



52F04NE0007 22 BROOKS LAKE

010

DIAMOND DRILLING

AREA: BROOKS LAKE

REPORT NO: 22

WORK PERFORMED FOR: Laramide Resources Ltd./ Rio Algom Exploration Inc.

RECORDED HOLDER: SAME AS ABOVE (xx)

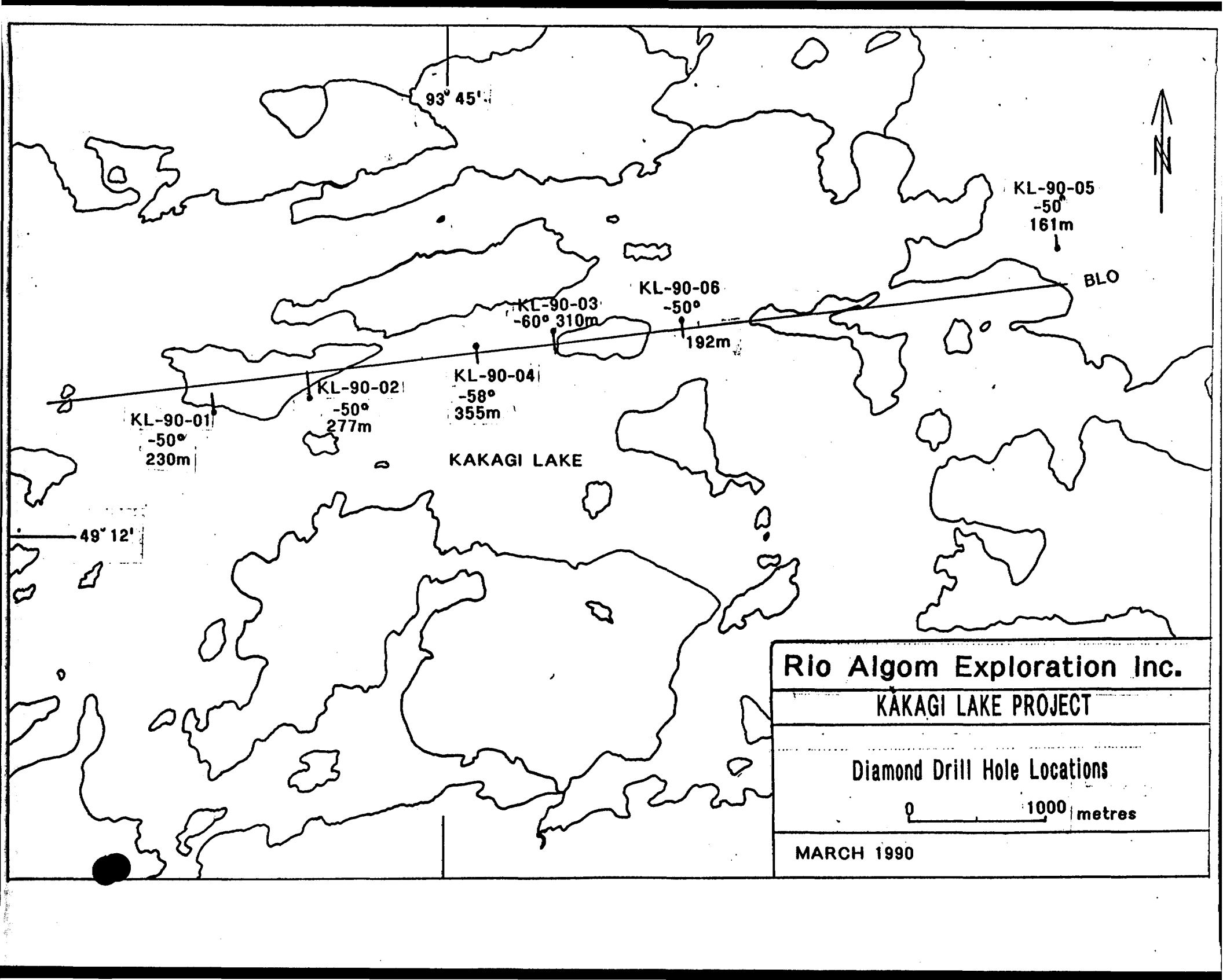
: OTHER

<u>CLAIM NO.</u>	<u>HOLE NO.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
K 590290	KL-90-03	310.0m	Mar/90	(1)
K 1019216	KL-90-04	355.4m	Mar/90	(1)
K 1122052	KL-90-05	161.5m	Mar/90	(1)
K 896096	KL-90-06	192.0m	Mar/90	(1)

4

10189

- NOTES:
- (1) W9001.067, filed May 90
 - (2) W9001.069, filed May/90
 - (3) W9001.070, filed May/90 with Heronry Lake



93° 45'

KL-90-05
-50°
161m

BLO

KL-90-06
-50°
192m

KL-90-03
-60° 310m

KL-90-04
-58°
355m

KL-90-02
-50°
277m

KL-90-01
-50°
230m

KAKAGI LAKE

49° 12'

Rio Algom Exploration Inc.

KAKAGI LAKE PROJECT

Diamond Drill Hole Locations

0 1000 metres

MARCH 1990

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 17 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		209.3-209.9 increased tourmaline, 25% black stringers, 5-7% disseminated pyrite. schistosity 32°C/A.	P13822	209.3	209.9	0.6						
		209.9-210.85 15% tourmaline, 7% pyrite. sericitic seams, black tourmaline seams and 7% disseminated tourmaline.	P13823	209.9	210.85	0.95						
		210.85-211.85 20% disseminated pyrite, locally semi-massive, 5% disseminated tourmaline.	P13824	210.85	211.85	1.0						
		211.85-212.35 25% pyrite, disseminated in seams, sericitic seams, 7% disseminated tourmaline, schistosity at 36°C/A.	P13825	211.85	212.35	0.5						
		212.35-213.0 fine grained, homogeneous dike-like, 2-3% fine disseminated pyrite, locally up to 20% coarse pyrite.	P13826	212.35	213.0	0.65						
		213.0-214.2 10-15% disseminated black tourmaline, 10% coarse seams of disseminated pyrite.	P13827	213.0	214.2	1.2						
		214.2-214.75 20% disseminated pyrite, 3-4% tourmaline, sericitic seams, schistosity 34°C/A	P13828	214.2	214.75	0.55						

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 18 of 5

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
214.75	220.1	SHEARED, SILICIFIED VUGGY TUFFS											
		Strongly silicified and sheared becomes weakly carbonatized down hole. Vuggy siliceous seams, locally minor tourmaline 5-20% disseminated pyrite.											
		214.75-215.65 20% tourmaline, minor pyrite, locally 20% pyrite in seams.	P13829	214.75	215.65	0.9							
		215.75-217.1 60% quartz (silicification), 1% pyrite, chloritic bands.	P13830	215.65	217.1	1.45							
		217.1-218.35 Very vuggy and blocky, 5% pyrite lining vugs, strong carbonatization.	P13831	217.1	218.35	1.25							
		218.35-219.35 badly broken, vuggy, 18°C/A schistosity, 2-3% disseminated pyrite.	P13832	218.35	219.35	1.0							
		219.35-220.1 strongly silicified, no longer vuggy, 1-2% pyrite, some quite coarse.	P13833	219.35	220.1	0.75							
220.1	234.25	INTERMEDIATE LAPILLI TUFF											
		Medium green fine grained, intermediate matrix with more mafic lapilli sized fragments, 5-25% fragments, some rounded, some angular. Locally											

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DIAMOND DRILL RECORD

HOLE No. RL-90-03

PAGE 19 of 20

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		silicified and pyritized, locally moderately carbonatized.											
		220.1-221.6 Schistosity 40°C/A, strongly silicified vuggy, up to 10% pyrite.	P13834	220.1	221.6	1.5							
		221.6-222.9 5-7% small mafic fragments, 1% disseminated pyrite.	P13835	221.6	222.9	1.3							
		222.9-224.0 Vuggy, lined with black tourmaline, minor pyrite (1%).	P13836	222.9	224.0	1.1							
		224.0-224.95 20% lapilli, minor pyrite (1%) in seams, small vugs.	P13837	224.0	224.95	.95							
		224.95-225.6 MAFI DIKE - fine grained, green, dioritic carbonate vesicles, contacts at 48°C/A.											
		225.6-227.7 Locally blocky, up to 7% pyrite locally, strong carbonatization locally.											
		227.7-229.35 2-3% irregular quartz carbonate stringers, locally black tourmaline or amphibole crystals 1mm. in diameter.											

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 20 of 20

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		229.35-231.1 10% small rounded mafic fragments, rare quartz carbonate stringers.										
		231.1-231.75 weakly carbonatized, locally black amphiboles as in 747-752 4, 7% pyrite in 1-3mm cubes.										
		231.75-234.25 Silicified, carbonatized and sheared, schistosity at 20°C/A, 1% pyrite.										
234.25	235.1	QUARTZ DIORITE.										
		Grey, fine to medium grained, weakly foliated (35°C/A), weakly sericitized, 1% fine disseminated pyrite. Contacts at 36°C/A.	P13838	234.25	235.1	0.85						
235.1	239.7	INTERMEDIATE LAPILLI TUFF										
		Medium green, fine grained intermediate ash tuff, 10-20% mafic and felsic lapilli, about 3-7% disseminated pyrite throughout.										
		235.1-236.5 7% disseminated pyrite, weakly carbonatized.	P13829	235.1	236.5	1.4						
		236.5-237.5 2% disseminated pyrite,	P13840	236.5	237.5	1.0						

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DIAMOND DRILL RECORD

HOLE No.: KL-90-03

PAGE 21 of 26

INTERVAL		DESCRIPTION	SAMPLE No	INTERVAL		LENGTH							
from	to			from	to								
		sericitized.											
		237.5-238.4 20% mafic fragments, 1-2% fine disseminated pyrite.	P13841	237.5	238.4	0.9							
		238.4-239.7 up to 7% disseminated pyrite, 25% mafic lapilli, schistosity 20°C/A, weakly carbonatized.	P13842	238.4	239.7	1.3							
239.7	247.8	QUARTZ DIORITE											
		Grey, fine grained, homogeneous quartz diorite intrusive, fine grained chilled margins, contacts at 35° and 33° C/A, yellow hairlike sericitic-seams accentrate weak foliation at 35°C/A, locally 0.5-1% fine disseminated pyrite.											
		239.7-241.1 1-2% disseminated pyrite, more near contact. 1% irregular quartz carbonate stringers.	P13843	239.7	241.1	1.4							
		241.1-244.8 lacks pyrite.											
		244.8-247.8 very fine grained. 1% quartz carbonate stringers, sericitic seams.											

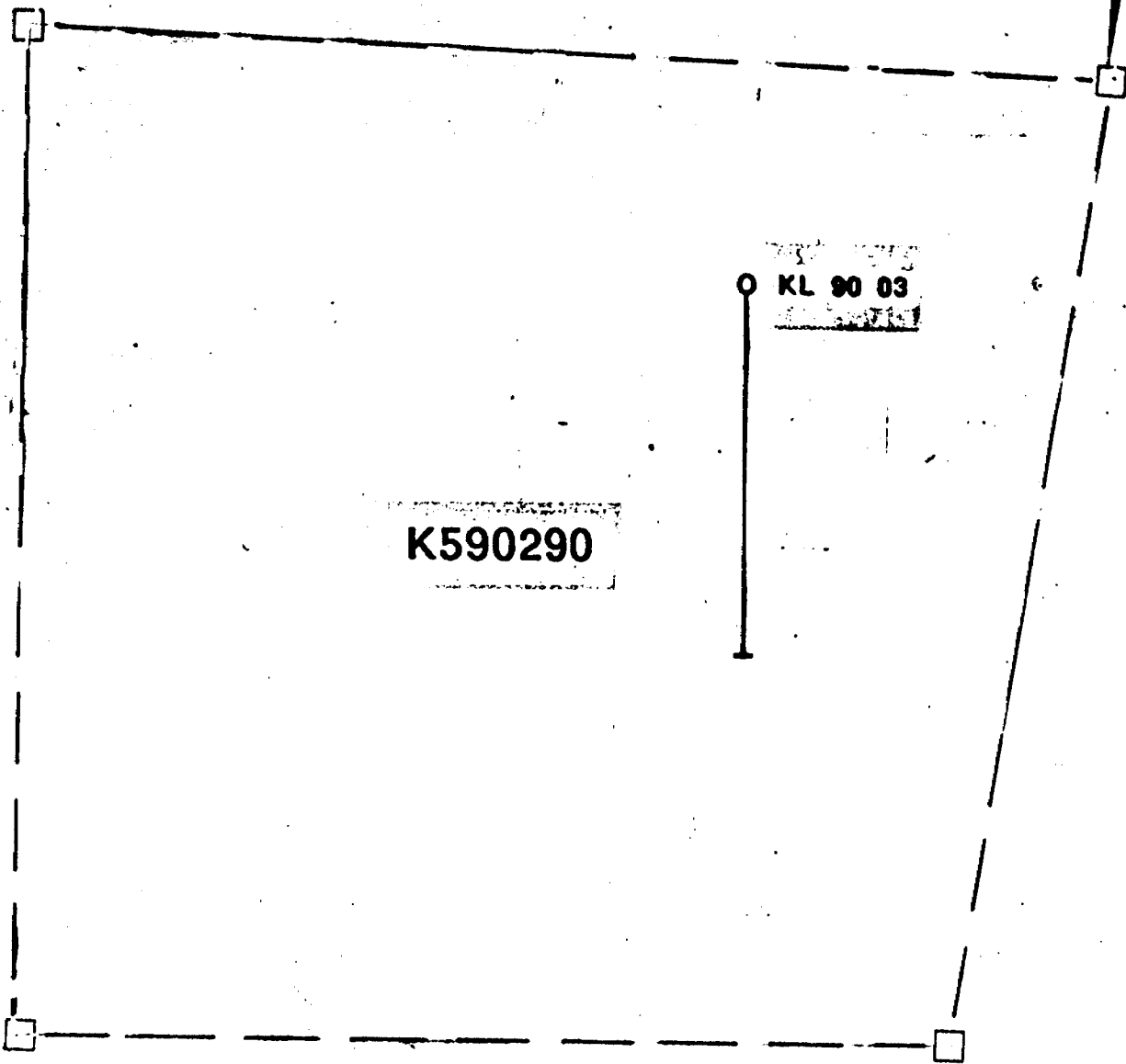
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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 22 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
247.8	254.9	FELSIC TUFF											
		Fine grained, medium green felsic ash matrix, 5-7% very small rounded intermed fragments weakly carbonatized, generally 1% fine disseminated pyrite throughout. Locally silicified, about 1-2% irregular quartz carbonate stringers.											
		247.8-249.1 1-2% fine disseminated pyrite, weakly silicified.	P13844	247.8	249.1	1.3							
		249.4-250.6 felsic! - 1-2% fine disseminated pyrite.	P13845	249.4	250.6	1.5							
		250.6-252.05 2-3% very fine disseminated pyrite.	P13846	250.6	252.05	1.45							
		252.05-253.5 30cm. pyritic, vuggy seam (10%) weakly carbonatized, foliation at 35°C/A.	P13847	252.05	253.5	1.45							
		253.5-254.9 2-3% disseminated pyrite, locally 10% mafic lapilli 6mm. in size.	P13848	253.5	254.9	1.4							
254.9	268.0	INTERMEDIATE TUFFS											
		Medium green, fine grained intermediate tuffs.											



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Diamond Drill Hole Location

KL 90 03

scale 1:3000

LOCATION: L0+30W 1+00N

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HOLE No.: KL-90-03

AZIMUTH: Grid S

DIAMOND DRILL RECORD

PAGE 1 of 26

DIP: -60° LENGTH: 310.0 m ELEVATION: ICE PROPERTY: Laramide Option

STARTED: March 3, 90 CORE SIZE: BQ DATE LOGGED: March 4, 90 CLAIM No.: K590290

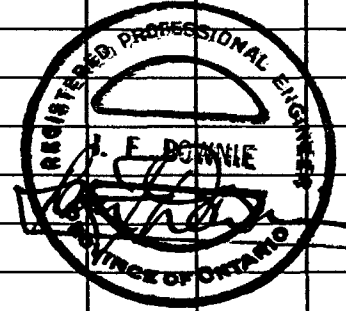
COMPLETED: Mar. 5, 1990 DIP TESTS: Collar -60° 182.9m -63° SECTION:

PURPOSE: IP CONDUCTOR, East Island Zone LOGGED BY: Kevin Kivi

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
0	35.95	CASING										
35.95	56.4	ALTERED INTERMEDIATE LAPILLI TUFF (IP CONDUCTOR)										
		Light green, Intermediate lapilli tuff, lapilli stretched and deformed, quartz flooded, 3-7% quartz stringers, rare weak carbonatization.										
		Abundant sheared, sericitic, pyritic zones. (3-25% fine disseminated pyrite). About 2-5% pyrite throughout, schistosity at 35° C/A.										
		35.95-36.00 BLOCKY GROUND BOULDERS - ignored.										
		36.6-37.6 7% fine pyrite, 10% quartz stringers.	P13760	36.6	37.6	1.0						
		37.6-38.7 1' ground core (return lost) - about 7-10% fine disseminated pyrite, strong silicification.	P13761	37.6	38.7	1.1						
		38.7-40.15 5% quartz stringers, fewer pyritic zones, about 2-3% pyrite overall.	P13762	38.7	40.15	1.4						

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE

APR 25 1990



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DIAMOND DRILL RECORD

HOLE No.: KT-90-03

PAGE 2 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		40.15-41.4 Chloritic-sericitic shear planes every 7mm (avg), about 3% fine disseminated pyrite overall, 1% quartz stringers.	P13763	40.1	41.4	1.3						
		41.4-42.75 sericitic, moderately carbonatized, moderately silicified, 3-5% very fine pyrite.	P13764	41.4	42.75	1.35						
		42.75-44.15 20% beige sericitic seams, silicified, 1% fine disseminated pyrite locally.	P13765	42.75	44.15	1.4						
		44.15-45.55 locally narrow (1-3cm) pyrite (5-7%) zones, 0.5% quartz carbonate stringers.	P13766	44.15	45.55	1.4						
		45.55-47.05 chlorite and sericite alteration, 3-5% fine pyrite in narrow zones, 1% irregular quartz carbonate stringers and blebs.	P13767	45.55	47.05	1.5						
		47.05-48.45 Sericitic, fairly soft locally 1% pyrite.	P13768	47.05	48.45	1.4						
		48.45-49.9 2-3% fine disseminated pyrite, sericitic, core locally broken, 1-2% irregular white quartz carbonate stringers.	P13769	48.45	49.9	1.45						
		49.9-51.0 sericitic ± chlorite bands, 1-2%	P13770	49.9	51.0	1.1						

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DIAMOND DRILL RECORD

HOLE No. : KI-90-03

PAGE 3 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		irregular quartz stringers, 3% fine disseminated pyrite, moderately carbonatized.										
		51.0-52.5 sericitic, soft, 2-3% fine disseminated pyrite, in seams and patches, moderately carbonatized.	P13771	51.0	52.5	1.5						
		52.5-53.95 sericitic seams, 2-5% pyrite, rare irregular quartz carbonate stringers and blebs strongly carbonatized.	P13772	52.5	53.95	1.45						
		53.95-55.35 locally 2-3% fine pyrite, sericitic, strongly carbonatized.	P13773	53.95	55.35	1.4						
		55.35-56.4 sericitic 1-2% pyrite, strongly carbonatized.	P13774	55.35	56.4	1.05						
56.4	64.35	INTERMEDIATE LAPILLI TUFF										
		Medium green to light green, intermediate lapilli tuff. Strong foliation (schistosity) at 25-35° C/A., 20-30% stretched large felsic lapilli, beige sericitic seams, locally silicified, locally 1-5% disseminated pyrite, weak to moderate carbonatization, locally stronger. 1-2% irregular quartz carbonate										

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DIAMOND DRILL RECORD

HOLE No.: KL-90-03

PAGE 4 of 26

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH								
		stringers.												
		56.4-58.2 sericitized, strongly carbonated, minor fine pyrite.												
		58.2-60.25 moderately to strongly carbonatized, 1% irregular quartz carbonate stringers.												
		60.25-64.35 locally 1% disseminated pyrite.												
64.35	93.65	INTERMEDIATE TUFF												
		Medium green, fairly homogeneous ash and small - rare lapilli tuff. No large felsic lapilli as above. Locally about 1% disseminated pyrite, moderately carbonatized locally stronger, 2-3% irregular quartz carbonate stringers.												
		64.35-66.15 local lapilli.												
		66.15-69.2 locally 1% disseminated pyrite, locally sericitized.												
		69.2-71.95 irregular quartz carbonate												

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DIAMOND DRILL RECORD

HOLE No.: KL-90-03

PAGE 5 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		stringers.										
		74.35-75.0 carbonatized silicified pyritic zone, oriented at 25° C/A.	P13775	74.35	75.0	0.65						
		75.0-77.45 strongly carbonatized, locally minor fine pyrite.										
		77.45-78.9 locally sericitic, up to 2% disseminated pyrite locally.	P13776	77.45	78.9	1.45						
		78.9-80.15 subparallel white quartz stringer, weakly sericitic.										
		80.15-80.85 strongly pyritized and carbonatized. Quartz carbonate vein, 8cm zone oriented at 42° C/A.	P13377	80.15	80.85	0.7						
		81.55-83.1 moderately sericitized, locally 3-5% pyrite, moderately carbonatized.	P13378	81.55	83.1	1.55						
		83.1-84.65 moderately sericitization, patchy pyritization 3-10%, blocky locally.	P13379	83.1	84.65	1.55						
		84.65-85.6 more mafic, ash, two 1-2cm pyritic bands.	P13380	84.65	85.6	0.95						

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DIAMOND DRILL RECORD

HOLE No. **KL-90-03**

PAGE 6 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		88.65-89.5 Subparallel qtz-carbonate stringer zone, 5% fine disseminated pyrite.	P13381	88.65	89.5	0.85							
		89.5-90.75 Strongly carbonatized, sericitized, 2-3% fine disseminated pyrite.	P13382	89.5	90.75	1.25							
		90.75-93.65 Homogeneous ash, dark green, about 1% fine disseminated pyrite. moderately carbonatized.											
93.65	115.75	INTERMEDIATE LAPILLI TUFF											
		Medium to dark green intermediate lapilli tuff, dark green, fine grained chloritic ash matrix, light grey-green felsic to intermediate stretched lapilli 8-20cm. in length (approx) 1-3% irregular quartz carbonate stringers, moderately sericitized, moderately carbonatized, locally up to 1% disseminated pyrite.											
		93.65-96.6 mafic fragments, 1% quartz-carbonate stringers.											
		96.6-99.65 moderately sericitized.											

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DIAMOND DRILL RECORD

HOLE No.: KL-90-03

PAGE 7 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		99.65-102.05 locally 1-2% pyrite, sericitized.										
		102.05-103.4 3-5% disseminated pyrite, carbonatized, sericitized, schistosity 35° C/A.	P13783	102.05	103.4	1.35						
		103.4-105.45 1% irregular quartz carbonate stringers.										
		105.45-108.2 2-3% irregular quartz-carbonate stringers moderately sericitized.										
		108.2-109.4 weakly sericitized, 1-2% disseminated pyrite.	P13784	108.2	109.4	1.2						
		109.4-111.85 1-2% irregular quartz-carbonate stringers.										
		111.85-114.35 stretched mafic and felsic lapilli strong foliation 32° C/A, 1% pyrite.										
		114.35-115.75 strong, patchy carbonatization, locally minor pyrite.	P13785	114.35	115.75	1.4						
115.75	141.65	QUARTZ DIORITE SILL										

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DIAMOND DRILL RECORD

HOLE No. : KL-90-03

PAGE 8 of 26

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH						
		Grey green, fine to medium grained quartz diorite, weakly foliated at 35°C/A. Locally minor quartz carbonate veining, locally minor disseminated pyrite.										
		115.75-117.2 Weakly sericitized, moderately carbonatized, minor pyrite, 1% irregular quartz carbonate stringers, sharp contact at 33°C/A.	P13786	115.75	117.2	1.45						
		117.2-120.7 weakly sericitized.										
		120.7-127.1 rare irregular quartz carbonate stringers and blebs.										
		127.1-129.25 Minor quartz carbonate veining, one vein, 18cm. wide at 45°C/A, sericitic alteration haloes.										
		129.25-133.2 rare quartz-carbonate veins (6cm wide)										
		133.2-134.4 locally carbonatized, sericitic seams, minor pyrite.										
		134.4-136.25 lighter grey, silicified, moderately carbonatized.										

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 9 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		136.25-140.4 rare irregular quartz carbonate stringers.										
		140.4-141.65 2% irregular quartz-carbonate stringers 1% fine disseminated pyrite, lower contact sharp at 32°C/A.	P13787	140.4	141.65	1.25						
141.65	154.05	INTERMEDIATE LAPILLI TUFF										
		Medium to dark grey, intermediate lapilli tuff, light green matrix, dark green chloritic fragments. About 30% mafic fragments, usually angular. Entire unit sericitic, locally 105% disseminated pyrite, moderately to strongly carbonatized, schistosity 30°C/A.										
		141.65-143.0 Strongly carbonatized, 2-3% fine disseminated pyrite, also pyrite fragments.	P13788	141.65	143.0	1.35						
		143.0-144.15 strongly carbonatized, 2% fine disseminated pyrite, lapilli decreases to 0.5cm. and abundance reduced to 15%.	P13789	143.0	144.5	1.5						
		144.5-145.95 5-25% lapilli, locally strongly carbonatized, 0.5% fine disseminated pyrite.	P13790	144.5	145.95	1.45						

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DIAMOND DRILL RECORD

HOLE No. KL 90-03

PAGE 10 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		145.95-147.45 locally up to 7% very fine disseminated pyrite, locally strong carbonatization.	P13791	145.95	147.45	1.5						
		147.45-148.9 2-3% very small lapilli, 2% fine disseminated pyrite in seams. 35°C/A foliation	P13792	147.45	148.9	1.45						
		148.9-150.4 2-10% mafic lapilli, 0.5% fine pyrite.	P13793	148.9	150.4	1.5						
		150.4-151.8 seams of pyrite, 3cm. quartz veins at 50°C/A, moderately to strongly carbonatized.	P13794	150.4	151.8	1.4						
		151.8-152.95 30% angular chloritic fragments, rare pyritic seams.	P13795	151.8	152.95	1.15						
		152.95-154.05 5% tiny lapilli (green), 1% pyrite in seams.	P13796	152.95	154.05	1.1						
154.05	155.85	QUARTZ DIORITE INTRUSIVE										
		Grey green, medium grained diorite intrusive. (sill?) moderately foliated at 38°C/A.	P13797	154.05	155.25	1.2						
		hairlike beige sericitic seams, 1% irregular quartz carbonate stringers. Contacts at 29° and 31°C/A.	P13798	155.25	155.85	0.6						

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 11 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
155.85	186.95	INTERMEDIATE LAPILLI TUFF/BRECCIA											
		Medium to dark green lapilli tuff, monotonous sequence (thick) light green intermediate ash matrix, 10-30% dark green chloritic fragments, stretched, angular. Moderate to strongly carbonatized, locally 1-2% disseminated pyrite are quartz-carbonate stringers.											
		155.85-156.05 strongly carbonatized, 1% disseminated pyrite.	P13799	155.85	156.25	0.4							
			P13800	156.25	156.95	0.7							
		156.05-159.1 moderately sheared and sericitic, schistosity 31°C/A.											
		159.1-161.55 very distinct - angular mafic fragments											
		161.55-163.65 1% irregular quartz-carbonate stringers, 0.5% fine pyrite.											
		163.65-166.1 5-10% fragments, much smaller (3-10mm) locally.											
		166.1-168.85 30% mafic fragments, stretched, quite large, 1% irregular quartz carbonate											

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DIAMOND DRILL RECORD

HOLE No. KL 90-03

PAGE 13 of 26

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH							
		185.45-186.95 5% large mafic fragments, 5% small mafic fragments (0.5cm), locally strong carbonatization 2% very fine pyrite.	P13804	188.45	190.1	1.65							
186.95	192.85	INTERMEDIATE TUFF											
		Fine grained medium to light green ash matrix with 5-10% very small lapilli fragments 4-6mm. in length - all about same size. Locally carbonated silicified, up to 5% pyrite locally.											
		186.95-188.45 2-3% irregular quartz carbonate stringers, 5% small mafic fragments (5mm.), 1% pyrite.											
		188.45-190.1 Spotted with 5% dark green, 5mm. fragments, 1-2% fine disseminated pyrite.											
		190.1-191.6 MAFIC DIKE - Dark green fine grained dioritic dike, amphibole clots locally some carbonatization and up to 5% disseminated pyrite.	P13805	191.25	191.6	0.35							
		191.6-192.85 locally strongly silicified, 1% fine disseminated pyrite, 5% well formed mafic fragments.	P13806	191.6	192.85	1.25							

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DIAMOND DRILL RECORD

HOLE No. : KL-90-03

PAGE 14 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
192.85	196.7	SHEARED TUFFS											
		Strongly sheared intermediate tuff, with 15% lapilli sized fragments and locally 5% 5mm. chloritic fragments as in above unit. Strongly carbonatized. 25% quartz-carbonate stringers. 2-3% fine disseminated pyrite. Schistosity 36° C/A.											
		192.85-194.1 locally silicified. 2% pyrite.	P13807	192.85	194.1	1.25							
		194.1-195.5 30% quartz carbonate stringers, 1% pyrite, 3% tiny chloritic fragments.	P13808	194.1	195.5	1.4							
		195.5-196.7 5% disseminated pyrite, 20% quartz carbonate stringers.	P13809	195.5	196.7	1.2							
196.7	204.4	INTERMEDIATE TUFFS											
		Medium grained, medium green ash matrix with 5% dark green mafic fragments 3-6mm in size. About 3% fine disseminated pyrite throughout 1% irregular quartz carbonate stringers.											
		196.7-196.95 2cm. quartz carbonate vein.	P13810	196.7	196.95	0.25							

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 15 of 26

INTERVAL		DESCRIPTION	SAMPLE No	INTERVAL		LENGTH						
from	to			from	to							
		196.95-198.4 1-2% fine disseminated pyrite, 1% irregular quartz carbonate stringers.	P13811	196.95	198.4	1.45						
		198.4-199.85 lighter green, 5% fragments, 1% fine disseminated pyrite throughout.	P13812	198.4	199.85	1.45						
		199.85-201.3 chloritic, 3% irregular quartz carbonate stringers, up to 5% fine disseminated pyrite.	P13813	199.85	201.3	1.45						
		201.3-202.65 20cm. white quartz vein, chloritic xenoliths, 3-5% disseminated pyrite throughout, sericite altered margins of quartz vein.	P13814	201.3	202.65	1.35						
		202.65-203.5 about 5% fine disseminated pyrite, moderately carbonatized.	P13815	202.65	203.5	0.85						
		203.5-204.4 3-5% disseminated pyrite, moderately carbonatized, schistosity at 33°C/A.	P13816	203.5	204.4	0.9						
204.4	214.75	QUARTZ-TOURMALINE-PYRITE SCHIST EAST ISLAND ZONE (IP CONDUCTOR)										
		Grey white, intensely silicified quartz										

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 16 of 26

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH								
		sericite schist, strongly tourmalized, strong pyrite mineralization 5-40%. Tourmaline disseminated and in irregular stringers. Strong foliation at 35°C/A.												
		204.4-205.4 Quartz-sericite-tourmaline pyrite schist, 7% fine disseminated pyrite, Two 1 and 2cm tourmaline veins.	P13817	204.4	205.4	1.0								
		205.4-206.2 60% quartz tourmaline vein, sericitic seams, 10cm. tourmaline vein (black), 1-2% pyrite some very coarse grained.	P13818	205.4	206.2	0.8								
		206.2-207.2 30% speckled with black tourmaline, 20-50% coarse pyrite disseminated and stringers, weakly sericitized, schistosity 37°C/A.	P13819	206.2	207.2	1.0								
		207.2-208.5 Strong pyrite mineralization, 35% coarse disseminated and in stringers, also brown ground mass of fine pyrite, 8-15% tourmaline, remainder quartz, some green mica.	P13820	207.2	208.5	1.3								
		208.5-209.3 Strongly silicified, 5% tourmaline disseminated and in stringers, 15% pyrite disseminated and in stringers.	P13821	208.5	209.3	0.8								

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DIAMOND DRILL RECORD

MOLE No. ~~KL~~L-90-03

PAGE 23 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH								
from	to			from	to									
		Locally felsic and mafic fragments. Locally 5-10% small mafic lapilli and/or amphibole crystals. 0.5-2% fine disseminated pyrite.												
		254.9-258.15 1% fine disseminated pyrite, 1-2% irregular quartz carbonate stringers.												
		258.15-261.2 fine grained, homogeneous, 1% very fine disseminated pyrite.												
		262.1-264.1 silicified, 1% fine disseminated pyrite, locally moderately carbonatized.												
		264.1-265.0 strongly carbonatized, bleached light grey, up to 10% coarse pyrite.	P13849	264.1	265.0	0.9								
		265.0-268.0 1% fine disseminated pyrite locally, weakly carbonatized.												
268.0	270.65	QUARTZ DIORITE												
		Light grey, fine grained, homogeneous quartz diorite intrusive, weakly sericitized, trace pyrite, contacts at 33°C/A.												
		270.65-273.4 Three narrow pyritic zones, these												

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 24 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		zones carbonated.											
		273.4-275.4 fine to medium grained, about 1% fine disseminated pyrite.											
		275.4-276.65 locally strongly carbonatized, 5- 7% fine disseminated pyrite.	P13850	275.4	276.65	1.25							
		276.65-277.5 QUARTZ-DIORITE DIKE- Light grey, fine grained, foliated at 35°C/A, trace fine pyrite.											
		277.5-278.2 Mafic fragments, 3cm. pyritic (15% band, carbonatized).	P13851	277.5	278.2	0.7							
		278.2-279.05 up to 15% pyrite in 30cm. section, 15% mafic fragments.	P13852	278.2	279.05	0.85							
		279.05-281.5 15% dark green mafic fragments may be amphibole crystals.											
		281.5-282.55 1-5% disseminated pyrite, locally strongly carbonatized.	P13853	281.5	282.55	1.05							
		282.55-285.65 fairly homogeneous, lacks pyrite rare fragments.											

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DIAMOND DRILL RECORD

HOLE No. KL-90-03

PAGE 25 of 26

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		285.65-286.55 5% fine disseminated pyrite, moderately carbonatized.	P13854	285.65	286.55	0.9						
		286.55 288.05 light green, 10% small mafic fragments, weakly carbonatized, up to 7% disseminated pyrite.	P13855	286.55	288.05	1.5						
		288.05-288.95 10% quartz veining, up to 6cm. wide, oriented at 20°C/A, others are randomly oriented.										
		288.95-292.05 0-1% fine disseminated pyrite, 1% irregular quartz carbonate stringers.	P13856	290.7	292.05	1.35						
292.05	310.0	QUARTZ DIORITE										
		Medium to fine grained grey quartz diorite, weakly foliated at 35°C/A, foliation emphasized by yellow hairlike sericitic seams. Near contact (within 20-30' up to 3% disseminated pyrite).										
		292.05-293.45 1-2% disseminated pyrite.	P13857	292.0	293.45	1.45						
		293.45-294.75 1% pyrite.	P13858	293.45	294.75	1.3						

K1019216



KL 90 04



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Diamond Drill Hole Location

KL 90 04

scale 1:2500

LOCATION: L6W 0+40N

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HOLE No.: KL-90-04

AZIMUTH: 175°

DIAMOND DRILL RECORD

PAGE 1 of 24

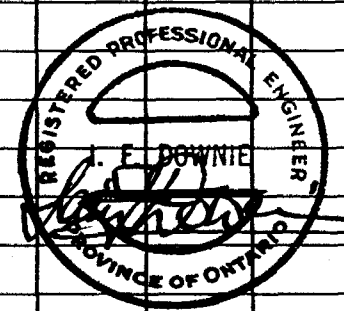
DIP: -58° LENGTH: 355.4m. ELEVATION: ICE PROPERTY: Lake Kakakgi -Marbank Option

STARTED: March 8, 1990 CORE SIZE: BQ DATE LOGGED: March 9, 90 CLAIM No.: K-1016216

COMPLETED: March 12, 90 DIP TESTS: SECTION:

PURPOSE: LOGGED BY: Terry Needham

INTERVAL		DESCRIPTION	ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILE SAMPLE No.	INTERVAL		LENGTH								
from	to			from	to									
0	98.15	CASING												
98.15	117.6	ALTERED INTERMEDIATE TUFF (FELSIC TUFF?)	RECEIVED											
		light to buff green coloured intermediate tuff, fine grained matrix with mm. size chlorite and/or sericite; moderate carbonatization/silicification; 3-10mm. qtz-carbonate veins/stringers; locally strongly foliated/sheared; 3-5% disseminated pyrite throughout; some zones up to 10% pyrite.												
	98.15-98.85	2-4% disseminated pyrite; 10% carbonate stringers; mm size chlorite; sericite seams prevalent; foliation @ 30°C/A.	P13861	98.15	98.85	0.7								
	98.85-99.75	fewer carbonate stringers; disseminated carbonate and carbonate veins up to 1cm. thick, 2-3% pyrite throughout.	P13862	98.85	99.75	0.9								
	99.75-100.15	silicified intermediate tuff, mm chlorite flakes; 5% py; massive; few carbonate	P13863	99.75	100.15	0.4								



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DIAMOND DRILL RECORD

HOLE No.: KL-90-04

PAGE 2 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		stringers 1mm. thick, thicker at bottom.										
	100.15-100.90	3% disseminated pyrite with local pyritic clots up to 2mm diameter. moderate carbonate alteration with few carbonate stringers up to ½cm thick.	P13864	100.15	100.90	0.75						
	100.90-101.50	ground core (lost return)										
	101.50-102.25	1-2% pyrite, disseminated carbonate and carbonate stringers up to 10%.	P13865	101.50	102.25	0.75						
	102.25-104.90	2-5% pyrite; disseminated carbonate, carbonate stringers + qtz. carbonate vein 1cm. thick.	P13866	102.25	104.90	2.65						
	104.90-105.6	5% pyrite, includes .9' zone at 10% pyrite; carbonate throughout, bottomsout with 3cm. thick carbonate/fault gauge. fault orientation @ 45°C/A.	P13867	104.90	105.60	0.7						
	105.60-108.65	poorly foliated to massive, qtz-carbonate +carbonate veins ½-1cm. thick, 1-2% disseminated pyrite.	P13868	105.60	108.65	3.05						
	108.65-109.55	moderately foliated;	P13869	108.65	109.55	0.9						

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DIAMOND DRILL RECORD

HOLE No.: KL-90-04

PAGE 3 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		carbonatized moderately, 2 qtz carbonate veins 1cm. thick, 2% pyrite.											
		109.55-110.25 strongly foliated/sheared; moderate to strong carbonatization; 5-7% pyrite overall with zones of 10-15% pyrite.	P13870	109.55	110.25	0.7							
		110.25-110.75 moderately foliated carbonate throughout, 1% pyrite.	P13871	110.25	110.75	0.5							
		110.75-111.55 moderately to strongly foliated/sheared; moderate to strong silicification, 3-5% py in more strongly foliated zones; 1-2% py in less strongly foliated zones, moderate carbonatization.											
		111.55-112.3 strongly silicified; moderate carbonatization; up to 10% py but 2-5% py overall.	P13873	111.55	112.3	0.75							
		112.3-113.3 moderately silicified, weak to moderate carbonatization; weakly foliated 2% disseminated pyrite; rare carbonate veins up to ½cm thick	P13874	112.3	113.3	1.0							

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DIAMOND DRILL RECORD

HOLE No. KL-90-04

PAGE 4 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		113.3-116.7 weakly foliated to massive intermediate tuff; weak sericitization along discrete plains; carbonate/qtz. carbonate veins locally - up to ½cm. thick. zones of strong carbonatization. 1-3% pyrite.	P13875	113.3	116.7	3.4							
		116.7-117.6 moderately to strongly foliated; weak carbonated; 2-3% pyrite	P13301	116.7	117.4	0.9							
117.6	122.64	QTZ-SERICITE SCHIST (ALTERED INTERMEDIATE TUFF)											
		grey to light grey, felsic to intermediate in composition, strongly foliated, locally brecciated, carbonated, silicified, sericitized disseminated and veined carbonate; veins up to cm thick, foliated @ 40°C/A.											
		contains tourmaline(?) locally' rare apatite; 1-3% disseminated pyrite; remnant qtz eyes 5%.											
122.6	128.62	INTERMEDIATE ALTERED TUFF											
		Same rock unit as described from 98.15-116.7.											
		122.6-123.38 1-3% disseminated pyrite; moderately to strongly foliated.	P13306	122.6	123.35	0.78							

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DIAMOND DRILL RECORD

MOLE No. KL-90-04

PAGE 5 of 9

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH							
		123.38-128.62 moderate to strongly foliated	P13307	123.38	124.55	117							
		locally silicified, carbonated stringers											
		irregular - up to 1cm. thick, 2-5% disseminated											
		pyrite.											
128.62	144.40	SILICIFIED INTERMEDIATE TUFF (FELSIC TUFF?)											
		rock grades from altered intermediate tuff into											
		much more leucocratic grey to light grey											
		rhyolitic looking tuff, contains abundant qtz-											
		fs-sericite, sericite defines strongly											
		developed foliated (possibly ductile shear											
		zone), foliated @35°C/A; fine to very fine											
		grained; weak to moderate carbonate; 2-3%											
		disseminated pyrite; locally up to 5% pyrite,											
		contains a number of breccia zones.											
		breccia zones are grey to dark grey with chunky											
		aspect, very fine grained dark matrix with fs											
		phenocrysts; qtz-carb stringers cut through											
		breccia clasts and locally cut by matrix - this											
		might represent brittle core to ductile fault											
		zone; moderate to strongly carbonated; only some											
		breccia zones contain pyrite - some zones											
		barren, up to 1m thick; qtz. veins up to 5cm.											
		thick.											

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DIAMOND DRILL RECORD

MOLE No. : KL-90-04

PAGE 6 of 4

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		locally grey to dark grey inclusions of intermediate comp. rock are noted within felsic rock - suggests strong silicification of originally intermediate rock.											
		128.62-130.55 gradation zone from altered intermediate tuff to highly silicified intermediate tuff such that it takes on rhyolitic look - later on in sequence you find intermediate enclaves which attest to intermediate protolith; 1-3% pyrite.	P13311	128.62	130.55	1.93							
		130.55-131.87 breccia zone - minor pyrite.											
		131.87-132.43 silicified intermediate tuff; 3-5% pyrite, strongly foliated sericitized; foliation @ 45° C/A.	P13312	131.87	132.43	0.56							
		132.43-135.10 breccia zone; minor pyrite in blebs up to 3mm across.											
		135.10-138.44 silicified intermediate tuff; 3% disseminated pyrite.	P13313	135.10	136.70	1.60							
		138.44-139.97 pyritic breccia zone, 1% disseminated pyrite.											

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DIAMOND DRILL RECORD

HOLE No. KL-90-04

PAGE 7 of 4

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH								
from	to			from	to									
		139.97-142.40 siliceous intermediate tuff, 2-5% pyrite with 7-10% pyrite.	P13314	139.97	140.10	1.27								
		142.40-144.40 silicified, intermediate tuff, contains intermediate enclaves indicating intermediate protolith, 2-5% pyrite.	P13315	142.40	143.85	1.45								
144.40	148.8	SHEARED SILICIFIED VUGGY TUFFS												
		grey to light grey, siliceous to felsic in composition; locally fragmental - fragments made up of subrounded porphyroclasts of white feldspar; generally fine to very fine grained; well developed planar fabric; fabric defined by discrete planes of sericite, vuggy texture develops more strongly down hole; still contains intermediate composition enclaves suggesting a strongly silicified intermediate tuff. due to felsic fragments - probably originally an intermediate feldspar crystal tuff; weak to moderate carbonate; moderately sericitized; foliation @ 27°C/A: 3-5% disseminated pyrite; pyrite fine grained.												
		144.40-145.50 as above 1-2% pyrite.	P13316	144.40	145.50	1.10								

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 8 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		145.50-148.80 as above 3-5% pyrite.											
148.80	153.40	SHEARED, SILICIFIED, VUGGY FRAGMENTAL											
		Similar rock as described above except that mm											
		to cm scale felsic fragments are obvious;											
		contains 3-7% py; py is fine grained											
		disseminated throughout with zones that may											
		exceed 7% pyrite, also contains lapilli sized											
		fragments/enclaves of grey to dark grey											
		intermediate rock; alot of this section is											
		crumbly - gravelly; strongly silicified and											
		sericitized- many fragments are strongly											
		flattened into well developed foliated planes.											
		148.80-149.5 3% pyrite	P13318	148.8	149.5	0.70							
		151.3-152.7 3-7% pyrite.	P13319	151.3	152.7	1.4							
		152.7 foliation @ 34° C/A.											
154.85	175.8	BRECCIA ZONE											
		similar lithologies to above, rock is less vuggy											
		and it loses its well developed foliated;											
		fabric still present but not nearly as well											

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DIAMOND DRILL RECORD

MOLE No.: KL-90-04

PAGE 9 of 24

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH						
		defined; strongly to moderately silicified; weak to moderate sericitization; silicification fairly pervasive except in zones where it is more blotchy. rock is very crumbly as in a fault gauge; generally pyrite is disseminated throughout; locally zones upto a few cm. thick can have as much as 10% pyrite; also a zone of tourmaline rich rock associated with moderate pyritization is present.										
		155.3-156.2 tourmaline rich zone; disseminated pyrite 3% with discrete zones 10% pyrite.	P13320	155.3	156.2	0.9						
		156.2-165 Breccia Zone										
		165-166.4 lost core										
		166.4-167.7 Breccia zone; 3-5% disseminated pyrite with zones up to 10% pyrite.	P13321	166.4	167.7	1.3						
		167.7-175.8 Breccia zone - 1% pyrite.										
175.8	179.2	QUARTZ DIORITE DYKE										
		dark grey, quartz diorite, fine to medium grained; becomes fine grained and foliated down										

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DIAMOND DRILL RECORD

HOLE No.: KL-90-04

PAGE 10 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		hole: small mm size crystals of feldspar; homogeneous in composition; chlorite in matrix.											
179.2	184.7	SHEARED, SILICIFIED VUGGY FRAGMENTAL											
		same unit as descibed above from 178.8-184.5; foliated @ 33°C/A some tourmaline present 1-5%; upto 3% pyrite disseminated throughout with stringers of pyrite up to 10%.											
		179.2-182 3% disseminated pyrite.											
		182-184.70 sheared, silicified, fragmental tuff; some discrete feldspar fragments upto 1cm. diameter; other fragments flattened into plane of foliated 1-2% pyrite disseminated.											
184.70	189.9	INTERMEDIATE, LAPILLI, VUGGY TUFF											
		grey in colour, intermediate-moderately silicified; weak to no carbonate; lapilli sized fragments consist of flattened felsic rock; chlorite mica defines plane of foliated; weak to moderate sericitization; no carbonate or quartz stringers; strongly developed foliation; 3-5% pyrite throughout with discrete ½cm wide											

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 11 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		zones with upto 20% pyrite; locally banded texture evident but this is not prevalent; vugs only 1-3% of rock.											
		184.70-186.65 3-5% pyrite with discrete ½cm. wide zones containing up to 20% pyrite.	P13323	184.70	188.65	1.95							
189.4	217.80	SILICIFIED INTERMEDIATE TUFF											
		grey to light grey; contains enclaves/streaks of dark grey intermediate rock- again suggests silica alteration to an intermediate protolith; moderately sericitized; lots of silica; very weak carbonate; rare quartz filling minor cm wide fractures - disseminated pyrite throughout 3%; most pyrite is concentrated around intermediate comp. enclaves - here upto 10% slightly vuggy.											
		189.4-190.7 silicified intermediate tuff 3% disseminated pyrite with pyrite concentrations of upto 10% around intermediate enclaves.	P13324	189.4	190.7	1.3							
		193.5-195.03 as above 2-4% disseminated pyrite foliated @ 42°C/A.	P13325	193.5	195.03	1.53							

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DIAMOND DRILL RECORD

HOLE No.: KL-90-04

PAGE 12 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		going down hole - same silicified intermediate tuff; 1-3% pyrite disseminated throughout again with pyrite concentration around intermediate enclaves, there is some evidence that silica has replaced lapilli sized fragments as one goes down hole - fragments look as though they were composed mainly of felsic material - white feldspar, none to very weak carbonation.											
		198.25-198.70 breccia zone - chloritic matrix with quartz fracture fillings; barren of sulphides and carbonate.											
		198.70-200.3 silicified intermediate tuff 2-3% disseminated pyrite; weak carbonate.	P13326	198.70	200.3	2.4							
		203.3-204.65 2% disseminated pyrite.	P13327	203.3	204.65	1.35							
		206.25-207.5 3-5% pyrite	P13328	206.15	207.5	1.35							
		208.4-208.6 very fine grained quartz diorite dyke, strongly foliated, breccia of sulphides.											
		208.6-210.5 silicified intermediate tuff as above quartz diorite dyke.											

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DIAMOND DRILL RECORD

HOLE No. KL-90-04

PAGE 13 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		210.5-211.93 as above; weak to moderate sericitization; 1-3% pyrite; foliated @ 24°C/A	P13329	210.5	211.93	1.47						
		212.65-214.75 as above; 1-5% pyrite weakly carbonatized; stronger silicification	P13330	212.65	214.75	2.10						
		216.90-217.83 medium-fine grained grey quartz diorite dyke; medium foliation; little sericite.										
		217.33-217.80 silicified intermediate tuff as above, quartz diorite dyke.										
217.80	232.20	BRECCIATED, SILICIFIED, INTERMEDIATE TUFF										
		Variable packages of rock ranging from dark grey; vuggy (possibly tourmaline rich) zones to strongly sheared, sericite rich, strongly silicified intermediate tuff - good breccia zone.										
		the dark grey, vuggy rock is massive, fine grained; up to 30% vugs - contains 15-20% pyrite; these zones can be upto 40cm. thick, locally this rock is permeated with Fe dolomite (fizzes only when scratched) weak										

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 14 of 14

INTERVAL		DESCRIPTION	SAMPLE No	INTERVAL		LENGTH						
from	to			from	to							
		carbonate; where Fe dolomite and silicification occurs the dark grey vuggy rock has a splotchy white and grey texture.										
		the host rock (silicified intermediate tuff) is strongly silicified; weak carbonate with Fe dolomite; discrete zones of reddish brown (Fe bearing) sericite occur through this rock, pyrite is disseminated throughout 3-5% pyrite - locally upto 10%.										
		217.8-219.0 strongly silicified intermediate tuff containing patchy textured intermediate tuff with upto 15% pyrite; disseminated pyrite 1-3% (defines top of breccia zone) foliation @ 34°C/A.	P13331	217.8	219.0	1.2						
		219.0-219.5 dark grey, vuggy (tourmaline rich) breccia zone, 20-25% pyrite.	P13332	219.0	219.5	0.5						
		219.5-220.5 a mixed zone of dark grey breccia rock upto 10cm. thick and sericite rich, sheared silicified intermediate tuff, 3-8% disseminated pyrite throughout.	P13333	219.5	220.5	1.0						
		220.5-221.7 3-8% pyrite	P13334	220.5	221.7	1.2						

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DIAMOND DRILL RECORD

HOLE No. KL-90-04

PAGE 15 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		221.7-223.2 3-5% pyrite	P13335	221.7	223.2	1.5							
223.2	228.5	SHEARED, SILICIFIED, INTERMEDIATE TUFF											
		as described above, breccia zone (189.4-217.8);											
		pyrite disseminated throughout rock - 1-3%;											
		weakly carbonatized; strongly silicified;											
		sericitization pervasive; local zones of											
		intermediate tuff atest to protolith.											
		232.2-227.70 1-3% pyrite	P13336	223.2	227.70	1.5							
228.5	229.25	SILICIFIED INTERMEDIATE TUFF											
		fine grained; grey to light grey - siliceous											
		intermediate tuff; fairly homogeneous in											
		composition; moderately foliated - much less											
		sericite; none to weak carbonate; very fine											
		grained disseminated pyrite throughout 2%.											
229.25	240.0	SILICEOUS SOLUTION BRECCIA (?) (INTERMEDIATE TUFF)											
		Spotty white to grey, fine to medium grained											
		with cm. scale ovoid patches of silica and/or											
		carbonate (weakly carbonatized); patches of											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 16 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		silica variably flattened - gives rock a somewhat plutonic aspect; well developed foliated @ 35°C/A; moderate to strongly sericitized; rare fuchsite; locally vuggy; fine to very fine grained pyrite disseminated throughout; 3-5% pyrite, contains zones of unbrecciated silicified, intermediate tuff upto 10cm thick.										
	230.0-231.3	3% very fine grained disseminated pyrite.	P13339	230.0	231.3	1.3						
	231.3-232.7	3-5% disseminated pyrite	P13340	231.3	232.7	1.4						
	232.7-234.05	1-2% disseminated pyrite	P13341	232.7	234.05	1.25						
	234.05-235.5	3% very fine grained disseminated pyrite.	P13342	234.05	235.5	1.45						
	235.5-237.0	1-3% disseminated pyrite contains small (2-3cm. thick) zone, of 5% tourmaline.	P13343	235.5	237.0	1.5						
	237.0-238.4	1-2% pyrite disseminated throughout; rare fuchsite; contains discrete zones of sheared, siliceous, intermediate tuff	P13344	237.0	238.4	1.4						

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 17 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		238.4-240.0 moderately vuggy; 1-3% disseminated pyrite.	P13345	238.4	240.0	1.6						
240.0	243.0	QUARTZ DIORITE DIKE										
		grey to light grey; intermediate felsic in comp.; homogeneous in comp. throughout; medium to fine grained, mm scale Qtz-feldspar crystals; weakly carbonatized; weakly sericitized; moderate to well foliated; 1-2% very fine grained disseminated pyrite; foliation @ 33°C/A.										
		240.0-244.0 1-2% pyrite (disseminated)	P13346	240.0	240.9	.9						
244.0	268.15	SHEARED, SILICIFIED, INTERMEDIATE TUFF-BRECCIA ZONE										
		A composite package of silicified intermediate tuff variably sheared and brecciated.										
		sheared rock identified by very strongly developed foliated abundant sericite; weakly carbonatized; has a patchy texture of grey, dark grey and white; contains upto 10% disseminated pyrite; slightly vuggy; contains										

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DIAMOND DRILL RECORD

HOLE No. K1-90-04

PAGE 18 of 24

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH						
		upto 10% disseminated pyrite; slightly vuggy;										
		contains upto 5% tourmaline, the unsheared rock										
		is a more uniform grey colour; medium to										
		strongly silicified; tourmaline free - more the										
		typical silicified intermediate tuff; the										
		breccia zones are dark grey in colour; well										
		developed vuggy texture - rich in tourmaline?										
		hence the darker colour; spotty texture derived										
		from feldspar porphyroclasts in dark grey vuggy										
		matrix, the silicified intermediate tuff										
		contains upto 3% disseminated pyrite; the										
		breccia zones contain no visible sulphides.										
		244.0-244.25 sheared; silicified intermediate										
		tuff; 3% disseminated pyrite.										
		244.25-245.35 silicified intermediate tuff 1-	P13348	244.0	245.35	1.35						
		3% disseminated pyrite.										
		245.35-246.10 sheared silicified intermediate	P13349	245.35	246.1	1.55						
		tuff 5-10% disseminated pyrite.										
		246.10-247.2 silicified intermediate tuff 1-3%										
		disseminated pyrite.										
		247.2-247.9 breccia zone 1-2% pyrite.										

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 19 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
	247.9-250.05	silicified intermediate tuff, 1-3% disseminated pyrite.	P13350	246.9	248.3	1.4						
	250.05-250.75	quartz diorite dyke	P13351	248.3	249.7	1.4						
	250.75-251.45	silicified intermediate tuff; 1% disseminated pyrite.										
	251.45-251.65	very fine grained to fine grained quartz diorite dyke.	P13352	249.7	251.05	1.35						
	251.65-254.0	silicified intermediate tuff; upto 3% disseminated pyrite.	P13353	251.05	252.4	1.35						
	254.0-256.0	sheared, silicified intermediate tuff; contains discrete zones of upto 5% tourmaline; moderate to weakly carbonatized; 1-2% pyrite	P13354	252.4	253.8	1.4						
	256.0-257.0	silicified intermediate tuff; rare tourmaline; 1-2% pyrite.	P13355	253.8	255.15	1.35						
			P13356	255.15	256.5	1.35						
	257.0-259.7	sheared, silicified, intermediate tuff; contains 5% tourmaline overall, 1-3% very fine to fine grained disseminated pyrite; moderate to strongly sericitized; moderately										

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 20 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		carbonatized.										
		259.7-268.15 strongly sheared, silicified	P13357	256.5	259.7	1.4						
		intermediate tuff; strong sericitization; rare	P13358	257.9	259.35	1.45						
		tourmaline; contains enclaves of intermediate	P13359	259.35	260.8	1.45						
		tuff - the rest is strongly altered with silica	P13360	260.8	262.05	1.25						
		and sericite; enclaves may be interpreted as	P13361	262.05	263.6	1.45						
		dykes, at 260.8 intermediate enclave contains	P13362	263.5	264.65	1.15						
		quartz vein, is cut by strongly sheared,	P13363	264.5	266.0	1.5						
		sericite intermediate tuff - shear zone shows	P13364	266.0	267.3	1.4						
		that brittle fracturing and sheared are coeval.	P13365	267.3	268.65	1.35						
			P13366	268.65	269.80	1.15						
			P13367	269.80	271.5	1.7						
			P13368	271.5	273.2	1.7						
272.3	284.45	BRECCIA ZONE WITIN SILICIFIED INTERMEDIATE TUFF										
		rock becomes dark grey to grey; moderately	P13369	273.2	274.45	1.25						
		vuggy to strongly vuggy; weak to moderate	P13370	274.45	276.0	1.55						
		carbonate; variably brecciated - much of the	P13371	276.0	277.3	1.3						
		core down hole is gravelly (fault gauge);	P13372	277.3	278.7	1.4						
		pyrite is very fine to fine grained,	P13373	278.7	280.15	1.45						
		disseminated throughout, notable increase in	P13374	280.15	281.35	1.25						
		pyrite content 5-10% with zones of upto 20%										
		pyrite most strongly associated with more										
		brecciated rock.										

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-04

PAGE 21 of 24

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		279.5-282.55 lost 0.61m of core.	P13375	282.0	283.5	1.5						
			P13376	283.5	284.6	1.5						
284.45	287.7	RHYOLITE FELDSPAR CRYSTAL TUFF	P13377	284.6	285.9	1.3						
		light grey to white felsic to siliceous tuff;										
		mm scale crystals of white feldspar distinct										
		throughout; rare rounded quartz eyes distinct										
		evenly; upto 5% mafics; weak to moderately										
		sericitization, no noticeable carbonate;										
		contains some tourmaline (no more than 3%										
		locally); moderate to well developed foliation;										
		foliation @ 34°C/A; 3-5% disseminated pyrite.										
			P13378	285.9	287.25	1.35						
		285.6-288.65 lost 0.60m core.										
		288.65-291.7 most 2.40m core.	P13379	287.5	289.6	2.10						
			P13380	291.7	292.8	1.1						
287.7	296.0	BRECCIA ZONE	P13381	292.8	244.1	1.3						
		as describe above from 272.3-284.45	P13382	294.1	295.4	1.3						
296.0	296.95	RHYOLITIC FELDSPAR CRYSTAL TUFF	P13383	295.4	296.8	1.4						
		as described above (284.45-287.7) 3-5%	P13384	296.8	298.0	1.2						
		disseminated pyrite.										

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DIAMOND DRILL RECORD

HOLE No. : KL-90-04

PAGE 22 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
296.95	344.6	BRECCIA ZONE	P13385	298.0	299.5	1.5						
		as before, zones of pyrite upto 20%; 7% pyrite overall.	P13386	299.5	300.9	1.4						
			P13387	300.9	302.3	1.4						
		continuing down hole, this breccia zone reveals itself a major, extensive zone of relative pyrite enrichment; breccia zone contains 5-10% pyrite disseminated throughout locally upto 15-20% disseminated pyrite; from 304m down (Box 37) a notable increase in the amount of tourmaline; fuchsite is rare but more noticeable through this portion of the zone.	P13388	302.3	303.9	1.6						
			P13389	303.9	305.3	1.4						
			P13390	305.3	306.7	1.4						
			P13391	306.7	308.0	1.3						
			P13392	308.0	309.4	1.4						
			P13393	309.4	310.9	1.5						
			P13394	310.9	312.2	1.3						
			P13395	312.2	313.6	1.4						
		breccia zone is punctuated by strongly sheared, highly sericitized siliceous intermediate tuff. the rock for the most part remains vuggy: rare mafic dykes cut rocks through here at 306.9m foliated @ 38°C/A.	P13396	313.6	315.0	1.4						
			P13397	315.0	316.4	1.4						
			P13398	316.4	317.8	1.4						
			P13399	317.8	319.35	1.55						
			P13400	319.35	320.7	1.35						
			P13876	321.2	322.45	1.45						
			P13877	322.45	323.8	1.35						
			P13878	323.8	325.6	1.8						
			P13879	325.6	327.1	1.5						
		from 327.1 (Box 41) pyrite content within breccia zone decreases to 1-3% disseminated										

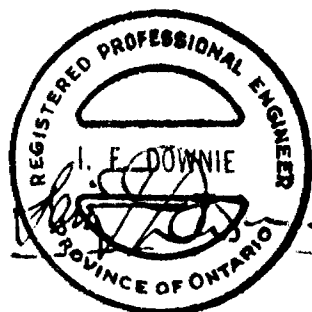
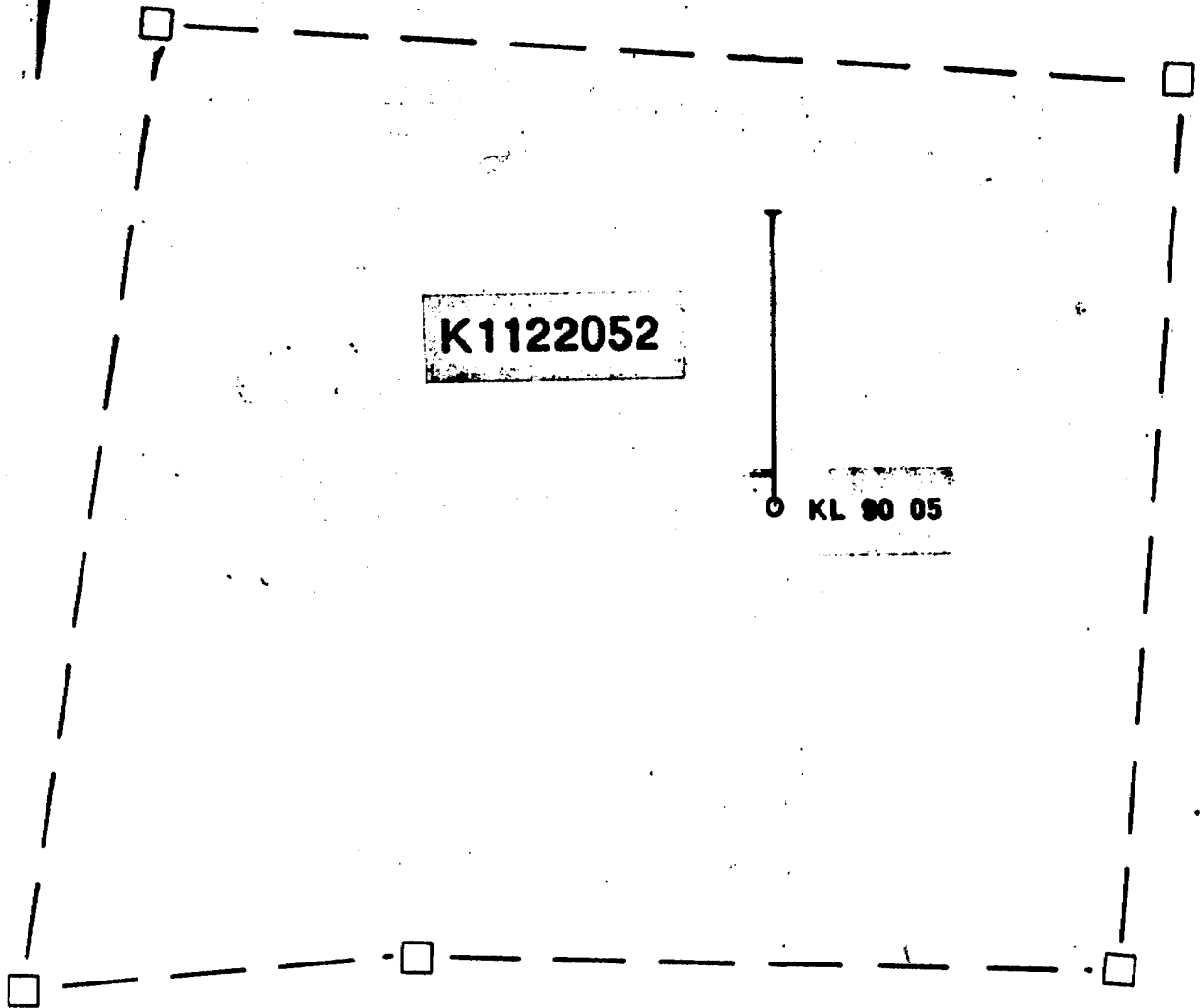
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DIAMOND DRILL RECORD

MOLE No. : KL-90-04

PAGE 23 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		pyrite; characteristics of breccia zone remains	P13880	327.1	328.7	1.6						
		essentially the same.	P13881	328.7	329.7	1.0						
			P13882	329.7	331.15	1.45						
			P13883	331.15	332.35	1.2						
			P13884	332.35	333.8	1.45						
			P13885	333.8	335.3	1.5						
			P13886	335.3	336.8	1.5						
			P13887	336.8	338.4	1.6						
			P13888	338.4	340.0	1.6						
			P13889	340.0	341.4	1.4						
			P13390	341.4	342.8	1.4						
			P13391	342.8	344.6	1.8						
344.6	355.4	QUARTZ DIORITE CONTACT ZONE										
		grey to dark grey; generally very fine grained;										
		medium to well foliated; foliation @ 41°C/A.										
		this zone is characterized by sheets of very										
		fine grained aphanitic quartz dioritic										
		sheets/dykes which cut silicified intermediate										
		tuff/breccia zone; sheets upto cm. thick.										
		down hole the quartz diorite becomes fine to										
		medium grained small micro-crysts of white										
		feldspar are evident; the coarser grained										



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Diamond Drill Hole Location

KL 90 05

scale 1:2500

LOCATION: L36E 2+50N

Rio Algom Exploration Inc.

HOLE No.: KL-90-05

AZIMUTH: 355°

DIAMOND DRILL RECORD

PAGE 1 of 9

DIP: -52°

LENGTH: 161.5m

ELEVATION:

PROPERTY: Kakagi Lake

STARTED: March 16, 90

CORE SIZE:

DATE LOGGED: March 17, 90

CLAIM No.: K1122052

COMPLETED: March 18, 90

DIP TESTS: collar: 21.3m -52° 155.4m-42°

SECTION:

PURPOSE:

casing: 91.4m. -46°

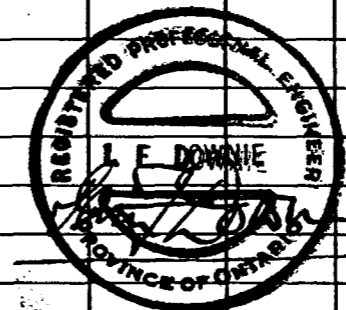
LOGGED BY: Terry Needham

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH								
from	to			from	to									
0	11.65	CASING												
11.65	30.65	STRONGLY SILICIFIED FELSIC TUFF	P13901	16.0	17.5	1.5								
		light grey in colour; texturally homogeneous medium to fine grained felsic tuff; locally contains cm scale felsic fragments (fragments have sharp margins - well to moderately rounded - may represent unsilicified protolith); moderately foliated - foliation defined by planes of sericite and long dimension of pyritic stringers; quartz-feldspar constitute principal phases; strongly silicified; moderate sericitization; no carbonate noted; few quartz veins up to 1cm thick; py concentrated along stringers/patches which contain up to 40-50% pyrite; stringers are up to a few cm. thick - discontinuous schlieren type structures - over all these stringers occupy 3-5% of rock volume; 1% fine grained disseminated pyrite throughout; very rare fuchsite.	P13902	23.5	24.95	1.45								

ONTARIO GEOLOGICAL SURVEY
 ASSESSMENT FILES
 OFFICE

 APR 25 1990

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Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-05

PAGE 2 of ●

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		24.4m foliation @ 27°C/A.											
		locally there is a strongly developed mineral lineation exhibited on the foliated planes defined by sericite and pyrite stringers											
		28.6-30.65 sericite rich zone within strongly silicified felsic tuff; 25-35% sericite; contains stringers of pyrite as above 5-7% overall.	P13903	28.6	30.65	2.05							
		27.75-27.85 quartz vein; barren											
30.65	95.8	COARSE FELSIC FRAGMENTAL TUFF	P13904	36.9	38.4	1.5							
		grey to dark grey matrix containing 60-70% light grey cm. scale fragments.	P13905	38.4	39.8	1.4							
		fragments of similar composition to silicified felsic tuff described above; also contains rare mafic to intermediate composition fragments.											
		matrix is grey to dark grey; fine grained chlorite.											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-05

PAGE 3 of

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH							
		weak to moderate sericitization; weak carbonate, quartz-carbonate veins generally only few mm. thick - few upto 2cm. thick.											
		1-3% pyrite overall - pyrite tends to be concentrated in patches upto few cm. thick - contains 20-30% pyrite; 1% pyrite disseminated throughout; highest concentrations occur in mm scale patches of pyrite rich rock (50-60%) surrounded by quartz-carbonate haloes; such features are generally rare;											
		42.7m foliation @ 22°C/A.											
		down hole zones upto 50cm. thick contain upto 15% pyrite; fragments show stronger silicification than note at top of unit; weakly carbonated.	P13906	47.5	48.9	1.4							
		49.8-50.0 20cm. thick zone of pyrite enrichment: pyrite 35%.	P13907	48.9	50.4	1.5							
			P13908	53.5	54.95	1.45							
			P13909	59.4	60.9	1.5							
		60.9-75.20 down hole the rocks remain texturally similar - still much the same coarse felsic fragmental; sericitization is less intense; weak carbonate; there is a noted	P13910	64.0	65.4	1.4							

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-05

PAGE 4 of ●

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		decrease in pyrite content; very fine grained disseminated pyrite 1-2%; no longer seen these pyrite rich wisps noted near the top of the hole; quartz-carbonate veining is rare 1%.											
		64.5-70.1 lost 1m core	P13911	73.8	75.35	1.55							
		at 75.35 foliation @ 42° C/A.											
		75.20-79.35 notable increases in the amount of sericite to 20% of the rock volume, though texturally the rock is the same coarse felsic fragmental; accompanying the increase in sericite is the amount of pyrite; disseminated pyrite 3-5% overall mostly concentrated in distinct cm. scale zones.											
		down hole from 79.2 occur breccia zones upto 20cm thick characterised by darker, more chloritic rock which contains clearly white/felsic angular fragments; few of these zones contain fault gouge; no significant pyrite in zone.	P13912	79.5	60.8	1.3							
			P13913	80.8	82.6	1.8							
		79.35-79.5 breccia zone as described above											

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DIAMOND DRILL RECORD

HOLE No.: KL-90-05

PAGE 5 of 9

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		79.5-86.6 down hole from 79.5 (under first 15cm. wide breccia zone) pyrite content increases - fine to medium grained disseminated pyrite 5-10% over all with discrete cm. scale zones where pyrite may be as much as 20%.										
		80.8-83.2 lost core 0.3m.										
		81.3-81.45 breccia zone	P13914	82.6	84.1	1.5						
			P13915	84.1	85.5	1.4						
		83.95-84.15 breccia zone	P13916	85.5	87.0	1.5						
		86.66-96.9 same coarse felsic fragmental pyrite fine to very fine grained mostly concentrated in matrix surrounding felsic fragments; 1-3% pyrite; locally tourmaline is suspected.	P13917	87.0	88.5	1.5						
				88.5	90.03	1.53						
				93.05	94.55	1.5						
				94.55	95.8	1.25						
95.8	97.65	QUARTZ DIORITE DIKE										
		grey to dark grey; fine to very fine grained. homogeneous in composition exhibits sharp contacts; plag is the dominant felsic phase - difficult to see any quartz; mafics 40-50% mostly chlorite; cut by a number of quartz veins and quartz stringers; weak foliation;										

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DIAMOND DRILL RECORD

HOLE No. KL-90-05

PAGE 6 of

INTERVAL		DESCRIPTION	SAMPLE No	INTERVAL		LENGTH						
from	to			from	to							
		barren of sulphides; although hard to see quartz - this rock is most definitely intrusive - probably Kevin's quartz diorite unit.										
		95.8 foliation @ 36° C/A.										
97.5	102.	COARSE FELSIC FRAGMENTAL	P13921	99.1	100.55	1.45						
		same unit as described above, quartz diorite dyke (30.65-95.8)										
		locally contains zones upto 5cm. thick which contains 20-30% very fine grained disseminated pyrite; few quartz-carbonate veins; at 110.4 foliation @ 43°C/A.	P13922	103.6	105.1	1.5						
			P13923	105.1	106.7	1.6						
			P13924	108.2	109.7	1.5						
111.7	144.5	VARIABLY SILICIFIED MAFIC FLOW										
		greenish grey to dark green grey; medium to fine grained; heterogeneous in composition due to silicification; darker green-grey zones (the least altered portions) are generally fine to medium grained; locally contain tiny feldspar microcrysts, chlorite is dominant mafic mineral (mafic mins 60% of rock volume), weak to very weak sericitization										

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-05

PAGE 7 of ●

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH								
		weakly carbonated, silicified zones are generally patchy to wispy - locally associated with quartz veining: intensity of silicification varies - some portions upto 1/2m. thick are bleached light grey and contain upto 60-70% silica, generally 1% pyrite.												
		124.3 foliation @ 38°C/A.												
		down hole from about 125m. the mafic flow contains weak to moderate carbonate: moderately sericitized: mm scale pyrite cubes are rare: pyrite 1% overall: quartz-carbonate veins are more abundant 3-5% of the rock volume.												
		131.75-142.4 moderately to strongly altered mafic flow - carbonate is moderate to strong: moderate silicification: rare pyrite cubes.	P13925	136.0	137.5	1.5								
		131.75 foliation @ 34°C/A.												
		142.4-142.85 breccia zone characterised by quartz veining and quartz stringers. Subrounded to sub angular blocks of mafic flow lithologies.												

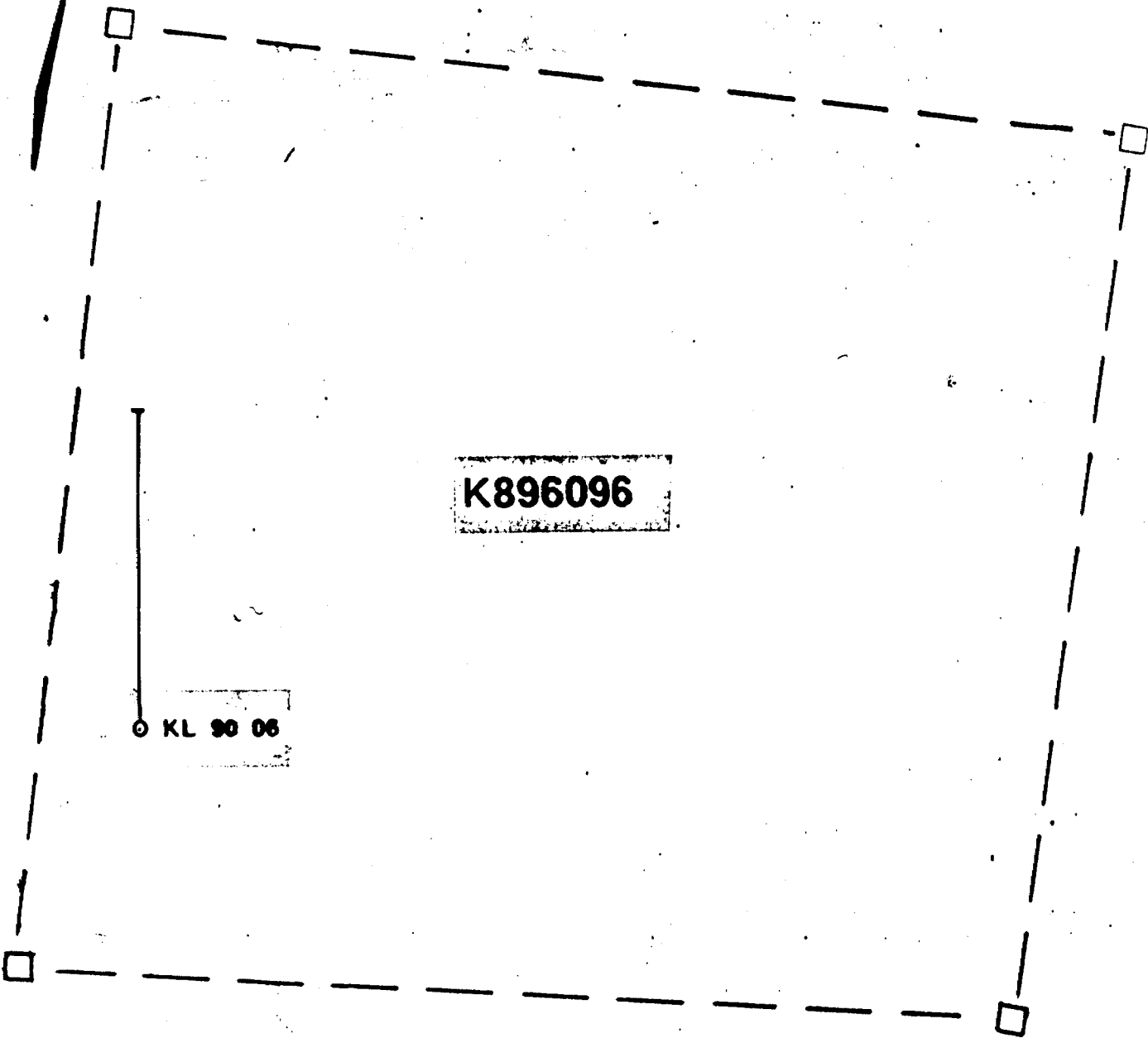
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DIAMOND DRILL RECORD

HOLE No. KL-90-05

PAGE 8 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		143.7-144.3 breccia zone as above										
144.3	161.5	MAFIC FLOW										
		down hole from silicified mafic flow rocks										
		become darker (higher mafic content - less										
		silica alteration) which signifies the end of										
		silica alteration; the rock is fine grained;										
		dominated by chlorite - dark grey-green in										
		colour; moderate to well foliated;										
		characterized by a number of quartz-carbonate										
		veins generally 0.5 to 1.0 cm. thick; in										
		general rock has moderate carbonate; some										
		sericite; rare pyrite patches but generally										
		pyrite 1% overall.										
		145.1 foliation @ 41°C/A.										
		faint flow banding is barely distinguishable at										
		the top of the unit; down hole, flow banding										
		(layering) becomes quite evident, foliation at										
		156m @ 42°C/A.										
		weak silicification is evident locally but this										
		is not prominent.										



K896096

KL 90 06



Rio Algom Exploration Inc.

Diamond Drill Hole Location

KL 90 06

scale 1:2500

LOCATION: L9E 0+50N

Rio Algom Exploration Inc.

HOLE No.: KL-90-06

AZIMUTH: 180°

DIAMOND DRILL RECORD

PAGE 1 of 11

DIP: 50° LENGTH: 192.0m. ELEVATION: ICE PROPERTY: Laramide Option 8925

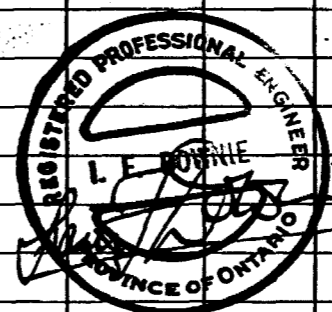
STARTED: March 20, 90 CORE SIZE: BWG DATE LOGGED: March 21, 90 CLAIM No.: K896091

COMPLETED: MARCH 22, 90 DIP TESTS: 50 -56° 630' -44° SECTION:

PURPOSE: geological 300'-53° LOGGED BY: Terry Needham

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
0	12.8	CASING										
12.8	41.3	CHLORITE - SERICITE SCHIST (MAFIC TO INTERMEDIATE METATUFF)										
		grey-green colour; mafic to intermediate schist; dominated by chlorite and sericite; plag. is also present - local concentrations of plag. give the rock a crystal tuff character - plag. crystals are generally tiny 1mm diameter in such sections; generally the rock is fine to very fine grained mafic to intermediate meta tuff; homogeneous in composition throughout; well developed foliation.										
		moderate carbonate expressed by a number of quartz-carbonate veins and stringers occupying upto 10% of the rock volume; sericite is fairly evenly distributed, though some sections upto 1/2m thick contain a noticeable increase in sericite content - rock much more strongly foliated in such sections.										

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Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-06

PAGE 2 of 11

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH							
		pyrite content 1%;											
		23.65-27.4 crystal mafic to intermediate tuff containing 20% overall micro-crystals of plag.											
		15.2 foliation @ 36°C/A.											
		27.4-28.7 similar chlorite-sericite schist except that much of the sericite obtains a buff-rusty brown to lilac colour most probably marking a local increase in Fe content in the rock.											
		28.7-31.6 chlorite sericite schist with an overall general increase in carbonate; pyrite 1%.											
		31.6-32.35 quartz-carbonate/breccia zone; this zone contains elements of a breccia zone; prominent quartz-carbonate vein system (veins upto 4cm. thick). the host rock itself is strongly carbonatized; has general brecciated aspect. 2cm. zone of fault gauge; quartz- carbonate veins contain stringers of some unidentified black material.											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-06

PAGE 3 of 11

INTERVAL		DESCRIPTION	SAMPLE No	INTERVAL		LENGTH							
from	to			from	to								
		30.8 foliation @ 40°C/A.											
		32.35-36.8 rock becomes light green -grey colour - same chlorite-sericite schist moderate to strongly carbonatized; change in colour probably a manifestation of some silica/carbonate alteration; locally crystal tuff textures observed - not prominent.											
		36.8-39.7 intense system of quartz-carbonate veins/stringers; quartz-carbonate veins upto 20cm. thick, contains discrete cm thick shear planes where sericite is concentrated; strongly carbonatized; quartz veins again contain stringers of unidentified black material (not magnetite).											
41.3	56.65	SERICITIZED/SHEARED MAFIC TO INTERMEDIATE TUFF.											
		very similar rock lithologically to the chlorite - sericite schist described above (12.8-41.3)											
		the rock is streaky, green-grey to grey in colour; fine to very fine grained chlorite and sericite dominate mineralogy. marked increase											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

MOLE No. : KL-90-06

PAGE 4 of 11

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		in sericite content -30-50% as opposed to 15-30% above; moderately to strongly carbonated; strongly foliated with concentrations of sericite form in mm thick cream coloured streaks accentuating foliated plane; local foliation is disrupted obtaining a kinked aspect; folding is evident as deduced from ovoid, closed rings of foliation planes; pressure shadows around competent grains and kinking along with flattening of quartz-carbonate stringers indicate a fair amount of shear strain; late quartz-carbonate veins cut foliation at high angles (these veins upto 1cm. thick). rare pyritic stringers lie in plane of foliation; isolated, very fine euhedral cubes of pyrite also seen; pyrite 1% overall.										
		local breccia/fault gauge zones upto 5cm. thick evident down hole.										
		44.25- foliation @ 31°C/A.										
56.65	57.05	QUARTZ-DIORITE DYKE										
		fine grained, sharp contacts with 1-2 cm. thick chill margin.										

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. K1-90-06

PAGE 5 of 11

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
57.05	62.1	SILICIFIED/SHEARED MAFIC TO INTERMEDIATE TUFF										
		similar lithology as described above (12.8-41.3) still part of sheared package of rock (41.3-56.65) major differences: major increase in the amount of silica alteration coincident with a marked decrease in sericite content: 10-30cm. thick zones of this rock appear to have up to 60% silica - but definitely the same mafic to intermediate composition protolith: rock loses its streaky character due to drop in sericite content (5-15%); still quite moderately carbonatized; pyrite 1%.										
		59.35 foliation @ 46°C/A.										
62.1	68.1	MAFIC FLOW	P13927	62.4	63.9	1.5						
		dark grey-green to grey-green in colour: fine to very fine grained moderate to well foliated - has more massive aspect when compared to rock above; locally moderately silicified; few quartz carbonate stringers; weak carbonate; weak to moderate sericitization; there is a weak suggestion of banding in the rock; pyrite upto 1%; the pyrite occurs as mm thick	P13928	63.9	65.35	1.45						

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No.: KL-90-06

PAGE 6 of

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		stringers - no disseminated pyrite to speak of.											
		65.4-66.3 system of quartz veins and stringers -quartz stringers - quartz veins occupy upto 70% of rock volume; weak carbonate; 1% pyrite.											
		64-67 lost core; lost 0.6m.											
68.1	76.4	INTERMEDIATE TUFF											
		dark grey to grey in colour; very fine to fine grained intermediate tuff; some chlorite 10% weak to moderately sericitized; weak to no carbonate; contains few quartz-carbonate veins/stringers; quartz carbonate veins generally upto 3cm. thick; one quartz carbonate vein is 15cm. thick; moderately well developed foliation; locally foliation is very strongly developed; no sulphide mineralization.											
		72.3 foliation at 25°C/A.											
76.4	80.9	INTERMEDIATE CRYSTAL-LAPILLI TUFF											
		grey in colour; very fine to fine grained intermediate composition matrix containing mm											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-06

PAGE 7 of 1

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		scale feldspar crystals and flattened felsic lapilli upto 1cm. in long dimension; fairly homogeneous in composition throughout, weak to moderately well foliated; minor quartz carbonate veining, contains quartz-chlorite-pl hardly any sericite; weakly silicified if at all; no sulphide mineralization.											
80.9	92.15	STRONGLY SILICIFIED/SERICITIZED INTERMEDIATE LAPILLI TUFF											
		light grey to cream coloured; very fine to fine grained - appears to be an intermediate composition tuff which becomes progressively silicified and sericitized down hole to the point where the rock is 50-60% silica 20-30% sericite ± chlorite; contains flattened felsic fragments/lapilli; contains quartz-carbonate veins/stringers which occupy 5% rock volume; strongly foliated; weak carbonate in general; 1% pyrite, foliated @ 32°C/A - 92.15											
		84.3 foliated @ 33°C/A.											
92.15	164.7	SILICIFIED/SERICITIZED MAFIC TO INTERMEDIATE TUFF											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. : KL-90-06

PAGE 8 of 11

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH						
from	to			from	to							
		greenish grey to grey in colour; fine to medium	P13929	92.15	93.55	1.4						
		grained chlorite-sericite-quartz plag matrix	P13930	93.55	95.1	1.55						
		containing lapilli (upto 2cm in long dimension)	P13931	95.1	96.55	1.45						
		or silicified fragments; fragments are	P13932	96.55	98.1	1.55						
		flattened, ovoid shapes, moderately to strongly	P13933	98.1	99.55	1.45						
		silicified; weak to moderate carbonate;	P13934	99.55	101.0	1.45						
		sericite 20% rock volume; well foliated; rare	P13935	101.0	102.5	1.5						
		quartz-carbonate veining; this unit is pyritic;										
		pyrite mostly fine to medium grained generally										
		concentrated in discontinuous stringers along										
		foliation plane; 3-5% pyrite overall.										
		down hole the rock remains much the same but										
		fragment /lapilli character is lost and gives										
		way to simply silicified intermediate tuff;										
		chlorite relatively prominent.										
		102.5 foliation @ 38°C/A.										
		104-105.55 very strongly silicified	P13936	104.1	105.6	1.5						
		intermediate tuff - light grey; fine grained	P13937	105.6	107.1	1.5						
		well foliated 3-5% mafics (mostly chlorite)	P13938	107.1	108.7	1.6						
		otherwise the rock has been completely replaced	P13939	108.7	110.35	1.65						
		by silica; weak to no carbonate 1-2% very fine	P13940	121.4	122.8	1.4						
		grained disseminated pyrite.										

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

MOLE No. : KL-90-06

PAGE 9 of 12

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH						
		from 105.55 down hole the rock remains moderately silicified intermediate tuff; rare quartz-carbonate veins upto 10cm. thick; weak carbonate; weak sericitization, locally disseminated pyrite upto 1-2%.										
		117.9 foliation @ 37°C/A.	P13941	136.4	137.9	1.5						
		137.2 foliation @ 36°C/A.	P13942	137.9	139.4	1.5						
		134.1-139.4 intermediate tuff becomes moderate to strongly silicified accompanied by an increase in sericite - 10% pyrite content increases from 1% to 1-2% disseminated pyrite.										
		143.7-147.4 another few metres of strongly silicified/sericitized intermediate tuff, grey to cream coloured - more extensively altered than the zone mentioned above (134.1-139.4); the central portion of this zone contains upto 3% disseminated pyrite.	P13943	144.7	146.1	1.4						
		147.4 foliation @ 41°C/A.										
		down hole from silicified/sericitized zone the rock returns to the more typical moderately										

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-06

PAGE 10 of 11

INTERVAL from	to	DESCRIPTION	SAMPLE No.	INTERVAL from	to	LENGTH							
		silicified intermediate tuff characterised by moderate silicification, moderate sericitization: weak carbonate: rare quartz-carbonate veins: grey to grey green colour; chlorite & sericite are principal phyllosilicates; 1% disseminated pyrite overall; locally intruded by grey to creamy grey-green quartz diorite dykes up to 30cm. thick:											
		147.6-147.7 minor breccia/fault gouge zone.											
164.7	177.0	INTERMEDIATE TO MAFIC FELSIC FRAGMENTAL TUFF: grey to dark grey chloritic matrix containing cm scale, flattened ovoid felsic fragments; matrix contains, besides chlorite, 15-20% sericite: fine grained well foliated: fragments principally composed of recrystallized feldspar: fragments are moderately silicified: 1% pyrite: very rare quartz-carbonate veining: at 164.7 foliated @ 52°C/A.											
		166.2-170 strongly silicified intermediate to mafic, felsic fragmental tuff, same lithology described above but much more strongly											

Rio Algom Exploration Inc.

DIAMOND DRILL RECORD

HOLE No. KL-90-06

PAGE 11 of 11

INTERVAL		DESCRIPTION	SAMPLE No.	INTERVAL		LENGTH							
from	to			from	to								
		silicified; light grey; moderate to strongly sericitized; 1% pyrite.											
173.0	184.15	SILICIFIED INTERMEDIATE TUFF											
		grey, medium-to fine-grained, contains 5-10% chlorite - plag-qtz-sericite; moderately silicified; shows evidence of layering parallel to well developed foliation locally exhibits fragmental character; rare quartz veining 1% pyrite.											
		foliation @ 176.8 is @ 42°C/A.											
184.15	192.0	SILICIFIED INTERMEDIATE FRAGMENTAL TUFF											
		as described above (164.7-177)											
		189 foliated at 34°C/A.											
	192.0	END OF HOLE											



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Report
of Work

DOCUMENT No.
W9001-067



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Assess files
BROOKS LAKE G. 2670

The Min

Name and Postal Address of Recorded Holder	Prospector's Licence No.
LARAMIDE RESOURCES LTD. 904-675 West Hastings Street Vancouver, B.C. V6B 1N2	T. 4371

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed	Mining Claim			Work Days Cr.	Mining Claim			Work Days Cr.
	Prefix	Number	Work Days Cr.		Prefix	Number	Work Days Cr.	
1647								
for Performance of the following work. (Check one only) <input type="checkbox"/> Manual Work <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work. <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip. <input type="checkbox"/> Power Stripping <input checked="" type="checkbox"/> Diamond or other Core drilling <input type="checkbox"/> Land Survey	K	896091	100	K	896101	110		
		896092	100		896102	100		
		896095	100		896103	100		
		896096	100		896104	100		
		896097	100		896110	100		
		896098	100		896111	97		
		896099	100		1085101	100		
		896100	140		1085102	100		

All the work was performed on Mining Claim(s): K590290 (1017) K896096 (630)

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

ADVANCE DIAMOND DRILLING P.O. Box 1323 2090 Riverside Drive Timmins, Ontario P4N 7J8 18 Feb. '90 - 13 Mar. '90 Boyles T38	ULTRAMOBILE DIAMOND DRILLING 12708 - 24th Avenue Surrey, B.C. V4A 2E6 19 Mar. '90 - 23 Mar. '90 JKS 300 (4cyl. Deutsch)
KENORA MINING DIV RECEIVED APR 06 1990 AM 11:29 PM 789101112123456	ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES APR 25 1990 RECEIVED
Date of Report	Recorded Holder of Agent (Signature)
Mar. 26, 90	<i>[Signature]</i>

Certification Verifying Report of Work

I hereby certify 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 and the annexed report is true.

Name and Postal Address of Person Certifying	Date Certified	Certifying Party (Signature)
Iain F. Downie, 2035 Montrose Pl., RR #4, Site 3, Box 19, Thunder Bay, Ont P7C 4Z2	05-04-90	<i>[Signature]</i>

Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific information per type	Other information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Sketch (as above) in duplicate
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.	896091	
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil



Ministry of
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Report
of Work

DOCUMENT No.
W9001.069

Instructions - Supply required data on a separate form for each type of work to be recorded (see table below).
- For Geo-technical work use form no. 1362 "Report of Work (Geological, Geophysical, Geochemical and Expenditures)".

Ontario **BROOKS LAKE G.2670**

The Mining Act

Name and Postal Address of Recorded Holder RIO ALGOM EXPLORATION INC.	Prospector's Licence No. A30260
2400-120 Adelaide Street West, Toronto, Ontario M5H 1W5	

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed 530	Mining Claim			Mining Claim			Mining Claim		
	Prefix	Number	Work Days Cr.	Prefix	Number	Work Days Cr.	Prefix	Number	Work Days Cr.
for Performance of the following work. (Check one only) <input type="checkbox"/> Manual Work <input type="checkbox"/> Shaft Sinking Drifting or other Lateral Work. <input type="checkbox"/> Compressed Air, other Power driven or mechanical equip. <input type="checkbox"/> Power Stripping <input checked="" type="checkbox"/> Diamond or other Core drilling <input type="checkbox"/> Land Survey	K	1122041	40	K	1122055	40			
		1122042	40		1122056	40			
		1122043	40		1122057	40			
		1122050	40		1122058	40			
		1122051	40		1122059	40			
		1122052	50						
		1122053	40						
	1122054	40							

All the work was performed on Mining Claim(s): **K1122052 (530)**

Required Information eg: type of equipment, Names, Addresses, etc. (See Table Below)

Ultramobile Diamond Drilling
12708 - 24th Avenue
Surrey, B.C.
V4A 2E6

JKS 300
(4 cyl. Deutsch)



Date of Report Mar. 26, 90	Recorded Holder or Agent (Signature) <i>[Signature]</i>
--------------------------------------	--

Certification Verifying Report of Work

I hereby certify 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 and the annexed report is true.

Name and Postal Address of Person Certifying Iain F. Downie, 2035 Montrose Pl., RR #4, Site 3, Box 19, Thunder Bay, Ont. P7C 4Z2	Date Certified 26-03-90	Certified by (Signature) <i>[Signature]</i>
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Table of Information/Attachments Required by the Mining Recorder

Type of Work	Specific Information per type	Other Information (Common to 2 or more types)	Attachments
Manual Work	Nil	Names and addresses of men who performed manual work/operated equipment, together with dates and hours of employment.	Work Sketch: these are required to show the location and extent of work in relation to the nearest claim post.
Shaft Sinking, Drifting or other Lateral Work			
Compressed air, other power driven or mechanical equip.	Type of equipment	Names and addresses of owner or operator together with dates when drilling/stripping done.	Work Sketch (as above) in duplicate
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.		
Diamond or other core drilling	Signed core log showing; footage, diameter of core, number and angles of holes.	1122040	
Land Survey	Name and address of Ontario land surveyer.	Nil	Nil

