



52G15NW0072 52G15NW0043 SIXMILE LAKE

010

### Diamond Drilling

Area of SIXMILE LAKE

Report N<sup>o</sup> 76

Work performed by: Norlex

Claim N <sup>o</sup>	Hole N <sup>o</sup>	Footage	Date	Note
PA 229371	NX-7	512.0'	July/75	(1)
PA 229372	NX-8	202.0'	July/75	(1)
PA 229364	NX-9	572.0'	Aug/75	(1)
PA 229413	NX-10	665.0'	Aug/75	(1)
PA 229373	NX-11	407.0'	Aug/75	(1)
	NX-12	328.0'	Aug/75	(1)
PA 229370	NX-13	337.0'	Nov/75	(1)
	<u>NX-14</u>	<u>480.0'</u>	Dec/75	(1)
<u>TOTAL</u>	8DH	3503 FT		

#### Notes:

(1) #1-76





D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX- 7					
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 3					
												Depth:					
Drill by:				Date From		To		Logged by:				Date From		To			
Size	Footage		Recovery		Assay Res.					DESCRIPTION							
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag								
	(190)	(193)	(3)								6" of magnetite-rich (10%) altered (carbonate-chlorite) dacite lava (?) fragments in carbonate-chlorite matrix. Sample for thin-section. Minor magnetite in local areas to 193'.						
		(200)									Acid test = 38° (corrected)						
		(230)									Sample containing pyrite and pyrrhotite for thin and polished sections.						
	(238)	(240)	(2)								Disseminated pyrite and pyrrhotite.						
	(243)	(244)	(1)														
		(249½)	(½)								2 mm brown gossanous limonitic zone with associated quartz, pyrite and pyrrhotite veinlets.						

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE				Hole No. NX-7	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION	
				Date From		To		Logged by:			
				Date From		To					
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	(260)	(261)	(1)							Light grey sericite schist with 1 mm diameter grass-green flattened blebs.	
										Sample for thin-section.	
	(265)	(267)	(2)							Quartz-carbonate vein.	
	(274)	(283)	(9)							Chlorite rich andesite tuff (?)	
	(281)	(281½)	(½)							5% disseminated magnetite.	
	(283)	(283½)	(½)							Rusty zone--broken core.	
	(287)	(288)	(1)							Chlorite schist with rusty stringers	
	(288)	(293)	(5)							Andesite fragmental (tuff?) deposit	

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX- 7	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 5	
				Depth:									
Drill by:				Date From				To				Logged by:	
				Date From				To					
Size	Footage		Recovery		Assay Res.					D E S C R I P T I O N			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
		(292½)									5 cm sericite schist with 5% magnetite.		
	(293)	(295)	(2)								Ground--no core		
	(295)	(296)	(1)								Chloritic (andesitic?) schist.		
	xx	xx	xx	xx									
	296	302	6	100							Dacite lava. Medium grey. Sparse (<0.5%) disseminated pyrite & pyrrhotite		
		(300)									Acid test = 33° (corrected)		

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX- 7										
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 6										
				Depth:																		
Drill by:				Date From		To		Logged by:				Date From		To								
Size	Footage		Recovery		Assay Res.					DESCRIPTION												
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag													
	xx	xx	xx	xx																		
	302	(305½)	3½	90																		Dacite fragmental, possible small scale autobreccia.
	(305)	(306)	(1)																			Water--bad broken ground.
	xx	xx	xx	xx																		
	305½	321	15½	75																		Chloritic andesite tuff. 1% disseminated and blebs pyrite and pyrrhotite.





D R I L L   R E C O R D

COMPANY	NORLEX	PROJECT	STURGEON LAKE		Hole No. NX- 7
REMARKS:		AZ.	INCL.	COORDINATES	ELEVATION
					Sheet No. 8
					Depth:

Drill by:	Date From	To	Logged by:	Date From	To
-----------	-----------	----	------------	-----------	----

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	(323)	(323½)	(½)							Ground--no core.
	xx	xx	xx	xx						
	327	340	13	85						Andesite tuffs and lavas.
	(327)	(330)	(3)							Andesite tuff--1% disseminated pyrite.
	(330)	(334)	(4)							Andesite lava--0.5% disseminated pyrite.
	(334)	(340)	(6)							Andesite tuff--2% disseminated pyrite.

**D R I L L   R E C O R D**

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX- 7	
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 8a	
									Depth:	
Drill by:			Date From			To			Logged by:	
									Date From	
									To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	(335)	(338)	(3)					1/20	1/20	Ground--no core
	(339)	(340)	(1)		<0.01%	<0.01%	<0.01%	<0.001	0.03	Sample for assay and for thin section
	xx	xx	xx	xx						
	340	350	10	98						Dacite lava and tuff
	(340)	(342)	(2)							Dacite lava
	(342)	(350)	(8)							Dacite tuff. 0.5% disseminated pyrite and pyrrhotite.

D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-7		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 9	
									Depth:	
Drill by:			Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	350	354	4	100						Andesite tuff--1-2% pyrite and magnetite.
	xx	xx	xx	xx						
	354	363	9	100						Dacite lava
	xx	xx	xx	xx						
	363	512	149	95						Andesite tuffs and lavas.

D R I L L   R E C O R D

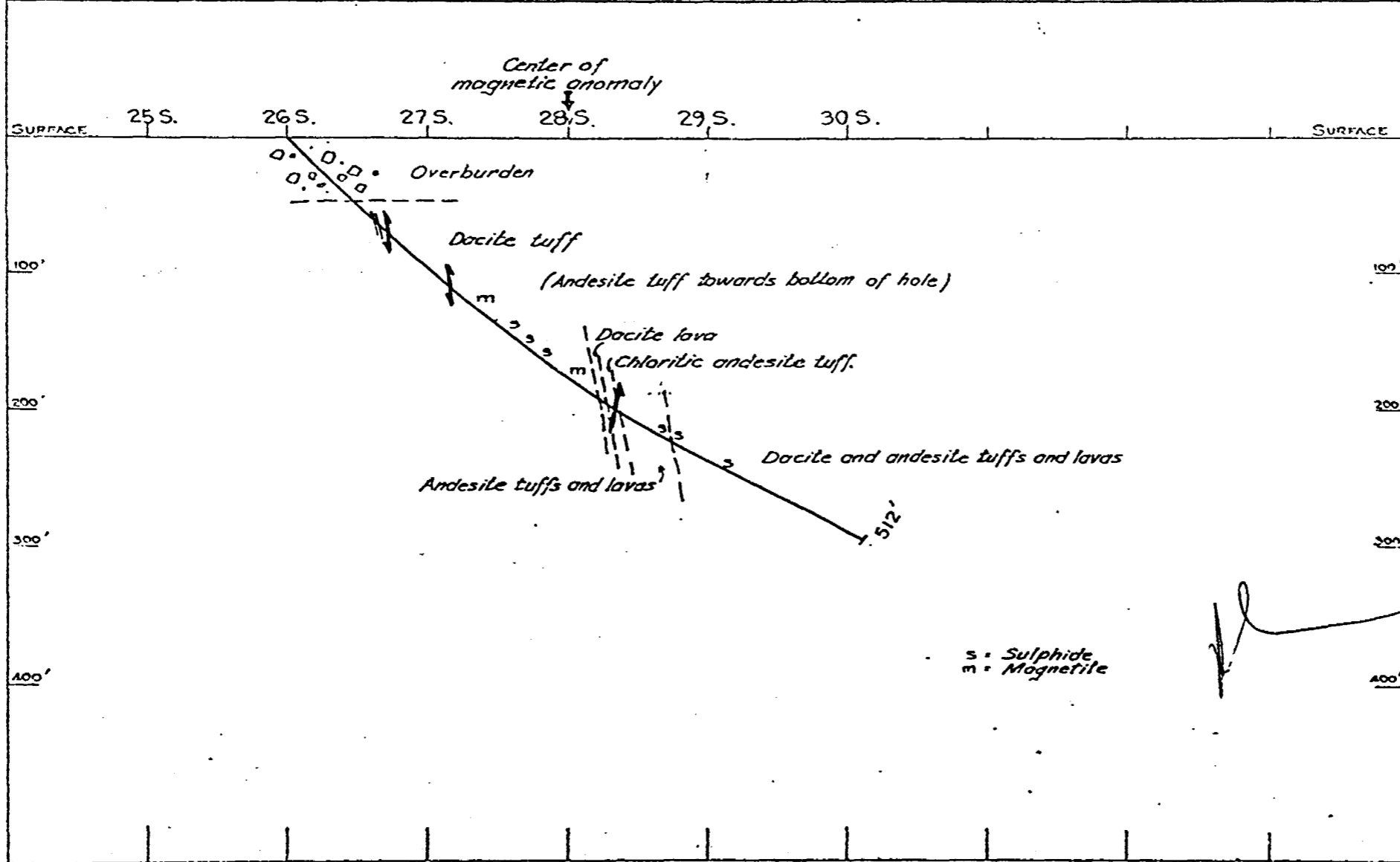
COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-7				
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 10			
										Depth:			
Drill by:				Date From		To		Logged by:		Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
	(363)	(366)	(3)							Andesite tuff--1% disseminated pyrite, locally blebby.			
	(366)	(377)	(11)							Andesite lava--0.5% disseminated pyrite.			
	(377)	(379½)	(2½)							Andesite tuff.			
	(379½)	(387)	(7½)							Andesite lava--<0.5% disseminated pyrite: Minor 2-5 cm tuffaceous sections.			
	(387)	(403)	(16)							Andesite tuff--minor 10 cm lava-like sections. 0.5-1% disseminated pyrite.			
		(400)								Acid test = 28° (corrected)			
	(403)	(512)	(109)							Andesite lava. Minor 2-30 cm tuffaceous sections. <0.5% pyrite.			

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-7		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 11	
				Depth:						
Drill by:			Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
		(452½) (459)								2 cm band; pyrrhotite and pyrite blebs.
	(460)	(461)	(1)							1% disseminated pyrrhotite and pyrite.
		(465) (468)								A few blebs pyrrhotite with minor pyrite.
		(473½) (485)								Ditto, in 4 cm tuffaceous band.
		(489½)								Ditto, in 6 cm tuffaceous band.
		(493)								Sample of andesite lava for thin section.
		(500)								Acid test = 31 <sup>0</sup> (corrected).
Also, other bands of disseminated and blebby pyrrhotite and pyrite.										



COMPANY: NORLEX MINES LTD.		STURGEON L. GROUP PROPERTY:		D.D.H. NO.: NX-7	
LINE: 0+00/26+00 S.	AZ.: 217° (GRID S.)	DIP: -45°	SIZE: AQ	LOOKING: S.E. (GRID E.)	
STARTED:	ENDED:	SCALE: 1 INCH = 100 FEET		1" = 100'	



D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-8 ✓	
REMARKS: Sited to locate the contact between amphibolite to south & rhyolite o. sediment to the north				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 1
				220°	-45°	L20E/20 + 00S		—	Depth: 202'
Drill by: Morissette			Date 1975 From 29 July To 2 Aug		Logged by: A.M.S. Clark			Date From 2 Aug 75 To —	
Size	Footage		Recovery		Assay Res.		D E S C R I P T I O N		
	From	To	Feet	%					
AQ	0	196	196	--	No samples		Overburden--casing		
	xx	xxx	xxx	xxx	collected				
	196	202 ✓	6	0			No core--rods jambed in hole. Green-black grindings in return water, possible amphibolite.		
							✓ HOLE ABANDONED		





D R I L L   R E C O R D

COMPANY NORLEX		PROJECT STURGEON LAKE				Hole No. NX-9					
REMARKS: _____		AZ.	INCL.	COORDINATES	ELEVATION	Sheet No. 2					
		_____	_____	_____	_____	Depth: _____					
Drill by: _____		Date From _____ To _____		Logged by: _____		Date From _____ To _____					
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	(13)	(23)	10					1/20	1/20		Sample for assay
	(21)	(22)	1		3/10	3/10	3/10	100	10		Fine-grained tuff horizon
	(28)	(39 1/2)	11 1/2					1/20	1/20		Sample for assay
	(33)	(34 1/2)	1 1/2		3/10	3/10	3/10	100	10		ditto
	(34 1/2)	(35)	1/2		3/10	3/10	3/10	100	10		Shaly
	(35 1/2)	(37 1/2)	2								Shaly
	xx	xx	xx	xx							
	39 1/2	84	44 1/2	90							Black slightly graphitic shale, with 2-5% pyrrhotite, pyrite and chalcopyrite (?)
											Well developed schistosity at 38° t.c.a. Many small pre-schistosity quartz-carbonate veins which contain pyrrhotite, pyrite and chalcopyrite (?).
											Bedding not well developed, is sub-parallel to schistosity. Several 5 cm to 40 cm tuffaceous interbeds.







D R I L L R E C O R D

COMPANY NORLEX		PROJECT STURGEON LAKE				Hole No. NX-9				
REMARKS:		AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 6			
							Depth:			
Drill by:		Date From		To		Logged by:				
						Date From				
						To				
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	(170)	(173)	3		<0.01%	<0.01%	<0.01%	<0.001 oz/t	0.01 oz/t	Sample for assay. Pebbly dyolitic tuff with pyrite and pyrrhotite (2%).
	(192)	(195)	3		<0.01%	<0.01%	<0.01%	<0.001 oz/t	0.02 oz/t	Sample for assay. Fine to medium grained tuff
		(200)			<0.01%	<0.01%	<0.01%	<0.001 oz/t	0.02 oz/t	Acid test = 31° (corrected)
	xx	xx	xx	xx						
	204	250½	46½							Green and grey, laminated to fine-bedded (locally thick bedded) cherty shale.
										Convolute bedding (soft sediment slumping?) common. Some beds
										tuffaceous. Shale poorly mineralised, with local sulphide concentrations.
	(204½)	(207½)	3		<0.01%	<0.01%	<0.01%	<0.001 oz/t	<0.01 oz/t	Sample for assay, containing 5 cm section with quartz-rich section and 10% sulphides (pyrrhotite, pyrite and minor chalcopyrite) at 207'.

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-9	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 7	
												Depth:	
Drill by:				Date From				To				Logged by:	
												Date From	
												To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
	(213)	(216)	3					1/20	1/20		Sample for assay. <sup>①</sup> Sulphides interbedded with shale. Sulphides associated with		
	(213)	(214)	1		<0.01%	<0.01%	0.01%	100.0%	0.01		quartz-rich sections and quartz-carbonate veins. <sup>②</sup> Graded bedding. 15 cm		
	(215)	(216)	1								scale, from fine-grained to very fine grained. Gets finer towards bottom of hole i.e.		
	(218)	(220)	2								towards N.E. Bedding planes 45° t.c.a.; schistosity 50° t.c.a. indicating		
											antiform to S.W.		
	(219)	(223)	4		<0.01%	<0.01%	0.01%	100.0%	0.04		Sample for assay.		
	(220)	(223)	3								Shale is laminated with interlaminae of sulphides (pyrrhotite and pyrite).		
								1/20	1/20				
	(231½)	(234½)	3		<0.01%	<0.01%	0.01%	100.0%	0.03		Microcline-quartz-carbonate breccia (brecciated vein?). Sample for assay.		

D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-9		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 8	
				Depth:						
Drill by:			Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
										5% sulphides (pyrrhotite, pyrite chalcopyrite (?) and arsenopyrite)
	(236	239	3)		①	②				Two samples for polished and thin-section. ① Grey-green shale with convolute
								1/20	1/20	(slump) folding of laminations.
					②					② Pyrrhotite and pyrite in thin streaks parallel to bedding (2%?). Sample for assay
	250 1/2	357	106 1/2		0.01%	0.01%	0.01%	0.001	0.02	Mainly poorly bedded black shale, but locally greenish hue predominant, and lamellae or very thin bedding developed. Gradual boundary with above shale.
										Minor tuffaceous sections throughout. Mineralisation is very sparse
										(pyrrhotite, pyrite, chalcopyrite (?))
		(253)								Imperfect graded bedding
		(300)								Acid test 36° (corrected)
	(322 1/2)	(324)	1 1/2							Ground--no core
	xx	xx	xx	xx						



D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-9							
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 9			
														Depth:	
Drill by:				Date From		To		Logged by:				Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION					
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag						
	357	369	12	90						Mainly green-grey shale, poorly bedded. some black shale horizons. Green and black shales grade onto one another. Mineralisation (pyrite pyrrhotite) sparse					
	(359)	(361)	2		⓪					--mainly associated with quartz veins. Tuff--open post-D fo'd.					
	(364)	(365)	1							Ground--no core.					
		(370)								F <sub>2</sub> folds of S <sub>1</sub> and pre-D <sub>2</sub> pyrite-quartz veinlets.					
	xx	xx	xx	xx											
	369	401	32	95						Grey-black shale--gradational contacts with green-grey shale.					
	(370)	(373)	3							Black shale with abundant quartz-carbonate veins with associated sulphides					
					0.01%	0.01%	0.01%	0.001 oz/oz	0.01%	(pyrrhotite, pyrite, chalcopyrite (?) -5%). Sample for assay.					
	(380)	(401)	21							Slight green tint, more tuffaceous, with interbedded 5-10 cm thick tuff beds.					
										Contacts generally gradational, but some are sharp.					
	(388)	(389)	1							} Flow-Banded, rhyolite lava. 5-10% opaque minerals (mainly magnetite with lesser pyrrhotite, pyrite & chalcopyrite(?)).					
	(390)	(391½)	1½												

D R I L L   R E C O R D

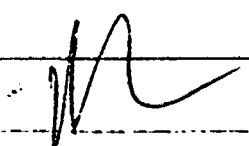
COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-9		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 10	
				Depth:						
Drill by:			Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	(388)	(391½)	3½		<0.01%	<0.01%	<0.01%	<0.001 oz/t	0.01 oz/t	Sample for assay
		(391)								Sample for thin and polished section.
		(400)								Acid test = 43° (corrected)
	xx	xx	xx	xx						
	401	411½	10½	95						Fine grained grey-green bedded tuffs gradational with above shales. Graded bedding marked (5-15 cm scale) with fine-grained part toward <u>top of hole</u>
										(i.e. reverse to 218'-220') No fold of bedding recognised, bedding = 45° t.c.a.
										schistosity = 63° t.c.a., intersection indicates antiform to west.
	xx	xx	xx	xx						
	411½	478½	67	95						Green-grey shale with minor black and tuffaceous horizons. Gradational contact with above tuffs. Abundant quartz-carbonate veins up to 4 cm thick.
	(414)	(415½)	1½							Black shale
	(429)	(433)	4							Grey-green, 1-20 cm graded bedded tuff. Grading to fine grained towards

D R I L L R E C O R D

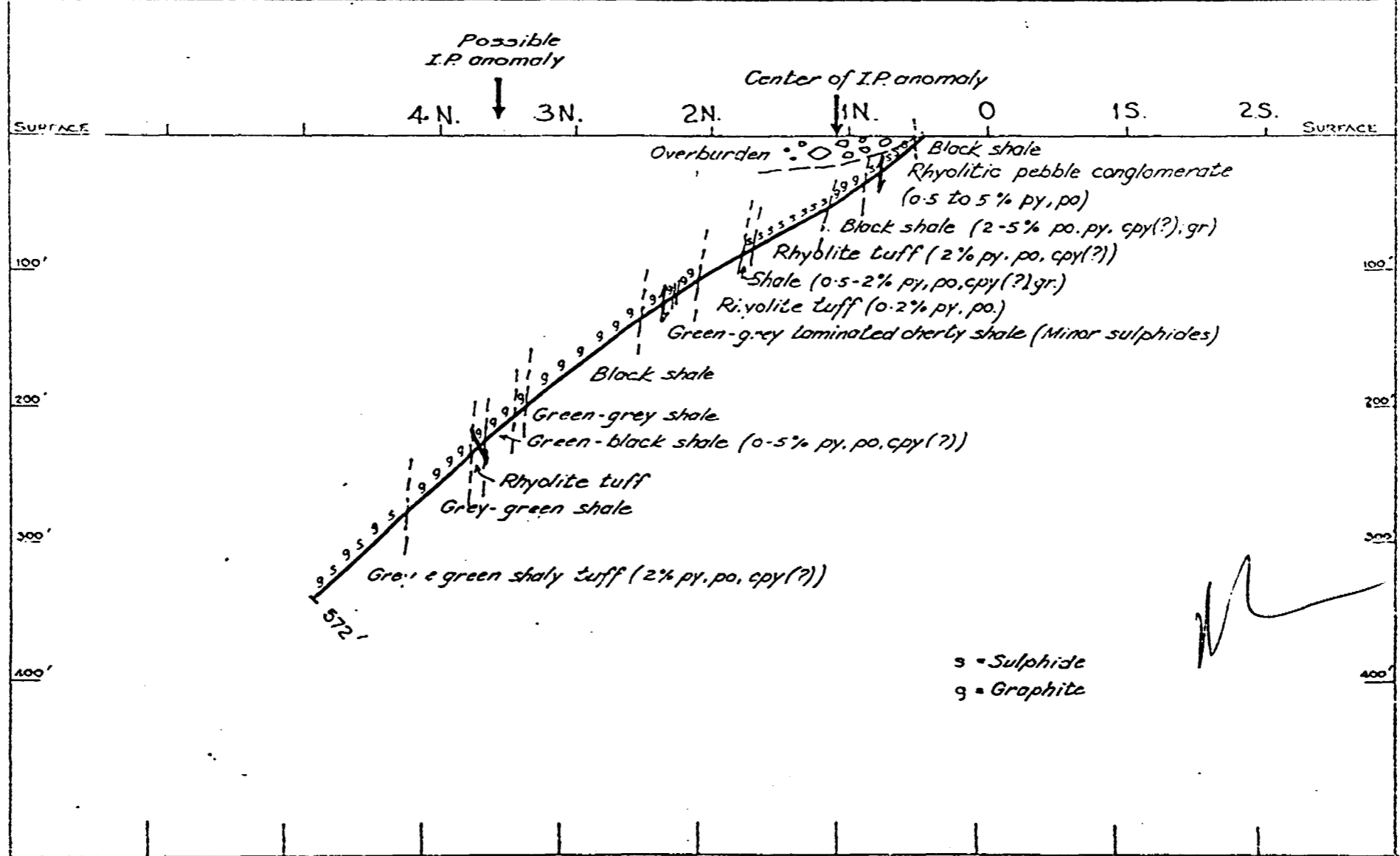
COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-9				
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 11			
									Depth:			
Drill by:			Date From		To		Logged by:		Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION		
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag			
												top of hole .
	(435½)	(439½)	4									Black shale
	(439½)	(448)	8½									Tuffaceous green shale
	(467)	(470)	3									Black shale, brecciated, quartz-carbonate filling. Fractures--no mineralisation
	(470)	(476)	6									Tuffaceous green shale, with minor (1-5cm) tuff beds.
	(476)	(478½)	2½									Tuffaceous black shale
	xx	xx	xx	xx								
	478½	572	93½	90								Grey and green shaly tuff with graded bedded units from 2 to 20 cm thick (fine grained towards bottom of hole). A few widely separated 2 to 5 cm wide green shaly units with up to 5% pyrrhotite and pyrite.
		(500)										Acid test = 43° (corrected)
	(532)	(534)	2		<0.01%	<0.01%	<0.01%	<0.001 oz/t	<0.01 oz/t			Sample for assay, grey-green laminated shale with 2% sulphides (pyrrhotite and pyrite).
	(545)	(548)	3									Yellow green cherty laminated shale--0.5 to 1 % pyrite.

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-9 ✓			
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 12			
												Depth:			
Drill by:				Date From		To		Logged by:				Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION					
	From	To	Fcet	%	Cu	Pb	Zn	Au	Ag						
	(548 1/2)	(550)	1 1/2							Ground--no core.					
		(553 1/2)								5 cm of brecciated black shale with 5% pyrite.					
	(554)	(560)	6							Green-black tuff with 0.5% pyrite in a few fractures.					
		(563)								5 cm green laminated shale with 5% pyrite					
		(568 1/2)								Controlled 1/4 cm vein of massive pyrite.					
	(571)	(572)	1							Black shale					
		(572)								END OF HOLE.					
<p><u>Note:</u> Unless otherwise specified all the shale and tuff units have gradational contacts, and the main sequences are mixed shales and tuffs with a predominance of one or the other.</p>															



COMPANY: NORLEX MINES LTD.		PROPERTY: STURGEON L. SL-1		D.D.H. NO.: NX-9	
LINE: 12 E / 0+50 N	AZ.: 040° (GRID N)	DIP: -45°	SIZE: AQ	LOOKING: S.E. (GRID E)	
STARTED:	ENDED:	SCALE: 1 INCH = 100 FEET <span style="border: 1px solid black; padding: 2px;">1" = 100'</span>			



D R I L L R E C O R D

COMPANY NORLEX	PROJECT STURGEON LAKE	Hole No. NX-10
REMARKS: Sited to intersect on I. P. anomaly at about 350' depth	AZ. 220°	INCL. -45°
	COORDINATES L8W/6 + 00N	ELEVATION
Drill by: Morissette		Sheet No. 1
Date From 12/08/75 To 19/08/75		Depth: 665'
Logged by: A.M.S. Clark		Date From 16/08/75 To 20/08/75

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
AQ	0	68	68	---						Overburden--casing
	xx	xx	xx	xx						
	68	74	6	50						Black shale with minor 2.5 cm tuffaceous horizons. Broken ground. <sup>Ⓟ</sup> Green
	73	73½	½		Ⓛ					Laminated shale with minor pyrite beds (?).
	xx	xx	xx	xx						
	74	153	79	98						Grey-green tuff--gradational boundary with above shale. Tuff is shaly, generally with black shale, but locally with green shale. Also has internal shale horizons, usually as fine grained portion of 5-10 cm graded beds, (fine grained part at top of core). Minor slumping noted.
	(80	81	1)							Black shale--brecciated; with quartz-carbonate veins containing very minor pyrite.
	(82	83	1)							Ground--no core.
	(90	91	1)							Ground--no core.
	(94	95	1)							Black shale with veinlets of pyrite (and pyrrhotite?).

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT			STURGEON LAKE			Hole No. NX-10		
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		
Drill by:				Date From		To		Logged by:			Date From	
											To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION		
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag			
	(98	99	1)								Grey-green laminated shale with pyrite (and Pyrrhotite?) in veins and on bedding planes.	
		(100)									Acid test = 28° (corrected)	
	(100	100½	½)								A few 2 x 10 mm pyrite blebs on bedding planes. Bedding 50° t.c.a.;	
											S-fabric 43° t.c.a.	
	(103	108	5)								Light grey, fine-grained tuff. No sign of bedding or grain-size variation.	
		105½									} Short brecciated section, upper boundary sharp, lower possibly gradational	
	(136	139	3)	①	0.01%	0.01%	0.01%	0.001 oz/t	1/2 oz			Sample for thin-section. ① Yellow-green cherty shale with magnetitic lamellae and pyrite veinlets--sample for assay.
	(142	145	3)								Shaly tuff with white "spots" (2mm x 1mm) of flattened clasts (volcanic ejecta?)	
	(145	147	2)								Black shale with F <sub>2</sub> fold of S <sub>1</sub> and bedding.	
	(147	149	2)								Shaly tuff with white flattened clasts(?)	
		(149)									Ptygmatically folded (F <sub>1</sub> ) 1/2 cm wide pre-D <sub>1</sub> quartz-carbonate-pyrite veinlet.	

D R I L L R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-10			
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 3			
												Depth:			
Drill by:				Date From		To		Logged by:				Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION					
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag						
	(149	152	3)							Dark grey to black tuffaceous shale.					
	(152	154	2)							Green tuffaceous shale					
	(152 $\frac{1}{2}$ )	153	$\frac{1}{2}$ )							Pyritic interlamellae					
	xx	xx	xx	xx											
	153	304	151	98						Grey-black shaly tuff with 5-15 cm graded beds--fine-grained part <u>to top of hole.</u>					
	(172	198	26)							Graded beds with fine-grained part to bottom of hole.					
	(193 $\frac{1}{2}$ )	194	$\frac{1}{2}$ )							Laminated green-yellow cherty shale cut by quartz-carbonate-pyrite veins					
	(194	196	2)							Graded beds with fine-grained part <u>to top of hole</u> . Note: this core section is continuous with previous graded bedded section, i.e. core is not turned around in box.					
		(200)								Acid test = 43° (corrected)					
	(201	201 $\frac{1}{2}$	$\frac{1}{2}$ )							Green shale with quartz-carbonate-pyrite veinlets.					
	(211	218	7)							Graded beds with fine-grained part <u>to bottom of hole.</u>					



D R I L L   R E C O R D

COMPANY    NORLEX		PROJECT    STURGEON LAKE				Hole No. NX-10		
REMARKS:			AZ.	INCL.	COORDINATES		ELEVATION	
Drill by:		Date From      To		Logged by:		Date From      To		
Size	Footage		Recovery		Assay Res.			D E S C R I P T I O N
	From	To	Feet	%	Cu	Pb	Zn	
	(218	220	2)					Laminated green shale with pyrrhotite on bedding planes and pyrite in cross-cutting veinlets. Total sulphides approximately 5%. Sample for assay.
					sample lost by T.S.L.			
	(229½	233	3½)					Pale grey and green laminated to very thinly banded dacitic lava (?) or dacitic tuff (?)
	(237	238	1)					Laminated green and black shale with bedded pyrrhotite and pyrite.
		(237)						Sample for thin-section and polished section.
	(246½	248½	2)					Green shale with a few pyrrhotitic interbeds and quartz-carbonate-pyrite veins.
	(293	304	10)					More shaly, black and green, with some small breccia segments and abundant quartz veining.
		(300)						Acid test = 38° (corrected)
	xx	xx	xx	xx				
	304	450	146	98				Small pebble rhyolitic conglomerate (clasts 2mm to 4 cm). Sulphides 1-5% mainly pyrite in 1 mm cubes and in ½ cm stringers and blebs.

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-10	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 5	
				Drill by:				Date From		To		Logged by:	
Size		Footage		Recovery		Assay Res.					DESCRIPTION		
		From To		Feet %		Cu Pb Zn Au Ag							
											Some medium-grained, well sorted, beds up to 40 cm thick.		
		(310 315)		5)		Sample lost by T.S.L.					Sample for assay. 5% sulphides		
				312							Sample for thin-section.		
		(335 340)		5)		0.04% 0.04% 0.01% 0.005 oz/t 0.01 oz/t					Sample for assay. 1-2% sulphides		
		(360 365)		5)		0.02% <0.01% 0.01% <0.001 oz/t 0.04 oz/t					Sample for assay. 1-2% sulphides		
		(385 390)		5)		0.03% 0.02% 0.01% 0.001 oz/t 0.04 oz/t					Sample for assay. 1-2% sulphides		
		(400)									Acid test = 38° (corrected)		
		(410 415)		5)		0.02% <0.01% 0.01% 0.003 oz/t 0.01 oz/t					Sample for assay. 2-3% sulphides		

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-10			
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 6		
Drill by:			Date From		To		Logged by:		Date From		To
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	(435½)	441	5½)		0.03%	0.01%	0.01%	0.002oz/t	0.01 oz/t	Black shaly tuffaceous horizon, 1-2% pyrite. Sample for assay	
	XX	XX	XX	XX							
	450	491½	41½	90						Black, laminated shale, complexly folded (soft sediment deformation as well as F <sub>1</sub> and F <sub>2</sub> folds), with minor tuff interbeds. 0-5% pyrite. no other sulphides recognised. Pyrite in 1mm cubes on bedding planes and in quartz-carbonate veinlets. Shale is slightly graphitic.	
	(450	453	3)		0.01%	<0.01%	0.01%	0.003oz/t	0.01 oz/t	Sample for assay. 3% pyrite	
	(475	480	5)		0.03%	<0.01%	<0.01%	0.002oz/t	<0.01 oz/t	Sample for assay. 1% pyrite.	
		(486½)								Bedding 50° t.c.a., schistosity 45° t.c.a., intersection indicates antiform to southwest.	

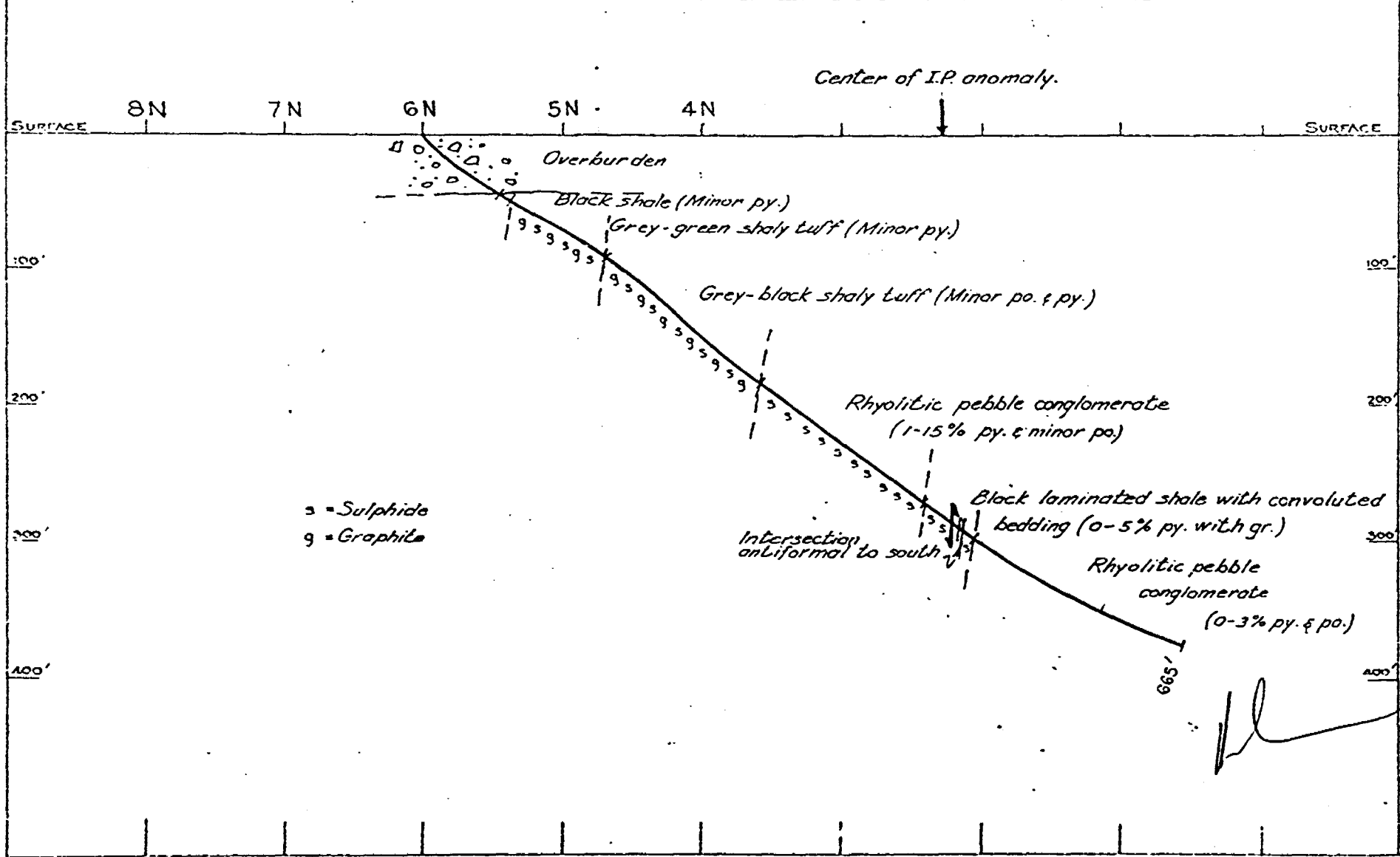
D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT			STURGEON LAKE			Hole No. NX-10	
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 7		
				Depth:							
Drill by:			Date From		To		Logged by:		Date From		
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	xx	xx	xx	xx							
	491½	665	173½	95						Pebble rhyolitic conglomerate (clasts 2mm to 2cm) with many tuffaceous horizons.	
	(495	500	5)		0.02%	<0.01%	0.01%	0.008oz/t	0.01oz/t	0-3% sulphides (pyrite and pyrrhotite)	
										Sample for assay	
		(500)								Acid test = 33° (corrected)	
	(520	525	5)		0.02%	<0.01%	0.01%	0.001oz/t	0.03 oz/t	Sample for assay	
	(545	550	5)		0.02%	<0.01%	0.01%	0.001oz/t	0.03 oz/t	Sample for assay	
	(570	575	5)		0.02%	<0.01%	<0.01%	<0.001oz/t	1/20 oz/t	Sample for assay	
					0.02%	<0.01%	<0.01%	<0.001oz/t	0.01 oz/t		

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-10			
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 8			
												Depth:			
Drill by:				Date From		To		Logged by:				Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION					
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag						
	(595	600	5)		0.01%	<0.01%	<0.01%	0.001oz/t	0.02 oz/t	Sample for assay					
		(600)								Acid test = 24° (corrected)					
	(620	625	5)		0.01%	<0.01%	<0.01%	0.003oz/t	0.01 oz/t	Sample for assay					
	(645	650	5)		0.02%	<0.01%	<0.01%	0.003oz/t	0.02 oz/t	Sample for assay					
										Mineralisation, 1-2% throughout the above section, getting up to 3% locally					
										Mineralisation decreases in last few feet of hole, but appears to be a regular variation as occurs above--i.e. the mineralisation probably continues further than end of hole.					
		(665)								END OF HOLE					

COMPANY: NORLEX MINES LTD.		PROPERTY: STURGEON L. SL-1		D.D.H. NO.: NX-10	
LINE: 8 E. / 6N	AZ.: 220° (GRIDS)	DIP: -45°	SIZE: AQ	LOOKING: SE. (GRID E)	
STARTED:	ENDED:	SCALE: 1 INCH = 100 FEET		1" = 100'	



D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-11		
REMARKS: Sited to intersect an I.P. Anomaly at 27 + 50S/175' depth				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 1	
				220°	-45°	L28E/25 + 75'S		-----	Depth: 407'	
Drill by: Morisette			Date From 25/8/75 To 29/8/75		Logged by: A.M.S. Clark			Date From 26/8/75 To 31/8/75		
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
AQ	0	68	68	100						Overburden--casing
	xx	xx	xx	xx						
	68	74	6	0						Bedrock--casing
	xx	xx	xx	xx						
	74	82	8	98						Feldspar porphyritic dacite lava. Very fine grained, very hard, no visible quartz.  no banding or layering apart from an incipient S-fabric (?) at 50° t.c.a.

**D R I L L   R E C O R D**

COMPANY		NORLEX		PROJECT		STURGEON LAKE				Hole No. MN-11	
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 2	
				Depth:							
Drill by:			Date From		To		Logged by:			Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
											Medium grey coloured
	xx	xx	xx	xx							
	82	160	78	95							Rhyolite pebble conglomerate. Medium grey, sub-aqueous, rhyolite and dacite pebble conglomerate (clasts 1 mm to 5 cm diameter) with some (1-3%) pyrrhotite-shale clasts and pyrrhotite-shale interbeds up to 4 cm thick. Clasts show tectonic flattening. Note: "Rhyolite" refers to quartz-porphyrific or non-porphyrific fine-grained acid igneous rock, and "dacite" to feldspar-porphyrific ditto. Bedding 45° l.c.a.
	(95	98	3)		<0.01%	<0.01%	<0.01%	1/20100.0	1/2020.0		Sample for assay. 1% pyrrhotite



D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-11	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 3	
												Depth:	
Drill by:				Date From				To				Logged by:	
												Date From	
												To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
			(100)							Acid test = 43° (corrected)			
	(157	160	3)		<0.01%	<0.01%	<0.01%	<0.001oz/t	0.01 oz/t	Sample for assay. 3% pyrrhotite			
	XX	XX	XX	XX									
	78	163	85	100						Rhyolitic tuff, contact gradational with above conglomerates. Some shale and pyrrhotite (2%) flakes and lenses (1 mm to 1cm long) which may be clasts. and some feldspar-porphyrific (dacite) lava fragments (?)			
	XX	XX	XX	XX									

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-11	
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 4
Drill by:				Date From		To		Logged by:		Date From
										To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	163	174	11	80						Black, laminated slightly graphitic pyritic shale with tuffaceous interbeds 1-4 cm thick. Sulphides 1% (pyrite cubes and lenses, pyrrhotite (?) and chalcopyrite (?))
	(169	172	3)		0.01%	<0.01%	<0.01%	0.001oz/t	<0.01oz/t	Sample for assay
	XX	XX	XX	XX						
	174	225	51	98						Small pebble to gritty tuffaceous rhyolitic conglomerate with 1 mm to 2 cm diameter rhyolite clasts. A few shale and chert clasts are also present. 0.5 to 1% sulphides (pyrite and minor pyrrhotite). Gradational contact with above shale.

D R I L L R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-11					
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 5					
				Depth:													
Drill by:				Date From		To		Logged by:				Date From		To			
Size	Footage		Recovery		Assay Res.					DESCRIPTION							
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag								
											A few large clasts or small lava flows of quartz-feldspar porphyritic lava, up to 8 cm wide. Bedding 70° t.c.a., S-fabric (poorly developed) 60° t.c.a. (antiformal to the south)						
			(200)								Acid test = 38° (corrected)						
	xx	xx	xx	xx													
	225	263	38	90							Black, laminated, tuffaceous pyritic shale with shaly rhyolitic tuff interbeds, 1 to 5% sulphides, mainly in the more shaly units (pyrite) but also on the tuffs (pyrrhotite and pyrite). Incipient S <sub>2</sub> crenulation cleavage at 20° t.c.a. (and sub-vertical in attitude ?)						

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX- 11		
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 6	
Drill by:				Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					D E S C R I P T I O N	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	(229	232	3)		210.0	210.0	210.0	1/2010oz/t	1/0.03 oz/t	Sample for assay. Shale and tuff with average 2% pyrrhotite and pyrite.	
	xx	xx	xx	xx							
	263	306	43	90						Dark grey, light grey or grey-green, very fine-grained rock composed of angular, blocky fragments 1/2 to 2 cm diameter in a matrix of similar composition. Possibly an auto-brecciated felsic lava. A few veinlets of pyrite and areas of sparse disseminated pyrite and pyrrhotite.	
		(273)								Sample for thin section	
		(300)								Acid test = 33° (corrected)	

D R I L L   R E C O R D

COMPANY	NORLEX	PROJECT	STURGEON LAKE		Hole No. NX-11
REMARKS:	AZ.		INCL.	COORDINATES	Sheet No. 7
					Depth:

Drill by:	Date From	To	Logged by:	Date From	To
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Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	xx	xx	xx	xx						
	306	321	15	100						Unbrecciated equivalent of above--presumably felsic lava. No banding, flow-tops or chill margins. Gradational contact with above.
	xx	xx	xx	xx						
	321	343	22	98						Brecciated felsic lava fragments (up to 2 cm diameter) with a matrix of green chloritic shale. Some fragments show 1 to 5 mm long amygdales. Trace of very fine-grained pyrrhotite. A few veinlets of quartz-carbonate-pyrite-chalcopyrite (?)

D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-11				
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 8				
									Depth:				
Drill by:			Date From		To		Logged by:			Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
	xx	xx	xx	xx							Gradational contact		
	343	349	6	90							Dark grey to black shaly tuff. Bedding 65° t. c. a. schistosity 65° t. c. a. 0.5 to 1% pyrite (and chalcopyrite?)		
	(343)	346)									Sample for assay. 1% pyrite (and chalcopyrite?)		
		(348)									Sample for thin-section		
	xx	xx	xx	xx							Gradational contact		

1/20000  
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**D R I L L   R E C O R D**

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-11				
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 9			
										Depth:			
Drill by:			Date From		To		Logged by:			Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
	349	407	58	98						Light grey, chloritic felsic tuff.			
		(358)								½ cm wide muddy seam			
		(358)								Sample for thin section (not of muddy seam).			
		(363)								½ cm wide muddy seam			
		(366)								1 cm wide muddy seam			
		(367)								1 cm wide muddy seam			
	(367)	368)								Ground--no core, muddy seams			

D R I L L   R E C O R D

COMPANY NORLEX	PROJECT STURGEON LAKE	Hole No. NX-11 ✓			
REMARKS:	AZ.	INCL.	COORDINATES	ELEVATION	Sheet No. 10
	Depth:				

Drill by:	Date From	To	Logged by:	Date From	To
-----------	-----------	----	------------	-----------	----

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
		(369)								½ cm wide muddy seam
		(373)								1 cm wide muddy seam
	(397	399½	1½)							Muddy seams
		(400)								Acid test = 33° (corrected)
	XX	XX	XX	XX						
		407								END OF HOLE

MINISTRY OF NATURAL RESOURCES

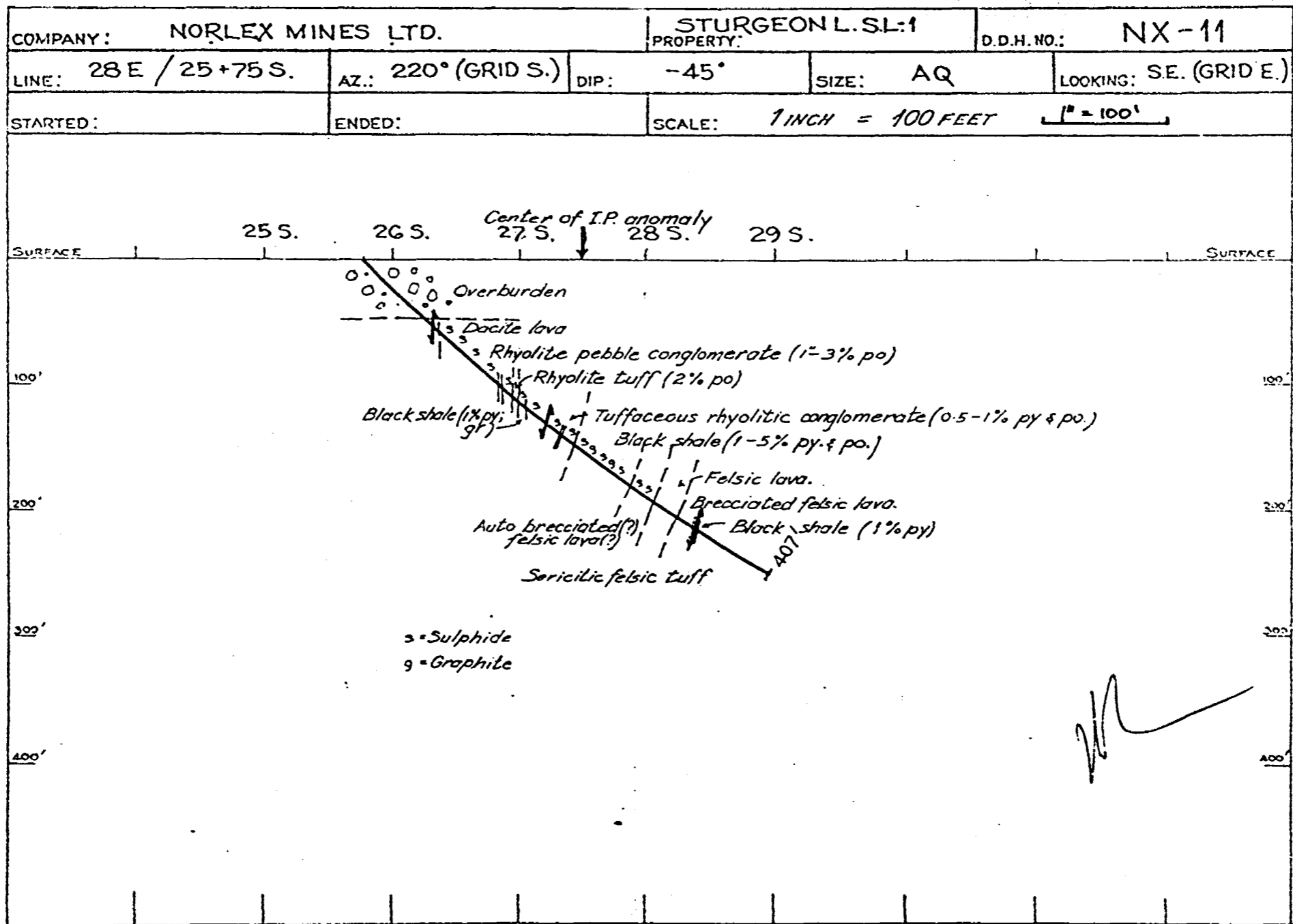
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RESIDENT GEOLOGIST'S OFFICE

SIOUX LOOKOUT





D R I L L R E C O R D

COMPANY	NORLEX	PROJECT	STURGEON LAKE		Hole No. NX-12
REMARKS: To intersect I.P. anomaly at 18 + 00S/ 150' depth	AZ.	INCL.	COORDINATES	ELEVATION	Sheet No. 1
	220°	-45°	L28E/16 + 50'S	-----	Depth: 328'
Drill by: Morissette	Date From 31/8/75 To 4/9/75	Logged by: A.M.S. Clark	Date From 2/9/75 To 4/9/75		

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
AQ	0	84	84	--						Overburden--casing
	xx	xx	xx	xx						
	84	236	52	95						Rhyolite pebble conglomerate. Local more tuffaceous horizons up to 40 cm wide. 1-2% pyrrhotite and pyrite. Pyrrhotite as lenses and grains on matrix, pyrite as 1 mm cubes or 1 cm blebs. S-fabric 45° to core axis (t. c. a.)
	(94	97	3)		<0.01%	<0.01%	<0.01%	<0.001oz/t	0.01 oz/t	Sample for assay. 1% pyrrhotite and minor pyrite.
		(100)								Acid test = 43° (corrected)

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-12		
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 2		
				Drill by:				Date From		To		Logged by:		Date From
Size	Footage		Recovery		Assay Res.					D E S C R I P T I O N				
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag					
	(118½)	121½	3)		<0.01%	<0.01%	0.01%	0.001oz/t	<0.01oz/t	Sample for assay, 3% pyrite and pyrrhotite.				
	(133	133½	½)		<0.01%	<0.01%	0.01%	0.001oz/t	<0.01oz/t	Rhyolite dykelet with chill margins both sides.				
	(139	139½	½)							Ground--no core				
		(200)								Acid test = 43 <sup>o</sup> (corrected)				
	(212½)	215½	3)		0.01%	<0.01%	0.01%	0.001oz/t	0.01oz/t	Sample for assay, 2% pyrite and pyrrhotite, green chloritic shale matrix				
	xx	xx	xx	xx										

D R I L L   R E C O R D

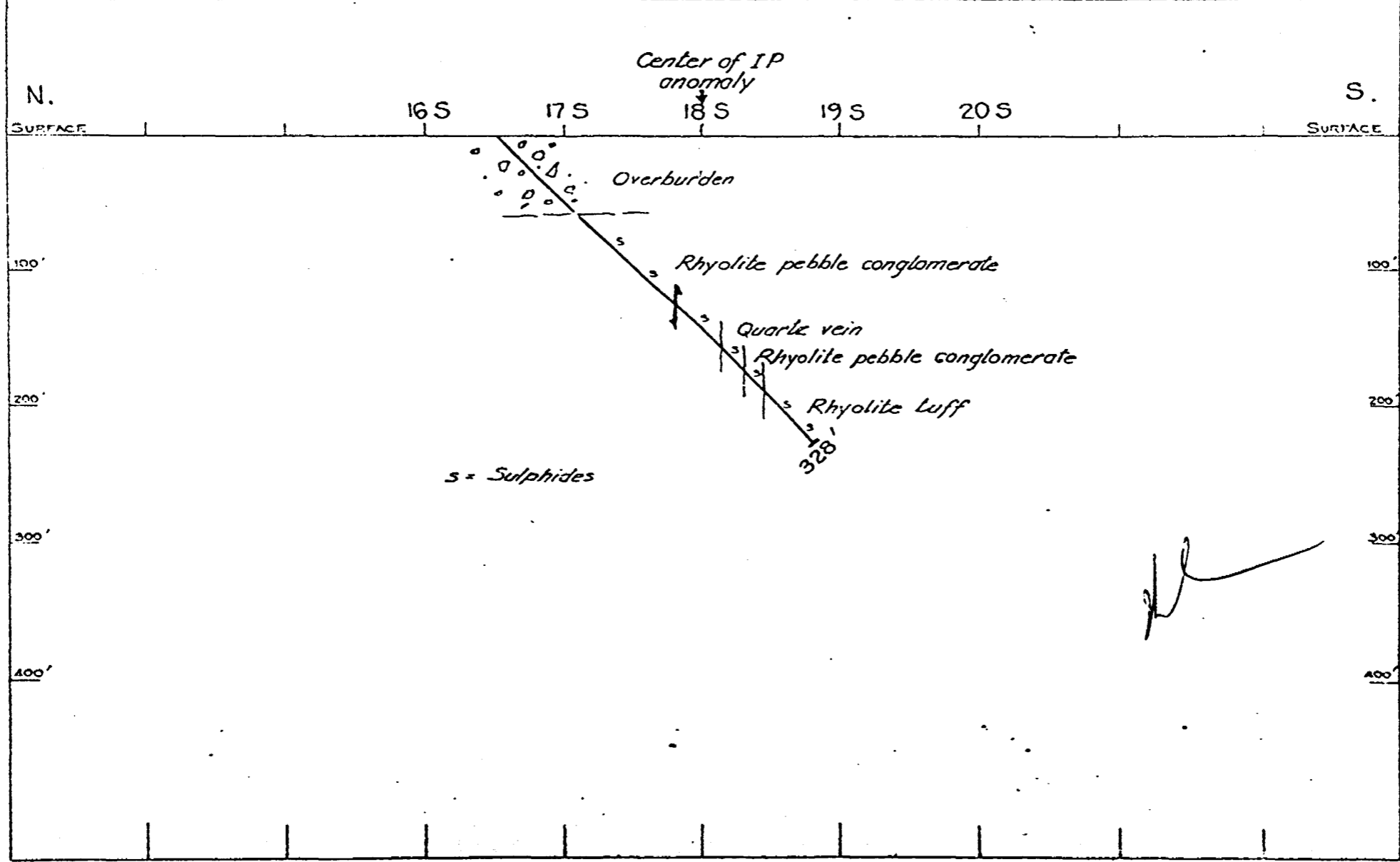
COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-12				
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 3				
									Depth:				
Drill by:			Date From		To		Logged by:			Date From		To	
Size	Footage		Recovery		Assay Res.					D E S C R I P T I O N			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
	236	255	19	90						Quartz vein, white, with fragments of wall-rock (shaly, pebbly, rhyolitic conglomerate) increasing in abundance to the bottom of the vein when it grades into unveined wall-rock. Very minor local veining by pyrite (<1% overall), and even less pyrrhotite.			
	(240)	243	3)		0.01%	<0.01%	<0.01%	0.055oz/t	<0.01%	Sample for assay. 1% pyrite			
		(243)								Sample for thin-section			
	xx	xx	xx	xx									
	255	277	22	98						Rhyolitic small-pebble conglomerate (clasts about 3-10 cm dia.) Shaly towards			

D R I L L R E C O R D

COMPANY		NORLEN		PROJECT		STURGEON LAKE		Hole No. NX-12		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 4	
									Depth:	
Drill by:			Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
										top and tuffaceous towards base. Grades down into underlying tuff.
										<0.5% pyrite and pyrrhotite. In top shaly section, 2-10 cm rhyolite dykelets (?)
	xx	xx	xx	xx						
	277	328	51	95						Rhyolitic tuff. A few 5-20 cm thick shaly tuff beds showing minor slumping. A few small pyrite cubes in the shaly parts.
		(300)								Acid test = 47° (corrected)



COMPANY: NORLEX MINES LIMITED		PROPERTY: STURGEON L. GROUP		D.D.H. NO.: NX-12	
LINE: L28E/16+50S	AZ.: 220°	DIP: -45°	SIZE: AQ	LOOKING: SE (GRIDE)	
STARTED:	ENDED:	SCALE: 1 INCH = 100 FEET		1" = 100'	



D R I L L R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX- 13	
REMARKS:		Sited to intersect an I.P. anomaly at about 250'				AZ.		INCL.		COORDINATES		ELEVATION	
						220°		-45°		LOE/16 + 75'S		Sheet No. 1 Depth: 337'	
Drill by: Morissette				Date From 26 November 1975 To 30				Logged by: A.M.S. Clark				Date From 29 November 1975 To 30	
Size	Footage		Recovery		Assay Res.					DESCRIPTION			
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag				
AQ	0	102	102	--						Overburden - casing			
	102	105	3	--						Overburden - cemented.			
		(100)								Acid test = 41 <sup>0</sup> (corrected)			
	XX	XX	XX	XX									
	105	163½	58½	95						Chloritic, pebbly (up to 1 cm diam.) dark grey green, dacitic (?) tuff with 5-10% sulphides (py & po) disseminated in the clasts, and to a lesser extent in the matrix. Carbonate fractures and replacement common. Becomes more rhyolitic, and lighter coloured towards base, with increase in rhyolite pebbles, but decrease in clast size. At base of sequence a few rhyolite pebbles up to 5 mm diam. occur in tuffaceous matrix. Sulphides decrease to 2-5%.			
		(134)								6 cm barren quartz-carbonate vein with inclusions of pyrrhotitic wall-rock.			
	(142)	144½	2½							Fractured, grey, cherty section with quartz veins.			



D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-13		
REMARKS:				AZ.	INCL.	COORDINATES		ELEVATION	Sheet No. 2		
									Depth:		
Drill by:			Date From		To		Logged by:			Date From	
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
		(147)								Two 1-2 cm diam. fragments of feldspar porphyritic andesite.	
	XX	XX	XX	XX							
	163½	206½	43	95						Black, slightly graphitic shale with cherty and tuffaceous horizons. Evidence of slumping is common, especially in the cherty layers. Schistosity not clearly defined.	
	(166	169	3)							Laminated pale grey-green chert and black shale.	
	(182	182½	½)							Tuffaceous horizon. Bedding at 40° to core axis. (t.c.a.). Contact at 182½' is more sharply defined than contact at 182', suggesting top of bed is towards top of hole.	
		(184)								5 cm wide grey, brecciated cherty band.	

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX-13		
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 3		
												Depth:		
Drill by:				Date From				To				Logged by:		
												Date From		
												To		
Size	Footage		Recovery		Assay Res.					DESCRIPTION				
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag					
	(184 $\frac{1}{2}$ )	185 $\frac{1}{2}$	1)							Slightly tuffaceous.				
	(185 $\frac{1}{2}$ )	188	2 $\frac{1}{2}$ )							Light grey cherty horizons laminated with black shale, brecciated by slumping.				
	(189 $\frac{1}{2}$ )	193	3 $\frac{1}{2}$ )							Slightly tuffaceous, slumped.				
		(193)								8 cm thick tuffaceous horizon. Sharp contact towards top of hole with coarser grain-size. More gradational, slightly laminated contact and slump structures toward base of hole suggesting top of horizon is towards base of hole.				
		(194)								4 cm tuffaceous horizon. Sharp contact to top of hole, gradational to base.				
		(197)								4 cm light grey cherty bed with pyrrhotite streak 2 mm thick on bedding plane.				

D R I L L R E C O R D

COMPANY	NORLEX	PROJECT	STURGEON LAKE		Hole No. NX-13
REMARKS:	AZ.		INCL.	COORDINATES	Sheet No. 4
					Depth:

Drill by:	Date From	To	Logged by:	Date From	To
-----------	-----------	----	------------	-----------	----

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	197½	198½	1)							Light grey chert lamellae interbedded with black shale. Schistosity in shale = 20° t.c.a. Bedding/schistosity intersection is antiformal towards southwest (grid south).
		(200)								Acid test = 39° corrected.
	XX	XX	XX	XX						
	206½	211	4½	100						Rhyolitic tuff with shale fragments up to 2 cm thick.
	XX	XX	XX	XX						
	211	262	51	98						Black, slightly graphitic shale with abundant brecciated (slumped) cherty horizons and tuffaceous sections.
		(212)								5 mm with pyrrhotite/pyritic stringers.

D R I L L R E C O R D

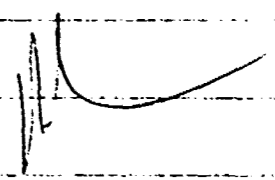
COMPANY	NORLEX	PROJECT	STURGEON LAKE	Hole No. NX- 13
REMARKS:		AZ.	INCL.	Sheet No. 5
				Depth:

Drill by:	Date From	To	Logged by:	Date From	To
-----------	-----------	----	------------	-----------	----

Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
	XX	XX	XX	XX						
	262	273	11	100						Rhyolitic tuff.
	XX	XX	XX	XX						
	273	292	19							Black, slightly graphitic shale with slightly tuffaceous horizons and chert lamellae in places, chert is brecciated due to slumping. Very minor pyrite and pyrrhotite (< 0.5%)
	XX	XX	XX	XX						
	292	298	6	100						Rhyolitic tuff.
	XX	XX	XX	XX						

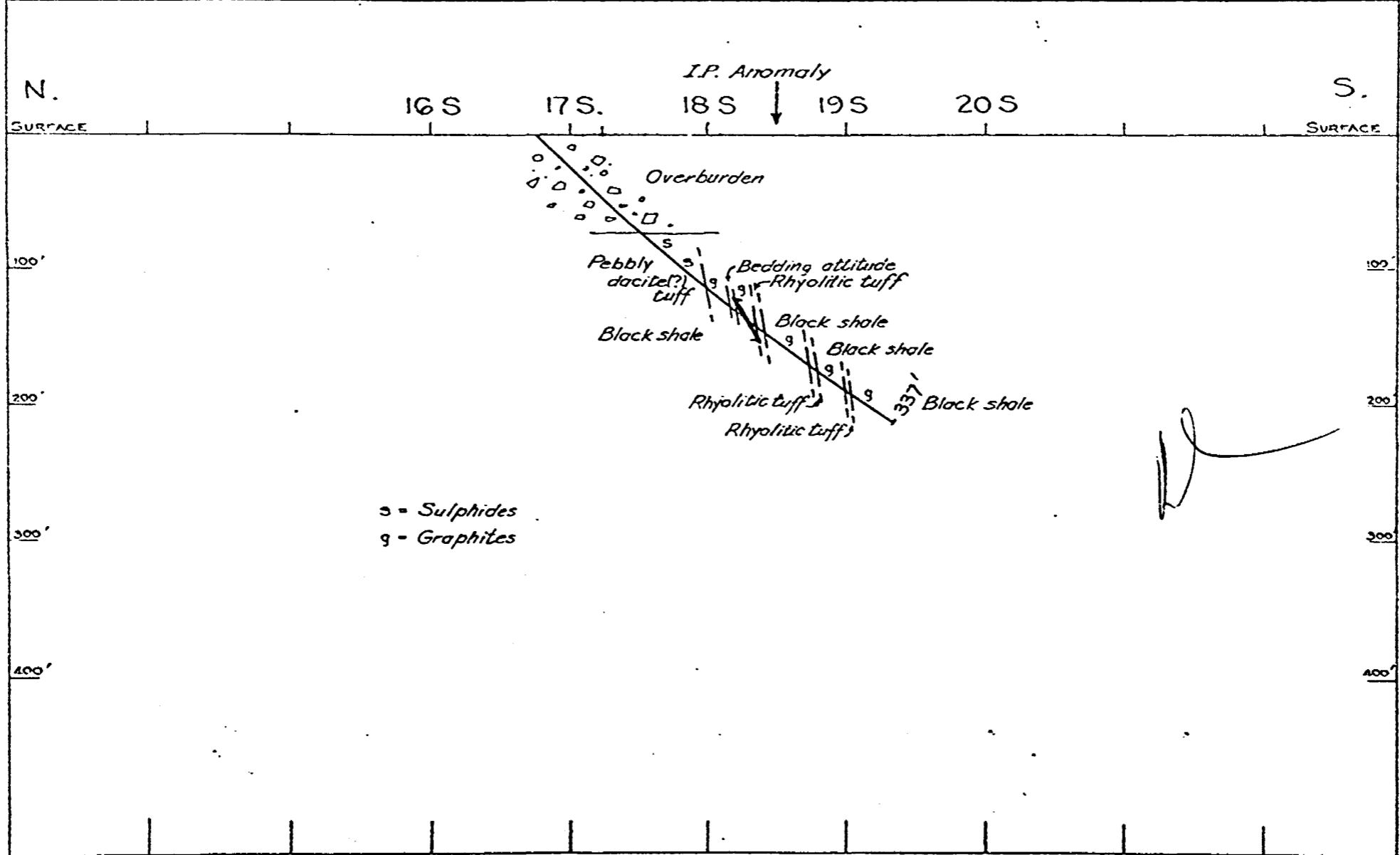
D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE			Hole No. NX-13 ✓		
REMARKS:				AZ.		INCL.	COORDINATES		ELEVATION	Sheet No. 6	
										Depth:	
Drill by:				Date From		To		Logged by:		Date From	To
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	298	337	39	98						Black, slightly graphitic shale with brecciated chert and slightly tuffaceous horizons. More tuffaceous generally than previous shale sequences.	
		(307)								Acid test = 37° (corrected)	
	XX	XX	XX	XX							
		337								END OF HOLE	



1975

COMPANY: NORLEX MINES LTD.		PROPERTY: STURGEON L. GROUP		D.D.H. NO.: NX-13	
LINE: L.O/16+75 S.	AZ.: 220°	DIP: -45°	SIZE: AQ	LOOKING: S.E. (GRID E)	
STARTED: NOV. 26-75	ENDED: NOV. 30-75	SCALE: 1 INCH = 100 FEET <span style="border: 1px solid black; padding: 2px;">1" = 100'</span>			



D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX- 14		
REMARKS:		To intersect EM - 16 and I.P. anomalies at 20 + 00S		AZ.		INCL.		COORDINATES		
				220°		-60°		L4W/18 + 25'S		ELEVATION
Drill by:		Morissette		Date		December 1975		Logged by:		
				From		2 To 6		A.M.S. Clark		
				Date		December 1975		Date		
				From		4 To 6		From 4 To 6		
Size	Footage		Recovery		Assay Res.					DESCRIPTION
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag	
AQ	0	114	114	--						Overburden - casing.
		(100)								Acid test = 57° (corrected)
	XX	XX	XX	XX						
	114	119	5							Bedrock - casing.
	XX	XX	XX	XX						
	119	136	17	98						Pebbly rhyolitic conglomerate with tuffaceous matrix. 2-3% pyrrhotite and pyrite. Moderately developed S-fabric at 45° to core axis (t.c.a.)
	XX	XX	XX	XX						

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE		Hole No. NX-14				
REMARKS:				AZ.	INCL.	COORDINATES	ELEVATION	Sheet No. 2				
										Depth:		
Drill by:			Date From		To		Logged by:		Date From		To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION		
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag			
	136	144	8	98						Convoluted, brecciated (slumped?) section of compact cherty and rhyolitic tuff beds up to 3 cm thick in a matrix of chloritic shale. 2% pyrite.		
	XX	XX	XX	XX								
	144	149	5	100						Rhyolitic tuff, coarser grained (graded bed?) towards base of hole. Convoluted boundary with underlying shale.		
	XX	XX	XX	XX								
	149	164	15	95						Pebbly rhyolitic conglomerate and rhyolitic tuff. Variable amount of pebbles from true conglomerate to true tuff. 0.5 - 10% pyrrhotite and pyrite, concentrated mainly in the conglomeratic sections.		
		(200)								Acid test = 52 <sup>o</sup> Corrected)		





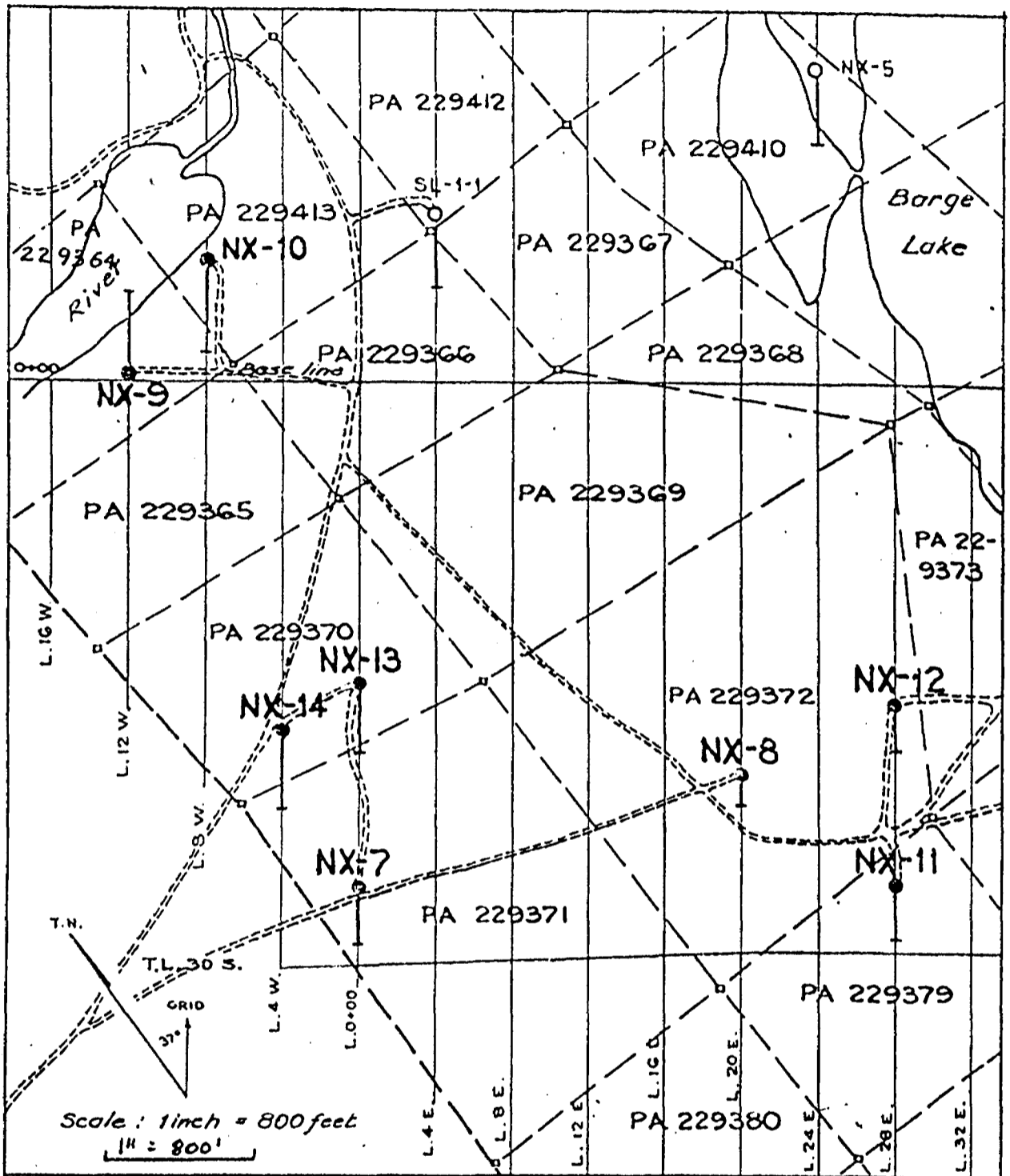
D R I L L R E C O R D

COMPANY		NORLEX		PROJECT		STURGEON LAKE				Hole No. NX-14	
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION	
				Date From		To		Logged by:		Date From	
										To	
Size	Footage		Recovery		Assay Res.					DESCRIPTION	
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag		
	317	343	26	98						Rhyolitic tuff. Grading down into tuffaceous black shale.	
	XX	XX	XX	XX							
	343	374½	31½	98						Interbedded, frequently with gradational contacts, 20 cm to 2 m beds of tuffaceous black shale and shaly tuff.	
	XX	XX	XX	XX							
	374½	401½	27	98						Rhyolitic tuff. Minor shaley sections.	
		(400)								Acid test = 39° (corrected)	
	XX	XX	XX	XX							

D R I L L   R E C O R D

COMPANY		NORLEX		PROJECT				STURGEON LAKE				Hole No. NX- 14				
REMARKS:				AZ.		INCL.		COORDINATES		ELEVATION		Sheet No. 5				
												Depth:				
Drill by:				Date From		To		Logged by:				Date From		To		
Size	Footage		Recovery		Assay Res.					D E S C R I P T I O N						
	From	To	Feet	%	Cu	Pb	Zn	Au	Ag							
	401½	457	55½	95						Black shale with tuffaceous sections and brecciated 1 to 5 cm tuffaceous beds. Moderately graphitic. Minor pyrite usually in shale adjacent to tuff beds.						
		(435)								Well developed schistosity 40° t.c.a. A later crenulation is developed on this schistosity.						
	xx	xx	xx	xx												
	457	480	23	98						Tuffaceous shale. Very slightly graphitic in more shaly parts. Becomes slightly shaly tuff towards base of hole. Few black shale horizons with convolute bedding.						
	xx	xx	xx	xx												
		480								END OF HOLE						





NORLEX MINES LTD.

D.D.H. LOCATION  
 STURGEON LAKE CLAIM GROUP  
 PATRICIA MINING DIVISION, ONTARIO



900

Bell Lake  
M-1888  
Quest Lake  
M-2875



ONTARIO

Sixmile Lake  
M-2877

A separate form is required for each type of work to be recorded.

76-1

THE MINING ACT REPORT OF WORK

To the Recorder of Patricia Mining Division

Norlex Mines Limited A-27282

name of Recorded Holder 250 University Avenue, Ste. 600, Toronto, Ont. Miner's Licence

Post Office Address

do hereby report the performance of 3503 days of Geological and Geophysical Survey

not before reported to be applied on the following contiguous claims

Claim No. Days Claim No. Days

SEE ATTACHED LIST

Diamond Drilling Performed 3503

Recorded 3177.2

Balance 325.8 for future use

RECEIVED  
MINING DIV.  
ASSESSMENT & RESEARCH OFFICE  
JAN 20 1976  
DAYS

All the work was performed on Mining Claim (s) PA229364, PA229370 to PA229372, Inc. PA229379 & PA229380 (In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.

For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.

For Compressed Air or Other Power Driven or Mechanical Equipment

Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.

For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.

With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.

For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.

For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

DDH No. NX-7	incl. -45°	AQ size	footage 512'
DDH No. NX-8	incl. -45°	AQ size	footage 202'
DDH No. NX-9	incl. -45°	AQ size	footage 572'
DDH No. NX-10	incl. -45°	AQ size	footage 665'
DDH No. NX-11	incl. -45°	AQ size	footage 407'
DDH No. NX-12	incl. -45°	AQ size	footage 328'
DDH No. NX-13	incl. -45°	AQ size	footage 337'
DDH No. NX-14	incl. -60°	AQ size	footage 480'

PATRICIA MINING DIV.  
RECEIVED  
JAN 10 1976  
AM 7:00 PM 10:00

see attached schedule

Date January 7, 1976

Signature of Recorded Holder

MINISTRY OF NATURAL RESOURCES  
RECEIVED  
JAN 30 1976  
RESIDENT GEOLOGIST'S OFFICE  
SIOUX LOOKOUT

The Mining Act  
Certificate Verifying Report of Work

Anthony M.S. Clark  
50 Georges Vanier St., Roxboro, Quebec H8Y 2S3  
(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed hereto, having performed the work or witnessed same during and/or after its completion.
2. That the annexed report is true.

Dated January 7, 1976 (A.M.S. Clark)

Signature

Pa. 211807

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

NORLEX - Sturgeon Lake Property

Claim Number	Assessment Credits		
	Previously Recorded	To Be Recorded Now	Total
PA 211807	140	60	200
PA 211808	140	60	200
PA 211810	140	60	200
PA 211812	140	60	200
PA 211813	140	60	200
PA 211814	140	60	200
PA 211815	140	60	200
PA 211816	140	60	200
PA 211817	142	58	200
PA 211818	152.6	47.4	200
PA 211819	153.6	46.4	200
PA 211820	140	60	200
PA 211821	140	60	200
PA 211822	152.6	47.4	200
PA 211823	152.6	47.4	200
PA 211824	140	60	200
PA 211825	140	60	200
PA 211826	152.6	47.4	200
PA 211827	140	60	200
PA 211828	140	60	200
PA 211829	152.6	47.4	200
PA 211831	140	60	200
PA 211832	140	60	200
PA 211834	140	60	200
PA 211835	140	60	200
PA 211837	198.8	1.2	200
PA 211838	199.8	0.2	200
PA 211839	199.8	0.2	200
PA 211840	199.8	0.2	200
PA 211841	198.8	1.2	200
PA 211842	198.8	1.2	200
PA 211843	198.8	1.2	200
PA 211845	154.8	45.2	200
PA 211846	198.8	1.2	200
PA 211847	183.8	16.2	200
PA 211848	193.8	6.2	200
PA 211849	198.8	1.2	200
PA 211850	<del>169.8</del> 186.8	30.2	<del>200</del> 219
PA 211851	178.8	21.2	200
PA 211852	183.8	16.2	200
PA 211857	195.8	4.2	200
PA 211858	182.8	17.2	200
PA 211859	158.8	41.2	200
PA 211860	198.8	1.2	200
PA 211861	184.8	15.2	200
PA 211869	142.6	57.4	200
PA 211870	199.8	0.2	200
PA 211871	199.8	0.2	200
PA 211872	199.8	0.2	200
PA 211873	198.8	1.2	200
PA 211874	198.8	1.2	200
PA 211875	198.8	1.2	200
PA 211876	141.6	58.4	200
PA 211877	141.6	58.4	200
PA 211878	198.8	1.2	200

PATRICIA  
 MINING DIV.  
 RECORDED  
 JAN 10 1976  
 AM 7:00 PM 2:00

January 6, 1976

<u>Claim Number</u>	<u>Previously Recorded</u>	<u>To Be Recorded Now</u>	<u>Total</u>
PA 211879	198.8	1.2	200
PA 211880	198.8	1.2	200
PA 211881	197.8	2.2	200
PA 211882	197.8	2.2	200
PA 211883	197.8	2.2	200
PA 211884	197.8	2.2	200
PA 211885	157.8	42.2	200
PA 211886	157.8	42.2	200
PA 211887	187.8	12.2	200
PA 227214	145.9 <sup>(125.9)</sup>	54.1	200
PA 227221	186.3	13.7	200
PA 229364	<del>167.9</del> 185.3	32.1	<del>200</del> 217.4
PA 229365	185.3	14.7	200
PA 229366	189.3	10.7	200
PA 229367	186.3	13.7	200
PA 229368	186.3	13.7	200
PA 229369	186.3	13.7	200
PA 229370	186.3	13.7	200
PA 229371	186.3	13.7	200
PA 229372	186.3	13.7	200
PA 229373	186.3	13.7	200
PA 229374	168.3	31.7	200
PA 229375	162.6	37.4	200
PA 229376	164.1	35.9	200
PA 229377	181.1	18.9	200
PA 229378	180.6	19.4	200
PA 229379	180.6	19.4	200
PA 229380	180.6	19.4	200
PA 229382	140.3	59.7	200
PA 229383	161.6	38.4	200
PA 229384	181.6	18.4	200
PA 229385	180.6	19.4	200
PA 229386	180.6	19.4	200
PA 229387	180.6	19.4	200
PA 229388	180.6	19.4	200
PA 229389	180.6	19.4	200
PA 229390	180.6	19.4	200
PA 229391	180.6	19.4	200
PA 229392	180.6	19.4	200
PA 229394	187.3	12.7	200
PA 229395	181.6	18.4	200
PA 229396	147.6	52.4	200
PA 229397	140	60	200
PA 229398	140	60	200
PA 229399	140	60	200
PA 299400	140	60	200
PA 229401	160	40	200
PA 229403	163.3	36.7	200
PA 229404	185.3	14.7	200
PA 229406	185.3	14.7	200
PA 229407	185.3	14.7	200
PA 229408	170.4	29.6	200
PA 229409	163.3	36.7	200
PA 229410	179.3	20.7	200
PA 229411	185.3	14.7	200
PA 229412	188.3	11.7	200
PA 229413	186.3	13.7	200

112

1922.8

3177.2

22400

PA 229413  
 RECEIVED  
 JAN 1 1976  
 AM 10:00

*Handwritten signature*



AREA OF

BELL L  
Lake

M-1888

DISTRICT OF  
KENORA - THUND

KENORA - PAT  
MINING DIVIS

SCALE: 1-INCH = 40

LEGEND

- PATENTED LAND
- PATENTED FOR SURFACE RIGHTS OR LEASES
- LICENSE OF OCCUPATION
- CROWN LAND SALE
- LOCATED LAND
- CANCELLED
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- HIGHWAY & ROUTE No.
- ROADS
- TRAILS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES

\*used only with summer resort locations & space is limited

NOTES

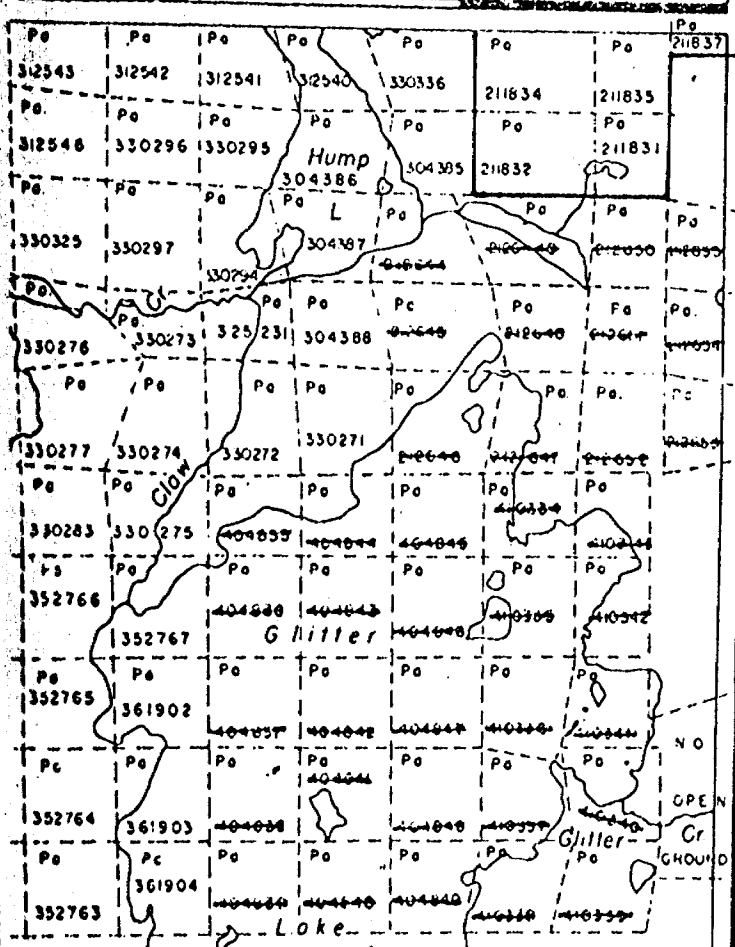
400 Surface Rights Reservation Around the S and Rivers

DATE OF ISS

SEP. 4' 1975

90° 45' 00"

49° 52' 30"



52'

51'

50'

49'

48'

DUNNE LAKE M.3274

# Quest Lake M-2875

Pa  
376009  
Pa  
376010  
Pa  
376019

Quest OLS  
243000 243004  
Pa Pa  
243003 243004  
Pa Pa  
243003 243004  
Pa Pa  
B.M.

422722				
422721				
362547	362544	422712	422713	
362546	362545	422715	422714	
434318		422716	422717	422718
434319	396083	422720	422719	422731
		396079	396078	
434320	396082		396075	396074
	396081	396080	396077	396076
			396073	
			362551	434315
434893	434894		362548	
			362550	362549
			434316	
				434317

434884	434890
434892	434891

Pa  
215845  
Pa  
215846  
Pa  
215847  
Pa  
215848

49°52'30"

90°45' 44' 43' 42' 41'

PHILLIPS  
9M  
10M  
11M  
MERIDIAN LINE  
BASE LINE

2M

1M

BASE

LINE

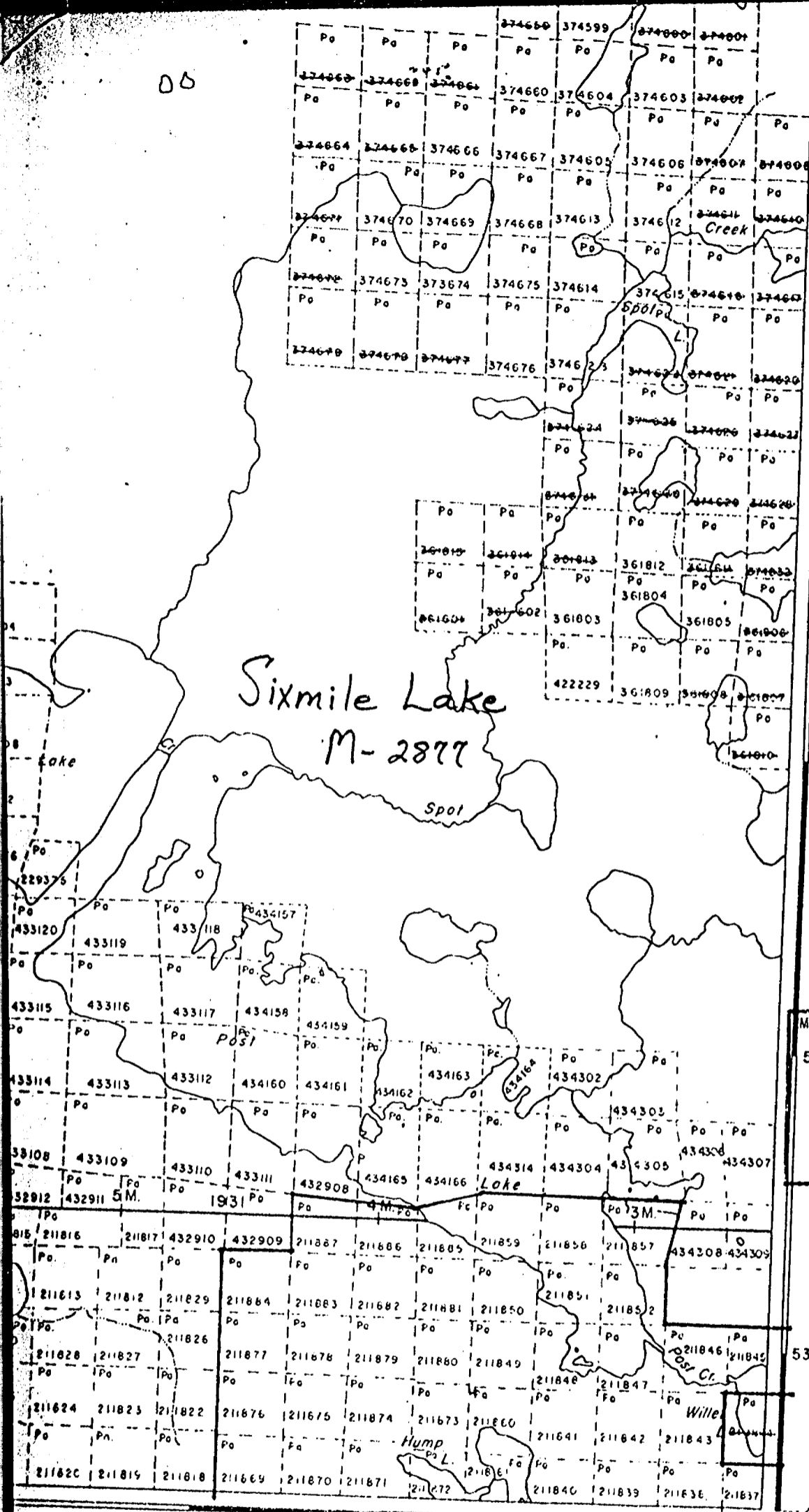
Willet  
Lake

Add

Vista



00



Quest Lake Area - M.2875

Sixmile Lake  
M-2877

MINISTRY OF NATURAL RESOURCES  
**RECEIVED**  
 JAN 30 1976  
 RESIDENT GEOLOGIST'S OFFICE  
 SIOUX LOOKOUT

NATION  
 PLA  
 MINIS

490904

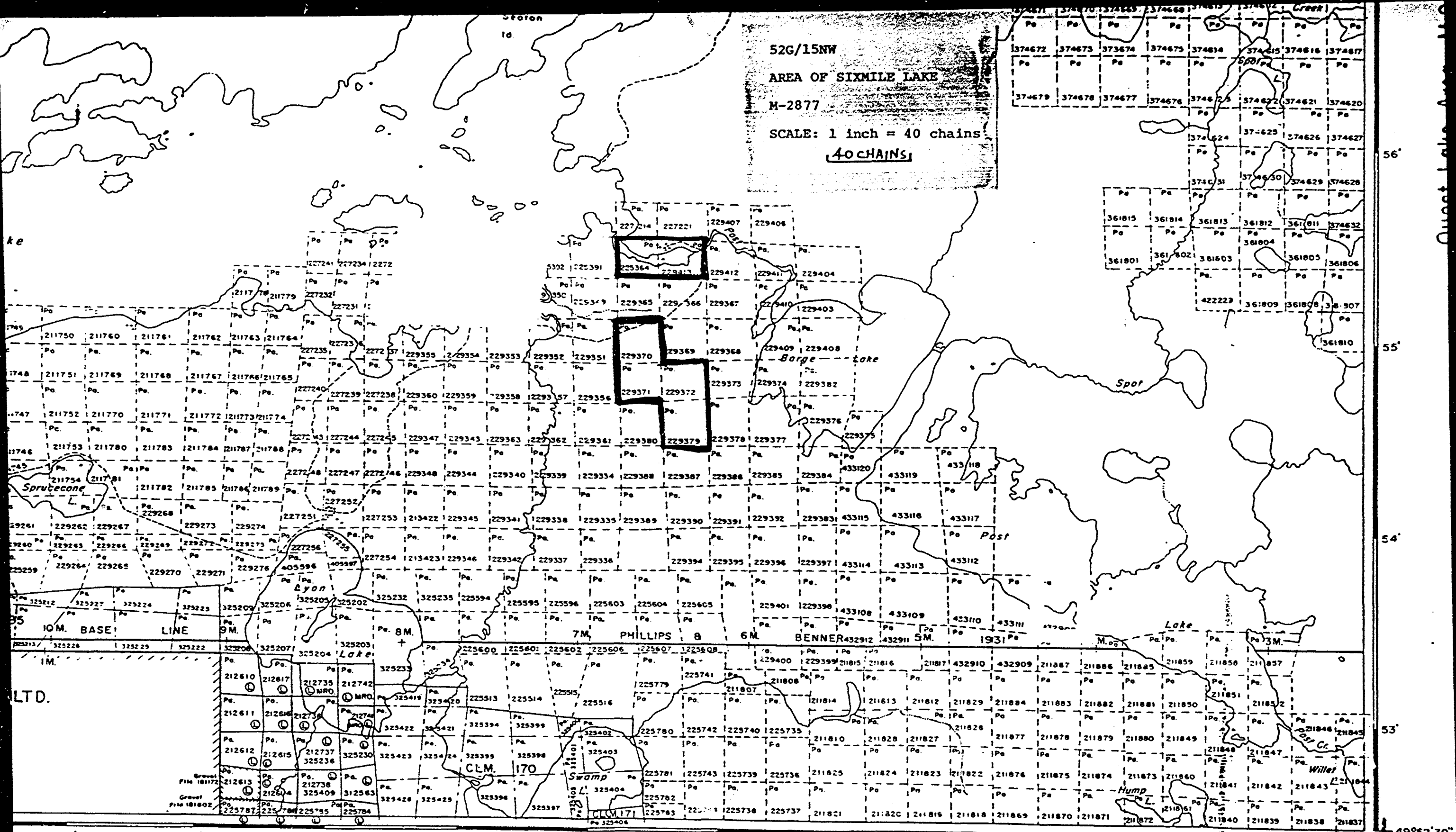
52G/15NW

AREA OF SIXMILE LAKE

M-2877

SCALE: 1 inch = 40 chains

40 CHAINS



Bell Lake M.1888

90°45'

cx