESITE - Same, from 106.5-108.5' quartz carbonate
				Ni	alteration, pyrite pyrrhotite and chalcopyrite in fractures
					Latter part of unit has tuffaceous bedding at 45-60° to
					core axis.
110.0	112.0	2.0			ANDESITE - Same as above, trace of sulphide
112.0	124.0	12.0			DIORITE - Coarse grained, more darker minerals than usual,
					approaching a gabbro here, siliceous portions - dykes
					(granodiorite)?
124.0	156.0	32.0			ANDESITE - Same, diorite inclusions, tuffaceous, small
					feldspar phenocrysts at 25°-35° to core axis. Specks of
					chalcopyrite, tuffaceous beds from 144.0'-146.0' show
					offsets; are inclined at 35° to core axis. Minor chalco-
					pyrite near bottom. Chalcopyrite speck at 131.0' and
					153.0'. Also pyrite from 151.0'-153.5' in silicified
					section.

D. Bartlett

DIAMOND DRILL RECORD

PROPERTY Flat Lake, N.W. Ontario.

SHEET NUMBER 1

HOLE NUMBER 5-LL-71

TOTAL DEPTH 107.0' CO-ORDINATES COLLAR

LOCATION NW Ontario Red Lake Min. Div. LAT. 6+00S DEP. 5+85E

LOGGED BY D. Bartlett ELEVATION COLLAR

DATE BEGUN June 21/71 BEARING Mag. North

DATE FINISHED June 27/71 ANGLE -60°

LOG FORM NO. 1

CORE FOOTAGE FROM	CORE FOOTAGE TO	CORE FOOTAGE LENGTH	CORE SAMPLE NO.	ASSAY	DESCRIPTION
0	2.0	2.0			CASING - broken bedrock
2.0	4.0	2.0			ANDESITE - green, altered, white feldspar phenocrysts aligned at 50°-60° to core axis. Minor quartz injections.
4.0	9.0	5.0	A-1699	Cu Ni	ANDESITE - Same, 75% blue quartz 60% sulphides, mainly pyrrhotite
9.0	40.0	31.0			ANDESITE - Same, dioritic 24.0'-27.5' quartz veining especially 30.0'-31.0' - Quartz and feldspar especially 32.0'-33.0', Dioritic 37.0'-39.0' - Chalcopyrite specks and pyrrhotite at 22.3'. From 10.0'-12.0' pyrite and pyrrhotite specks.
40.0	45.8	5.8			DIORITE - Same as previous diorite, quartz feldspar dykes (32.3'-33.2'), andesite inclusions.
45.8	48.3	2.5			ANDESITE - Same
48.3	51.0	2.7			QUARTZ-FELDSPAR DYKE - pink tinge, pink feldspar, white quartz-sharp upper, gradational lower, contact.
51.0	56.0	5.0			ANDESITE - Same
56.0	60.0	4.0	A-1700	Ag, Au Cu, Ni	ANDESITE - siliceous, blebs of chalcopyrite in narrow veinlets at 57.0' at 30° to core axis. 30% sulphide in unit, mostly pyrrhotite. Massive from 57.5'-58.6'. Chalcopyrite bleb at 58.5'. Best section in hole 0.7-0.8% Copper.
60.0	62.0	2.0			QUARTZ-FELDSPAR DYKE - 80% pink feldspar, milk white quartz
62.0	74.0	12.0			ANDESITE - typical with intrusive diorite and quartz feldspar phenocrysts, minor pyrrhotite from 62.5'-62.7'. Porphyritic from 72.5-73.0', no alignment of phenocrysts.

PROPERTY Flat Lake, N.W. Ontario. DIAMOND DRILL RECORD

SHEET NUMBER 2

HOLE NUMBER 5-LL-71

Log Form No. 2A

CORE FOOTAGE			CORE SAMPLE NO.	ASSAY	DESCRIPTION
FROM	TO	LENGTH			
74.0	79.0	5.0	D-610	Ag, Au, Cu, Ni	ANDESITE - Same, pyrrhotite and chalcopyrite (latter in fractures) from 77.7'-78.2' at roughly 65° to core axis.
79.0	83.0	4.0	D-611	Cu Ni	ANDESITE - Same, less chalcopyrite, unit more dioritic and siliceous.
83.0	87.0	4.0	D-612	Cu Ni	ANDESITE - Same, less chalcopyrite, quartz feldspar dyke 86.5'-86.9'.
87.0	107.0	20.0			ANDESITE - Same, minor pyrite and pyrrhotite, specks of chalcopyrite at 92.5'-93.5' and 101.0', not continuous, more quartz feldspar veins. Conductor probably at pyrrhotite 57.5'-58.8'.

L. Hamilton

520/11SW

AREA OF MCVICAR LAKE

M-2741

SCALE: One Inch = 40 Chains

40 CHAINS

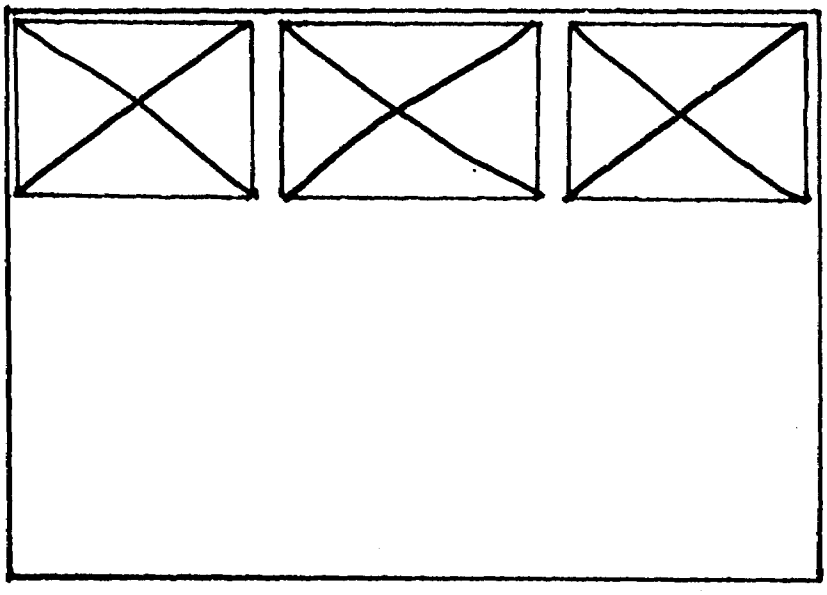
CANNON LAKE (M.2142)

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52Ø/11SW-0015 #1-3

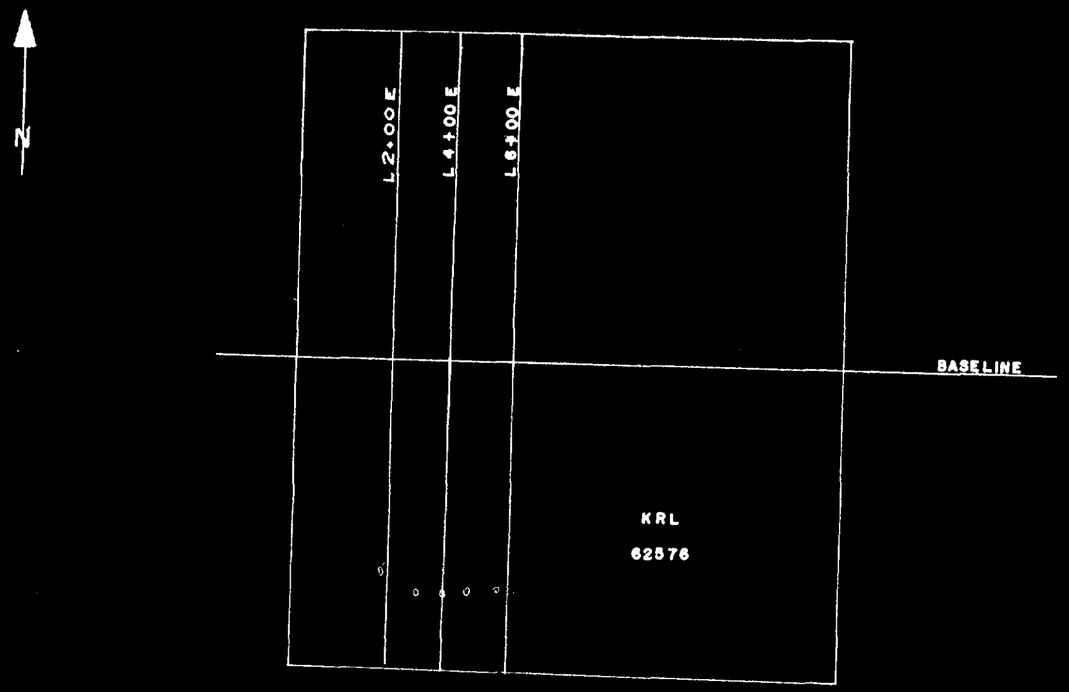
LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)



FOR ADDITIONAL INFORMATION SEE MAPS:

520/11SW-0015 #4-7



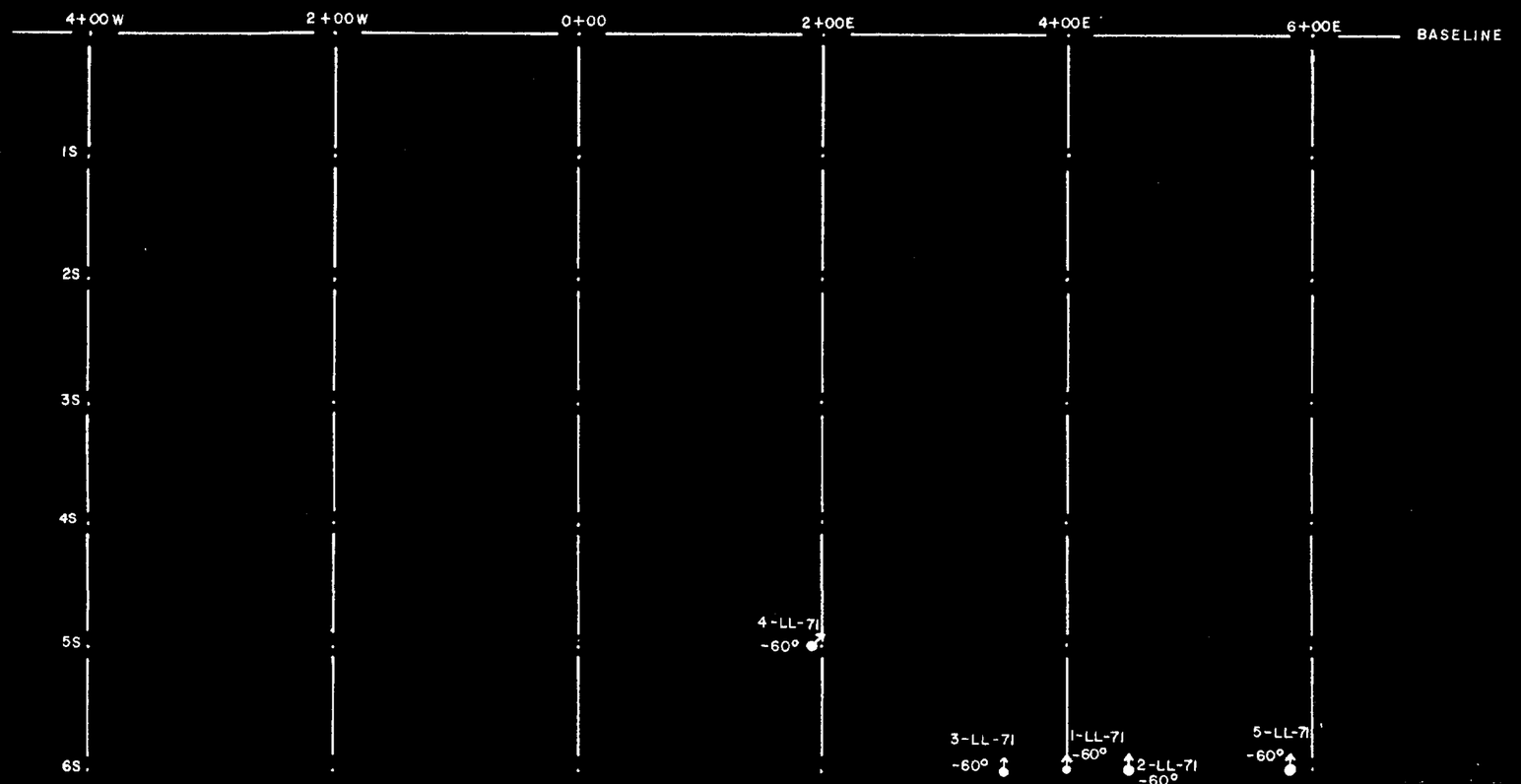
NEW JERSEY ZINC EXPLORATION CO. (CANADA) LTD.

LANG LAKE GROUP

RED LAKE MINING DIVISION
N.T.S. 52 O/11

JULY, 1971

SCALE 1" = 400'



CLAIM 62576

NEW JERSEY ZINC EXPLORATION CO. (CANADA) LTD.

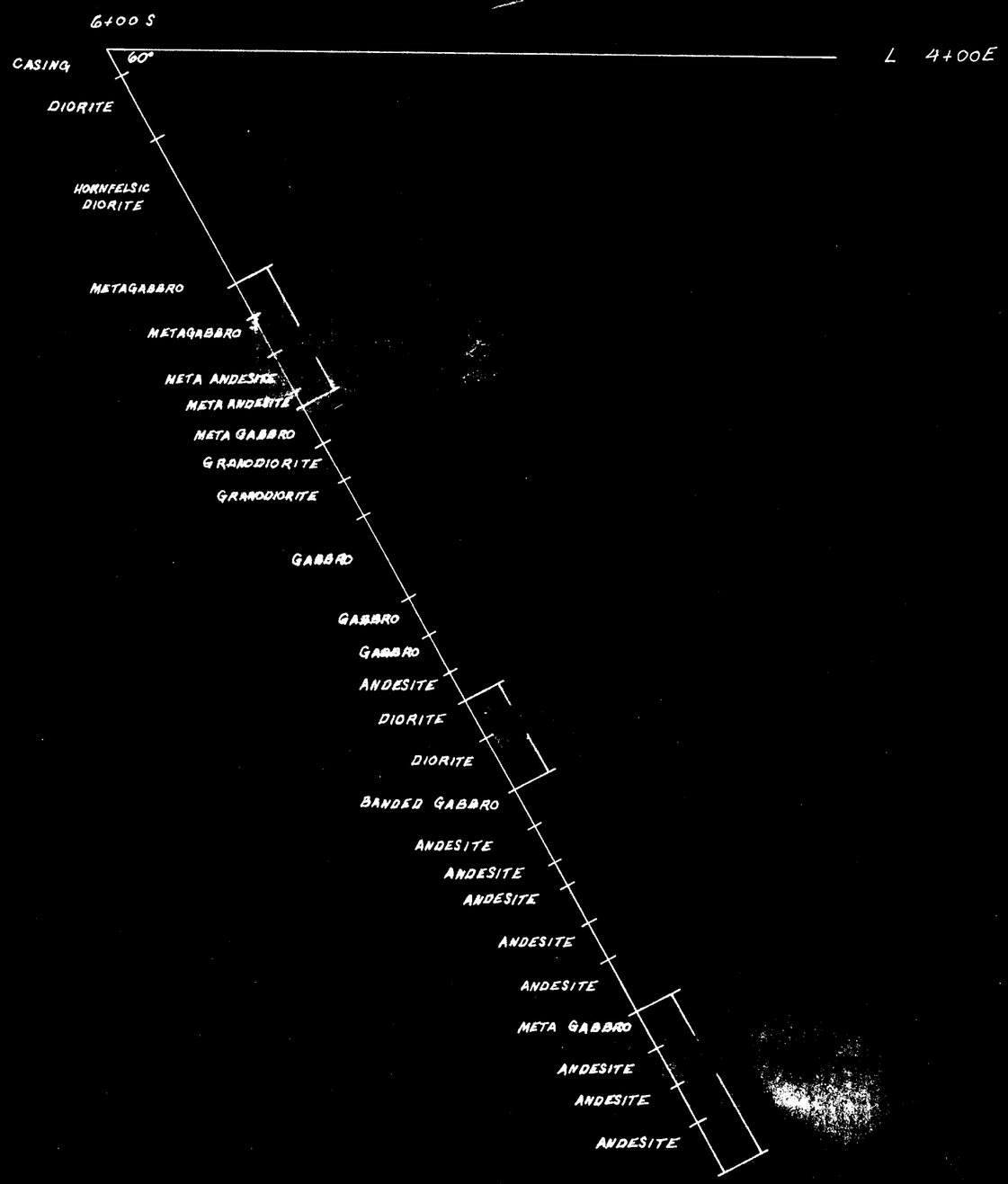
DRILL PLAN

LANG LAKE GROUP

RED LAKE MINING DIVISION

JUNE, 1971

SCALE: 1" = 100'



#185

NEW JERSEY ZINC EXPLORATION COMPANY (CANADA) LTD.

SECTION

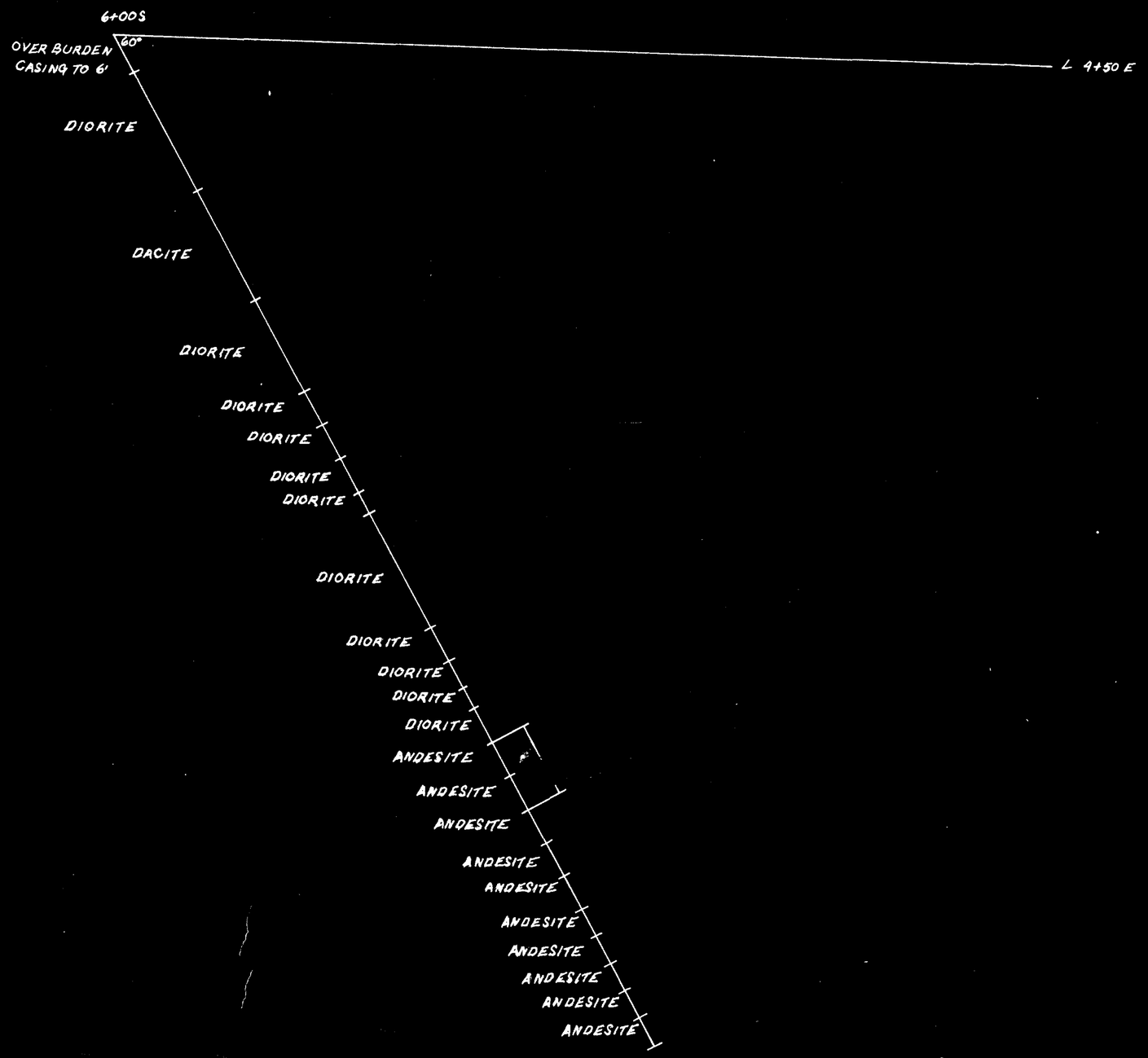
DIAMOND DRILL HOLE 1-LL-71

PROPERTY LANG LAKE

SCALE 1" = 10' DATE AUG. 26, 1971

LOGGED D. B DRAWN W.H.R.

52Ø/11SW-0015, #3



NEW JERSEY ZINC EXPLORATION COMPANY (CANADA) LTD.

SECTION

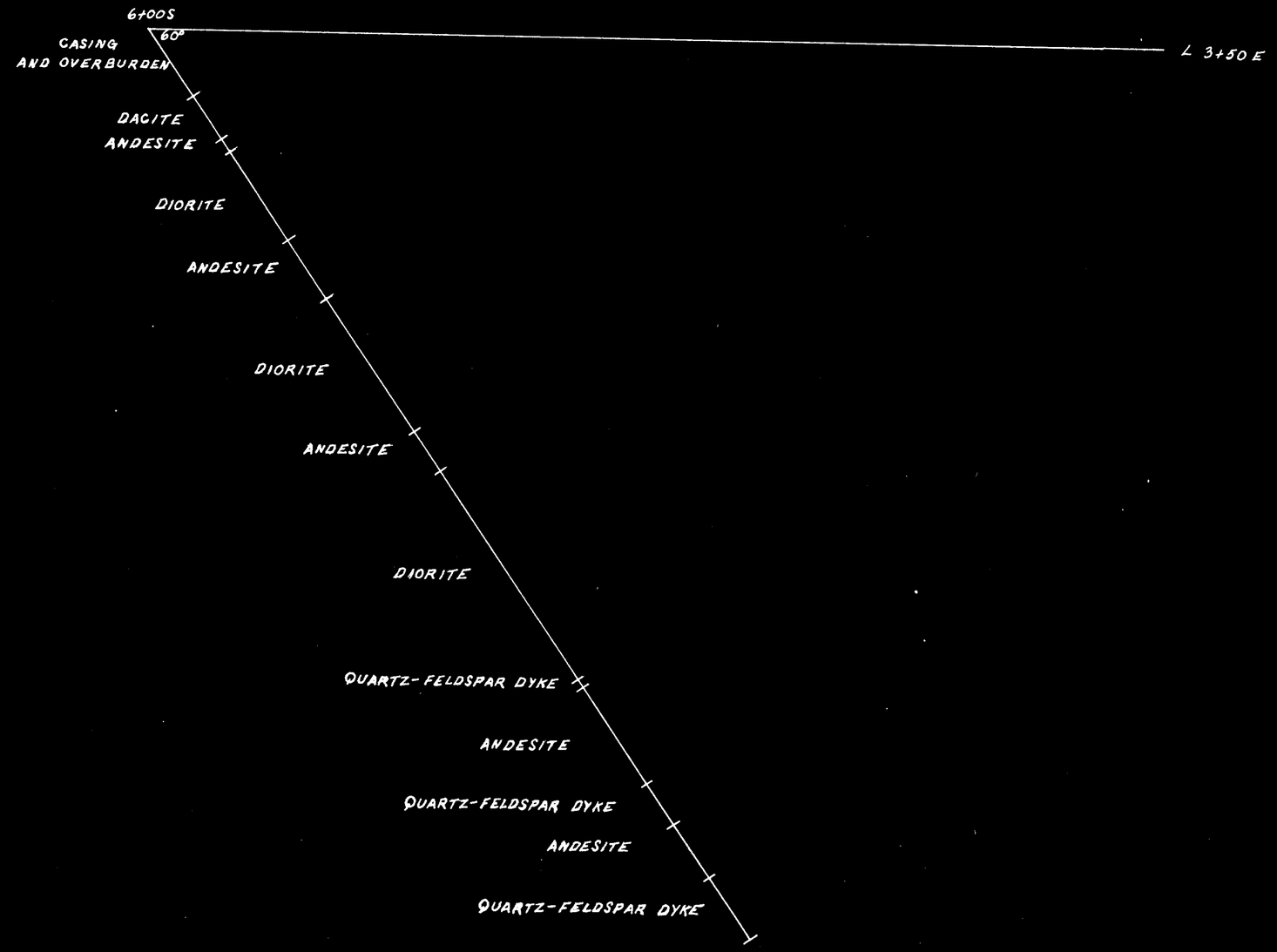
DIAMOND DRILL HOLE 2-LL-71

PROPERTY LANG LAKE

SCALE 1" = 10' DATE AUG. 26, 1971

LOGGED D.B DRAWN W.H.R.

52Ø/11SW-0015, #4

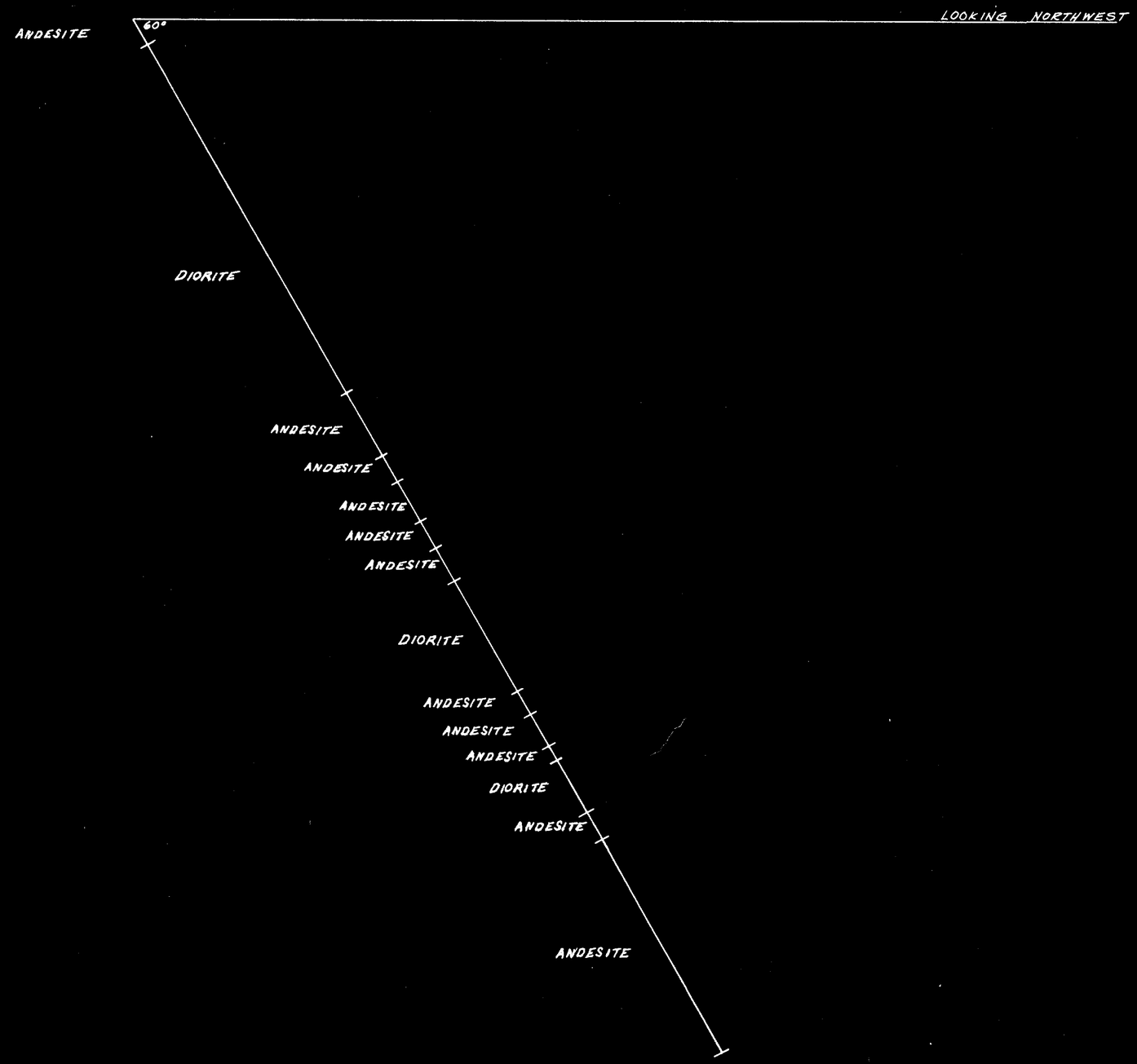


185

NEW JERSEY ZINC EXPLORATION COMPANY
(CANADA) LTD.
SECTION
DIAMOND DRILL HOLE 3-LL-71
PROPERTY LANG LAKE
SCALE 1" = 10' DATE AUG. 26/71
LOGGED D.B DRAWN W.H.C.

240

52Ø/11SW-0015, #5



NEW JERSEY ZINC EXPLORATION COMPANY (CANADA) LTD.

SECTION

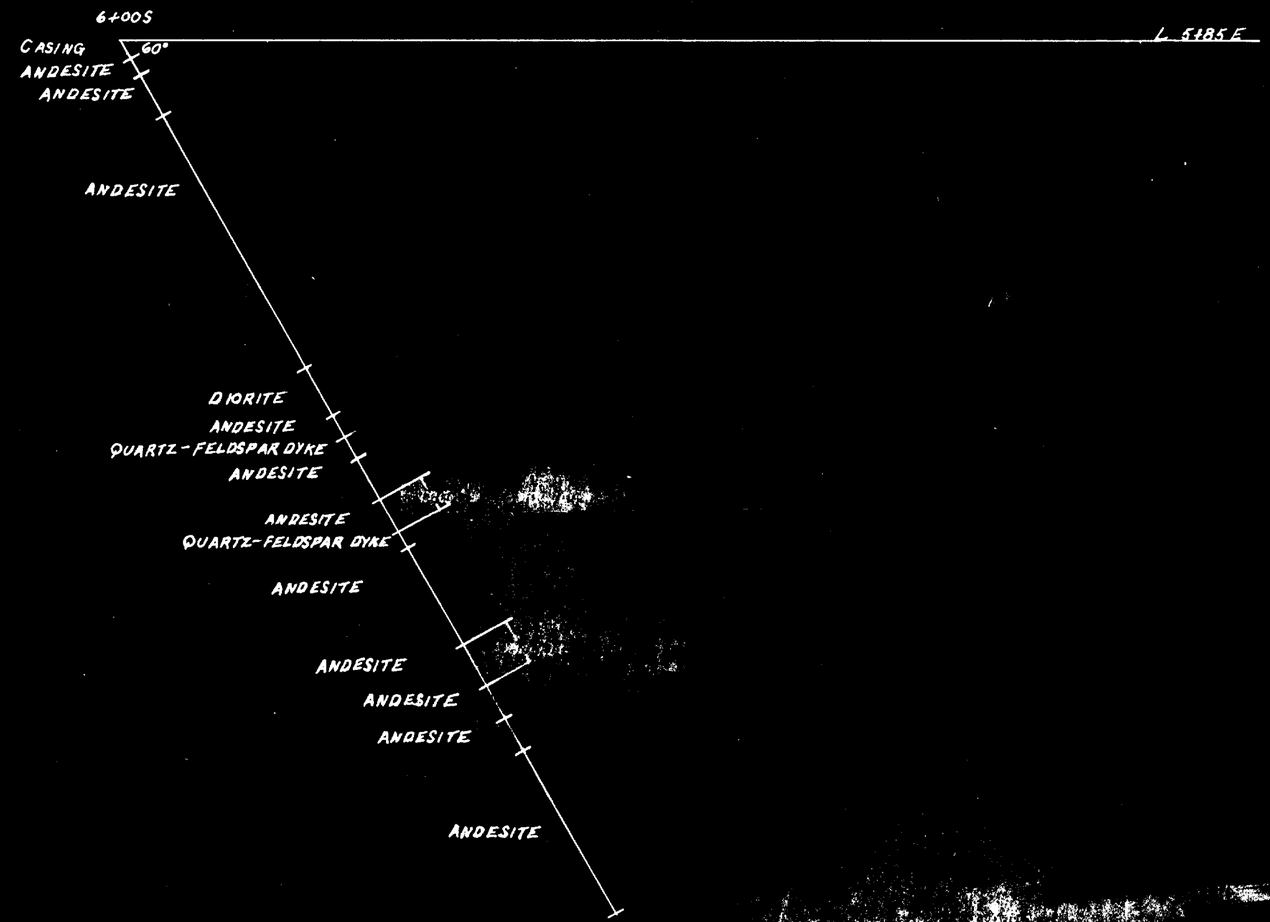
DIAMOND DRILL HOLE 4-LL-71

PROPERTY LANG LAKE

SCALE 1" = 10' DATE AUG. 26/71

LOGGED D.B DRAWN W.H.R.

52Ø/11SW-0015, #6



NEW JERSEY ZINC EXPLORATION COMPANY (CANADA) LTD.

SECTION

DIAMOND DRILL HOLE 5-LL-71

PROPERTY LANG LAKE

SCALE 1" = 10' DATE AUG. 26/71

LOGGED D.B DRAWN W.H.C.

52Ø/11SW-0015, #7