

010

DIAMOND DRILLING

AREA: HERONRY LAKE REPORT NO: 16

WORK PERFORMED FOR: Canadian Nickel Co. Ltd.

RECORDED HOLDER: Same as above [xx]
: Other [ ]

Claim No.	Hole No.	Footage	Date	Note
K 638459	70456-0	121.9m	Mar/85	(1)(2)
K 589478	70468-0	220.7m	Feb/87	(1)(2)
K 589479	70470-0	155.8m	Feb/87	(1)(2)
K 777750	70471-0	138.7m	Feb/87	(1)(2)
K 589479	70472-0	255.7m	Feb/87	(1)(2)
K 638462	70473-0	184.4m	Feb/87	(1)(2)
K 589479	70474-0	157.0m	Feb/87	(1)(2)
K 638458	70475-0	248.1m	Feb/87	(1)(2)
K 589478	70476-0	146.3m	Feb/87	(1)(2)
	70477-0	63.3m	Feb/87	(1)(2)
K 638466	74811-0	79.9m	Feb/86	(1)(2)
K 589477	74814-0	83.5m	Mar/86	(1)(2)
K 589482	74815-0	153.6m	Mar/86	(1)(2)
K 589480	74817-0	251.2m	Mar/86	(1)(2)
K 589480	74818-0	248.1m	Mar/86	(1)(2)
K 777750	74819-0	76.2m	Mar/86	(1)(2)
K 777750	70478-0	249.0m	Mar/88	(1)

NOTES: (1) #W8801.166, filed in Jan/89

(2) Also submitted under OMEP, #OM86-3-P-102, see Toronto file #63.5454. Extra material in Cross Sections and Progress Report.

DIAMOND DRILLING

AREA: HERONRY LAKE REPORT NO: 16

WORK PERFORMED FOR: Canadian Nickel Co. Ltd.

RECORDED HOLDER: Same as above [xx]
: Other [ ]

Claim No.	Hole No.	Footage	Date	Note
K 777750	70479-0	194.5m	Mar/88	(1)
K 777750	70480-0	170.1m	Mar/88	(1)
K 638461	70481-0	306.0m	Mar/88	(1)
K 638461	70482-0	62.2m	Mar/88	(1)
K 589479	70483-0	307.2m	Mar/88	(1)
K 589480	70484-0	251.8m	Mar/88	(1)
K 638459	70485-0	309.7m	Mar/88	(1)
K 589479	70486-0	317.9m	Mar/88	(1)
K 638459	70487-0	184.7m	Mar/88	(1)
K 589480	70488-0	306.6m	Mar/88	(1)
K 638465	74812-0	306.6m	Mar/86	(1) (2)
K 638466	74813-0	305.7m	Mar/86	(1)(2)
K 589479	74816-0	260.3m	Mar/86	(1)(2)

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NOTES: (1) #W8801.166, filed in Jan/89

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9750.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-19-85
PROPERTY	: Penn Option	DEPARTURE	:E 9100.0 M	L.K. TOWNSHIP	: Heronry	COMPLETED	: 03-21-85
BOREHOLE	: 70456-0	ELEVATION	: 1368.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K638459	DRILL TYPE	: J.K.Smit 300
DEPTH	: 121.9 M	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : 40 feet BW casing and shoe left in hole. Collar is 50m N, 115m W of post 3.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
15.20	355.0	-43.00	61.00	355.0	-42.00	121.90	355.0	-40.00			

**********DESCRIPTION**********

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	12.18	OVERBURDEN								
12.18	43.68	PERIDOTITE								
		Fine grained to medium grained black massive peridotite. Easily scratched, talcose, 10 to 15% quartz carbonate veins to 8 millimetres wide. Trace disseminated pyrite. Weakly magnetic. Texture difficult to observe because rock is rather uniform in colour. Occasional rough fractures at various angles to core.	FX139606	12.18	13.68	1.50	TR	-	<.005	.000
			FX139607	13.68	15.18	1.50	TR	-	<.005	.000
			FX139608	15.18	16.68	1.50	TR	-	<.005	.000
			FX139609	16.68	18.18	1.50	TR	-	.005	.007
			FX139610	18.18	19.68	1.50	TR	-	<.005	.007
			FX139611	19.68	21.18	1.50	TR	-	<.005	.007
			FX139612	21.18	22.68	1.50	TR	-	<.005	.007
			FX139613	22.68	24.18	1.50	TR	-	<.005	.007
			FX139614	24.18	25.68	1.50	TR	-	<.005	.007
			FX139615	25.68	27.18	1.50	TR	-	<.005	.007
		16.18 18.18 Badly broken over 20 centimetres.								
		27.18 28.68 2 centimetre wide fault gouge at 28.62.								
		28.68 33.18 Not magnetic.								
		33.18 34.68 As above. Possible 35 centimetres lost core.								

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FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Some foliation.	FX139616	27.18	28.68	1.50	TR	-	<.005	.007
	34.68 37.68	As above. Some lost core. Core badly broken up overall. Several 2 to 5 millimetre faults filled with gouge. 2 to 3% quartz calcite veins to 2 centimetres wide.	FX139617	28.68	30.18	1.50	TR	-	<.005	.007
			FX139618	30.18	31.68	1.50	TR	-	<.005	.007
			FX139619	31.68	33.18	1.50	TR	-	<.005	.007
			FX139620	33.18	34.68	1.50	TR	F62	<.005	.007
	37.68 39.18	Similar to above. 20% highly brecciated gray quartz carbonate veins to 3 centimetres wide. At least 10% fine grained medium gray alteration material as indistinct bands to 2 centimetres wide sub parallel to foliation. Some coarse grained sections of peridotite. Some chlorite as stretched smears. Trace pyrite, not magnetic.	FX139621	34.68	36.18	1.50	TR	-	<.005	.007
			FX139622	36.18	37.68	1.50	TR	-	.010	.022
			FX139623	37.68	39.18	1.50	TR	-	<.005	.022
			FX139624	39.18	40.68	1.50	TR	-	.005	.030
			FX139625	40.68	42.18	1.50	TR	-	.020	.060
			FX139626	42.18	43.68	1.50	TR	-	.035	.112
	39.18 42.18	As above but only 5 to 7% brecciated quartz carbonate veins. Overall colour is dark gray green with some chloritic sections. May be more gabbroic but still easily scratched.								
	42.18 43.68	As at 37.68.								
43.68	49.06	PERIDOTITE								
		Transition zone from peridotite to gabbro.	FX139627	43.68	45.18	1.50	TR	-	.040	.172
	43.68 45.18	Similar to above but rock is considerably harder. This may be due to a more pervasive silicification.	FX139628	45.18	46.68	1.50	TR	-	<.005	.172
			FX139629	46.68	48.18	1.50	TR	-	.025	.210
			FX139630	48.18	49.06	.88	TR	-	.025	.232
	45.18 46.68	Fairly massive fine grained peridotite grading to a medium grained massive rock which has a gabbroic texture. 2 to 3% highly brecciated quartz carbonate veins within distinct margins in most cases. Much of the vein material consists of fragments floating in fine grained peridotite or								

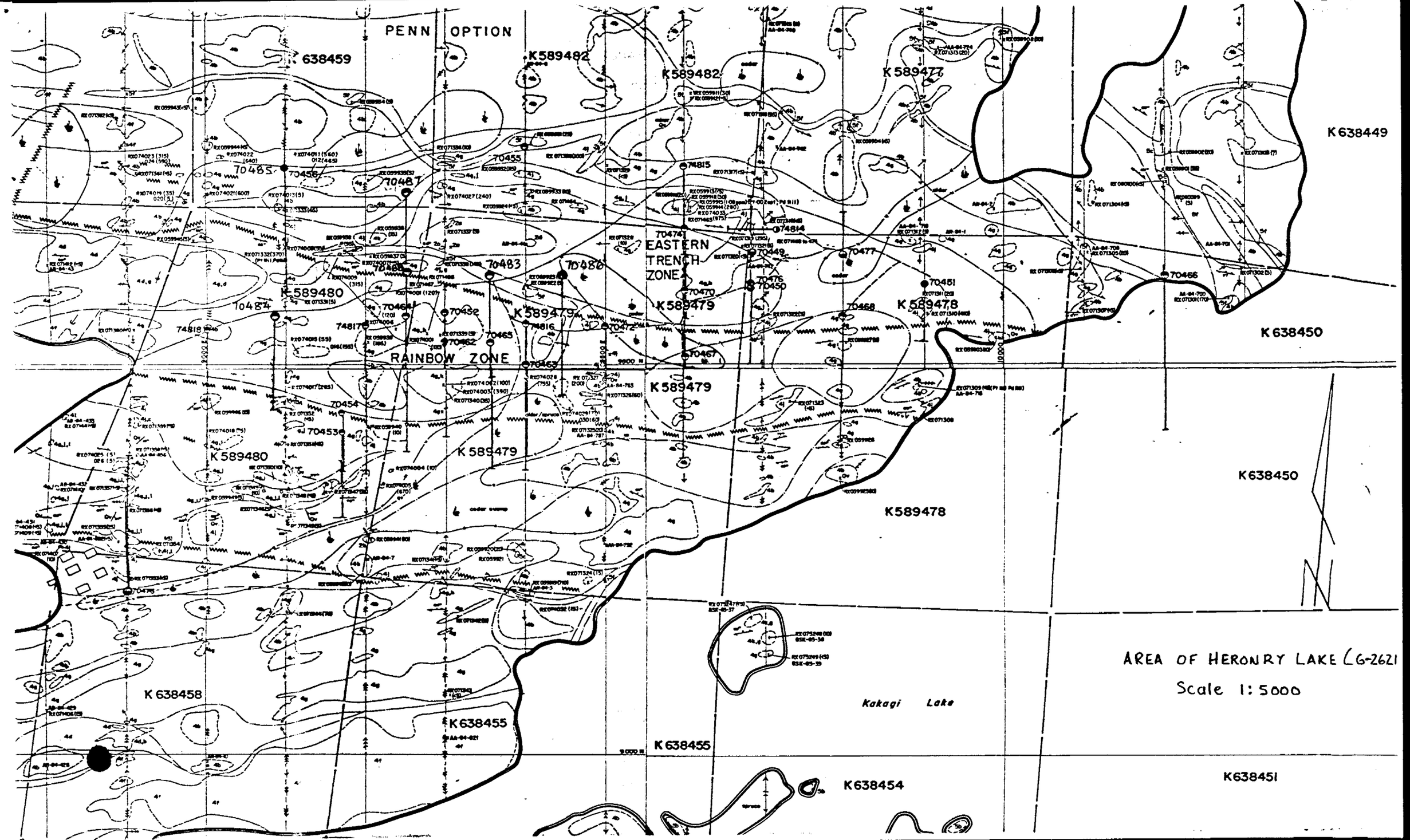
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
		gabbro. Trace pyrite.								
	45.18	48.18 Pyroxinitic medium grained to coarse grained peridotite. Massive to weakly foliated, up to 1% light gray alteration veinlets. Rock consists of black rounded crystals in a medium gray matrix. Crystals average 2 to 3 millimetres diameter and form 50%.								
	48.18	49.06 As above. Becomes fine grained toward bottom.								
49.06	60.64	GABBRO								
		Medium to dark gray, hard and competant gabbro or pyroxenite ? medium grained to coarse grained, weakly magnetic. Grades into above unit. To 25% gray brown irregular grains of ? to 4 millimetres diameter sitting in matrix of medium gray irregular grains and dark gray irregular grains or clots with sharp to diffuse contacts. It is possible that the rock is intrusive into peridotite. Up to 1% fine grained disseminated leucoxene, trace pyrite, no alteration or quartz carbonate veins.	FX139631	49.06	50.56	1.50	TR	-	.020	.262
			FX139632	50.56	52.06	1.50	TR	-	<.005	.262
			FX139633	52.06	53.56	1.50	TR	-	<.005	.262
			FX139634	53.56	55.06	1.50	TR	-	<.005	.262
			FX139635	55.06	56.56	1.50	TR	-	<.005	.262
			FX139636	56.56	58.06	1.50	TR	-	<.005	.262
			FX139637	58.06	59.56	1.50	TR	-	<.005	.262
			FX139638	59.56	60.64	1.08	TR	-	<.005	.262
	52.06	53.56 As above. Portion has some of the light coloured crystals with a light brown alteration colour.								
	53.56	55.06 Has a more uniform medium gray colour. Lacks the colour variations in crystals. Medium grained, rock is quite hard. Trace pyrite.								
	55.06	56.56 Similar to above. Fine grained to medium grained, 1% quartz carbonate veins to 1 centimetre wide.								
	56.56	60.64 Similar to above but fine grained overall. Dioritic and very massive. Looks like a								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		dike. Up to 1% quartz carbonate veins.								
60.64	118.45	DIORITE								
		Medium grained to coarse grained very massive diorite which rapidly grades into above. 50% chloritic pyroxene, or amphibole in matrix of white anhedral feldspar. Rock looks very fresh looking. trace very fine grained iron carbonate. Up to 1% quartz carbonate veins. Very hard. Not magnetic, trace pyrite.	FX139639	60.64	62.14	1.50	TR	-	<.005	.262
			FX139640	62.14	63.64	1.50	TR	-	<.005	.262
			FX139641	63.64	65.14	1.50	TR	-	<.005	.262
			FX139642	65.14	66.64	1.50	TR	-	<.005	.262
			FX139643	66.64	68.14	1.50	TR	-	<.005	.262
			FX139644	68.14	69.64	1.50	TR	-	<.005	.262
			FX139645	69.64	71.14	1.50	TR	-	<.005	.262
			FX139646	71.14	72.64	1.50	TR	-	<.005	.262
			FX139647	72.64	74.14	1.50	TR	-	<.005	.262
			FX139648	74.14	75.64	1.50	TR	-	<.005	.262
			FX139649	75.64	77.14	1.50	TR	-	<.005	.262
			FX139650	77.14	78.64	1.50	TR	-	<.005	.262
			FX139651	78.64	79.97	1.33	TR	-	<.005	.262
			FX139652	79.97	81.47	1.50	TR	-	<.005	.262
			FX139653	81.47	82.97	1.50	TR	-	<.005	.262
			FX139654	82.97	84.47	1.50	TR	-	<.005	.262
			FX139655	84.47	85.97	1.50	TR	-	<.005	.262
			FX139656	85.97	87.47	1.50	TR	-	<.005	.262
			FX139657	87.47	88.97	1.50	TR	-	<.005	.262
			FX139658	88.87	90.47	1.60	TR	-	<.005	.262
			FX139659	90.47	91.97	1.50	TR	-	<.005	.262
			FX139660	91.97	93.47	1.50	TR	-	<.005	.262
			FX139661	93.47	94.97	1.50	TR	-	<.005	.262
			FX139662	94.97	96.47	1.50	TR	F45	<.005	.262
			FX139663	96.47	97.97	1.50	TR	-	<.005	.262
			FX139664	97.97	99.47	1.50	TR	-	<.005	.262
			FX139665	99.47	100.97	1.50	TR	-	<.005	.262
			FX139666	100.97	102.47	1.50	TR	-	<.005	.262
79.97	81.47	Fine grained to medium grained, light to medium gray dioritic rock which may be a portion of dike. 1% quartz carbonate veins, trace pyrite, trace leucoxene, very massive.								
81.47	82.97	As above, with some weak foliation, 5 to 7% dark gray bands to 1.5 centimetres wide perpendicular to core axis. Some of the fine grained unit is weakly chloritic. trace pyrite.								
82.97	88.50	As at 79.97.								
88.50	89.27	Gradational contact with above.								
89.27	90.47	As at 79.97.								
92.23	92.66	As at 79.97.								
93.87	94.69	Fine grained light gray diorite with minor local foliation. 2 to 3% dark gray fine grained alteration ? bands to 1 centimetre wide trending sub parallel to foliation which is at 30 degrees.								
94.69	95.09	Medium grained massive diorite as at 60.64 with 3 to 4% quartz carbonate veins to 1.5 centimetres wide trending parallel to core axis. Trace fine grained disseminated iron								

FROM M	TO M	**********DESCRIPTION**********
		carbonate, trace fine grained pyrite.
95.09	96.99	Fine grained greenish gray diorite, slightly foliated and with some gray to white alteration bands to ? centimetres wide parallel to foliation.
96.99	97.97	Medium grained as at 94.69.
97.97	99.47	Medium grained as above. One 8 centimetre white quartz carbonate vein.
99.47	108.47	Medium grained massive diorite as above.
108.47	109.97	As above with 2% bull quartz veins.
109.97	111.47	As above with 1% bull quartz veins.
111.47	112.02	As above with 1% white gray alteration veins to 3 to 4 millimetres wide at various angles.
112.02	112.97	Fine grained to medium grained massive medium gray diorite to slightly gabbroic diorite. 1 to 2% white alteration veinlets to 6 millimetres wide at various angles and with sharp to diffuse margins.
112.97	114.47	Similar to above but with weak foliation, 10% white gray alteration veins to 3 centimetres wide with sharp to diffuse margins. Some veins stretched and brecciated slightly. Trace black brown chlorite, trace pyrite.
114.47	117.26	As at 112.02. Possibly more mafic.
117.26	118.45	Similar to above but highly injected with 50 to 60% wispy light gray alteration and quartz veins at various angles. Some of the veins are brecciated. Some chlorite, up to 1% pyrite crystals to 3 millimetres diameter.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX139667	102.47	103.97	1.50	TR	-	<.005	.262
FX139668	103.97	105.47	1.50	TR	-	<.005	.262
FX139669	105.47	106.97	1.50	TR	-	<.005	.262
FX139670	106.97	108.47	1.50	TR	-	<.005	.262
FX139671	108.47	109.97	1.50	TR	-	.005	.270
FX139672	109.97	111.47	1.50	TR	-	<.005	.270
FX139673	111.47	112.97	1.50	TR	-	<.005	.270
FX139674	112.97	114.47	1.50	TR	F54	<.005	.270
FX139675	114.47	115.97	1.50	TR	-	<.005	.270
FX139676	115.97	117.26	1.29	TR	-	.010	.282
FX139677	117.26	118.45	1.19	TR	-	.030	.318

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
118.45	121.92	GABBRO								
		Similar to above but more mafic and only about 8% alteration veinlets. trace pyrite.	FX139678	118.45	119.53	1.08	TR	-	<.005	.318
		119.53 121.04 Similar to above but about 15% alteration veins to 4 centimetres wide. Texture is medium grained, trace pyrite.	FX139679	119.53	121.04	1.51	TR	-	<.005	.318
		121.04 121.92 Medium grained massive slightly altered dioritic gabbro with 2% quartz carbonate alteration veins to 8 millimetres wide and with sharp margins. Trace pyrite. Foot of hole.	FX139680	121.04	121.92	.88	TR	-	<.005	.318


PENN OPTION
K638459
K589482
K589482
K589477
K638449
70485
70456
70487
70455
74815
74814
70474
EASTERN
TRENCH
ZONE
70449
70477
70466
70483
70486
70476
70450
70451
K589480
70484
70464
70432
K589479
K589478
74817
74818
74816
70472
70465
70462
RAINBOW ZONE
70463
70470
70468
70467
K638450
K589479
70454
70453
K589480
K589479
K589478
K638450
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 9560.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-15-87
PROPERTY	: Penn	DEPARTURE	:E 9800.0 M	TOWNSHIP	: Heronry	COMPLETED	: 02-19-87
BOREHOLE	: 70468-0	ELEVATION	: 1342.3 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Wynne Drilling Ltd.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K 589478	DRILL TYPE	: Super LY 38
DEPTH	: 220.7 M	LOGGED BY	: M. Duda	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS :

LEFT IN HOLE: 4.27 m of BW casing & casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.27		-45.50	121.92		-36.00	220.67		-21.00 ?			
60.96		-45.50	182.88		-36.50						

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
.00	3.07	OVERBURDEN 4.72 Metres of casing.								
3.07	8.47	PERIDOTITE Dark gray to black. Medium grained to coarse grained. Very soft. Homogeneous. 10% calcareous amygdules. Stretched chloritic clots. Foliated. 10% chloritic quartz carbonate veinlets parallel to foliation, with cross cutting and parallel stringers and blebs. Magnetic. Locally rusty iron carbonate amygdules. Soapy feel to surface.	FX222281	3.07	4.27	1.20	TR	F25	<.005	.005
			FX222282	4.27	5.32	1.05	TR	F38	.005	.005
			FX222283	5.32	6.81	1.49	TR	F40	<.005	.005
			FX222284	6.81	7.67	.86	TR	F36	<.005	.005
			FX222285	7.67	8.47	.80	TR	-	<.005	.005

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MINING DIV.
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JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

70468-0
PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
8.47	8.67	QUARTZ VEIN Composition chloritic quartz vein, slightly calcareous with 1% disseminated pyrite crystals. White to smokey gray opaque colour. Chloritic stylolites and cross cutting quartz stringers. Vein is parallel to foliation.	FX222286	8.47	8.67	.20	1	F41	.005	.006
8.67	9.12	PERIDOTITE Gray to dark gray. Medium grained to coarse grained. Homogeneous. Slightly silicified. Foliated. 30% quartz carbonate veins, veinlets stringers with 10% iron carbonate. 2% cubic and subhedral pyrite. 10% stretched chloritic clots. Weakly magnetic.	FX222287	8.67	9.12	.45	2	F37	<.005	.006
9.12	9.29	QUARTZ VEIN White and opaque with fragments of wall rock.	FX222288	9.12	9.29	.17	TR	F39	<.005	.006
9.29	15.07	PERIDOTITE As at 3.07 to 8.47.	FX222289	9.29	10.63	1.34	TR	F44	<.005	.006
			FX222290	10.63	12.04	1.41	TR	F50	<.005	.006
			FX222291	12.04	13.60	1.56	TR	F40	<.005	.006
			FX222292	13.60	15.07	1.47	TR	F40	<.005	.006
15.07	33.78	PERIDOTITE As at 3.07 to 8.47 , but dark gray to locally light gray, with up to 10% quartz veins and veinlets with 5% iron carbonate, cross cutting and parallel to foliation. Soft.	FX222293	15.07	16.03	.96	TR	F40	<.005	.006
			FX222294	16.03	17.91	1.88	TR	F41	<.005	.006
			FX222295	17.91	18.69	.78	TR	F45	.020	.022
			FX222296	18.69	20.11	1.42	TR	F44	.040	.079

FROM M	TO M	**********DESCRIPTION**********
	16.44 17.91	Locally muddy fault gouge at 17.43. Blue gray chloritic mud. Parallel to foliation.
	17.91 18.69	Poorly foliated. Weakly magnetic.
	18.69 20.11	15% contorted , composition chloritic quartz vein with 5% iron carbonate. Weakly foliated.
	20.11 21.46	10% cross cutting and parallel quartz veinlets with iron carbonate.
	21.46 29.05	Trace quartz veinlets. Foliated. Weakly magnetic. Locally at 22.65, blue green very soft peridotite, slightly muddy.
	29.05 30.53	Trace blebby pyrite.
	30.53 32.00	Locally rusty iron carbonate blebs adjacent to fractures. 4 centimetre thick composite quartz vein with iron carbonate and wall rock inclusions.
	32.00 33.78	Locally quartz flooded with 20% contorted veinlets and stringers parallel and cross cutting foliation. Sharp contact with felsite dike, parallel to foliation.
33.78	34.33	FELSITE
		Dike. Pale pink - tan to gray, with dark green, fine grained chloritic clots and feldspar phenocrysts. fine grained. 5% blebby iron carbonate. Weakly foliated. 2% finely disseminated pyrite. Composite chloritic quartz veinlets occurring at periphries, with trace pyrite crystals.
34.33	49.21	GABBRO
		Gray with 40% stretched dark green to black mafic clots.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222297	20.11	21.46	1.35	TR	F45	<.005	.079
FX222298	21.46	23.12	1.66	TR	F35	.025	.120
FX222299	23.12	24.57	1.45	TR	F58	<.005	.120
FX222300	24.57	26.00	1.43	TR	F57	<.005	.120
FX222301	26.00	27.47	1.47	TR	F55	<.005	.120
FX222302	27.47	29.05	1.58	TR	F48	.005	.128
FX222303	29.05	30.53	1.48	TR	F46	.010	.143
FX222304	30.53	32.00	1.47	TR	F42	<.005	.143
FX222305	32.00	33.06	1.06	TR	-	.010	.153
FX222306	33.06	33.78	.72	TR	-	<.005	.153
FX222307	33.78	34.33	.55	2	-	.085	.200
FX222308	34.33	35.55	1.22	2	F53	.010	.212

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Fine grained to medium grained. Very homogeneous. Massive to weakly foliated. Weakly silicified with 10% weak iron carbonate. 1 to 2% quartz veinlets parallel and cross cutting foliation with iron carbonate. Locally weakly magnetic. Trace disseminated pyrite. 1% tan leucoxene. Moderately hard.	FX222309	35.55	37.00	1.45	TR	F53	.010	.227
			FX222310	37.00	38.51	1.51	TR	F50	<.005	.227
			FX222311	38.51	39.99	1.48	TR	F49	.025	.264
			FX222312	39.99	41.37	1.38	TR	F49	.005	.271
			FX222313	41.37	42.95	1.58	TR	F49	.015	.295
			FX222314	42.95	44.45	1.50	TR	F49	1.740	2.905
			FX222315	44.45	45.92	1.47	TR	F46	.020	2.934
			FX222316	45.92	47.47	1.55	TR	F50	.010	2.949
			FX222317	47.47	49.21	1.74	TR	F46	<.005	2.949
		34.33 35.55 5% cross cutting and parallel quartz veinlets with iron carbonate. 2% scattered subhedral and cubic pyrite up to 3 millimetre.								
		35.55 39.99 Locally rusty iron carbonate blebs adjacent to fractures.								
		42.95 45.92 Locally rusty iron carbonate adjacent to quartz veinlets and fractures.								
		47.47 49.21 Pervasive weak rusty iron carbonate. Trace stringer of iron carbonate cross cutting foliation. Sharp contact with feldspar porphyry.								
49.21	49.86	FELDSPAR PORPHYRY								
		Green, fine grained with medium grained feldspar phenocrysts. 5% fine grained mafic crystals. Pervasive iron carbonate staining. Massive, homogeneous. 3% cubic and subhedral pyrite. Sharp contact with peridotite.	FX222318	49.21	49.86	.65	3	C54	.015	2.959
49.86	62.09	PERIDOTITE								
		As at 3.07 to 8.47. Massive to poorly foliated. Non - magnetic.	FX222319	49.86	51.34	1.48	TR	F45	<.005	2.959
			FX222320	51.34	52.88	1.54	TR	F45	<.005	2.959
		60.28 62.09 Locally 3% subhedral to cubic pyrite and disseminated crystals. 10% quartz veinlets	FX222321	52.88	54.36	1.48	TR	F47	<.005	2.959
			FX222322	54.36	55.93	1.57	TR	F49	<.005	2.959

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		with iron carbonate. Muddy gray green fault gouge at 61.56. Sharp contact with felsite dike.	FX222323	55.93	57.38	1.45	TR	F50	<.005	2.959
			FX222324	57.38	58.81	1.43	TR	F45	<.005	2.959
			FX222325	58.81	60.28	1.47	TR	F40	.005	2.967
			FX222326	60.28	62.09	1.81	3	F50	.020	3.003
62.09	62.68	LAMPROPHYRE Dike. Dark gray to black. Fine grained with 2 to 3 centimetre long lenses of black mafic material. Weakly foliated. 20% biotite crystals. Magnetic. Silicified and hard. Weakly iron carbonatized. Sharp contact with peridotite.	FX222327	62.09	62.68	.59	TR	F45	.005	3.006
62.68	68.87	PERIDOTITE As at 51.34 to 62.09.	FX222328	62.68	64.18	1.50	1	F40	<.005	3.006
		62.68 64.18 1% scattered pyrite crystals.	FX222329	64.18	65.60	1.42	1	F48	<.005	3.006
		64.18 65.60 5% quartz veinlets with iron carbonate and 1% disseminated pyrite.	FX222330	65.60	67.25	1.65	TR	F50	<.005	3.006
		65.60 67.25 Weakly magnetic.	FX222331	67.25	68.87	1.62	TR	F54	<.005	3.006
		67.25 68.87 Weakly magnetic. Sharp contact with lamprophyre.								
68.87	71.69	LAMPROPHYRE Biotite lamprophyre dike. Dark gray to black with 20% biotite crystals. Massive, homogeneous. Weakly foliated. 15% blebby iron carbonate. Magnetic. Interfingering wall rock. 2% disseminated and cubic pyrite.	FX222332	68.87	70.27	1.40	2	F53	<.005	3.006
			FX222333	70.27	71.69	1.42	TR	C28	<.005	3.006
		68.87 71.69 20% medium grained to coarse grained blebby iron carbonate.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
71.69	88.06	PERIDOTITE								
		As at 51.34 to 62.09.	FX222334	71.69	73.27	1.58	TR	-	.010	3.021
		71.69 73.27 Trace disseminated pyrite.	FX222335	73.27	74.65	1.38	TR	F47	.005	3.028
		76.27 77.79 Locally altered light green halos adjacent to chloritic quartz veinlets cross cutting foliation.	FX222336	74.65	76.27	1.62	TR	F49	<.005	3.028
			FX222337	76.27	77.79	1.52	TR	F46	<.005	3.028
			FX222338	77.79	79.30	1.51	1	F55	<.005	3.028
		80.72 82.22 10 centimetre thick composite chloritic quartz vein with 2% disseminated and cubic pyrite and iron carbonate.	FX222339	79.30	80.72	1.42	TR	F60	<.005	3.028
			FX222340	80.72	82.22	1.50	2	F60	<.005	3.028
			FX222341	82.22	83.66	1.44	TR	F56	<.005	3.028
		82.22 83.66 5% quartz carbonate veinlets with iron carbonate.	FX222342	83.66	85.11	1.45	TR	F42	<.005	3.028
			FX222343	85.11	86.56	1.45	TR	F57	.005	3.036
		86.56 88.06 Gradational alteration. 10% quartz veinlet with iron carbonate.	FX222344	86.56	88.06	1.50	TR	F60	<.005	3.036
88.06	90.78	PERIDOTITE								
		Weakly altered. Green to locally light gray. Medium grained to coarse grained. Foliated. 20% boudinaged white chloritic quartz veinlets stringers with iron carbonate. Stretched mafic and iron carbonate blebs. 1 to 2% pyrite as crystals and replacing stringers.	FX222345	88.06	89.46	1.40	1	F46	.010	3.050
			FX222346	89.46	90.78	1.32	2	F46	.030	3.089
		89.46 90.78 8 centimetre thick chloritic quartz vein with 10% iron carbonate, parallel to foliation. 2% blebby pyrite and disseminated crystals.								
90.78	101.02	PERIDOTITE								
		As at 51.34 to 62.09. Locally up to 10% quartz veinlets with iron carbonate, parallel to weak foliation.	FX222347	90.78	92.28	1.50	TR	-	<.005	3.089
			FX222348	92.28	93.58	1.30	TR	-	.050	3.154

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
92.28	93.58	Locally light gray, muddy fault gouge with quartz fragments. Locally 1% pyrite crystals.	FX222349	93.58	95.25	1.67	TR	F54	<.005	3.154
			FX222350	95.25	96.73	1.48	2	F59	.040	3.213
95.25	96.73	Locally boudinaged chloritic quartz veinlets with stringer pyrite in adjacent gray alteration halo. 20% opaque quartz veinlets and stringers.	FX222351	96.73	98.16	1.43	TR	F49	<.005	3.213
			FX222352	98.16	99.58	1.42	TR	F53	<.005	3.213
			FX222353	99.58	101.02	1.44	TR	-	<.005	3.213
101.02	101.45	QUARTZ FELDSPAR PORPHYRY								
		Dike. Mauve gray. Very fine grained with fine grained quartz and feldspar phenocrysts. Homogeneous and massive. locally mottled colour. Single chloritic quartz stringer with pyrite cubes. 3% finely disseminated and cubic pyrite. Sharp contact with peridotite.	FX222354	101.02	101.45	.43	3	-	.015	3.220
101.45	122.49	PERIDOTITE								
		As at 51.34 to 62.09. 10% chloritic, white, opaque quartz veins and veinlets. 2 to 3% tan to yellow leucoxene. Weakly foliated.	FX222355	101.45	102.90	1.45	TR	F55	<.005	3.220
			FX222356	102.90	104.36	1.46	2	F60	.005	3.227
			FX222357	104.36	105.98	1.62	TR	F56	<.005	3.227
102.90	104.36	Locally weakly altered adjacent to 2 translucent 1 centimetre thick quartz veins cross cutting a white, opaque quartz vein, parallel to foliation. 2% pyrite crystals in and adjacent to the quartz vein.	FX222358	105.98	107.13	1.15	TR	F59	.015	3.244
			FX222359	107.13	108.65	1.52	2	F58	<.005	3.244
			FX222360	108.65	110.18	1.53	TR	F54	.035	3.298
			FX222361	110.18	111.61	1.43	1	F45	.065	3.391
			FX222362	111.61	113.15	1.54	TR	F49	<.005	3.391
			FX222363	113.15	114.68	1.53	1	F46	.020	3.422
107.13	108.65	2% pyrite crystals in and adjacent to a contorted chloritic quartz veinlet.	FX222364	114.68	116.18	1.50	TR	F53	.005	3.429
			FX222365	116.18	117.69	1.51	TR	F47	.005	3.437
110.18	111.61	20 centimetre thick chloritic light gray to white quartz carbonate vein. Very contorted with 1% disseminated pyrite.	FX222366	117.69	118.82	1.13	TR	F50	<.005	3.437
			FX222367	118.82	120.39	1.57	TR	F45	<.005	3.437
			FX222368	120.39	120.96	.57	TR	F52	.005	3.439

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	ANALYSES AU PPM	ANALYSES FPM*M
		50% quartz carbonate veins similar to above. 1% rusty iron carbonate amygdules.	FX222369	120.96	122.49	1.53	TR	F50	<.005	3.439
113.15	114.68	40% quartz carbonate veins similar to above. 1% finely disseminated pyrite.								
114.68	122.49	Gray to dark green, with up to 20% composite chloritic quartz carbonate veins and stringers.								
122.49	123.03	QUARTZ FELDSPAR PORPHYRY								
		Light gray mauve. Very fine grained with fine grained quartz and feldspar phenocrysts. 10% rusty quartz carbonate veins. 10% rusty iron carbonate amygdules. 2% finely disseminated pyrite. Sharp contact with peridotite	FX222370	122.49	123.03	.54	2	-	.010	3.445
123.03	136.50	PERIDOTITE								
		As at 101.45 to 122.49. 5% quartz carbonate veinlets and stringers.	FX222371	123.03	124.46	1.43	TR	F45	<.005	3.445
			FX222372	124.46	126.19	1.73	TR	F56	.005	3.453
133.76	135.08	Gray to light gray, slightly bleached.	FX222373	126.19	127.71	1.52	TR	F67	.005	3.461
135.08	136.50	10% quartz carbonate vein and veinlets. Locally brown iron carbonate staining with 1% pyrite crystals. silicified and hard.	FX222374	127.71	129.23	1.52	TR	F60	<.005	3.461
			FX222375	129.23	131.71	2.48	TR	F50	<.005	3.461
			FX222376	131.71	132.28	.57	TR	F49	<.005	3.461
			FX222377	132.28	133.76	1.48	TR	F51	<.005	3.461
			FX222378	133.76	135.08	1.32	TR	F50	<.005	3.461
			FX222379	135.08	136.50	1.42	1	F55	<.005	3.461
136.50	148.65	PERIDOTITE								
		Dark green to gray. Fine grained to medium grained. Foliated. 10 to 15% boudinaged, chloritic white opaque quartz carbonate veinlets, with scattered brown iron	FX222380	136.50	137.98	1.48	3	F50	<.005	3.461
			FX222381	137.98	138.13	.15	2	F55	.220	3.494
			FX222382	138.13	139.59	1.46	1	F40	.005	3.501

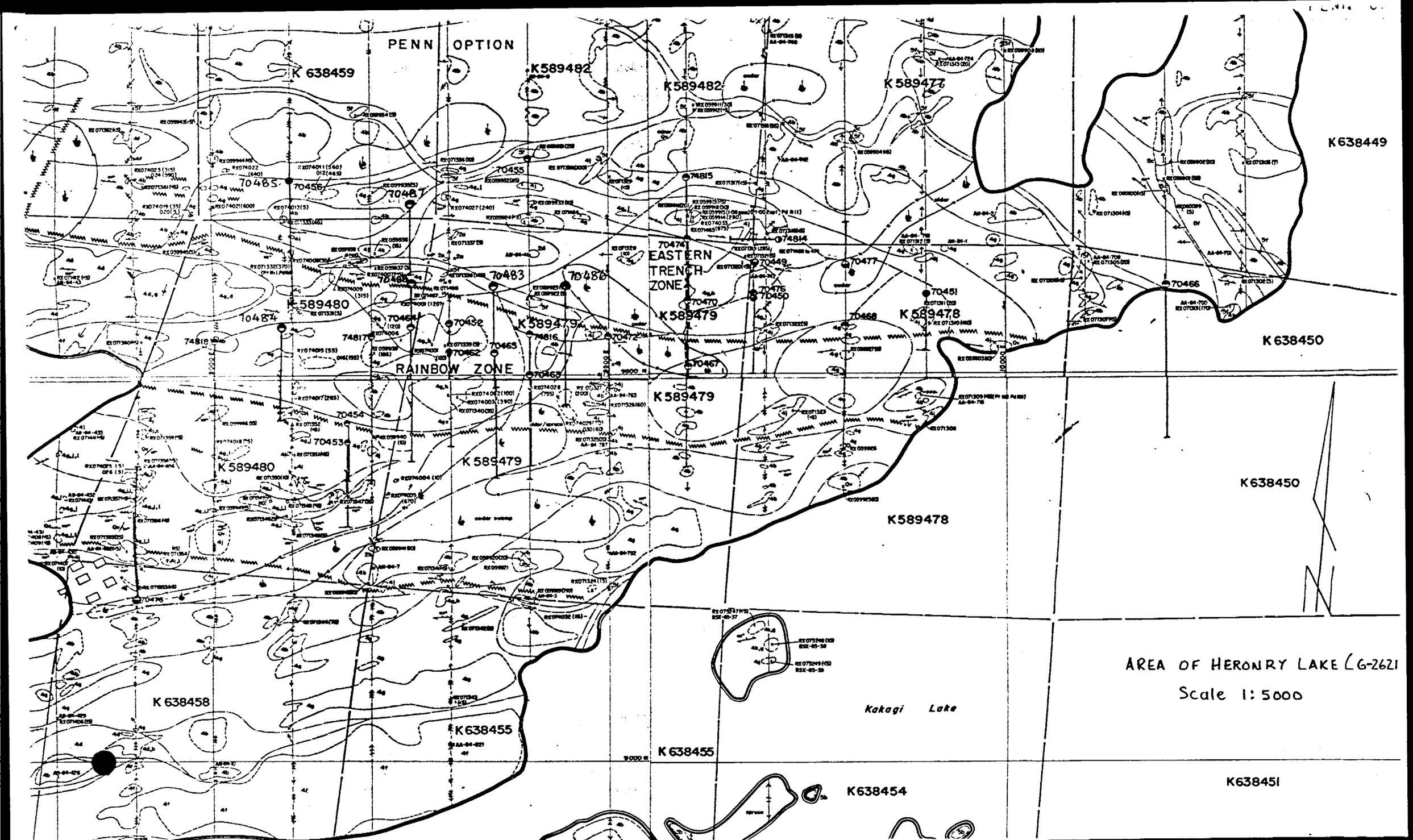
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		carbonate staining. Locally slightly bleached. 5% pale yellow to tan leucoxene streaks and stringers. Stretched mafic and feldspathic clots. 2% disseminated pyrite and scattered crystals, locally concentrated adjacent to quartz veins.	FX222383	139.59	142.58	2.99	1	F50	.015	3.546
			FX222384	142.58	144.16	1.58	1	F50	<.005	3.546
			FX222385	144.16	145.52	1.36	1	-	<.005	3.546
			FX222386	145.52	147.02	1.50	TR	-	<.005	3.546
			FX222387	147.02	148.65	1.63	TR	-	<.005	3.546
		144.16 147.02 Locally dark green to black. 10% blebby leucoxene. Poorly foliated.								
148.65	164.36	PERIDOTITE								
		Dark green to black with 30% light gray, chloritic quartz carbonate streaks and blebs. Weakly foliated. Homogeneous. Fine grained. Locally slightly bleached. 5% quartz carbonate stringers and veinlets, locally with brown iron carbonate staining. Trace to 1% pyrite crystal	FX222388	148.65	150.15	1.50	TR	-	<.005	3.546
			FX222389	150.15	151.64	1.49	TR	-	.015	3.569
			FX222390	151.64	152.14	.50	TR	-	<.005	3.569
			FX222391	152.14	154.66	2.52	TR	-	.010	3.594
			FX222392	154.66	156.28	1.62	TR	-	.015	3.618
		156.28 156.87 17 centimetre thick quartz vein with iron carbonate and gray alteration halo. 1% pyrite crystals and 20% cross cutting quartz carbonate veinlets.	FX222393	156.28	156.87	.59	TR	-	.015	3.627
			FX222394	156.87	158.37	1.50	TR	-	<.005	3.627
			FX222395	158.37	159.20	.83	TR	F54	.005	3.631
			FX222396	159.20	160.07	.87	TR	F70	<.005	3.631
		159.20 160.07 Light gray chloritic quartz carbonate vein with bleached, silicified peridotite.	FX222397	160.07	161.68	1.61	TR	F65	.015	3.655
			FX222398	161.68	163.26	1.58	TR	-	.010	3.671
			FX222399	163.26	164.36	1.10	TR	-	.005	3.677
164.36	169.64	BASALT								
		Dark green, fine grained, massive. Equigranular and homogeneous. Up to 10% quartz carbonate veins and veinlets. Locally silicified. Trace disseminated pyrite. Interfingering peridotite. Moderately hard to hard. Sharp upper contact with peridotite.	FX222400	164.36	165.61	1.25	TR	-	.010	3.689
			FX222401	165.61	166.93	1.32	TR	-	.010	3.702
			FX222402	166.93	168.43	1.50	2	-	.070	3.807
			FX222403	168.43	169.64	1.21	TR	C45	.010	3.819
		165.61 166.93 Quartz flooded. Light gray quartz carbonate with chloritic stringers and								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		stylolites.								
	166.93	168.43 Locally tan alteration adjacent to brown iron carbonate stained fracture. Lensoidal pyrite bleb rimmed by possible chalcopyrite. (Replacing calcite in quartz calcite lens?)..								
	168.43	169.64 Sharp contact with peridotite at 168.70.								
169.64	220.67	PERIDOTITE								
		As at 148.65 to 164.36. Locally quartz flooded with light gray quartz carbonate and black chloritic stringers and stylolites. Up to 20% tan blebby leucoxene.	FX222404	169.64	170.40	.76	TR	-	.010	3.827
			FX222405	170.40	171.55	1.15	TR	-	.005	3.833
			FX222406	171.55	172.99	1.44	TR	-	.010	3.847
	171.55	172.99 Locally vesicular. 10 centimetre thick light gray quartz carbonate vein. Contorted 1 centimetre thick quartz carbonate vein approximately parallel to the core axis.	FX222407	172.99	174.65	1.66	TR	F55	.005	3.855
			FX222408	174.65	176.01	1.36	TR	F52	.005	3.862
			FX222409	176.01	177.58	1.57	TR	F60	<.005	3.862
			FX222410	177.58	178.55	.97	TR	F65	.005	3.867
	177.58	178.55 5 centimetre thick composite chloritic, weakly iron carbonate stained quartz carbonate vein.	FX222411	178.55	179.36	.81	TR	-	.025	3.887
			FX222412	179.36	180.82	1.46	TR	-	.020	3.916
			FX222413	180.82	182.32	1.50	TR	-	.010	3.931
			FX222414	182.32	183.87	1.55	TR	-	<.005	3.931
	178.55	179.36 10 centimetre thick light gray quartz carbonate vein, quartz flooded and slightly bleached.	FX222415	183.87	185.37	1.50	TR	F54	.015	3.954
			FX222416	185.37	186.10	.73	TR	F43	.025	3.972
			FX222417	186.10	186.38	.28	TR	F28	.020	3.978
	183.87	185.37 Locally brecciated light gray quartz carbonate vein.	FX222418	186.38	187.88	1.50	TR	F50	<.005	3.978
			FX222419	187.88	189.50	1.62	TR	-	<.005	3.978
	185.37	196.28 Patchy black to gray. Up to 10% light gray quartz carbonate veins and veinlets. Locally brown iron carbonate stained.	FX222420	189.50	190.29	.79	TR	-	.030	4.002
			FX222421	190.29	191.79	1.50	TR	-	.010	4.017
			FX222422	191.79	193.29	1.50	TR	-	<.005	4.017
	196.28	197.79 8 centimetre thick anastomosing quartz vein with calcareous periphries.	FX222423	193.29	194.79	1.50	TR	-	<.005	4.017
			FX222424	194.79	196.28	1.49	TR	F62	.020	4.046
	197.79	220.67 Dark green. Up to 5% quartz carbonate	FX222425	196.28	197.79	1.51	TR	-	.015	4.069

**********DESCRIPTION**********

FROM M	TO M	
		veins and veinlets. Locally iron carbonate stained.
		220.67 Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222426	197.79	198.54	.75	TR	-	<.005	4.069
FX222427	198.54	199.51	.97	TR	F70	<.005	4.069
FX222428	199.51	201.04	1.53	TR	-	.010	4.084
FX222429	201.04	201.36	.32	TR	-	.015	4.089
FX222430	201.36	202.78	1.42	TR	F68	<.005	4.089
FX222431	202.78	204.26	1.48	TR	-	<.005	4.089
FX222432	204.26	205.59	1.33	TR	F65	.010	4.102
FX222433	205.59	207.27	1.68	TR	-	.005	4.111
FX222434	207.27	208.66	1.39	TR	-	<.005	4.111
FX222435	208.66	210.17	1.51	TR	-	<.005	4.111
FX222436	210.17	211.67	1.50	TR	F40	<.005	4.111
FX222437	211.67	213.17	1.50	TR	F45	<.005	4.111
FX222438	213.17	214.65	1.48	TR	F55	.025	4.148
FX222439	214.65	216.15	1.50	TR	-	.005	4.155
FX222440	216.15	217.63	1.48	TR	-	.010	4.170
FX222441	217.63	219.15	1.52	TR	F64	.020	4.200
FX222442	219.15	220.67	1.52	TR	F52	.010	4.216


PENN OPTION
K 638459
K589482
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K589477
K638449
70485
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70466
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EASTERN TRENCH ZONE
70483
70486
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70468
K638450
74816
74817
70472
70465
70462
70467
RAINBOW ZONE
70463
K589479
K589479
70454
70453
K589480
K589478
K638458
K638455
K638455
K638454
K638451
Kakagi Lake
AREA OF HERONRY LAKE (G-2621
Scale 1: 5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox JV	LATITUDE	:N 9592.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-21-87
PROPERTY	: Penn	DEPARTURE	:E 9600.0 M	TOWNSHIP	: Heronry	COMPLETED	: 02-23-87
BOREHOLE	: 70470-0	ELEVATION	: 1365.8 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K5B9479	DRILL TYPE	: Hydracore 28
DEPTH	: 155.8 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 75 m W and 80 m S of number one post.

LEFT IN HOLE:2.14 m casing

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.05		-46.00	60.96		-41.50	121.92		-36.25	155.75		-33.00

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	1.65	OVERBURDEN Casing in gravelly overburden.								
1.65	6.71	GABBRO Fine grained to medium grained dark green homogeneous massive gabbro. Few calcite veinlets. 5.00 6.71 Becoming foliated down hole.	FX224807 FX224808 FX224809	1.65 3.00 5.00	3.00 5.00 6.71	1.35 2.00 1.71	TR TR TR	- - F50	.020 .025 .050	.027 .077 .163
6.71	13.84	GABBRO Weakly altered. Slightly bleached gray to light green moderately foliated gabbro. Very weakly carbonatized and silicified adjacent to quartz carbonate veins.	FX224810 FX224811 FX224812	6.71 8.21 9.30	8.21 9.30 10.80	1.50 1.09 1.50	TR TR TR	F40 - F35	.030 .070 .020	.208 .284 .314

ONTARIO GEOLOGICAL SURVEY
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PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		8.21 9.30 25 centimetre quartz carbonate vein.	FX224813	10.80	12.34	1.54	TR	F35	<.005	.314
		9.30 10.80 25% carbonate quartz black quartz veining.	FX224814	12.34	13.94	1.50	TR	-	<.005	.314
		12.34 13.84 25% veining with weakly fuchsitic contacts.								
13.84	48.43	GABBRO								
		Mid-green fine grained to medium grained weakly foliated gabbro. Locally basaltic looking. Occasional thin quartz carbonate vein. Minor leucoxene.	FX224815	13.84	15.34	1.50	TR	-	.015	.336
			FX224816	15.34	17.07	1.73	TR	-	.020	.371
			FX224817	17.07	18.57	1.50	TR	-	.035	.423
		18.57 20.12 Oxidized carbonate veinlet.	FX224818	18.57	20.12	1.55	TR	F35	.025	.462
		20.12 21.62 Oxidized fracture.	FX224819	20.12	21.62	1.50	TR	-	.005	.470
		21.62 23.12 Several oxidized quartz carbonate veins.	FX224820	21.62	23.12	1.50	TR	-	.005	.477
		23.12 24.69 As above. Broken core. 2 centimetres of intense silicification and 5% pyrite adjacent to thin quartz carbonate vein.	FX224821	23.12	24.69	1.57	TR	-	.015	.501
			FX224822	24.69	26.29	1.60	TR	-	.040	.565
			FX224823	26.29	27.91	1.62	TR	-	.015	.589
		26.29 27.91 Scoriaceous looking - very pitted surface. Badly broken core.	FX224824	27.91	29.41	1.50	TR	-	<.005	.589
			FX224825	29.41	30.86	1.45	TR	F45	.005	.596
		29.41 30.86 Oxidized adjacent to thin quartz veinlet.	FX224826	30.86	32.32	1.46	TR	-	<.005	.596
		30.86 32.32 Section contains 8 thin quartz veinlets.	FX224827	32.32	33.83	1.51	TR	F45	<.005	.596
		32.32 33.83 Oxidized adjacent to 10 centimetre carbonate quartz vein with fuchsitic contacts.	FX224828	33.83	35.33	1.50	TR	-	<.005	.596
			FX224829	35.33	36.77	1.44	TR	-	.150	.812
		35.33 36.77 Several oxidized carbonate veinlets.	FX224830	36.77	38.22	1.45	TR	-	<.005	.812
		36.77 38.22 Several pinkish dolomite carbonate quartz veinlets.	FX224831	38.22	39.64	1.42	TR	-	<.005	.812
			FX224832	39.64	41.03	1.39	2	F45	<.005	.812
		38.22 39.64 Quartz carbonate fuchsite vein parallel to core axis with speck of chalcopyrite.	FX224833	41.03	42.57	1.54	TR	-	.130	1.012
			FX224834	42.57	44.00	1.43	TR	-	<.005	1.012
		39.64 41.03 65 centimetres of discontinuous carbonate quartz veining with fuchsitic pyritic contacts.	FX224835	44.00	45.50	1.50	TR	-	.005	1.020
			FX224836	45.50	46.96	1.46	3	F40	.625	1.932
			FX224837	46.96	48.43	1.47	TR	-	.090	2.065
		41.03 42.57 Oxidized quartz veinlet with pyritic fuchsitic contacts. 6 quartz carbonate veins to 3 centimetres wide.								

FROM M	TO M	DESCRIPTION
	45.50 46.96	Several dolomite quartz carbonate chlorite veins with fuchsitic carbonatized silicified pyritic contacts to 10 centimetres wide.
	46.96 48.43	As above with 15% veining. 2 centimetre wide folded ptygmatic dolomite vein subparallel to core axis.
48.43	57.38	GABBRO
		Halo alteration. Dark green brown fine grained strongly foliated weakly hematitized and sericitized gabbro. Occasional thin dolomite veinlet typically parallel to foliation.
	48.43 49.83	4 centimetre quartz carbonate vein. Locally strongly hematitized with 15 to 20% red brown mineral probably hematite.
	51.37 52.78	12 centimetre quartz carbonate vein with minor fine grained tourmaline. 5% yellowish green mineral stretched parallel to core axis. Probably leucoxene or saussuritized feldspars.
	52.78 53.73	Predominate colour becoming brown. 30% wispy soft reddish brown mineral with red streak. Probably hematite.
	53.73 54.53	Dark reddish- brown green. As above with predominant mineral hematite with chloritic stringers. Sharply gradational lower contact.
	54.43 55.75	Dark green fine grained gabbro with numerous stringers of leucoxene or saussuritized feldspars as to 52.78 metres. Cut by numerous thin contorted dolomite veinlets.
	55.75 57.38	As above. Sharp irregular lower contact.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
FX224838	48.43	49.83	1.40	TR	F45	.005	2.072
FX224839	49.83	51.37	1.54	TR	F42	<.005	2.072
FX224840	51.37	52.78	1.41	TR	-	2.330	5.357
FX224841	52.78	53.73	.95	TR	F45	.040	5.395
FX224842	53.73	54.53	.80	TR	F50	.020	5.411
FX224843	54.53	55.75	1.22	TR	-	.165	5.612
FX224844	55.75	57.38	1.63	TR	-	<.005	5.612

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
57.38	66.22	GABBRO								
		Altered. Pink brown fine grained to aphanitic highly siliceous strongly carbonatized gabbro ?. Numerous thin chloritic stringers. the different styles of alteration suggest different primary lithologies. This may be an altered quartz feldspar porphyry or felsite dike.	FX224845	57.38	58.66	1.28	TR	-	<.005	5.612
			FX224846	58.66	60.20	1.54	TR	F40	.135	5.820
			FX224847	60.20	61.64	1.44	TR	F50	.070	5.921
			FX224848	61.64	63.14	1.50	TR	-	.010	5.936
			FX224849	63.14	64.98	1.84	TR	-	.005	5.945
			FX224850	64.98	66.22	1.24	TR	F48	.010	5.958
		58.66 60.20 Pervasively hematitized.								
		60.20 61.64 Top and bottom 25 centimetres strongly hematitized.								
		63.14 64.98 Brecciated appearance due to numerous thin black veinlets of chlorite.								
		64.98 66.22 Alteration confined to bands and lozenge shaped stringers to 10 centimetres wide. Rest is soft chloritic weakly hematitized and carbonatized gabbro.								
66.22	67.34	GABBRO								
		Altered. Very fine grained tan-brown moderately silicified strongly carbonatized gabbro cut by 10 centimetre quartz carbonate vein with tourmaline and minor coarse grained pyrite at contacts. Sharp lower contact 60 degrees.	FX224851	66.22	67.34	1.12	2	F60	.105	6.075
67.34	69.40	GABBRO								
		Altered. As to 66.22 metres.	FX224852	67.34	68.50	1.16	TR	-	.010	6.087
			FX224853	68.50	69.40	.90	TR	F50	.035	6.118

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
69.40	69.60	GABBRO Altered. Intensely silicified carbonatized tan-buff fine grained gabbro. Alteration centred on irregular thin quartz vein.	FX224854	69.40	69.60	.20	4	-	1.590	6.436
69.60	70.48	GABBRO Altered. As to 66.22 metres.	FX224855	69.60	70.48	.88	TR	-	.140	6.560
70.48	71.98	GABBRO Halo alteration. Mid to dark green fine grained gabbro cut by numerous thin dolomite quartz carbonate veins typically parallel to foliation. Weakly bleached, silicified and carbonatized at vein contacts. 1 centimetre quartz carbonate vein cutting older 3 centimetre carbonate quartz vein. Fyritic contacts.	FX224856	70.48	71.98	1.50	1	F50	.010	6.575
71.98	89.45	GABBRO Dark green fine grained well foliated weakly altered gabbro cut by numerous thin dolomite quartz carbonate veins with weakly altered locally fuchsitic contacts. Veins generally parallel to foliation. Minor yellow to tan leucoxene. 73.46 74.96 20 centimetre brecciated quartz carbonate vein. 77.90 79.27 30% veining with weakly bleached contacts. 79.27 80.73 As above. Contacts moderately bleached and fuchsitic. 16 centimetre quartz carbonate vein. 83.68 85.17 20 centimetre quartz carbonate dolomite vein.	FX224857	71.98	73.46	1.48	TR	F55	.005	6.582
			FX224858	73.46	74.96	1.50	TR	-	<.005	6.582
			FX224859	74.96	76.45	1.49	TR	F45	.290	7.014
			FX224860	76.45	77.90	1.45	TR	-	.005	7.021
			FX224861	77.90	79.27	1.37	TR	-	<.005	7.021
			FX224862	79.27	80.73	1.46	TR	-	.120	7.196
			FX224863	80.73	82.18	1.45	TR	-	.010	7.211
			FX224864	82.18	83.68	1.50	TR	F55	.020	7.241
			FX224865	83.68	85.17	1.49	TR	-	.120	7.420
			FX224866	85.17	87.65	2.48	TR	F50	.015	7.457
			FX224867	87.65	88.10	.45	TR	-	.770	7.803
			FX224868	88.10	89.45	1.35	1	F50	.015	7.824

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		88.10 89.45 Several oxidized hematitized quartz veins.								
89.45	89.66	VEIN Quartz carbonate vein with highly bleached tan-buff contacts and 8% fine grained pyrite.	FX224869	89.45	89.66	.21	8	-	1.190	8.074
89.66	91.61	GABBRO Dark to light green gabbro bleached adjacent to thin dolomite veinlets parallel to foliation. 89.66 90.74 Several quartz carbonate veins to 3 centimetres wide. 90.74 91.61 As above with 35% veining with weakly fuchsitic contacts. 5 centimetre quartz carbonate vein with tourmaline at 50 degrees to core axis with highly bleached light gray contacts and 5% pyrite over 5 centimetres.	FX224870 FX224871	89.66 90.74	90.74 91.61	1.08 .87	TR TR	F50 -	.055 .085	8.133 8.207
91.61	92.40	GABBRO Fine grained mid-green very weakly bleached gabbro or basalt with 5% thin carbonate veinlets.	FX224872	91.61	92.40	.79	TR	-	.090	8.278
92.40	93.05	VEIN Predominantly irregular brecciated carbonate quartz veining with highly bleached weakly fuchsitic gabbro inclusions.	FX224873	92.40	93.05	.65	TR	-	.620	8.681

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
93.05	97.84	GABBRO Light green fine grained weakly bleached and fuchsitic gabbro with 5 to 10% yellowish-green leucoxene. 10 to 15% millimetre to centimetre wide carbonate veinlets. 94.79 96.29 Darker green than above. 5% veinlets. 96.29 97.84 5% dolomite veinlets.	FX224874	93.05	94.79	1.74	TR	-	.005	8.690
			FX224875	94.79	96.29	1.50	TR	F60	<.005	8.690
			FX224876	96.29	97.84	1.55	TR	F58	<.005	8.690
97.84	131.25	GABBRO Dark green homogeneous fine grained to medium grained gabbro locally basaltic looking. Massive to locally weakly foliated. occasional thin carbonate dolomite or carbonate quartz vein. 97.84 98.34 10 centimetre discontinous quartz carbonate chlorite vein. 103.94 105.44 Quartz carbonate vein with weakly fuchsitic contacts parallel to core axis for 40 centimetres. 111.53 113.08 Highly irregular 5 centimetre quartz carbonate vein with fuchsitic contacts. 113.08 114.58 Two quartz veins to 3 centimetres wide and several thin veinlets with moderately fuchsitic contacts for 3 to 4 centimetres. 118.95 120.40 5 to 10% quartz carbonate veins with bleached silicified and carbonatized contacts for 7 to 10 centimetres. 123.29 124.43 Few dolomite carbonate veins with weakly fuchsitic contacts. 124.43 125.43 Top 25 centimetres is discontinous quartz carbonate veining with bleached silicified carbonatized and pyritic contacts. Section also contains 2 10	FX224877	97.84	98.34	.50	TR	-	<.005	8.690
			FX224878	98.34	100.89	2.55	TR	-	.010	8.715
			FX224879	100.89	102.39	1.50	TR	-	.005	8.723
			FX224880	102.39	103.94	1.55	TR	F55	.020	8.754
			FX224881	103.94	105.44	1.50	TR	-	<.005	8.754
			FX224882	105.44	106.98	1.54	TR	F50	<.005	8.754
			FX224883	106.98	108.48	1.50	TR	-	<.005	8.754
			FX224884	108.48	110.03	1.55	TR	-	<.005	8.754
			FX224885	110.03	111.53	1.50	TR	-	.010	8.769
			FX224886	111.53	113.08	1.55	TR	-	<.005	8.769
			FX224887	113.08	114.58	1.50	TR	-	.020	8.799
			FX224888	114.58	116.03	1.45	TR	-	<.005	8.799
			FX224889	116.03	117.45	1.42	TR	-	<.005	8.799
			FX224890	117.45	118.95	1.50	TR	-	<.005	8.799
			FX224891	118.95	120.40	1.45	TR	-	.005	8.806
			FX224892	120.40	121.90	1.50	TR	F60	.005	8.814
			FX224893	121.90	123.29	1.39	TR	-	<.005	8.814
			FX224894	123.29	124.43	1.14	TR	F45	.040	8.859
			FX224895	124.43	125.43	1.00	3	-	1.930	10.789
			FX224896	125.43	126.93	1.50	1	-	.035	10.842
			FX224897	126.93	128.32	1.39	TR	F50	<.005	10.842
			FX224898	128.32	129.82	1.50	TR	-	<.005	10.842
			FX224899	129.82	131.25	1.43	TR	F48	.005	10.849

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		centimetre veins with similar alteration.								
		125.43 126.93 Quartz carbonate vein 7 centimetres wide with very minor fuchsite alteration adjacent to contacts.								
		129.82 131.25 5% dolomite veinlets parallel to foliation.								
131.25	133.32	GABBRO								
		Weakly to moderately altered. Chloritic green to slightly bleached reddish-gray green fine grained very weakly to moderately hematitized and sericitized carbonatized gabbro. Cut by numerous pink orange dolomite veins. Minor leucoxene.	FX224900	131.25	132.08	.83	TR	-	.035	10.878
			FX224901	132.08	132.45	.37	3	F52	1.400	11.396
			FX224902	132.45	133.32	.87	2	-	.140	11.518
		131.25 132.08 Moderately hematitized rusty brown colour. 10% carbonate quartz veining.								
		132.08 132.45 As above with 45% dolomite quartz veining.								
		132.45 133.32 Weakly hematitized. 20 centimetre quartz carbonate vein with 3% pyrite. Sharp lower contact at 68 degrees to core axis.								
133.32	133.57	VEIN								
		Milky white quartz vein with one coarse grained pyrite cube. Silicified contacts with minor pyrite for less than 1 centimetre. Sharp lower contact 50 degrees to core axis.	FX224903	133.32	133.57	.25	TR	-	.280	11.588
133.57	149.51	GABBRO								
		Weakly altered as to 133.32 metres.	FX224904	133.57	134.75	1.18	TR	-	.020	11.611
		133.57 134.75 Dolomite quartz carbonate veining for 20 centimetres with weakly fuchsitic	FX224905	134.75	135.85	1.10	3	F55	.090	11.710
			FX224906	135.85	136.58	.73	TR	-	<.005	11.710

**********DESCRIPTION**********

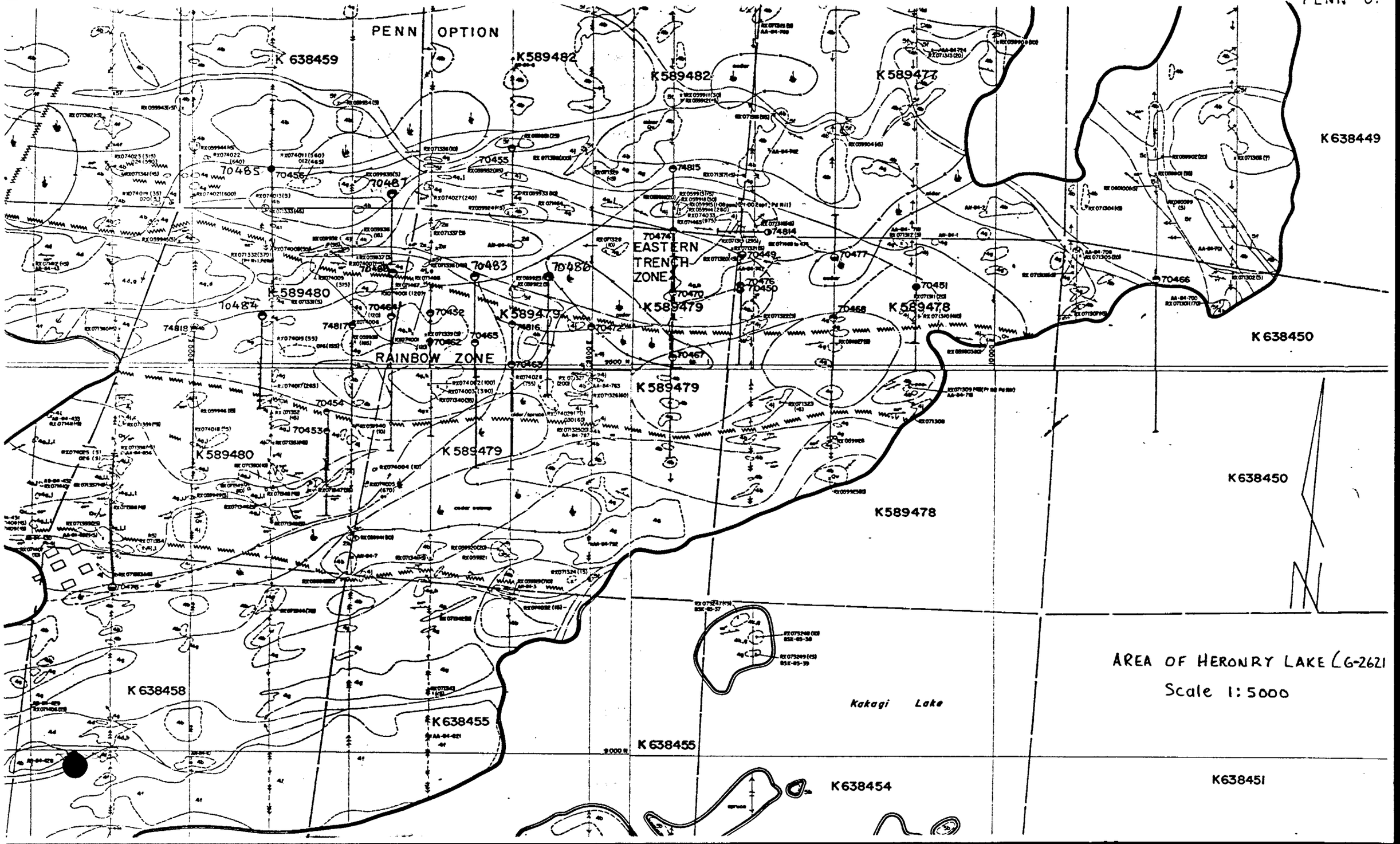
FROM M	TO M	
		contacts. Locally to 10% yellow green saussuritized feldspars.
134.75	135.85	Weakly to locally moderately hematitized carbonatized and silicified adjacent to quartz carbonate dolomite chlorite veins.
135.85	136.58	30% yellow-green saussuritized feldspars.
136.58	137.46	Strongly altered gabbro riddled with 65% carbonate dolomite quartz veining and cut by 17 centimetre milky white quartz vein at end of section. Vein contacts strongly carbonatized and hematitized and weakly fuchsitic.
137.46	138.76	15 to 20% dolomite quartz carbonate veining. Weakly to moderately hematitized.
138.76	139.58	Hematitized as above. 50% brecciated veining with contacts moderately fuchsitic and hematitized.
139.58	141.06	Hematitized as above. 15% carbonate dolomite quartz veins parallel to foliation
141.06	142.54	5% veining.
144.04	144.87	Strongly silicified and carbonatized. 20 to 25% veining and 8% fine grained to coarse grained disseminated pyrite.
145.66	145.98	Predominantly orange to tan highly irregular dolomite carbonate quartz vein.
147.97	148.42	20% irregular thin dolomite veining with strongly hematitized silicified and carbonatized contacts.
148.87	149.51	Several quartz dolomite veins with highly altered pyritic contacts for 5 to 7 centimetres.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX224907	136.58	137.46	.88	TR	-	.050	11.754
FX224908	137.46	138.76	1.30	TR	-	.040	11.806
FX224909	138.76	139.58	.82	TR	-	.025	11.827
FX224910	139.58	141.06	1.48	TR	F50	.010	11.842
FX224911	141.06	142.54	1.48	TR	F55	<.005	11.842
FX224912	142.54	144.04	1.50	2	F48	.015	11.864
FX224913	144.04	144.87	.83	B	-	.750	12.487
FX224914	144.87	145.66	.79	2	-	.105	12.569
FX224915	145.66	145.98	.32	TR	-	.015	12.574
FX224916	145.98	147.10	1.12	TR	F50	.015	12.591
FX224917	147.10	147.97	.87	TR	-	.010	12.600
FX224918	147.97	148.42	.45	4	-	.480	12.816
FX224919	148.42	148.87	.45	TR	-	.680	13.122
FX224920	148.87	149.51	.64	5	-	.375	13.362

**********DESCRIPTION**********

FROM M	TO M	
149.51	155.75	GABBRO
		As to 131.25 metres. Fine grained to medium grained dark green gabbro or basalt. Locally altered adjacent to thin quartz dolomite veins.
	150.91 152.76	Moderately hematitized contacts to 3 centimetre dolomite quartz vein. 3% pyrite at contacts.
	152.76 153.11	Strongly altered section. Moderately fuchsitic carbonatized and silicified adjacent to frequent 2 to 5 millimetre dolomite veinlets and 2 centimetre quartz carbonate vein.
	153.11 154.34	Becoming soft and dark green down hole. 10% irregular dolomite carbonate quartz veins.
	154.34 155.75	Fine grained dark green fairly soft possibly high-MgO basalt or gradational to ultramafic. Several quartz carbonate dolomite veins.
	155.75	Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX224921	149.51	150.91	1.40	TR	-	.020	13.390
FX224922	150.91	152.76	1.85	TR	-	.030	13.445
FX224923	152.76	153.11	.35	4	F55	.680	13.683
FX224924	153.11	154.34	1.23	TR	-	.010	13.696
FX224925	154.34	155.75	1.41	TR	-	<.005	13.696


PENN OPTION
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RAINBOW ZONE
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Kakagi Lake
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 8000.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-21-87
PROPERTY	: Penn	DEPARTURE	:E 4800.0 M	TOWNSHIP	: Hennessy	COMPLETED	: 02-22-87
BOREHOLE	: 70471-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Wynne
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K 777750	DRILL TYPE	: Super LY 38
DEPTH	: 138.7 M	LOGGED BY	: M. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is located 195 m south & 130 m west of Post #1.
12.19 m of water was encountered.
LEFT IN HOLE:Casing pulled from hole. Hole cemented.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
24.08		-55.50	123.52		-50.00	138.68		-50.00			

**********DESCRIPTION**********

FROM M	TO M	
.00	12.19	WATER
12.19	24.08	OVERBURDEN 24.08 Metres of casing drilled through sandy and gravelly overburden.
24.08	26.67	GABBRO Dark green to black. Medium grained to coarse grained, massive and very homogeneous. Trace quartz carbonate veinlets, locally iron carbonate stained. 2 to 3% iron carbonate. 25.51 26.67 1 centimetre thick quartz vein with iron

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222443	24.08	25.51	1.43	TR	-	<.005	.000
FX222444	25.51	26.67	1.16	TR	-	.040	.046

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PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
		carbonate stringers at periphries. Weakly altered halo with trace fuchsite. Contact with quartz gabbro is obscured by broken core								
26.67	29.26	QUARTZ GABBRO								
		Dark green. Medium grained to coarse grained with quartz eyes. Massive and homogeneous. Locally weakly pervasive brown iron carbonate. Scattered quartz carbonate veinlets with tan to light green alteration halos and 1 to 2% subhedral to cubic pyrite.	FX222445	26.67	27.93	1.26	1	-	<.005	.046
			FX222446	27.93	29.26	1.33	3	-	.025	.080
		26.67 27.93 1% finely disseminated pyrite in quartz carbonate stringers.								
		27.93 29.26 Quartz carbonate veinlets with 4 centimetre gradational alteration halo and trace fuchsite. 3% pyrite crystals in stringers and halo. Sharp upper contact with leucoxene bearing quartz gabbro.								
29.26	31.57	QUARTZ GABBRO								
		As at 26.67 to 29.26 with 10% tan leucoxene.	FX222447	29.26	30.24	.98	TR	-	<.005	.080
		30.24 31.57 Scattered quartz carbonate veinlets with tan to light green silicified alteration halos and 3 to 4% blebby and cubic pyrite in and adjacent to the veinlets and stringers. Trace fuchsite adjacent to veinlets and stringers. Sharp contact with possible tuff.	FX222448	30.24	31.57	1.33	4	-	.075	.179
31.57	44.77	TUFF								
		Andesite to dacite tuff. Dark green. Fine grained,	FX222449	31.57	32.91	1.34	2	-	<.005	.179

**********DESCRIPTION**********

FROM M	TO M	
		clasts obscured by alteration, but grades into obvious lapilli tuff. Foliated. Locally silicified, altered and bleached adjacent to quartz carbonate veins and veinlets. quartz carbonate veins are composite with chloritic stylolites, trace tourmaline and fuchsite. Mineralization consisting of subhedral to cubic pyrite crystals is concentrated adjacent to the veins and becomes less concentrated towards the margins of the alteration. Hard.
31.57	32.91	Locally dark green, but generally green to light gray. Locally iron carbonate stained stringers adjacent to quartz carbonate veinlets cross cutting foliation. Pale green alteration halo surrounds stringers. Trace fuchsite streaks adjacent to stringers. 1 to 2% pyrite crystals in alteration.
32.91	34.09	Pervasive alteration and quartz carbonate veinlets parallel to foliation. Cross cutting 2 centimetre thick composite quartz carbonate vein. Locally very iron carbonate weathered, (limonitic?) along fractures. 2 to 4% pyrite crystals.
34.09	34.67	Very altered and bleached light tan with 1% green fuchsite streaks. Iron carbonate stained quartz carbonate veinlets. Mottled coloration in alteration. 3 to 5% pyrite crystals. Alteration centred in 1 to 2 centimetre quartz carbonate vein.
34.67	35.58	Quartz carbonate vein at 34.90 metres, subparallel to core axis. Composite, chloritic with trace tourmaline crystals. Carbonate rims. Alteration halo, mottled

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222450	32.91	34.09	1.18	3	F15	.010	.191
FX222451	34.09	34.67	.58	4	F15	.045	.217
FX222452	34.67	35.58	.91	3	F15	.010	.226
FX222453	35.58	36.10	.52	2	F15	<.005	.226
FX222454	36.10	37.26	1.16	3	F15	.025	.255
FX222455	37.26	37.75	.49	3	F17	31.000	15.445
FX222456	37.75	38.47	.72	2	F24	.085	15.507
FX222457	38.47	39.97	1.50	TR	F24	.005	15.514
FX222458	39.97	41.25	1.28	TR	F19	<.005	15.514
FX222459	41.25	42.75	1.50	1	F21	.020	15.544
FX222460	42.75	43.71	.96	TR	F25	<.005	15.544
FX222461	43.71	44.77	1.06	2	F17	.075	15.624

FROM M	TO M	**********DESCRIPTION**********
		white to light green with green fuchsite streaks . 2 to 4% pyrite in stringers parallel to foliation in alteration, with scattered crystals in wallrock.
35.58	36.10	Quartz carbonate stringers parallel to foliation with pale green to tan, fuchsitic halos and 1 to 2 % pyrite crystals.
36.10	37.26	Scattered smokey gray, chloritic quartz carbonate vein and veinlets cross cutting quartz carbonate stringers with pale tan to light green fuchsitic halos. 2 to 3% pyrite crystals in stringers and halos.
37.26	37.75	Smokey gray, pyritic, chloritic, 2 centimetre thick quartz carbonate vein parallel to foliation, with gradational light green to white fuchsitic alteration halo. 3% pyrite.
37.75	38.47	Locally quartz carbonate stringers parallel to foliation with 10 centimetre thick alteration halo, mottled white, yellow, pale green, pale pink. Diffuse silicification. 1% fine tourmaline crystals. 1 to 2% disseminated pyrite crystals. Trace fuchsite.
38.47	41.25	Dark green to gray. Trace quartz carbonate stringers.
41.25	42.75	As above. Locally bleached and altered adjacent to quartz carbonate stringers with brown iron carbonate staining. 1% pyrite crystals in alteration.
42.75	43.71	5% brown iron carbonate stained quartz carbonate stringers parallel to weak

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********
		foliation.
	43.71	44.77 Strongly foliated, with stretched mafic clasts. Locally bleached and altered adjacent to parallel quartz carbonate stringers, with locally cross cutting iron carbonate stained quartz carbonate veinlets. 1% pyrite crystals. 10 centimetre gabbroic to dioritic clast with 2% pyrite cubes.
44.77	84.21	TUFF
		Andesitic to dacitic lapilli tuff. Dark green gray, poorly sorted fine grained to medium grained, matrix supported, with scattered, locally stretched dioritic (gabbroic) and dacitic clasts and cobbles up to 10 centimetres. Poorly foliated. Locally up to 5% quartz carbonate stringers. Locally dark green chloritic alteration halos adjacent to stringers. Locally brown iron carbonate staining in stringers and fractures. Trace pyrite.
	48.58	50.14 Locally stretched black mafic clasts.
	50.14	51.52 10% stretched black mafic clasts.
	52.46	53.77 Locally altered and bleached light green to tan halos adjacent to quartz carbonate stringers.
	56.78	58.28 Dark green to black chloritic fault gouge at 57.15 metres.
	58.28	62.56 Massive with no clasts.
	62.56	64.06 Locally black, fine grained, foliated, soft, possibly sheared tuff.
	64.06	65.44 Locally rusty iron carbonate quartz carbonate veinlet.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222462	44.77	46.20	1.43	TR	F30	<.005	15.624
FX222463	46.20	47.18	.98	TR	-	<.005	15.624
FX222464	47.18	48.58	1.40	TR	F19	<.005	15.624
FX222465	48.58	50.14	1.56	TR	F17	<.005	15.624
FX222466	50.14	51.52	1.38	TR	F17	<.005	15.624
FX222467	51.52	52.46	.94	TR	F15	.490	16.084
FX222468	52.46	53.77	1.31	TR	F15	<.005	16.084
FX222469	53.77	55.20	1.43	TR	F15	<.005	16.084
FX222470	55.20	56.78	1.58	TR	F15	<.005	16.084
FX222471	56.78	58.28	1.50	TR	F45	<.005	16.084
FX222472	58.28	59.44	1.16	TR	-	<.005	16.084
FX222473	59.44	61.12	1.68	TR	-	<.005	16.084
FX222474	61.12	62.56	1.44	TR	-	<.005	16.084
FX222475	62.56	64.06	1.50	TR	F65	<.005	16.084
FX222476	64.06	65.44	1.38	TR	F25	<.005	16.084
FX222477	65.44	66.94	1.50	TR	-	<.005	16.084
FX222478	66.94	68.28	1.34	TR	-	<.005	16.084
FX222479	68.28	69.76	1.48	TR	F25	<.005	16.084
FX222480	69.76	71.18	1.42	TR	F17	<.005	16.084
FX222481	71.18	72.68	1.50	TR	F17	<.005	16.084
FX222482	72.68	74.18	1.50	TR	F20	<.005	16.084

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU FPM	PPM*M
	66.94	68.28 Locally bleached and altered adjacent to quartz carbonate veinlet.	FX222483	74.18	75.67	1.49	TR	-	<.005	16.084
	69.76	71.18 Matrix to framework supported.	FX222484	75.67	77.11	1.44	TR	-	<.005	16.084
	71.18	72.68 Locally bleached and altered adjacent to quartz carbonate veinlet.	FX222485	77.11	78.59	1.48	TR	-	<.005	16.084
	77.11	78.59 Locally iron carbonate stained quartz carbonate veinlets.	FX222486	78.59	80.08	1.49	1	-	<.005	16.084
	78.59	80.08 1% blebby pyrite in matrix.	FX222487	80.08	81.53	1.45	TR	-	<.005	16.084
	81.53	83.03 1% blebby pyrite in matrix.	FX222488	81.53	83.03	1.50	TR	F18	<.005	16.084
	83.03	84.21 Sharp contact with dacitic ash tuff.	FX222489	83.03	84.21	1.18	TR	F20	<.005	16.084
84.21	90.27	ASH TUFF								
		Dark green, aphanitic to fine grained, massive, very homogeneous, 1% finely disseminated pyrite. 5% quartz carbonate veinlets parallel and cross cutting.	FX222490	84.21	85.30	1.09	1	-	<.005	16.084
	86.42	87.89 Very foliated. 15% boudinaged quartz carbonate chloritic stringers and veinlets, parallel to core axis, with minor cross cutting. Locally brown iron carbonate staining. Slightly altered to green with trace yellow streaks. locally folded. Soft. (Sheared?).	FX222491	85.30	86.42	1.12	1	-	<.005	16.084
	87.89	89.22 As above with local fault gouge and broken core at 89.21 metres obscuring transition into massive tuff.	FX222492	86.42	87.89	1.47	TR	F05	<.005	16.084
	89.22	90.27 As at 84.21 to 86.42 metres. Gradational into lapilli tuff.	FX222493	87.89	89.22	1.33	TR	F10	<.005	16.084
			FX222494	89.22	90.27	1.05	TR	-	.005	16.090
90.27	115.31	LAPILLI TUFF								
		As at 46.20 to 84.21 metres. Locally grades into	FX222495	90.27	91.75	1.48	TR	-	<.005	16.090

**********DESCRIPTION**********

FROM M	TO M	
		agglomerate.
91.75	93.25	Locally rusty iron carbonate quartz carbonate stringers.
94.60	96.06	1% blebby pyrite in quartz carbonate stringers. Locally tan alteration adjacent to quartz carbonate veinlets.
96.06	97.64	2% blebby pyrite in matrix.
97.64	98.98	Light green to tan bleached and altered adjacent to contorted quartz carbonate vein 1 centimetre thick.
98.98	100.45	Locally bleached and altered to light green adjacent to dolomitic chloritic quartz carbonate veinlets.
100.45	101.75	Large boulder clast, dark green to black. Very fine grained, massive, homogeneous very hard. Possible fragment of dacitic ash tuff, with scattered dolomitic chloritic quartz carbonate veinlets and veins.
101.75	110.53	As at 46.20 to 84.21 metres. Trace disseminated pyrite.
110.53	114.34	Locally bleached and altered to light tan adjacent to quartz carbonate stringers.
114.34	115.31	Dark green to black, very fine grained, massive, homogeneous, dacitic ash tuff. sharp gradational contact into gabbro.
115.31	138.68	GABBRO
		Dark green to light green - gray. Medium grained to coarse grained. Massive, very homogeneous. Chloritic. White to pale green feldspathic phenocrysts. Locally up

**********ANALYSES**********

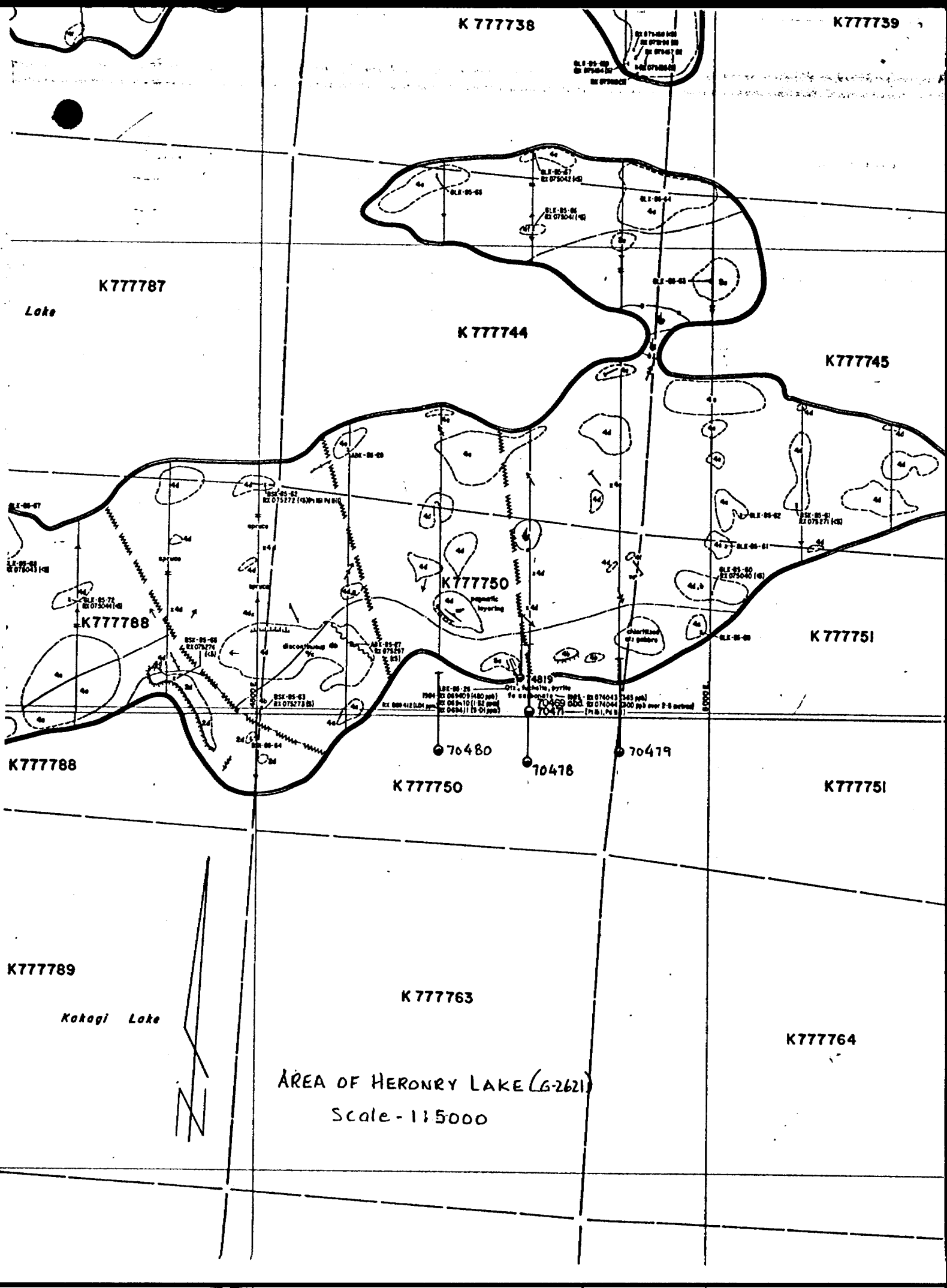
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222496	91.75	93.25	1.50	TR	-	<.005	16.090
FX222497	93.25	94.60	1.35	TR	-	<.005	16.090
FX222498	94.60	96.06	1.46	1	-	.005	16.097
FX222499	96.06	97.64	1.58	2	F44	<.005	16.097
FX222500	97.64	98.98	1.34	TR	-	<.005	16.097
FX222501	98.98	100.45	1.47	TR	-	.005	16.104
FX222502	100.45	101.75	1.30	TR	-	<.005	16.104
FX222503	101.75	102.98	1.23	TR	-	<.005	16.104
FX222504	102.98	104.63	1.65	TR	-	<.005	16.104
FX222505	104.63	106.07	1.44	TR	-	<.005	16.104
FX222506	106.07	107.67	1.60	TR	-	.005	16.112
FX222507	107.67	109.09	1.42	TR	-	<.005	16.112
FX222508	109.09	110.53	1.44	TR	-	<.005	16.112
FX222509	110.53	111.97	1.44	TR	-	<.005	16.112
FX222510	111.97	113.38	1.41	TR	-	<.005	16.112
FX222511	113.38	114.34	.96	TR	-	.005	16.117
FX222512	114.34	115.31	.97	TR	-	<.005	16.117
FX222513	115.31	116.79	1.48	TR	-	<.005	16.117
FX222514	116.79	118.29	1.50	TR	-	<.005	16.117
FX222515	118.29	119.86	1.57	TR	-	<.005	16.117

FROM M	TO M	**********DESCRIPTION**********
		to 1% pyrite adjacent to veinlets in alteration, adjacent to 5% chloritic quartz carbonate veinlets with dark green alteration halos.
115.31	116.79	Trace dolomitic quartz carbonate stringers.
116.79	118.29	Locally dolomitic quartz flooded gabbro. Pale orange to white.
118.29	119.86	Gradational coarse grained to fine grained - medium grained.
119.86	121.28	Locally coarse grained. Locally dolomitic quartz flooded with pale orange to white chloritic crystals.
121.28	122.72	1 centimetre thick chloritic quartz carbonate vein with 1% blebby pyrite in pale green alteration halo. Scattered quartz carbonate veinlets with dark green halos.
122.72	125.41	Gradational medium grained to fine grained with scattered coarse grained crystals. (Locally pegmatitic).
125.41	126.82	Mottled dark green and black with 1 centimetre thick smokey gray, slightly chloritic, dolomitic quartz carbonate vein. 1% disseminated pyrite.
126.82	130.93	As at 122.72 to 125.41 metres.
130.93	132.59	1% blebby pyrite occurring in smokey gray chloritic quartz carbonate streaks with 1 to 2% tan leucoxene.
132.59	133.96	As at 122.72 to 125.41 metres.
133.96	135.29	1.5 centimetre dolomitic quartz carbonate vein. Pale orange to white, translucent with green fuchsitic streaks adjacent to vein. 1% blebby pyrite in fuchsite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222516	119.86	121.28	1.42	TR	-	<.005	16.117
FX222517	121.28	122.72	1.44	1	-	<.005	16.117
FX222518	122.72	123.99	1.27	TR	-	<.005	16.117
FX222519	123.99	125.41	1.42	TR	-	<.005	16.117
FX222520	125.41	126.82	1.41	1	-	<.005	16.117
FX222521	126.82	128.21	1.39	TR	-	<.005	16.117
FX222522	128.21	129.54	1.33	TR	-	<.005	16.117
FX222523	129.54	130.93	1.39	TR	-	<.005	16.117
FX222524	130.93	132.59	1.66	1	-	<.005	16.117
FX222525	132.59	133.96	1.37	TR	-	<.005	16.117
FX222526	133.96	135.29	1.33	1	-	.010	16.130
FX222527	135.29	136.65	1.36	3	-	<.005	16.130
FX222528	136.65	138.68	2.03	TR	-	<.005	16.130

FROM M	TO M	**********DESCRIPTION**********
135.29	136.65	3 centimetre thick composite chloritic quartz carbonate vein with 1% dolomite. Locally 3% subhedral to cubic pyrite crystals in vein. Scattered fuchsitic quartz carbonate veinlets.
136.65	138.68	5% scattered fuchsitic quartz carbonate stringers and veinlets.
138.68		Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M



AREA OF HERONRY LAKE (G-2621)

Scale - 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 9550.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-22-87
PROPERTY	: Penn	DEPARTURE	:E 9500.0 M	TOWNSHIP	: Henonry	COMPLETED	: 02-26-87
BOREHOLE	: 70472-0	ELEVATION	: 1349.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K 589479	DRILL TYPE	: J.K. Smit 300
DEPTH	: 255.7 M	LOGGED BY	: M. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: Thin wall BQwl	ASSAYED FOR	: Gold

COMMENTS : Hole is collared 110 m south & 184 m west of post #1.

LEFT IN HOLE:3.49 m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
60.96		-44.50	121.92		-37.00	182.88		-36.50	218.85		-34.00

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
.00	3.49	OVERBURDEN 3.49 Metres of casing.								
3.49	28.97	PERIDOTITE Black. Fine grained to medium grained. Massive, homogeneous. Weakly foliated. 5% composite chloritic quartz carbonate veins, veinlets, and stringers with iron carbonate. 10% blebby iron carbonate. Trace to 1% tan leucoxene locally adjacent to quartz carbonate. Magnetic. Trace pyrite. 3.49 4.02 Locally boudinaged and microfaulted quartz carbonate veinlets. Slightly talcose. 4.02 7.05 Scattered rusty iron carbonate staining along	FX222529	3.49	4.02	.53	TR	F40	.005	.00
			FX222530	4.02	5.55	1.53	TR	F40	.020	.03
			FX222531	5.55	7.05	1.50	TR	F45	<.005	.033
			FX222532	7.05	8.60	1.55	TR	F45	<.005	.033
			FX222533	8.60	9.98	1.38	TR	F45	<.005	.033
			FX222534	9.98	11.46	1.48	TR	F50	.010	.048
			FX222535	11.46	13.20	1.74	TR	F50	<.005	.048
			FX222536	13.20	14.31	1.11	TR	F45	.005	.054
			FX222537	14.31	15.67	1.36	TR	F45	<.005	.054

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PAGE 1

FROM M	TO M	**********DESCRIPTION**********
		fractures.
7.05	8.60	As above with 2 centimetre thick composite chloritic quartz carbonate vein parallel to weak foliation.
9.98	11.46	10% quartz carbonate as composite chloritic veinlets and blow-outs, with trace blebby pyrite locally rimmed by tan leucoxene. Trace hematitic staining.
15.67	17.16	Locally hematitic staining in smokey gray chloritic quartz carbonate veinlets with trace blebby pyrite.
20.19	21.55	Locally folded composite chloritic quartz carbonate vein, weakly dolomitic with tan leucoxene at periphries. 1% pyrite and chalcopyrite.
24.52	27.47	7% composite chloritic quartz carbonate veinlets parallel and cross cutting.
27.47	28.97	Gradational contact from black, soft peridotite to moderately hard, dark green gabbro.
28.97	34.97	GABBRO
		Green, fine grained with scattered medium grained feldspathic phenocrysts. Massive, homogeneous, locally weakly foliated. 10 to 15% composite, chloritic quartz carbonate veins, veinlets, and stringers. Locally boudinaged, and parallel to foliation. 1 to 2% tan to pale yellow leucoxene adjacent to veins. Trace pyrite.
33.47	34.97	2 centimetre thick slightly dolomitic quartz carbonate vein with chloritic crystals. 3% pyrite crystals in wall rock adjacent to

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	********** ANALYSES ********** AU PPM	PPM*M
FX222538	15.67	17.16	1.49	TR	F40	<.005	.054
FX222539	17.16	18.66	1.50	TR	F50	<.005	.054
FX222540	18.66	20.19	1.53	TR	F40	<.005	.054
FX222541	20.19	21.55	1.36	TR	F60	<.005	.054
FX222542	21.55	23.05	1.50	TR	F48	<.005	.054
FX222543	23.05	24.52	1.47	TR	F50	<.005	.054
FX222544	24.52	26.07	1.55	TR	F55	.005	.061
FX222545	26.07	27.47	1.40	TR	F45	<.005	.061
FX222546	27.47	28.97	1.50	TR	F45	.005	.069
FX222547	28.97	30.45	1.48	TR	F45	<.005	.069
FX222548	30.45	32.04	1.59	TR	F50	.005	.077
FX222549	32.04	33.47	1.43	TR	F50	<.005	.077
FX222550	33.47	34.97	1.50	3	F50	.120	.257

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		quartz carbonate stringers. Sharp contact between unaltered gabbro and weakly altered gabbro, broken by a 6 centimetre thick quartz carbonate vein.								
34.97	43.48	GABBRO								
		Weakly altered. Light green gray. Fine grained, massive and homogeneous 5% dolomitic quartz carbonate veins and veinlets with bleached and altered, silicified pale gray halos. Locally weakly foliated. 2% pyrite crystals concentrated adjacent to veining, fining towards margins of halos. 15% iron carbonate. Slightly silicified. Hard.	FX222551	34.97	36.40	1.43	3	F47	.090	.386
			FX222552	36.40	37.87	1.47	3	-	.165	.628
			FX222553	37.87	39.36	1.49	2	-	.005	.635
			FX222554	39.36	40.81	1.45	2	-	.055	.715
			FX222555	40.81	42.30	1.49	3	-	.025	.752
			FX222556	42.30	43.48	1.18	3	-	.130	.906
		34.97 36.40 2 to 8 centimetre thick composite chloritic, dolomitic quartz carbonate veins, parallel to foliation with cross cutting translucent quartz veinlets, pale orange to white with black and green stringers of chlorite. Alteration halo adjacent to veins grades from pale yellow - tan to light gray green. 2 to 3% pyrite crystals concentrated adjacent to veining, thinning towards margins of halos.								
		36.40 37.87 Possible contact at 37.37 metres (alteration boundary?) 2 centimetre thick dolomitic quartz carbonate vein, with gossany iron carbonate. 3% pyrite in and adjacent to vein.								
		37.87 40.81 Locally vuggy chloritic, fuchsitic quartz carbonate veinlet with light gray alteration halo.								
		40.81 42.30 Boudinaged chloritic, weakly fuchsitic quartz carbonate vein 1 centimetre thick								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		parallel to core axis. Locally vuggy with 3% pyrite crystals in the vein and halo.								
42.30	43.48	3% pyrite crystals in and adjacent to quartz carbonate veinlets and halos. Sharp contact with feldspar porphyry dike.								
43.48	45.42	FELDSPAR PORPHYRY								
		Dike. Light tan to light gray. Very fine grained with 15% white feldspar phenocrysts. 5% black fine grained chloritic crystals. massive, very homogeneous. 5% finely disseminated pyrite. 5% iron carbonate blebs. Similar to foot of hole of 70463-0.	FX222557	43.48	44.51	1.03	1	-	.455	1.375
			FX222558	44.51	45.42	.91	5	-	.870	2.166
43.48	44.51	2 centimetre thick anastomosing quartz carbonate vein with 1% cubic pyrite.								
44.51	45.42	Trace chloritic stringers adjacent to 1.5 centimetre thick quartz carbonate vein. Trace fuchsite ?.								
45.42	58.75	GABBRO								
		Weakly altered. As at 34.97 to 43.48 metres. Light green to green. Alteration halo adjacent to quartz carbonate veins have up to 2% disseminated pyrite.	FX222559	45.42	47.01	1.59	2	F40	.055	2.254
			FX222560	47.01	48.46	1.45	1	-	.015	2.275
45.42	47.01	2 centimetre thick chloritic quartz vein with scattered calcareous stringers.	FX222561	48.46	49.90	1.44	1	-	<.005	2.275
			FX222562	49.90	51.51	1.61	TR	-	.010	2.292
51.51	55.79	Light green to green with alteration halos.	FX222563	51.51	53.01	1.50	TR	F36	.040	2.352
			FX222564	53.01	54.56	1.55	1	F44	.015	2.375
55.79	57.25	Alteration halo adjacent to 8 centimetre thick composite chloritic quartz carbonate vein. Bleached, tan with 3% disseminated pyrite. 2% blebby and cubic pyrite occurs in vein. Trace chalcopyrite.	FX222565	54.56	55.79	1.23	1	F33	.195	2.615
			FX222566	55.79	57.25	1.46	5	-	5.450	10.572
			FX222567	57.25	58.75	1.50	3	-	.200	10.872

FROM M	TO M	**********DESCRIPTION**********
	57.25 58.75	Locally bleached and silicified adjacent to quartz carbonate vein. 3% disseminated pyrite, trace chalcopyrite occurring in quartz carbonate and halo. Locally boudinaged quartz carbonate veinlets. Gradational into unaltered gabbro.
58.75	89.60	GABBRO
		Dark green, fine grained to medium grained. Massive, homogeneous. Minor alteration halos (<5%) adjacent to quartz carbonate veinlets and stringers, locally dolomitic.
	60.16 61.66	Locally up to 2% pyrite.
	61.66 64.73	Stronger alteration adjacent to 1.5 centimetre thick composite, chloritic quartz carbonate veins. bleached, silicified with 3% pyrite crystals. 1% pyrite in veins.
	64.73 66.03	Weaker alteration halos adjacent to 6 centimetre wide chloritic quartz carbonate veins, locally dolomitic. 1% pyrite.
	66.03 68.89	Locally stronger bleaching adjacent to weakly dolomitic quartz carbonate veins up to 2.5 centimetres thick with 2% pyrite cubes. Locally 2% pyrite in halo.
	68.89 70.39	5 to 7% weakly dolomitic quartz carbonate stringers with bleached, silicified light tan alteration. 1% scattered pyrite.
	70.39 71.97	6 centimetre thick dolomitic quartz carbonate vein and pale orange to tan alteration halo. locally 4% pyrite cubes in vein and alteration. Locally rusty iron

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222568	58.75	60.16	1.41	1	F50	.015	10.893
FX222569	60.16	61.66	1.50	2	F36	.015	10.915
FX222570	61.66	63.25	1.59	4	-	.545	11.782
FX222571	63.25	64.73	1.48	4	F30	.380	12.344
FX222572	64.73	66.03	1.30	1	F35	.020	12.370
FX222573	66.03	67.39	1.36	2	F35	.065	12.459
FX222574	67.39	68.89	1.50	2	-	.120	12.639
FX222575	68.89	70.39	1.50	1	-	.085	12.766
FX222576	70.39	71.97	1.58	2	-	.385	13.374
FX222577	71.97	73.73	1.76	1	-	.015	13.401
FX222578	73.73	75.23	1.50	TR	-	.005	13.408
FX222579	75.23	76.31	1.08	TR	-	<.005	13.408
FX222580	76.31	77.85	1.54	TR	-	<.005	13.408
FX222581	77.85	78.94	1.09	TR	-	<.005	13.408
FX222582	78.94	80.44	1.50	TR	-	<.005	13.408
FX222583	80.44	82.00	1.56	TR	-	<.005	13.408
FX222584	82.00	83.51	1.51	TR	F35	<.005	13.408
FX222585	83.51	85.04	1.53	TR	F30	.005	13.416
FX222586	85.04	86.55	1.51	TR	-	<.005	13.416
FX222587	86.55	88.09	1.54	TR	-	<.005	13.416
FX222588	88.09	89.60	1.51	1	-	<.005	13.416

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		carbonate blebs.								
	71.97	73.73 Mottled light to dark green. 5% quartz carbonate veins and veinlets.								
	73.73	75.23 As above with 5 centimetre thick quartz vein and 1% tourmaline crystals. 5% tan leucoxene.								
	75.23	80.44 Dark green, fine grained to medium grained. 10% chloritic quartz carbonate veins and veinlets. 1 to 2% tan leucoxene.								
	80.44	82.00 Locally bleached and silicified alteration halo adjacent to chloritic quartz carbonate vein with trace fuchsite. Trace pyrite.								
	82.00	83.51 Locally 2 centimetre thick dolomitic quartz carbonate vein.								
	83.51	85.04 3 centimetre composite chloritic dolomitic quartz carbonate veins.								
	88.09	89.60 Gradational dark green to green gray. Locally 1% pyrite in rusty, chloritic quartz carbonate vein.								
89.60	154.32	GABBRO								
		Locally weakly altered. As at 45.42 to 58.75 metres.	FX222589	89.60	91.13	1.53	TR	F30	<.005	13.416
	91.13	92.64 Pale green gray silicified alteration halos adjacent to quartz carbonate veinlets. 1 to 2% pyrite in halos.	FX222590	91.13	92.64	1.51	1	-	<.005	13.416
	92.64	94.18 Locally dolomitic veinlets.	FX222591	92.64	94.18	1.54	1	-	<.005	13.416
	94.18	95.66 10% white, chloritic quartz carbonate vein, weakly dolomitic with pale green, fuchsitic alteration halos. 3% fine pyrite crystals in halo, becoming coarser in slightly altered gabbro. 15% iron carbonate.	FX222592	94.18	95.66	1.48	3	-	.810	14.615
			FX222593	95.66	97.23	1.57	1	F44	.030	14.662
			FX222594	97.23	98.74	1.51	5	-	.765	15.817
			FX222595	98.74	100.28	1.54	TR	-	.015	15.840
			FX222596	100.28	101.79	1.51	TR	-	<.005	15.840
			FX222597	101.79	103.33	1.54	TR	-	<.005	15.840
			FX222598	103.33	104.85	1.52	TR	-	.005	15.848
	95.66	97.23 5% quartz carbonate veins and veinlets with	FX222599	104.85	106.38	1.53	TR	-	.025	15.886

FROM M	TO M	**********DESCRIPTION**********
		weak pale green to tan halos and 1% pyrite.
97.23	98.74	As above with 3% pyrite crystals in quartz carbonate veinlets and halos. 6 centimetre thick white, chloritic, slightly dolomitic quartz carbonate vein with locally 5% fine grained blebby pyrite. Weakly fuchsitic. 2% coarse grained pyrite cubes in gabbro.
98.74	104.85	Dark green with 5 to 7% chloritic quartz carbonate veinlets and stringers. Weakly altered adjacent to veinlets. 1 to 2% leucoxene.
104.85	106.38	Up to 6 centimetre thick quartz carbonate veins, locally dolomitic, locally brecciated.
106.38	110.93	As at 98.74 to 104.85 metres.
110.93	112.47	3 to 4% leucoxene. 15% calcareous blebs.
113.38	114.44	Locally 7% leucoxene at gradational sharp contact with alteration halo.
114.44	115.61	Quartz carbonate flooded gabbro. Dolomitic. Light brown to tan. White, green. 15% leucoxene. 10% chlorite crystals. Cross cutting quartz carbonate veinlets. Hard. Sharp lower contact with unaltered gabbro at 58 degrees to core axis
115.61	117.10	Locally altered and bleached adjacent to dolomitic quartz carbonate veinlets. Locally folded and contorted composite chloritic, dolomitic quartz carbonate veins up to 2 centimetres thick. Foliated.
117.10	118.57	Chloritic quartz veins with calcareous margins up to 2 centimetres thick. Locally 10% blebby calcite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX222600	106.38	107.89	1.51	TR	-	.005	15.894
FX219601	107.89	109.42	1.53	TR	-	<.005	15.894
FX219602	109.42	110.93	1.51	TR	-	<.005	15.894
FX219603	110.93	112.47	1.54	TR	-	<.005	15.894
FX219604	112.47	113.38	.91	TR	-	.010	15.903
FX219605	113.38	114.44	1.06	TR	-	.005	15.908
FX219606	114.44	115.61	1.17	TR	-	<.005	15.908
FX219607	115.61	117.10	1.49	TR	F60	<.005	15.908
FX219608	117.10	118.57	1.47	TR	-	<.005	15.908
FX219609	118.57	120.06	1.49	TR	-	<.005	15.908
FX219610	120.06	121.61	1.55	TR	-	<.005	15.908
FX219611	121.61	122.87	1.26	TR	-	<.005	15.908
FX219612	122.87	123.31	.44	TR	-	<.005	15.908
FX219613	123.31	124.65	1.34	TR	-	<.005	15.908
FX219614	124.65	126.18	1.53	TR	-	<.005	15.908
FX219615	126.18	127.71	1.53	TR	-	<.005	15.908
FX219616	127.71	129.22	1.51	TR	-	<.005	15.908
FX219617	129.22	130.76	1.54	TR	-	<.005	15.908
FX219618	130.76	132.28	1.52	TR	-	<.005	15.908
FX219619	132.28	133.81	1.53	TR	-	<.005	15.908
FX219620	133.81	135.33	1.52	TR	-	<.005	15.908
FX219621	135.33	136.85	1.52	TR	-	<.005	15.908
FX219622	136.85	138.37	1.52	TR	-	.015	15.931
FX219623	138.37	139.90	1.53	TR	-	.015	15.954
FX219624	139.90	141.43	1.53	TR	-	<.005	15.954
FX219625	141.43	142.95	1.52	TR	-	<.005	15.954
FX219626	142.95	144.48	1.53	TR	-	<.005	15.954
FX219627	144.48	146.00	1.52	TR	-	<.005	15.954
FX219628	146.00	147.53	1.53	TR	-	<.005	15.954
FX219629	147.53	149.05	1.52	TR	-	<.005	15.954
FX219630	149.05	150.58	1.53	TR	-	<.005	15.954
FX219631	150.58	152.10	1.52	2	-	.145	16.174

FROM M	TO M	**********DESCRIPTION**********
118.57	120.06	As at 107.89 to 110.93 metres.
120.06	121.61	Locally dolomitic quartz carbonate stringers.
122.87	123.31	Quartz vein. White, opaque, with calcite along fractures. Trace dolomite. 1% green chlorite. Contacts at 38 degrees to core axis.
123.31	124.65	Minor alteration and bleaching adjacent to chloritic quartz carbonate veinlet with weak dolomitization. 10% chloritic quartz veins with calcareous margins. 5% iron carbonate.
124.65	127.71	10% chloritic quartz carbonate veins and veinlets, locally weakly dolomitic. 5% calcareous stringers. 5% leucoxene.
127.71	129.22	Locally dark brown - red dolomitic stringers.
129.22	132.28	5% quartz carbonate veinlets and stringers in green, fine grained, massive gabbro. 5% leucoxene.
132.28	138.37	Dark green, fine grained, massive, homogeneous, with 5 to 10% quartz carbonate veins, veinlets, and stringers. Locally dolomitic veinlet. Weakly mottled dark green and green.
138.37	139.90	10% dolomitic quartz carbonate veins and veinlets with chlorite, locally fuchsitic. weak alteration halos.
141.43	142.95	10% fuchsitic quartz carbonate veins and veinlets with weak dolonitic margins.
142.95	146.00	As above with 5% fuchsitic quartz carbonate veins and veinlets.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219632	152.10	153.13	1.03	TR	-	.005	16.179
FX219633	153.13	153.80	.67	TR	-	<.005	16.179
FX219634	153.80	154.32	.52	TR	-	.050	16.205

FROM M	TO M	**********DESCRIPTION**********
	146.00 147.53	5% dolomitic quartz carbonate veinlets.
	147.53 149.05	Sharp contact between gabbro and dolomitic quartz carbonate veins up to 20 centimetres thick. Pale orange with black chloritic stylolites.
	149.05 150.58	Dolomitic quartz carbonate veins up to 3 centimetres thick with possible fuchsite.
	150.58 152.10	1 centimetre thick chloritic dolomitic quartz carbonate vein with light tan to pale green, weakly fuchsitic, bleached alteration halo, with 1% pyrite. 1% pyrite in gabbro. Interfingering coarse grained gabbro. Dark green with 7% pale yellow leucoxene. 5% dolomitic quartz carbonate stringers.
	152.10 153.13	5% dolomitic quartz carbonate veinlets and stringers.
	153.13 153.80	Coarse grained gabbro interfingering with fine grained gabbro, as at 150.58 to 152.10 metres.
	153.80 154.32	Pervasive iron oxide staining in gabbro and along fractures. Locally blue gray talcose serpentine along fractures. Sharp lower contact with coarse grained gabbro.
154.32	184.10	GABBRO
		Dark green. Coarse grained, massive, homogeneous. Weakly foliated. Up to 20% dolomitic quartz carbonate veins, veinlets and stringers. Pale orange with white carbonate crystals, and black chloritic stringers. Weakly altered bleached to a green - light gray. 2% disseminated pyrite

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219635	154.32	155.74	1.42	2	-	.050	16.276
FX219636	155.74	157.27	1.53	2	-	.025	16.314
FX219637	157.27	158.69	1.42	1	F55	<.005	16.314
FX219638	158.69	160.22	1.53	1	F55	<.005	16.314
FX219639	160.22	161.24	1.02	TR	-	<.005	16.314

FROM M	TO M	**********DESCRIPTION**********
		crystals in quartz carbonate and gabbro. Locally up to 10% streaky pale yellow leucoxene. 10% iron carbonate.
154.32	155.74	20% dolomitic quartz carbonate veins and stringers, with brecciated appearance. 2% scattered disseminated pyrite.
155.74	157.27	10% dolomitic quartz carbonate veins and stringers. Locally rusty iron oxide along fractures.
157.27	158.69	5% quartz carbonate veins and stringers weakly dolomitic. 10% streaky pale yellow leucoxene. Weakly foliated.
158.69	160.22	As above with locally cross cutting stringers and veins.
160.22	161.24	Dolomitic at margins of quartz carbonate vein.
162.74	164.29	3 centimetre thick carbonate quartz vein with 2% pyrite crystals. Weakly dolomitic.
164.29	165.79	Locally rusty iron carbonate.
165.79	168.85	Pervasive oxidized iron carbonate adjacent to very rusty fracture. Locally limonitic in 2 centimetre thick quartz carbonate vein
168.85	170.38	As at 164.29 to 165.79 metres.
173.43	174.95	Locally 10% chloritic quartz carbonate veins cross cutting and parallel with rusty oxidized iron carbonate.
174.95	176.48	Weakly bleached and altered. Pale green, fuchsitic alteration halo adjacent to 10% quartz carbonate veinlets with 2% pyrite.
176.48	178.00	2% pyrite crystals adjacent to 10% chloritic quartz carbonate veins up to 2 centimetres thick.
178.00	181.06	Very rusty oxidized iron carbonate along

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219640	161.24	162.74	1.50	TR	F43	<.005	16.314
FX219641	162.74	164.29	1.55	2	-	.085	16.446
FX219642	164.29	165.79	1.50	TR	-	.035	16.499
FX219643	165.79	167.33	1.54	TR	-	<.005	16.499
FX219644	167.33	168.85	1.52	TR	-	<.005	16.499
FX219645	168.85	170.38	1.53	TR	-	<.005	16.499
FX219646	170.38	171.90	1.52	TR	F46	<.005	16.499
FX219647	171.90	173.43	1.53	TR	F48	<.005	16.499
FX219648	173.43	174.95	1.52	TR	F50	<.005	16.499
FX219649	174.95	176.48	1.53	2	F50	<.005	16.499
FX219650	176.48	178.00	1.52	1	-	.060	16.590
FX219651	178.00	179.53	1.53	TR	-	<.005	16.590
FX219652	179.53	181.06	1.53	TR	-	<.005	16.590
FX219653	181.06	182.58	1.52	TR	-	.005	16.598
FX219654	182.58	184.10	1.52	2	-	.020	16.628

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		fractures parallel to core axis. Coarse grained gabbro grading into fine grained gabbro.								
	181.06 182.58	5% dolomitic quartz carbonate veinlets. Scattered rusty oxidized iron carbonate adjacent to fractures.								
	182.58 184.10	Interfingering peridotite, laced with contorted carbonate quartz veins and veinlets. rusty oxidized iron carbonate in fractures along upper contact. Lower contact subparallel to core axis. 2% fine disseminated pyrite in peridotite.								
184.10 191.34		BASALT								
		Dark green, fine grained, massive, equigranular, very homogeneous. 1 to 2% smokey gray quartz with carbonate rims replacing calcareous amygdules.	FX219655	184.10	185.62	1.52	TR	-	<.005	16.628
			FX219656	185.62	187.13	1.51	TR	-	<.005	16.628
			FX219657	187.13	188.71	1.58	TR	-	<.005	16.628
	188.71 190.21	10 centimetre of interfingering peridotite.	FX219658	188.71	190.21	1.50	TR	-	<.005	16.628
			FX219659	190.21	191.34	1.13	TR	-	<.005	16.628
191.34 192.68		LAMPROPHYRE								
		Mafic dike. Dark green to green. Fine grained with medium grained white calcareous and iron carbonate blebs. Hematitized quartz carbonate veinlets. Locally 1% scattered pyrite crystals. Dark green to black chill margins at upper contact (30 degrees) and lower contact (40 degrees). Hard.	FX219660	191.34	192.68	1.34	1	-	<.005	16.628
192.68 255.73		PERIDOTITE								

FROM M	TO M	**********DESCRIPTION**********
		Dark green to black. Medium grained, massive, homogeneous. Shot with carbonate veins and veinlets. 15 to 20% iron carbonate. 2 to 3% quartz carbonate veinlets. Bleached and altered to a pale green - gray with 5% blotchy pale yellow leucoxene. Locally up to 2% fine grained pyrite crystals.
194.77	196.49	Locally 2% fine grained disseminated pyrite adjacent to smokey gray quartz veinlets cross cutting carbonate veins.
199.33	200.86	Locally brecciated texture to carbonate veins and veinlets.
200.86	202.38	Locally hematitic staining along fractures.
202.38	203.91	Quartz carbonate veinlets cut by chloritic stringers. Locally hematitic staining along fracture. Locally 1% pyrite crystals.
205.44	206.96	Locally brecciated texture. Locally 1% pyrite crystals.
213.05	214.58	Centre of sample fuchsitic. Brecciated texture.
214.58	216.10	Weakly fuchsitic.
217.58	218.54	Bleached light tan to white with pale green fuchsite. Brecciated texture.
218.54	219.52	Weakly fuchsitic.
221.02	224.54	Locally bleached light gray with chloritic stringers.
224.54	226.05	5% slightly dolomitic quartz carbonate veinlets. Trace disseminated pyrite.
226.05	227.85	10% dolomitic quartz carbonate veins up to 3 centimetre thick parallel to weak foliated. Pink - brown with cross cutting black chloritic stringers.
227.85	229.35	As above with 15% dolomitic quartz

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219661	192.68	193.86	1.18	TR	-	<.005	16.628
FX219662	193.86	194.77	.91	TR	-	<.005	16.628
FX219663	194.77	196.49	1.72	TR	-	<.005	16.628
FX219664	196.49	197.81	1.32	TR	F55	<.005	16.628
FX219665	197.81	199.33	1.52	TR	-	<.005	16.628
FX219666	199.33	200.86	1.53	TR	-	.005	16.636
FX219667	200.86	202.38	1.52	TR	-	<.005	16.636
FX219668	202.38	203.91	1.53	1	-	.005	16.643
FX219669	203.91	205.44	1.53	TR	-	<.005	16.643
FX219670	205.44	206.96	1.52	1	-	.010	16.658
FX219671	206.96	208.48	1.52	TR	-	.030	16.704
FX219672	208.48	210.00	1.52	TR	-	<.005	16.704
FX219673	210.00	211.53	1.53	TR	-	<.005	16.704
FX219674	211.53	213.05	1.52	TR	F65	.005	16.712
FX219675	213.05	214.58	1.53	TR	-	.005	16.719
FX219676	214.58	216.10	1.52	TR	-	<.005	16.719
FX219677	216.10	217.58	1.48	TR	-	.010	16.734
FX219678	217.58	218.54	.96	TR	-	.010	16.744
FX219679	218.54	219.52	.98	TR	-	<.005	16.744
FX219680	219.52	221.02	1.50	TR	-	<.005	16.744
FX219681	221.02	222.26	1.24	TR	-	<.005	16.744
FX219682	222.26	223.78	1.52	TR	-	<.005	16.744
FX219683	223.78	224.54	.76	TR	-	<.005	16.744
FX219684	224.54	226.05	1.51	TR	-	.005	16.751
FX219685	226.05	227.85	1.80	TR	F50	.005	16.760
FX219686	227.85	229.35	1.50	TR	-	.015	16.783
FX219687	229.35	230.84	1.49	TR	F50	.015	16.805
FX219688	230.84	232.30	1.46	TR	-	.005	16.812
FX219689	232.30	233.54	1.24	1	F50	<.005	16.812
FX219690	233.54	235.05	1.51	TR	-	.010	16.827
FX219691	235.05	236.62	1.57	TR	F55	.005	16.835
FX219692	236.62	237.44	.82	TR	F35	<.005	16.835

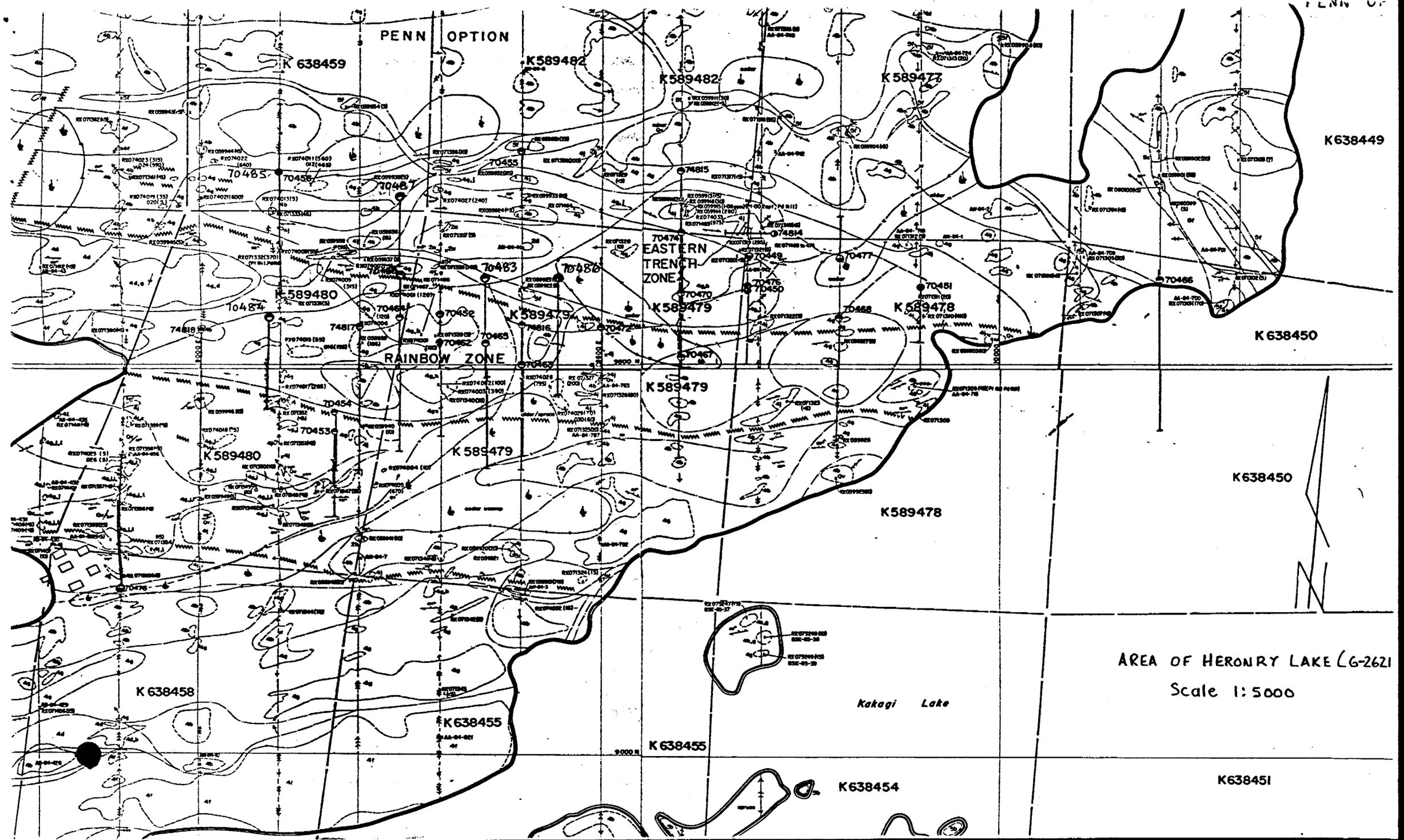
**********DESCRIPTION**********

FROM M	TO M	
		carbonate veins. Locally hematitic quartz vein 3 centimetres thick, with stringers.
229.35	230.84	5% weakly dolomitic quartz carbonate stringers parallel to weak foliation.
230.84	232.30	15% dolomitic quartz carbonate veins.
232.30	233.54	15% dolomitic quartz carbonate veins with 1% disseminated pyrite.
233.54	235.05	Slightly bleached and altered with 20% dolomitic quartz carbonate veins and veinlets, weakly fuchsitic.
235.05	236.62	Locally bleached and brecciated texture, weakly fuchsitic.
236.62	238.09	1 centimetre thick smokey quartz vein with carbonate rims. Fuchsitic, green alteration halos grading to light gray. Weakly to moderately fuchsitic throughout.
238.09	239.01	8 centimetre thick anastomosing quartz carbonate vein with fuchsitic halo, grading to light gray.
239.01	240.49	Weakly fuchsitic with 10% zoned quartz carbonate veins, rimmed with carbonate.
241.97	243.45	Locally 5% chloritic quartz carbonate vein with trace pyrite crystals.
243.45	244.90	Locally chloritic dolomitic quartz carbonate vein.
244.90	246.25	Slightly bleached and altered adjacent to quartz carbonate veinlets.
246.25	247.66	Dark gray, locally weakly bleached. 10% chloritic quartz carbonate veins and veinlets parallel to and cross cutting weak foliation. 1% blebby to cubic pyrite.
247.66	249.11	As above with 10% 8 centimetre thick

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
FX219693	237.44	238.09	.65	TR	-	<.005	16.835
FX219694	238.09	239.01	.92	TR	-	.020	16.854
FX219695	239.01	240.49	1.48	TR	F50	.020	16.883
FX219696	240.49	241.97	1.48	TR	F55	<.005	16.883
FX219697	241.97	243.45	1.48	TR	F55	<.005	16.883
FX219698	243.45	244.90	1.45	TR	F50	.005	16.891
FX219699	244.90	246.25	1.35	TR	F65	<.005	16.891
FX219700	246.25	247.66	1.41	1	F60	<.005	16.891
FX219701	247.66	249.11	1.45	1	F60	<.005	16.891
FX219702	249.11	250.58	1.47	TR	F55	<.005	16.891
FX219703	250.58	252.09	1.51	TR	F55	<.005	16.891
FX219704	252.09	253.51	1.42	TR	F50	<.005	16.891
FX219705	253.51	255.04	1.53	TR	F60	<.005	16.891
FX219706	255.04	255.73	.69	TR	F60	<.005	16.891

FROM M	TO M	**********DESCRIPTION**********
		composite chloritic quartz carbonate veins.
249.11	253.51	Dark gray to black. Locally weakly bleached adjacent to quartz carbonate veins and veinlets.
253.51	255.73	Black. 5 to 7% quartz carbonate veins and veinlets.
255.73		Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
70455
74815
70487
74814
70474
EASTERN
TRENCH
ZONE
70449
70477
70483
70486
70466
K589480
70484
70470
K589479
K589478
70468
70451
70450
74818
74816
70462
70463
K638450
RAINBOW ZONE
70467
K589479
70454
70453
K589480
K589479
K589478
K638450
70476
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

70473-0
PAGE 1

PROJECT	: Fort Knox JV	LATITUDE	:N 9200.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-23-87
PROPERTY	: Penn	DEPARTURE	:E 8400.0 M	TOWNSHIP	: Heronry	COMPLETED	: 02-26-87
BOREHOLE	: 70473-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Wynne
DIP	: -50.0	GRID BEARING	:	CLAIM #	: K63B462	DRILL TYPE	: Longyear S38
DEPTH	: 184.4 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 50 m S and 410 m W of number one post.
Casing pulled and hole cemented.
LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
48.77		-50.00	91.44		-48.00	121.92		-44.00	184.40		-44.50

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 26 1988
RECEIVED

KENO
MINING DIV.
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	********DESCRIPTION********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANB	********ANALYSES******** AU PPM	PPM*M
.00	48.77	OVERBURDEN Casing through 29.87 metres of water followed by 18.90 metres of clay and boulders.								
48.77	85.25	PERIDOTITE Black medium grained massive to weakly foliated very soapy soft peridotite. Weakly to strongly magnetic. Thin calcite carbonate veins with minor pyrite common. 48.77 50.19 Occasional large bleb of pyrite. 55.42 56.87 Few pyrite cubes in quartz carbonate vein. 73.13 74.82 Several carbonate quartz veins to 2 centimetres wide with minor pyrite. 74.82 77.72 2 centimetre carbonate vein at 45 degrees to	FX225142	48.77	50.19	1.42	1	F45	<.005	.000
			FX225143	50.19	51.57	1.38	TR	-	<.005	.000
			FX225144	51.57	53.65	2.08	TR	-	<.005	.000
			FX225145	53.65	55.42	1.77	TR	-	<.005	.000
			FX225146	55.42	56.87	1.45	1	F40	<.005	.000
			FX225147	56.87	58.37	1.50	TR	-	<.005	.000
			FX225148	58.37	59.64	1.27	TR	-	<.005	.000
			FX225149	59.64	61.14	1.50	TR	-	.045	.068

70473-0
PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		core axis. Olivine texture gives a foliated appearance at 72 degrees to core axis.	FX225150	61.14	62.96	1.82	TR	-	<.005	.068
			FX225151	62.96	64.46	1.50	TR	-	<.005	.068
79.27	80.77	Quartz carbonate vein 10 centimetres wide perpendicular to core axis.	FX225152	64.46	65.79	1.33	TR	-	<.005	.068
			FX225153	65.79	67.29	1.50	TR	-	<.005	.068
80.77	82.32	Quartz carbonate vein 3 centimetres wide perpendicular to core axis.	FX225154	67.29	68.69	1.40	2	F40	<.005	.068
			FX225155	68.69	70.19	1.50	TR	-	<.005	.068
82.32	83.78	Becoming non- magnetic down hole.	FX225156	70.19	71.63	1.44	TR	-	<.005	.068
83.78	85.25	Gradational down hole to gabbro. Becoming more siliceous and lighter gray in colour. Patchy carbonate hematite alteration increasing down hole.	FX225157	71.63	73.13	1.50	TR	-	<.005	.068
			FX225158	73.13	74.82	1.69	2	-	<.005	.068
			FX225159	74.82	77.72	2.90	TR	F72	<.005	.068
			FX225160	77.72	79.27	1.55	TR	F70	<.005	.068
			FX225161	79.27	80.77	1.50	TR	-	.010	.083
			FX225162	80.77	82.32	1.55	TR	-	<.005	.083
			FX225163	82.32	83.78	1.46	TR	-	<.005	.083
			FX225164	83.78	85.25	1.47	TR	-	<.005	.083
85.25	91.21	GABBRO								
		Mid- green fine grained to medium grained massive weakly to moderately carbonatized and weakly hematitized gabbro. Few quartz veins 1 to 4 centimetres wide with ankerite along contacts.	FX225165	85.25	86.76	1.51	TR	-	.070	.188
			FX225166	86.76	88.25	1.49	TR	-	<.005	.188
88.25	89.73	Quartz carbonate vein 5 to 6 centimetres wide. Highly irregular carbonate is hematitized.	FX225167	88.25	89.73	1.48	TR	F68	<.005	.188
			FX225168	89.73	91.21	1.48	TR	-	<.005	.188
89.73	91.21	Alteration increasing down hole.								
91.21	97.08	GABBRO								
		Altered. Rusty brick-red to brown fine grained pervasively hematitized and carbonatized gabbro with 25 to 45% coarse grained carbonate crystals. Numerous thin	FX225169	91.21	92.71	1.50	TR	-	<.005	.188
			FX225170	92.71	94.15	1.44	TR	-	.010	.203
			FX225171	94.15	95.65	1.50	TR	F60	.015	.225

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		chlorite stringers at 70 degrees to core axis. Carbonate quartz veins and patches common.	FX225172	95.65	97.08	1.43	TR	-	<.005	.225
		91.21 92.71 10% chloritic patches. Alteration increasing down hole.								
97.08	99.41	FAULT								
		Rusty oxidized locally clay altered gabbro as above. Between 97.54 and 99.06 only 80 centimetres of core recovered.	FX225173	97.08	99.41	2.33	TR	F75	.010	.248
99.41	109.86	GABBRO								
		Altered. As to 97.08 metres. Chlorite stringers not as abundant and now are at variable core angles giving a brecciated appearance. Essentially a hematitized coarse grained carbonate rock.	FX225174	99.41	101.07	1.66	TR	-	<.005	.248
			FX225175	101.07	102.47	1.40	TR	-	<.005	.248
			FX225176	102.47	104.03	1.56	TR	-	<.005	.248
			FX225177	104.03	105.44	1.41	TR	-	<.005	.248
		101.07 102.47 Smokey black quartz vein 6 centimetres wide	FX225178	105.44	106.99	1.55	TR	-	<.005	.248
		102.47 104.03 Numerous irregular patches and crystals of ankerite.	FX225179	106.99	108.39	1.40	TR	-	<.005	.248
			FX225180	108.39	109.86	1.47	TR	-	<.005	.248
		104.03 105.44 Two quartz carbonate veins 4 to 6 centimetres wide.								
		105.44 106.99 7 centimetre quartz carbonate vein.								
		106.99 108.39 5 centimetre quartz carbonate vein.								
		108.39 109.86 Sharp irregular lower contact to weakly hematitized.								
109.86	117.30	GABBRO								
		Altered. Brownish- dark green gabbro almost totally replaced by coarse grained carbonate. Very weakly hematitized. Cut by occasional 2 to 10 centimetre	FX225181	109.86	111.35	1.49	TR	-	.005	.256
			FX225182	111.35	112.90	1.55	TR	-	<.005	.256
			FX225183	112.90	114.30	1.40	TR	-	<.005	.256

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		hematitized quartz carbonate vein.	FX225184	114.30	115.85	1.55	TR	-	<.005	.256
		109.86 111.35 Few coarse grained pyrite cubes adjacent to hematitized carbonate vein.	FX225185	115.85	117.30	1.45	TR	-	.035	.307
		112.90 114.30 15% veining.								
		115.85 117.30 10% veining.								
117.30	117.85	GABBRO								
		Altered. Mid-green strongly carbonatized medium grained gabbro riddled with patches and veins of hematitized carbonate. Thin black chloritic stringers aligned at 42 degrees to core axis may represent foliation. 10% fine grained to coarse grained disseminated pyrite.	FX225186	117.30	117.85	.55	10	-	.085	.353
117.85	118.62	GABBRO								
		Altered. Pale yellow green strongly carbonatized moderately silicified medium grained gabbro with 10% yellow leucoxene. 20 centimetres of irregular carbonate veining locally weakly hematitized.	FX225187	117.85	118.62	.77	2	-	.070	.407
118.62	119.15	GABBRO								
		Altered. Weakly fuchsitic light to mid-green fine grained strongly carbonatized gabbro riddled with irregular carbonate veining locally hematitized.	FX225188	118.62	119.15	.53	2	-	.010	.413
119.15	122.43	GABBRO								
		Altered. Light to mid-green gabbro almost totally replaced by medium grained carbonate. Few quartz carbonate veins.	FX225189	119.15	120.33	1.18	TR	-	<.005	.413
			FX225190	120.33	121.17	.84	TR	-	<.005	.413
			FX225191	121.17	122.43	1.26	TR	-	.005	.419

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	120.33	121.17 As above but 40% hematitized carbonate black quartz veining.								
	121.17	122.43 Weakly fuchsitic. 10% veining.								
122.43	126.93	GABBRO								
		Altered. Dark green fairly soft strongly carbonatized medium grained gabbro with few 2 to 3 centimetre quartz carbonate veins.	FX225192	122.43	123.37	.94	TR	-	.035	.452
			FX225193	123.37	124.83	1.46	TR	-	.075	.561
			FX225194	124.83	126.20	1.37	TR	-	<.005	.561
			FX225195	126.20	126.93	.73	TR	-	.015	.572
	123.37	124.83 Lighter green colour. Several thin black locally dendritic quartz veins.								
	124.83	126.20 Riddled with dendritic black quartz veins giving brecciated appearance. Bleached to a tan colour adjacent to veins. Weakly fuchsitic adjacent to wispy carbonate veins.								
	126.20	126.93 Sharp irregular lower contact.								
126.93	127.93	FELDSPAR PORPHYRY								
		Aphanitic buff colored fairly soft strongly carbonatized and bleached rock with 7% disseminated pyrite. Upper contact has 60% pyrite over 2 centimetres. Sharp lower contact cut by black quartz vein.	FX225196	126.93	127.93	1.00	7	-	.125	.697
127.93	128.65	GABBRO								
		Altered. Strongly altered gabbro riddled with black fine grained quartz giving a brecciated appearance as to 126.20 metres. Altered gabbro inclusions locally leucoxene bearing and fuchsitic. Sharp irregular lower contact.	FX225197	127.93	128.65	.72	TR	-	.020	.712

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
128.65	129.25	FELDSPAR PORPHYRY As to 127.93 metres. Cut by few ankerite veins and black quartz veins. 10% fine grained disseminated pyrite to coarse grained patches. Sharp lower contact at 45 degrees to core axis.	FX225198	128.65	129.25	.60	10	C45	.085	.763
129.25	129.75	GABBRO As to 128.65 metres. Sharp lower contact 70 degrees to core axis.	FX225199	129.25	129.75	.50	TR	C70	.010	.768
129.75	130.00	FELDSPAR PORPHYRY As to 127.93 metres. Sharp lower contact 90 degrees to core axis.	FX225200	129.75	130.00	.25	10	C90	.025	.774
130.00	130.30	GABBRO As to 128.65 metres. Inclusions moderately fuchsitic and contain 10% yellow leucoxene.	FX225201	130.00	130.30	.30	2	-	.015	.778
130.30	131.10	VEIN Predominantly black quartz forming a stockwork breccia with highly altered inclusions of gabbro and occasional feldspar porphyry. Few ankerite quartz patches.	FX225202	130.30	131.10	.80	3	-	.015	.790
131.10	135.44	GABBRO Altered. Fine grained to medium grained yellow green	FX225203	131.10	132.12	1.02	TR	-	.005	.795

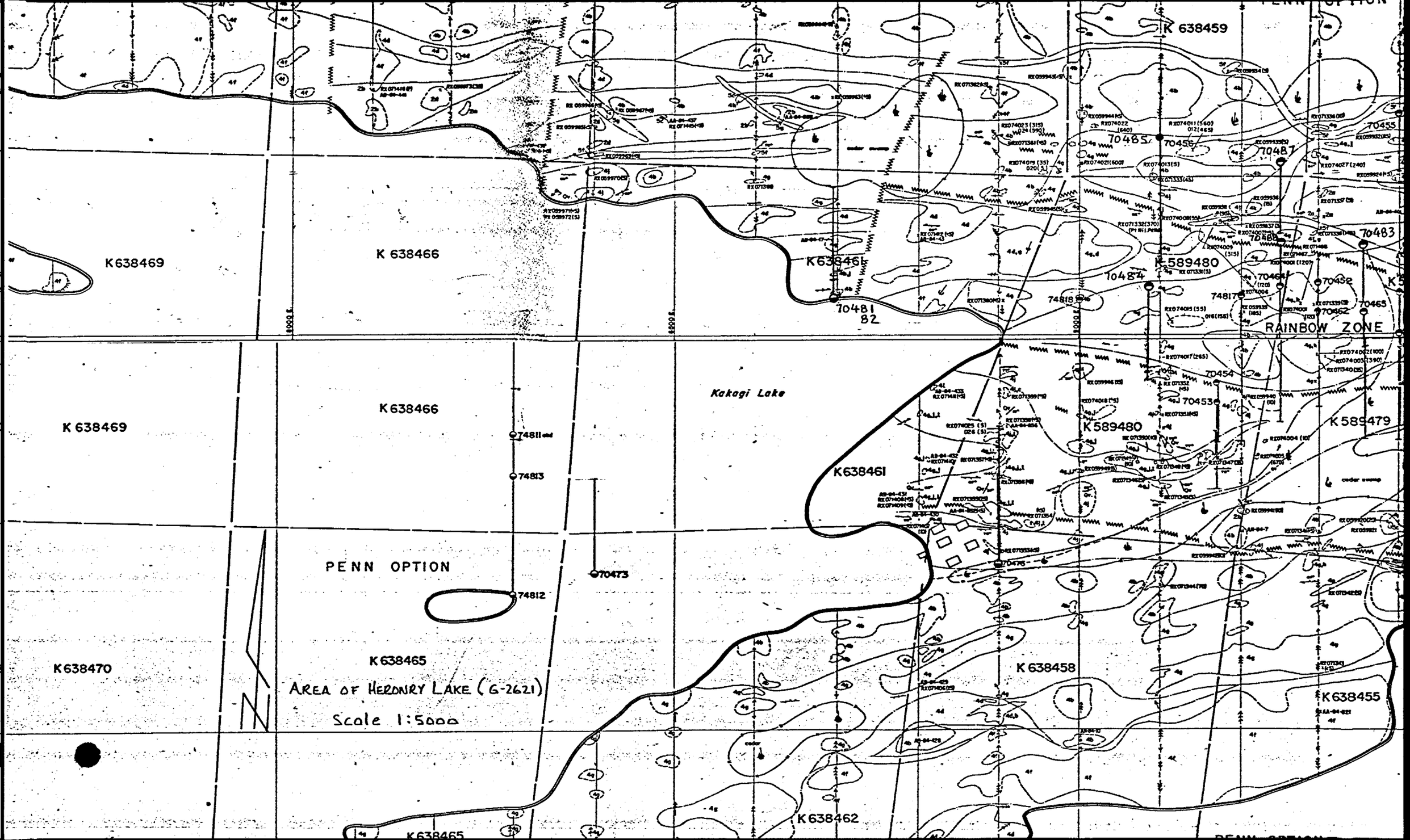
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		highly silicified and carbonatized gabbro with 15 to 20% yellow coarse grained leucoxene. Riddled with black fine grained quartz veins and coarse grained ankerite dolomite veins.	FX225204	132.12	132.66	.54	TR	-	.015	.804
			FX225205	132.66	133.69	1.03	TR	-	<.005	.804
			FX225206	133.69	134.46	.77	TR	-	<.005	.804
			FX225207	134.46	135.44	.98	TR	-	<.005	.804
		132.12 132.66 Minor veining.								
		134.46 135.44 Sharp lower contact at 45 degrees to core axis.								
135.44	135.73	GABBRO								
		Medium grained mid-green moderately carbonatized gabbro.	FX225208	135.44	135.73	.29	TR	-	<.005	.804
135.73	136.24	VEIN								
		Predominantly brecciated black fine grained quartz carbonate dolomite veining and patches in gabbro.	FX225208	135.73	136.24	.51	TR	-	<.005	.804
136.24	137.10	GABBRO								
		As to 135.73 metres. Cut by 15 centimetre black quartz white quartz carbonate vein.	FX225209	136.24	137.10	.86	TR	-	<.005	.804
137.10	151.15	GABBRO								
		Light gray green medium grained homogeneous weakly carbonatized gabbro cut by few ankerite quartz veins.	FX225210	137.10	138.68	1.58	TR	-	.010	.819
			FX225211	138.68	140.20	1.52	TR	-	<.005	.819
		149.35 151.15 Becoming fine grained and less altered down hole.	FX225212	140.20	141.73	1.53	TR	-	1.000	2.349
			FX225213	141.73	143.25	1.52	TR	-	<.005	2.349
			FX225214	143.25	144.78	1.53	TR	-	.020	2.380
			FX225215	144.78	146.30	1.52	TR	-	.010	2.395
			FX225216	146.30	147.83	1.53	TR	-	.105	2.556
			FX225217	147.83	149.35	1.52	TR	-	<.005	2.556

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
			FX225218	149.35	151.15	1.80	TR	-	<.005	2.556
151.15	156.93	BASALT								
		Fine grained dark green homogeneous massive basalt or chilled gabbro.	FX225219	151.15	152.55	1.40	TR	-	<.005	2.556
		153.92 155.78 Sharp lower contact cut by carbonate vein.	FX225220	152.55	153.92	1.37	TR	-	<.005	2.556
		155.78 156.93 Medium grained gabbroic looking basalt. Last 15 centimetres fine grained orange dolomite vein.	FX225221	153.92	155.78	1.86	TR	-	.005	2.565
			FX225222	155.78	156.93	1.15	TR	-	<.005	2.565
156.93	172.54	LAPILLI TUFF								
		Dacitic. Massive dark green fine grained dacitic matrix supported lapilli tuff. 10 to 20% sub rounded clasts typically granodioritic or intermediate volcanic looking. Chlorite clots in volcanic clasts common.	FX225223	156.93	158.31	1.38	TR	-	<.005	2.565
			FX225224	158.31	159.83	1.52	TR	-	<.005	2.565
			FX225225	159.83	161.24	1.41	TR	-	<.005	2.565
			FX225226	161.24	162.57	1.33	TR	-	<.005	2.565
		162.57 164.00 40% clasts.	FX225227	162.57	164.00	1.43	TR	-	<.005	2.565
		164.00 165.55 As above. Oxidized fracture at 166.0 metres	FX225228	164.00	165.55	1.55	TR	-	.050	2.643
		169.70 171.36 Possible 4 centimetre chloritic siltstone at 52 degrees to core axis at 171.20 metres	FX225229	165.55	166.95	1.40	TR	-	.035	2.692
			FX225230	166.95	168.33	1.38	TR	-	<.005	2.692
		171.36 172.54 Sharp lower contact 55 degrees to core axis	FX225231	168.33	169.70	1.37	TR	-	<.005	2.692
			FX225232	169.70	171.36	1.66	TR	-	1.000	4.352
			FX225233	171.36	172.54	1.18	TR	C55	<.005	4.352
172.54	174.28	LAMPROPHYRE								
		Fine grained mafic dike with chloritic clots stretched parallel to foliation up to 1 centimetre long. Sharp irregular lower contact cut by brecciated boudinaged dolomite vein.	FX225234	172.54	174.28	1.74	TR	F52	<.005	4.352

**********DESCRIPTION**********

FROM M	TO M	
174.28	184.40	LAPILLI TUFF
		As to 172.54 metres.
		180.20 181.52 Several oxidized fractures.
		184.40 Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX225235	174.28	175.64	1.36	TR	-	<.005	4.352
FX225236	175.64	177.27	1.63	TR	-	<.005	4.352
FX225237	177.27	178.70	1.43	TR	-	<.005	4.352
FX225238	178.70	180.20	1.50	TR	-	.005	4.359
FX225239	180.20	181.52	1.32	TR	-	<.005	4.359
FX225240	181.52	182.90	1.38	TR	-	.005	4.366
FX225241	182.90	184.40	1.50	TR	-	<.005	4.366


K638469
K638466
K638461
K638459
K589480
K589479
K638458
K638455
K638462
K638465
K638470
Kakagi Lake
PENN OPTION
RAINBOW ZONE
70481
82
70484
70485
70456
70487
70455
70483
70480
70482
70465
70462
70454
70453
70476
70473
74811
74813
74812
74817
74818
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

70474-0
PAGE 1

PROJECT	: Fort Knox JV	LATITUDE	:N 9670.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-25-87
PROPERTY	: Penn	DEPARTURE	:E 9600.0 M	TOWNSHIP	: Heronry	COMPLETED	: 02-28-87
BOREHOLE	: 70474-0	ELEVATION	: 1360.6 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Hydracore 28
DEPTH	: 157.0 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 85 m W of number one post.

LEFT IN HOLE:4.57 m casing

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
60.96		-43.00	118.87		-40.50	156.97		-38.15			

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
.00	2.85	OVERBURDEN Casing in overburden.								
2.85	6.23	BASALT Fine grained dark green massive basalt with 10% vessicles to 3 millimetres filled with quartz calcite. minor leucoxene. 2.85 4.36 Occasional thin calcite quartz veinlet.	FX224926 FX224927 FX224928	2.85 4.36 5.77	4.36 5.77 6.23	1.51 1.41 .46	TR TR TR	- - -	<.005 <.005 .010	.000 .000 .005
6.23	10.67	BASALT Fine grained dark green massive basalt. Occasional thin quartz calcite veinlet.	FX224928 FX224929	6.23 7.32	7.32 8.75	1.09 1.43	TR TR	- -	.010 .005	.016 .023

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PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	8.75	10.67 Gradational lower contact.	FX224930	8.75	10.67	1.92	TR	-	.010	.042
10.67	26.16	GABBRO								
		Fine grained to medium grained mid to dark green massive homogeneous gabbro.	FX224931	10.67	11.78	1.11	TR	-	.005	.047
		10.67 11.78 Becoming medium grained down hole. Occasional thin quartz calcite vein.	FX224932	11.78	13.21	1.43	TR	-	.015	.069
			FX224933	13.21	14.68	1.47	TR	-	.005	.076
			FX224934	14.68	16.13	1.45	TR	-	.005	.083
		17.60 19.14 Becoming fine grained down hole.	FX224935	16.13	17.60	1.47	TR	-	.010	.098
		19.14 20.61 Fine grained basaltic looking.	FX224936	17.60	19.14	1.54	TR	-	.005	.106
		20.61 22.13 Fine grained to medium grained gabbro.	FX224937	19.14	20.61	1.47	TR	-	.010	.121
		22.13 23.62 Fine grained gabbro.	FX224938	20.61	22.13	1.52	TR	-	.035	.174
		23.62 24.35 Fine grained to medium grained.	FX224939	22.13	23.62	1.49	TR	-	.015	.196
		24.35 26.16 Weakly foliated. Several thin quartz calcite veins. Sharp lower contact at 50 degrees to core axis.	FX224940	23.62	24.35	.73	TR	-	<.005	.196
			FX224941	24.35	26.16	1.81	TR	F45	.015	.223
26.16	26.87	LAMPROPHYRE								
		Light green gray fine grained soft mafic dike possibly lamprophyre with 15% chloritic clots. Sharp lower contact at 45 degrees to core axis.	FX224942	26.16	26.87	.71	TR	C45	.050	.259
26.87	109.19	GABBRO								
		Fine grained to medium grained dark green massive to locally weakly foliated adjacent to occasional quartz carbonate vein. Minor leucoxene. Locally basaltic looking.	FX224943	26.87	28.08	1.21	TR	-	.020	.283
			FX224944	28.08	29.50	1.42	TR	F45	.025	.318
			FX224945	29.50	31.65	2.15	TR	F35	.065	.458
			FX224946	31.65	33.11	1.46	TR	-	.015	.480
		28.08 29.50 Quartz carbonate vein with tourmaline 2 centimetres wide parallel to core axis for 45 centimetres. Foliation adjacent to vein	FX224947	33.11	34.61	1.50	TR	-	.015	.503
			FX224948	34.61	35.66	1.05	TR	-	.020	.524
			FX224949	35.66	36.37	.71	2	-	.030	.545

FROM M	TO M	**********DESCRIPTION**********
		parallel to core axis.
29.50	31.65	Two 4 to 5 centimetre wide quartz carbonate veins with tourmaline at 35 degrees to core axis.
35.66	36.37	Cut by two 11 to 12 centimetre wide quartz veins. One is milky white quartz and other is quartz carbonate vein with 4% pyrite.
45.77	47.27	Quartz carbonate vein 5 centimetres wide.
59.06	60.61	Quartz vein 4 centimetres wide.
70.88	72.35	Slightly bleached adjacent to 2.5 centimetre quartz carbonate vein.
78.35	79.90	5 centimetre quartz vein with ankerite at contacts. Wallrock bleached and pyritic for 5 millimetres. Vein at 45 degrees to core axis.
79.90	80.56	5% millimetre size patches of carbonate.
80.56	80.93	Three quartz carbonate veins to 3 centimetres wide with bleached pyritic contacts. Altered for 1 to 1.5 centimetres from vein contacts.
80.93	81.42	As to 80.56 metres. 3 centimetre quartz vein.
85.81	87.22	Ankerite quartz vein 4 centimetres wide.
100.54	102.00	1 to 2 centimetre boudinaged pink orange dolomite vein.
102.00	103.54	Several fine grained orange pink dolomite veins.
104.99	106.44	Several thin carbonate calcite quartz veins
106.44	107.89	Quartz calcite carbonate vein 2 centimetres wide parallel to core axis.
107.89	109.19	5% disseminated dolomite crystals concentrated around thin quartz dolomite veinlets.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX224950	36.37	36.75	.38	TR	-	.175	.611
FX224951	36.75	38.25	1.50	TR	-	.005	.619
FX224952	38.25	39.93	1.68	TR	-	.015	.644
FX224953	39.93	41.43	1.50	TR	-	<.005	.644
FX224954	41.43	42.84	1.41	TR	-	<.005	.644
FX224955	42.84	44.34	1.50	TR	-	<.005	.644
FX224956	44.34	45.77	1.43	TR	-	<.005	.644
FX224957	45.77	47.27	1.50	TR	-	.030	.689
FX224958	47.27	48.72	1.45	TR	-	.020	.718
FX224959	48.72	50.18	1.46	TR	-	.005	.725
FX225061	50.18	51.70	1.52	TR	-	.005	.733
FX225062	51.70	53.08	1.38	TR	-	.300	1.147
FX225063	53.08	54.67	1.59	TR	-	.015	1.171
FX225064	54.67	56.10	1.43	TR	-	.010	1.185
FX225065	56.10	57.59	1.49	TR	-	.010	1.200
FX225066	57.59	59.06	1.47	TR	-	.055	1.281
FX225067	59.06	60.61	1.55	TR	-	.010	1.296
FX225068	60.61	61.97	1.36	TR	-	.010	1.310
FX225069	61.97	63.46	1.49	TR	-	.015	1.332
FX225070	63.46	64.95	1.49	TR	-	.005	1.340
FX225071	64.95	66.37	1.42	TR	-	<.005	1.340
FX225072	66.37	67.92	1.55	TR	-	.005	1.348
FX225073	67.92	69.35	1.43	TR	-	.005	1.355
FX225074	69.35	70.88	1.53	TR	-	.030	1.401
FX225075	70.88	72.35	1.47	TR	-	.025	1.437
FX225076	72.35	73.95	1.60	TR	-	.010	1.453
FX225077	73.95	75.41	1.46	TR	-	.010	1.468
FX225078	75.41	76.96	1.55	TR	-	.010	1.483
FX225079	76.96	78.35	1.39	TR	-	.010	1.497
FX225080	78.35	79.90	1.55	1	-	.035	1.552
FX225081	79.90	80.56	.66	TR	-	.035	1.575
FX225082	80.56	80.93	.37	4	-	.060	1.597

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
			FX225083	80.93	81.42	.49	TR	-	.020	1.607
			FX225084	81.42	82.84	1.42	TR	-	.005	1.614
			FX225085	82.84	84.26	1.42	TR	-	<.005	1.614
			FX225086	84.26	85.81	1.55	TR	-	<.005	1.614
			FX225087	85.81	87.22	1.41	TR	F45	.010	1.628
			FX225088	87.22	88.77	1.55	TR	-	.005	1.636
			FX225089	88.77	90.32	1.55	TR	-	.010	1.651
			FX225090	90.32	91.70	1.38	TR	-	<.005	1.651
			FX225091	91.70	93.20	1.50	TR	-	<.005	1.651
			FX225092	93.20	94.57	1.37	TR	-	<.005	1.651
			FX225093	94.57	96.07	1.50	TR	-	<.005	1.651
			FX225094	96.07	97.54	1.47	TR	-	<.005	1.651
			FX225095	97.54	99.09	1.55	TR	-	.005	1.659
			FX225096	99.09	100.54	1.45	TR	-	<.005	1.659
			FX225097	100.54	102.00	1.46	TR	-	.010	1.674
			FX225098	102.00	103.54	1.54	TR	F60	.010	1.689
			FX225099	103.54	104.99	1.45	TR	-	.020	1.718
			FX225100	104.99	106.44	1.45	TR	-	.005	1.725
			FX225101	106.44	107.89	1.45	TR	-	.010	1.740
			FX225102	107.89	109.19	1.30	5	-	.030	1.779
109.19	109.44	VEIN Milky white quartz vein with coarse grained carbonate along contacts. Wallrock contacts bleached carbonatized silicified and pyritic.	FX225103	109.19	109.44	.25	3	-	.050	1.791
109.44	117.32	GABBRO As to 109.19.								
		111.08 112.78 5% tan-brown leucoxene.	FX225104	109.44	111.08	1.64	TR	-	.010	1.808
		112.78 113.72 About 50% ankerite quartz veining. Gabbro	FX225105	111.08	112.78	1.70	TR	F50	<.005	1.808
			FX225106	112.78	113.72	.94	TR	-	.010	1.817

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		slightly bleached.								
		113.72 114.85 Strongly foliated.	FX225107	113.72	114.85	1.13	TR	F45	.005	1.823
			FX225108	114.85	115.82	.97	TR	-	.010	1.832
			FX225109	115.82	117.32	1.50	TR	-	.010	1.847
117.32	117.60	GABBRO								
		Cut by 3 irregular quartz carbonate veins with minor tourmaline. Gabbro bleached to tan-green colour and is silicified and carbonatized. 6% disseminated pyrite.	FX225110	117.32	117.60	.28	6	-	2.500	2.547
117.60	128.30	GABBRO								
		As to 109.19.								
		120.29 121.92 30% carbonate quartz veining with slightly bleached and carbonatized contacts.	FX225111	117.60	118.87	1.27	TR	-	.015	2.566
			FX225112	118.87	120.29	1.42	TR	-	.010	2.581
			FX225113	120.29	121.92	1.63	TR	F40	.010	2.597
			FX225114	121.92	122.46	.54	TR	-	<.005	2.597
			FX225115	122.46	123.97	1.51	TR	-	.025	2.635
			FX225116	123.97	125.41	1.44	TR	-	.160	2.865
			FX225117	125.41	126.86	1.45	TR	-	<.005	2.865
			FX225118	126.86	128.30	1.44	TR	-	<.005	2.865
128.30	133.60	GABBRO								
		Sub-halo alteration. Fine grained dark gray to light green very slightly bleached weakly carbonatized gabbro. Few wispy diffuse carbonate patches and occasional quartz carbonate vein with bleached weakly fuchsitic contacts.	FX225119	128.30	129.80	1.50	TR	-	.010	2.880
			FX225120	129.80	131.20	1.40	TR	F40	.005	2.887
			FX225121	131.20	132.75	1.55	TR	-	<.005	2.887
			FX225122	132.75	133.60	.85	TR	F45	<.005	2.887
		132.75 133.60 Sharp lower contact at 40 degrees to core axis.								

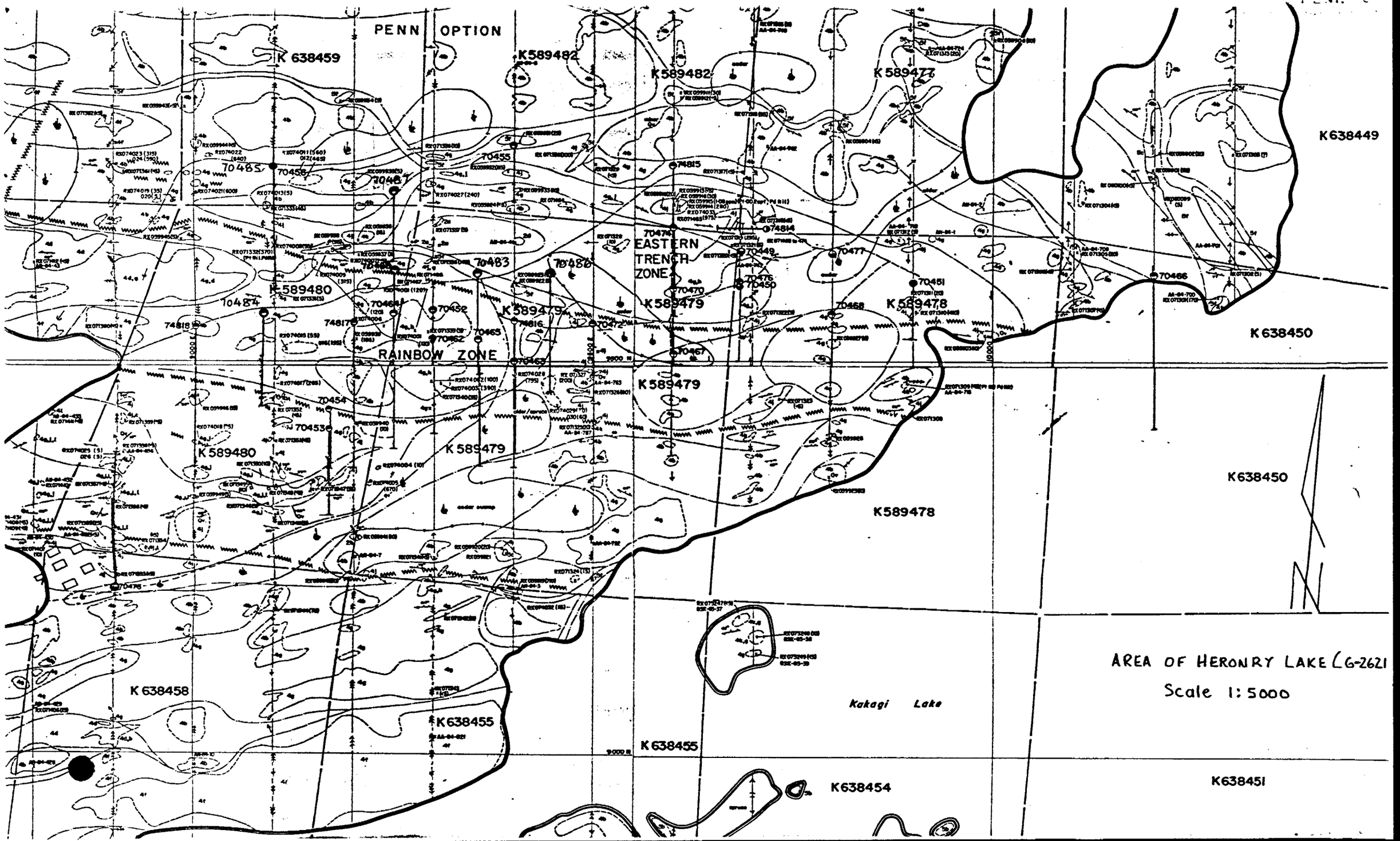
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
133.60	136.15	LAMPROPHYRE								
		Fine grained dark gray massive homogeneous mafic dike. Few chloritic clots.	FX225123	133.60	134.95	1.35	TR	-	<.005	2.887
		133.60 134.95 29 centimetre inclusion of weakly altered gabbro as to 133.60 metres at 134.28 metres. Upper contact of inclusion is 45 degrees and lower contact 60 degrees to core axis.	FX225124	134.95	136.15	1.20	TR	C30	<.005	2.887
		134.95 136.15 Sharp lower contact at 30 degrees to core axis.								
136.15	141.25	GABBRO								
		Halo alteration. Pale green weakly to moderately fuchsitic and carbonatized fine grained gabbro. Slightly more bleached than to 133.60 metres.	FX225125	136.15	137.73	1.58	TR	F48	.005	2.895
			FX225126	137.73	138.53	.80	TR	-	<.005	2.895
			FX225127	138.53	140.03	1.50	TR	-	<.005	2.895
		136.15 137.73 20% irregular quartz carbonate smokey quartz chlorite veins. Contacts moderately fuchsitic.	FX225128	140.03	141.25	1.22	TR	F40	.005	2.901
		137.73 138.53 Quartz carbonate vein 5 centimetres wide with very weakly fuchsitic contacts.								
141.25	142.17	VEIN								
		Predominantly quartz carbonate vein subparalled to core axis. Fine grained black chlorite tourmaline stringers. Gabbro contacts weakly to moderately fuchsitic.	FX225129	141.25	142.17	.92	TR	-	.005	2.906
142.17	146.27	GABBRO								
		Altered. Fine grained pale green moderately fuchsitic carbonatized silicified foliated gabbro. 5% yellow green	FX225130	142.17	143.72	1.55	TR	F48	<.005	2.906
			FX225131	143.72	145.21	1.49	TR	-	.040	2.965

FROM M	TO M	**********DESCRIPTION**********
		leucoxene or sericite. Numerous quartz carbonate veins.
	142.17 145.21	15% veining.
	145.21 145.48	Two 2 centimetre quartz veins with carbonate at contacts. 7 to 10 % yellow leucoxene or sericite. 5% fine grained disseminated pyrite.
	145.48 146.27	Tan-brown to pale green in colour. 15% quartz carbonate veins.
146.27	153.09	GABBRO
		Weakly altered. Light green fine grained slightly bleached weakly carbonatized gabbro cut by numerous thin dolomite carbonate veins typically parallel to foliation
	148.72 150.22	Few hematitized patches and stringers. 10 centimetre dolomite quartz vein.
	151.70 153.09	7% dolomite carbonate veins and quartz carbonate veins. Weakly hematitized.
153.09	155.60	GABBRO
		Altered. Fine grained orange pink carbonatized moderately hematitized gabbro riddled with brecciated dolomite smokey black quartz veins.
	154.50 155.60	Strongly hematitized. Local stockworks of black smokey quartz. Fuchsitic fractures.
155.60	156.97	GABBRO
		Weakly altered. As to 153.09. 55 centimetres of dolomite black quartz veining with fuchsitic stringers as to 155.60 metres.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX225132	145.21	145.48	.27	5	-	.425	3.080
FX225133	145.48	146.27	.79	TR	F50	.085	3.147
FX225134	146.27	147.29	1.02	TR	-	<.005	3.147
FX225135	147.29	148.72	1.43	TR	F58	<.005	3.147
FX225136	148.72	150.22	1.50	TR	-	<.005	3.147
FX225137	150.22	151.70	1.48	TR	F55	<.005	3.147
FX225138	151.70	153.09	1.39	TR	F50	<.005	3.147
FX225139	153.09	154.50	1.41	TR	-	<.005	3.147
FX225140	154.50	155.60	1.10	TR	-	<.005	3.147
FX225141	155.60	156.97	1.37	TR	F45	.010	3.161

FROM M	TO M	**********DESCRIPTION**********
		156.97 Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70458
70487
70455
74815
70483
70486
74814
EASTERN TRENCH ZONE
70449
70477
70476
70450
70451
70466
K589480
70484
70482
K589479
K589478
74818
74817
74816
70472
70468
70462
70465
70467
K638450
RAINBOW ZONE
K589479
70454
70453
K589480
K589479
K589478
K638450
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 9210.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-26-87
PROPERTY	: Penn	DEPARTURE	:E 8900.0 M	TOWNSHIP	:	COMPLETED	: 02-28-87
BOREHOLE	: 70475-0	ELEVATION	: 1338.3 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Wynne
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K 638458	DRILL TYPE	: Super LY 38
DEPTH	: 248.1 M	LOGGED BY	: M. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Hole is collared 60 m south & 85 m east of post #4.

LEFT IN HOLE:4.88 m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
60.96		-41.50	121.92		-38.50	183.88		-38.00	248.11		-34.50

**********DESCRIPTION**********

FROM M	TO M	
.00	4.88	OVERBURDEN 4.88 Metres of casing.
4.88	19.51	PERIDOTITE Dark green to black. Fine grained to medium grained. Massive, very homogeneous. Weakly foliated. 20% light brown to white feldspar phenocrysts. 1 to 2% dolomitic quartz carbonate veinlets and stringers. 2% scattered subhedral to cubic pyrite crystals up to 5 millimetres. 1 to 2% iron carbonate. 6.31 7.64 Locally slightly muddy fault gouge at 7.31 metres. Very iron oxidized with rusty iron carbonate blebs, adjacent to fractures and in

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX219707	4.88	6.31	1.43	2	F50	<.005	.000
FX219708	6.31	7.64	1.33	2	F55	<.005	.000
FX219709	7.64	9.15	1.51	1	F45	<.005	.000
FX219710	9.15	10.62	1.47	1	F45	<.005	.000
FX219711	10.62	12.11	1.49	2	F44	<.005	.000
FX219712	12.11	13.56	1.45	2	-	<.005	.000
FX219713	13.56	15.06	1.50	2	-	<.005	.000
FX219714	15.06	16.56	1.50	1	-	.005	.007
FX219715	16.56	17.95	1.39	1	-	<.005	.007

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**********DESCRIPTION**********

FROM M	TO M	
		brown quartz carbonate veins.
7.64	9.15	1% scattered pyrite.
9.15	10.62	Up to 2 centimetre thick rusty, oxidized quartz carbonate veins with trace limonitic stringers. Pale lime green alteration halo with rusty iron carbonate blebs. 1% scattered pyrite.
10.62	12.11	Locally rusty oxidized fractures with adjacent brown iron carbonate blebs. 5% brown carbonate veinlets. 2% scattered pyrite.
16.56	19.51	Gradational change from peridotite to gabbro. Dark green to gray.
19.51	36.23	GABBRO
		Dark green gray. Fine grained to medium grained. Massive, very homogeneous. Weakly foliated. 15% feldspar phenocrysts. 5% streaky leucoxene. Locally weakly altered and bleached to a gray adjacent to quartz carbonate veins. 5% composite quartz carbonate veins, locally slightly dolomitic with inclusions of chlorite. 1 to 2% scattered pyrite crystals. Locally silicified.
28.63	30.15	Weakly fuchsitic alteration adjacent to quartz carbonate veinlets and veins.
31.67	33.19	Locally fuchsitic quartz carbonate veinlets.
33.19	34.71	15% contorted quartz carbonate veins with inclusions of chlorite and wallrock.
34.71	36.23	Pervasive brown carbonate staining in gabbro and strong staining in chloritic quartz carbonate vein with tourmaline crystals.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX219716	17.95	19.51	1.56	1	F55	<.005	.007
FX219717	19.51	21.03	1.52	1	F50	<.005	.007
FX219718	21.03	22.55	1.52	2	-	.005	.015
FX219719	22.55	24.07	1.52	1	F55	<.005	.015
FX219720	24.07	25.59	1.52	1	-	<.005	.015
FX219721	25.59	27.11	1.52	1	F50	.005	.023
FX219722	27.11	28.63	1.52	1	-	<.005	.023
FX219723	28.63	30.15	1.52	1	F50	.005	.030
FX219724	30.15	31.67	1.52	2	-	<.005	.030
FX219725	31.67	33.19	1.52	2	F55	<.005	.030
FX219726	33.19	34.71	1.52	1	-	<.005	.030
FX219727	34.71	36.23	1.52	1	F45	<.005	.030

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
36.23	38.33	QUARTZ FELDSPAR PORPHYRY								
		Dike. Light brown gray, weakly green. Fine grained with white feldspar phenocrysts and quartz eyes. Massive, homogeneous. 10% feldspars with green alteration. Upper and lower contacts bounded by quartz carbonate veinlets. 3% scattered pyrite and crystals along fractures and quartz carbonate veinlets.	FX219728	36.23	37.75	1.52	3	-	.015	.053
		37.75 38.33 With interfingering wallrock. Sharp lower contact with fuchsitic gabbro. Chill margins	FX219729	37.75	38.33	.58	4	-	<.005	.053
38.33	46.52	GABBRO								
		As at 19.51 to 36.23 metres.	FX219730	38.33	38.92	.59	2	-	<.005	.053
		38.33 38.92 Locally fuchsitic alteration halo adjacent to cross cutting quartz carbonate vein 1.5 centimetres thick with 1% tourmaline crystals. Cross cutting pale orange dolomitic quartz carbonate vein parallel to core axis. 10% dolomitic quartz carbonate veinlets with weak fuchsitic halos. 2% scattered pyrite.	FX219731	38.92	40.44	1.52	2	F45	.005	.061
			FX219732	40.44	41.96	1.52	2	-	<.005	.061
			FX219733	41.96	43.48	1.52	3	-	<.005	.061
			FX219734	43.48	45.00	1.52	TR	-	<.005	.061
			FX219735	45.00	46.52	1.52	TR	-	<.005	.061
		38.92 40.44 7 centimetre thick carbonate vein cross cut by a 2 centimetre thick quartz carbonate vein with minor fuchsitic alteration and 2% disseminated pyrite. Locally iron oxidized staining along fracture and in quartz carbonate vein.								
		40.44 41.96 Contorted carbonate quartz dolomite vein 7 centimetres thick, locally fuchsitic alteration halos adjacent to quartz carbonate veins with dolomite. 2 to 3%								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		pyrite in halos.								
	41.96 43.48	3% pyrite in fuchsitic alteration halos adjacent to smokey gray to black quartz carbonate veinlets.								
	43.48 45.00	2 to 3% quartz carbonate veinlets with dolomite.								
	45.00 46.52	2 to 3% quartz carbonate, weakly dolomitic and fuchsitic veinlets.								
46.52	47.94	GABBRO Mottled black to light gray. Medium grained to coarse grained. Massive. Very homogeneous. 2 to 3% scattered quartz carbonate veinlets and stringers, locally chloritic. Very weakly altered. Trace pyrite. Moderately hard.	FX219736	46.52	47.94	1.42	TR	-	<.005	.061
47.94	59.52	GABBRO Weakly altered. As 46.52 to 47.94 metres, but pervasive pale green fuchsitic alteration, increasing in intensity towards quartz carbonate veins and veinlets. 5% slightly dolomitic quartz carbonate veins up to 1 centimetre thick with light tan to white alteration halos. 1% scattered pyrite crystals in gabbro, becoming more concentrated in halos.	FX219737	47.94	49.39	1.45	1	-	<.005	.061
			FX219738	49.39	50.19	.80	2	-	.005	.065
			FX219739	50.19	50.97	.78	1	-	<.005	.065
			FX219740	50.97	52.27	1.30	1	-	<.005	.065
			FX219741	52.27	53.03	.76	4	-	.010	.072
			FX219742	53.03	53.81	.78	1	-	<.005	.072
			FX219743	53.81	55.11	1.30	1	-	<.005	.072
			FX219744	55.11	56.55	1.44	1	-	<.005	.072
			FX219745	56.55	58.02	1.47	1	-	<.005	.072
			FX219746	58.02	59.13	1.11	1	-	<.005	.072
			FX219747	59.13	59.52	.39	3	-	<.005	.072
	49.39 50.19	Up to 15 centimetre thick white, opaque quartz carbonate veins with 5% iron carbonate and inclusions of chlorite. Hematitic staining in fractures at margins. Numerous cross cutting quartz carbonate veinlets. An extensive pale brown to white,								

FROM M	TO M	**********DESCRIPTION**********
		chloritic alteration halo with patchy green fuchsite and 1 to 2% disseminated and cubic pyrite concentrated in the fuchsite, exists around the vein.
50.19	50.97	Smokey gray quartz veinlets with carbonate rims and fuchsitic halos.
50.97	52.27	Locally microfaulted veinlets.
52.27	53.03	Intense green, fuchsitic alteration around 13 centimetre thick composite chloritic, weakly dolomitic quartz carbonate vein with smokey gray quartz stringers. 1% scattered pyrite crystals in vein, with 2 to 3% fine grained disseminated pyrite in halo.
53.03	53.81	Green to light gray alteration occurring around parallel 1.5 centimetre thick, weakly dolomitic quartz carbonate veins. Locally 1% pyrite in halo adjacent to cross cutting quartz carbonate vein. Locally 2% pale yellow leucoxene. Trace chalcopyrite.
53.81	55.11	Alteration grades from green to pervasive pale gray green. The gabbro is shot with parallel and cross cutting quartz carbonate veins and veinlets, weakly dolomitic, with inclusions of wallrock, chlorite and fuchsite. 2% pale yellow leucoxene. 1% scattered pyrite.
55.11	56.55	Cross cutting fuchsitic quartz carbonate veinlets.
56.55	58.02	Contorted quartz carbonate veins with numerous cross cutting carbonate veinlets and inclusions of wallrock. Dark gray to black margins on veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********
		58.02 59.13 Up to 15 centimetre thick quartz carbonate veins with inclusions of wallrock, chlorite, and fuchsite. 1% pyrite cubes occurring in inclusions and wallrock.
		59.13 59.52 Alteration grades from light green gray to emerald green pervasive fuchsite. Shot with quartz carbonate veins and veinlets. 2 to 3% disseminated pyrite.
59.52	60.48	QUARTZ FELDSPAR PORPHYRY
		Contacts at 90 degrees to core axis, bordered by smokey gray, chloritic quartz carbonate veins. Light brown gray, weakly green. Fine grained with white feldspar phenocrysts and quartz eyes. Massive, very homogeneous. 10% feldspars with green alteration. 1 to 2% scattered quartz carbonate stringers. 6 to 8% subhedral to cubic pyrite crystals. 5% iron carbonate.
60.48	74.24	GABBRO
		As at 47.94 to 59.52 metres. Gradational green fuchsitic alteration. Shot with contorted quartz carbonate veins and veinlets. 1% scattered pyrite.
		61.12 62.08 Pervasive pale green fuchsitic alteration. 3% fine grained disseminated pyrite.
		62.08 63.32 Increasing intensity of fuchsitic alteration adjacent to 70 centimetre thick composite quartz carbonate vein with inclusions of fuchsitic wallrock and tourmaline at the margins. Locally smokey gray. 1 to 2% scattered pyrite crystals.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219748	59.52	60.48	.96	6	-	.010	.082
FX219749	60.48	61.12	.64	1	-	<.005	.082
FX219750	61.12	62.08	.96	3	-	<.005	.082
FX219751	62.08	63.32	1.24	2	-	.005	.088
FX219752	63.32	64.48	1.16	TR	F55	<.005	.088
FX219753	64.48	65.38	.90	1	-	<.005	.088
FX219754	65.38	66.54	1.16	1	F65	<.005	.088
FX219755	66.54	67.67	1.13	1	-	<.005	.088
FX219756	67.67	68.44	.77	TR	-	<.005	.088
FX219757	68.44	69.13	.69	1	-	.005	.092
FX219758	69.13	70.63	1.50	1	-	.010	.107
FX219759	70.63	71.32	.69	2	F55	.005	.110

**********DESCRIPTION**********

FROM M	TO M	
63.32	64.48	Emerald green fuchsitic alteration adjacent to 20% contorted quartz carbonate veins with inclusions of light tan to white altered wallrock with light yellow leucoxene. Smokey gray quartz stringers and veinlets.
64.48	65.38	As above with 1% scattered pyrite in fuchsite
65.38	66.54	As above, but forest green weak fuchsite alteration. 1% disseminated pyrite.
66.54	67.67	Gradational pale emerald green fuchsitic alteration. 20% quartz carbonate veins with inclusions of light tan to white altered wallrock, and black chloritic stringers. 5% smokey gray stringers with adjacent 1% scattered pyrite.
67.67	68.44	As at 65.38 to 66.54 metres. Smokey gray quartz veins with tourmaline crystals.
68.44	69.13	As at 66.54 to 67.67 metres.
69.13	70.63	As at 65.38 to 66.54 metres. 10 centimetre thick white quartz vein with tourmaline crystals at margins. Rusty staining along fractures. 1% pyrite adjacent to fuchsitic quartz carbonate vein 2 centimetres thick.
70.63	71.32	Green, weak fuchsitic alteration. 2% scattered pyrite crystals.
71.32	72.85	As above with 20% white, opaque quartz veins with black tourmaline crystals at margins. 1% scattered pyrite.
72.85	74.24	10% white quartz carbonate veins and veinlets with 5% smokey gray cross cutting quartz carbonate veinlets. 1% pyrite crystals concentrated adjacent to veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219760	71.32	72.85	1.53	1	F60	<.005	.110
FX219761	72.85	74.24	1.39	1	F55	<.005	.110

**********DESCRIPTION**********

FROM M	TO M	
74.24	86.21	QUARTZ CARBONATE VEIN White, opaque, bullish with inclusions of wallrock and chlorite. Locally pale brown dolomite. 1 to 2% tourmaline crystals occurring along margins of inclusions. Wallrock varies from bleached buff to altered emerald green fuchsite with pale yellow leucoxene streaks. Vein becomes locally smokey gray. Trace pyrite. 74.24 75.80 15% forest green fuchsitic wallrock with 1% scattered pyrite crystals. Hematitic staining along fractures in quartz vein. 75.80 77.22 5% dark green wallrock inclusions. Possible siltstone inclusion occurring between quartz veins. 77.22 78.72 15% bleached light tan wallrock inclusions in chloritic rims. 78.72 79.25 Hematitic staining along fractures. 2 to 3% wallrock inclusions. 79.25 80.67 75% bleached buff to emerald green fuchsitic wallrock inclusions, rimmed with tourmaline. 80.67 81.66 As above with 25% wallrock inclusions. 81.66 84.72 As above with 50% wallrock inclusions, with 1% scattered pyrite. 84.72 86.21 As above with 30% wallrock inclusions.
86.21	87.98	GABBRO Pervasive green, weakly altered, fuchsitic gabbro. Fine grained to medium grained. Massive, homogeneous. 10 to 15% tan leucoxene. Stretched clots of chlorite. Weakly foliated. 10% locally dolomitic quartz carbonate veins

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX219762	74.24	75.80	1.56	1	-	<.005	.110
FX219763	75.80	77.22	1.42	TR	-	<.005	.110
FX219764	77.22	78.72	1.50	TR	-	.005	.117
FX219765	78.72	79.25	.53	TR	-	<.005	.117
FX219766	79.25	80.67	1.42	TR	-	.010	.132
FX219767	80.67	81.66	.99	TR	-	.005	.137
FX219768	81.66	83.21	1.55	1	-	.035	.191
FX219769	83.21	84.72	1.51	1	-	.010	.206
FX219770	84.72	86.21	1.49	TR	-	<.005	.206
FX219771	86.21	86.31	.10	TR	-	.010	.207
FX219772	86.31	87.98	1.67	4	-	.050	.291

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		veinlets, with 1% tourmaline crystals.								
		86.21 86.31 Trace pyrite concentrated adjacent to weakly iron oxidized fractures.								
		86.31 87.98 Quartz vein, with bleached wallrock inclusions, carbonate, weakly dolomitic , locally fuchsitic. 3 to 5% disseminated pyrite in inclusions. Locally rusty iron oxidized along fractures.								
87.98	89.01	QUARTZ FELDSPAR PORPHYRY								
		Dike. Green to tan, fine grained, with feldspar phenocrysts and quartz eyes. Weak fuchsitic stringers. 10% cross cutting quartz carbonate veins with 1% tourmaline crystals. Locally rusty iron oxidized at margins of vein. 3 to 4% disseminated pyrite and crystals in veins. Contacts bordered by quartz carbonate veins.	FX219773	87.98	89.01	1.03	4	-	.095	.388
89.01	117.69	GABBRO								
		As at 86.21 to 87.98 metres. Emerald green fuchsitic alteration, grading to unaltered forest green gabbro.	FX219774	89.01	90.53	1.52	1	-	.010	.404
		89.01 90.53 15% weakly dolomitic quartz carbonate veins with cross cutting quartz veinlets. Locally with tourmaline crystals. Trace to 1% pyrite crystals concentrated adjacent to tourmaline bearing veinlets.	FX219775	90.53	91.88	1.35	TR	-	.005	.410
			FX219776	91.88	93.32	1.44	1	-	<.005	.410
			FX219777	93.32	94.77	1.45	1	-	.045	.476
			FX219778	94.77	96.32	1.55	TR	-	.015	.499
			FX219779	96.32	97.43	1.11	TR	-	<.005	.499
			FX219780	97.43	98.19	.76	TR	-	<.005	.499
		90.53 91.88 As above, with locally black chloritic stringers in veins and wallrock. locally rusty iron oxidized and iron carbonate adjacent to fractures. Hematitic quartz	FX219781	98.19	99.30	1.11	TR	-	.005	.504
			FX219782	99.30	100.91	1.61	TR	-	.010	.520
			FX219783	100.91	102.43	1.52	TR	-	.005	.528
			FX219784	102.43	103.93	1.50	TR	-	.005	.536

**********DESCRIPTION**********

FROM M	TO M	
		carbonate veinlet. Trace pyrite crystals concentrated adjacent to veins.
91.88	93.32	Very weakly altered. Dark green with patchy fuchsitic alteration halos, adjacent to composite, chloritic dolomitic quartz carbonate veins. 1% pyrite crystals in halos.
93.32	97.43	Dark forest green. 5 to 7% weakly dolomitic. Trace pyrite crystals, locally a 2 centimetre pod of pyrite cubes and quartz carbonate occurs in the gabbro.
97.43	98.19	Weak fuchsitic alteration halos adjacent to quartz carbonate veinlets.
98.19	99.30	Weak fuchsitic alteration increasing in intensity towards 20 centimetre thick weakly dolomitic quartz carbonate vein with chloritic stringers. Trace pyrite in fuchsitic halo adjacent to vein.
99.30	100.91	As at 93.32 to 98.19 metres. Locally brown rusty iron oxide in fractures and staining quartz carbonate vein with fuchsite halo. Trace pyrite in halo.
100.91	102.43	As at 93.32 to 98.19 metres. Locally smokey gray quartz carbonate veinlets with halos.
102.43	108.50	As at 93.32 to 98.19 metres.
108.50	110.00	Locally rusty iron oxide along fracture filled by quartz carbonate.
110.00	111.50	Becoming weakly bleached to gray down hole. Locally pale green fuchsitic alteration halo with yellow leucoxene adjacent to composite chloritic quartz carbonate vein, with cross cutting rusty

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANB	AU PPM	PPM*M
FX219785	103.93	105.45	1.52	TR	-	.010	.551
FX219786	105.45	106.98	1.53	TR	-	<.005	.551
FX219787	106.98	108.50	1.52	TR	-	.015	.574
FX219788	108.50	110.00	1.50	TR	-	.005	.581
FX219789	110.00	111.50	1.50	TR	-	<.005	.581
FX219790	111.50	113.02	1.52	TR	-	<.005	.581
FX219791	113.02	114.54	1.52	1	-	.015	.604
FX219792	114.54	115.40	.86	TR	-	.010	.612
FX219793	115.40	116.15	.75	1	-	.015	.624
FX219794	116.15	116.84	.69	TR	-	.005	.627
FX219795	116.84	117.69	.85	1	-	<.005	.627

FROM M	TO M	**********DESCRIPTION**********
		iron oxide in fractures.
111.50	113.02	As above with 20% weakly fuchsitic quartz carbonate vein with trace tourmaline.
113.02	114.54	5% smokey gray quartz carbonate veinlets with fuchsitic halos and 1% pyrite.
114.54	115.40	Gradational pale green fuchsitic alteration
115.40	116.15	Shot with chloritic quartz carbonate veins and veinlets, with 2% tourmaline crystals at margins. Pale emerald green fuchsitic halos with trace to 1% pyrite.
116.15	116.84	Pervasive light green fuchsitic alteration. Gradational alteration from light emerald green fuchsite to a pale green gray bleached fuchsite. 30% quartz carbonate veins and veinlets with 1% tourmaline and 1% pyrite crystals.
117.69	129.83	GABBRO
		Strongly bleached. Pale gray to buff. Aphanitic to fine grained. Massive, very homogeneous. Patchy pale green fuchsite. 10 to 15% pale green fuchsitic blebs. Locally silicified. Iron carbonatized. 5% quartz stringers and veinlets. Locally weakly foliated. 1 to 2% scattered pyrite crystals.
120.74	122.19	Patchy pale green fuchsite.
123.65	125.63	Very pale buff with distinct pale green fuchsitic blebs. locally foliated.
125.63	126.44	Dark buff, mottled.
126.44	126.90	3 centimetre thick weakly dolomitic quartz carbonate vein with a 1 centimetre pyrite crystal clot. 5% chloritic, siliceous

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219796	117.69	119.24	1.55	1	-	.055	.712
FX219797	119.24	120.74	1.50	1	-	<.005	.712
FX219798	120.74	122.19	1.45	1	-	.010	.727
FX219799	122.19	123.65	1.46	1	-	.035	.778
FX219800	123.65	124.47	.82	1	-	.010	.786
FX219801	124.47	125.63	1.16	1	F50	.020	.809
FX219802	125.63	126.44	.81	1	-	.020	.826
FX219803	126.44	126.90	.46	2	-	.265	.947
FX219804	126.90	128.17	1.27	1	-	.035	.992
FX219805	128.17	129.83	1.66	1	-	.035	1.050

FROM M	TO M	**********DESCRIPTION**********
		blebs.
	128.17	129.83 Mottled dark buff with gradational weakening of bleaching, becoming greener.
129.83	140.11	GABBRO
		Weakly fuchsitic. As at 86.31 to 87.98 metres.
	131.56	132.28 Dark forest green, shot with 20% dolomitic quartz carbonate veins.
	132.28	133.52 Rusty iron oxidized fracture.
	133.52	135.78 Pervasive light green fuchsitic alteration, intensifying adjacent to composite , chloritic, dolomitic quartz carbonate veins and veinlets, with 2% adjacent pyrite.
	135.78	136.33 15 centimetre thick quartz carbonate vein with inclusions of wallrock, chlorite, and tourmaline, with adjacent fuchsitic alteration.
	136.33	137.81 Smokey gray to black quartz veins and veinlets with tourmaline and dolomitic. rims locally 2% pyrite in gray quartz carbonate veinlet.
	137.81	139.31 Locally rusty iron oxidized wallrock and quartz carbonate vein adjacent to fracture. Weakly bleached tan alteration halos adjacent to quartz carbonate veinlets and stringers.
	139.31	140.11 Hematitic staining in contorted composite, chloritic, dolomitic quartz carbonate vein with locally 2% pyrite. Gradational increase in hematitic staining.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219806	129.83	130.77	.94	TR	-	.020	1.069
FX219807	130.77	131.56	.79	TR	-	.010	1.077
FX219808	131.56	132.28	.72	TR	-	<.005	1.077
FX219809	132.28	133.52	1.24	2	-	.040	1.126
FX219810	133.52	135.03	1.51	2	-	.055	1.209
FX219811	135.03	135.78	.75	1	-	.010	1.217
FX219812	135.78	136.33	.55	TR	-	.030	1.233
FX219813	136.33	137.81	1.48	2	-	.055	1.315
FX219814	137.81	139.31	1.50	TR	-	<.005	1.315
FX219815	139.31	140.11	.80	2	-	.105	1.399

FROM M	TO M	**********DESCRIPTION**********
140.11	162.05	GABBRO
		Altered. Pale red brown with green fuchsitic blebs and streaks. Aphanitic to fine grained. Iron carbonatized. Dolomitic, locally silicified. 5 to 10% smokey gray to black quartz carbonate veins and veinlets. 5% subhedral to cubic pyrite, occurring in fuchsitic blebs and quartz carbonate veinlets.
	140.11 141.43	10% composite quartz carbonate veins with locally 1% tourmaline. Dolomitic with patchy smokey gray to black quartz veins and veinlets. 2% subhedral to cubic pyrite in veins with 3% pyrite crystals in wallrock. Locally hematitic staining ?.
	141.43 144.34	Locally pale green to white fuchsitic halos adjacent to dolomitic quartz carbonate vein 1 centimetre thick. 5% scattered subhedral to cubic pyrite.
	144.34 144.72	10% hematitic stringers adjacent to rusty brown vuggy quartz calcite veinlet. 3 to 4% scattered pyrite.
	144.72 145.83	Quartz carbonate vein. Composite chloritic with smokey gray quartz inclusions. Hematite clot staining along fractures. 3% pyrite in inclusions.
	145.83 147.22	Very altered gabbro shot with smokey gray quartz carbonate. Pale green tan to pink. Quartz carbonate is locally dolomitic. 6 to 8% finely disseminated pyrite and subhedral crystals.
	147.22 148.40	White fractured quartz rimmed by

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219816	140.11	141.43	1.32	5	-	.035	1.445
FX219817	141.43	142.54	1.11	5	-	.035	1.484
FX219818	142.54	144.34	1.80	5	-	.080	1.628
FX219819	144.34	144.72	.38	3	-	.020	1.635
FX219820	144.72	145.83	1.11	3	-	.010	1.647
FX219821	145.83	146.46	.63	7	-	.015	1.656
FX219822	146.46	147.22	.76	7	-	<.005	1.656
FX219823	147.22	148.40	1.18	5	-	<.005	1.656
FX219824	148.40	149.27	.87	3	-	.010	1.665
FX219825	149.27	150.15	.88	2	-	.005	1.669
FX219826	150.15	151.55	1.40	1	-	<.005	1.669
FX219827	151.55	153.08	1.53	TR	-	<.005	1.669
FX219828	153.08	154.48	1.40	2	-	<.005	1.669
FX219829	154.48	156.15	1.67	1	-	.005	1.677
FX219830	156.15	157.58	1.43	TR	-	<.005	1.677
FX219831	157.58	158.59	1.01	TR	-	<.005	1.677
FX219832	158.59	159.60	1.01	TR	-	<.005	1.677
FX219833	159.60	161.05	1.45	TR	-	<.005	1.677
FX219834	161.05	162.05	1.00	TR	-	<.005	1.677

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		tourmaline crystals. 5% disseminated pyrite. Altered light brown to buff gabbro with green fuchsitic patches.								
148.40	149.27	Altered fuchsitic gabbro with 5% smokey black quartz veinlets with dark brown carbonate rims. 5% dolomitic quartz carbonate veins 3 to 4% fine disseminated pyrite.								
149.27	150.15	Dolomitic, pyritic, bleached buff alteration halo adjacent to quartz carbonate vein with smokey black rims.								
150.15	151.55	Locally rusty iron oxidized fracture. Trace smokey gray quartz stringer with bleached light tan alteration halo.								
151.55	153.08	Pervasive weak fuchsitic alteration. Bleached buff alteration halos surrounding quartz carbonate stringers and veinlets. Trace pyrite crystals adjacent to veinlets.								
153.08	156.15	5% smokey gray quartz veinlets and stringers with buff alteration halos. 2% pyrite.								
156.15	157.58	4 centimetre thick dolomitic quartz carbonate vein with smokey gray quartz at margins. Bleached buff alteration halo. Gradationally becoming more dolomitic. 3 centimetre white quartz vein with dolomite and tourmaline at edges.								
157.58	158.59	Pervasive brown dolomite. 15% quartz carbonate veins with tourmaline crystals and dolomite. Locally with smokey gray quartz edges. Hematite in fractures.								
158.59	159.60	Composite chloritic, dolomitic quartz								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		carbonate vein with inclusions of wallrock smokey gray patches of quartz. Locally hematite in fractures.								
	159.60 161.05	Shot with brown dolomitic quartz carbonate. 10% smokey gray to black quartz. Fuchsitic stringers.								
	161.05 162.05	As above. Sharp lower contact with gabbro.								
162.05 171.91		GABBRO								
		Weakly fuchsitic. As at 129.83 to 140.11 metres.								
	162.05 163.43	Locally 7% dolomitic quartz carbonate veins and veinlets with bleached buff alteration halos , locally smokey gray quartz.	FX219835	162.05	163.43	1.38	TR	-	<.005	1.677
			FX219836	163.43	164.95	1.52	TR	-	<.005	1.677
	163.43 164.95	Smokey gray 1.5 centimetre thick quartz vein with dolomitic edges. 7% weakly dolomitic quartz carbonate vein and veinlets, with buff alteration halos.	FX219837	164.95	166.37	1.42	TR	-	<.005	1.677
			FX219838	166.37	167.89	1.52	TR	-	<.005	1.677
			FX219839	167.89	169.40	1.51	1	-	<.005	1.677
	166.37 167.89	Locally rusty iron oxidized carbonate adjacent to fractures.	FX219840	169.40	170.92	1.52	TR	-	<.005	1.677
			FX219841	170.92	171.91	.99	TR	-	<.005	1.677
	167.89 169.40	Locally fuchsite alteration halo surrounding quartz carbonate veins with dolomitic quartz carbonate stringers and blow-outs of smokey gray quartz. 10% weakly dolomitic quartz carbonate vein with inclusions of fuchsitic wallrock with 1% disseminated pyrite.								
	169.40 170.92	Alteration and buff bleaching with tourmaline crystals surrounding 4 centimetre thick smokey quartz vein, with stringers and veinlets.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	170.92	171.91 Fuchsitic alteration decreasing down hole , becoming dark forest green. locally fuchsitic halo surrounding cross cutting weakly dolomitic quartz carbonate veinlet.								
171.91	224.55	GABBRO								
		As at 19.51 to 36.23 metres. dark forest green, fine grained to medium grained. Massive, homogeneous with 10% parallel dolomitic quartz carbonate veinlets. Weakly foliated. Weak fuchsitic alteration halos adjacent to quartz carbonate stringers.	FX219842	171.91	173.43	1.52	TR	F55	<.005	1.677
			FX219843	173.43	174.95	1.52	TR	-	<.005	1.677
			FX219844	174.95	176.48	1.53	TR	-	<.005	1.677
			FX219845	176.48	178.00	1.52	TR	-	<.005	1.677
			FX219846	178.00	179.53	1.53	TR	-	<.005	1.677
			FX219847	179.53	181.05	1.52	TR	-	.005	1.685
			FX219848	181.05	182.58	1.53	TR	-	<.005	1.685
			FX219849	182.58	184.10	1.52	TR	F65	.005	1.693
			FX219850	184.10	185.53	1.43	TR	-	<.005	1.693
			FX219851	185.53	187.15	1.62	TR	-	<.005	1.693
			FX219852	187.15	188.67	1.52	TR	-	<.005	1.693
			FX219853	188.67	190.20	1.53	TR	F60	<.005	1.693
			FX219854	190.20	191.72	1.52	TR	-	<.005	1.693
			FX219855	191.72	193.24	1.52	TR	-	<.005	1.693
			FX219856	193.24	194.76	1.52	TR	-	<.005	1.693
			FX219857	194.76	196.29	1.53	TR	F55	<.005	1.693
			FX219858	196.29	197.83	1.54	TR	-	.010	1.708
			FX219859	197.83	199.34	1.51	TR	-	.005	1.716
			FX219860	199.34	200.57	1.23	TR	-	<.005	1.716
			FX219861	200.57	201.39	.82	TR	-	.005	1.720
			FX219862	201.39	202.39	1.00	TR	-	<.005	1.720
			FX219863	202.39	203.91	1.52	TR	-	<.005	1.720
			FX219864	203.91	205.43	1.52	TR	-	<.005	1.720
			FX219865	205.43	206.95	1.52	TR	F55	<.005	1.720
			FX219866	206.95	208.48	1.53	TR	-	<.005	1.720
	176.48	178.00 Locally rusty iron oxidized fractures.								
	184.10	185.53 15% cross cutting and parallel dolomitic quartz carbonate veinlets and veins.								
	185.53	187.15 Increasing pervasive brown hematitic and iron carbonate staining.								
	187.15	188.67 Intense rusty oxidized iron carbonate and hematite adjacent to a series of parallel fractures.								
	188.67	190.20 15% dolomitic quartz carbonate veins and hematitic staining.								
	190.20	194.76 Weak hematitic staining. 15% dolomitic quartz carbonate veinlets and stringers.								
	194.76	196.29 5% dolomitic quartz carbonate veins.								
	197.83	199.34 15% dolomitic quartz carbonate veins and veinlets, locally smokey gray, with inclusions of wallrock. Increasing brown dolomite content.								
	199.34	200.57 Very dolomitic. Red brown hematitic staining.								
	200.57	201.39 Intense hematitic staining adjacent to								

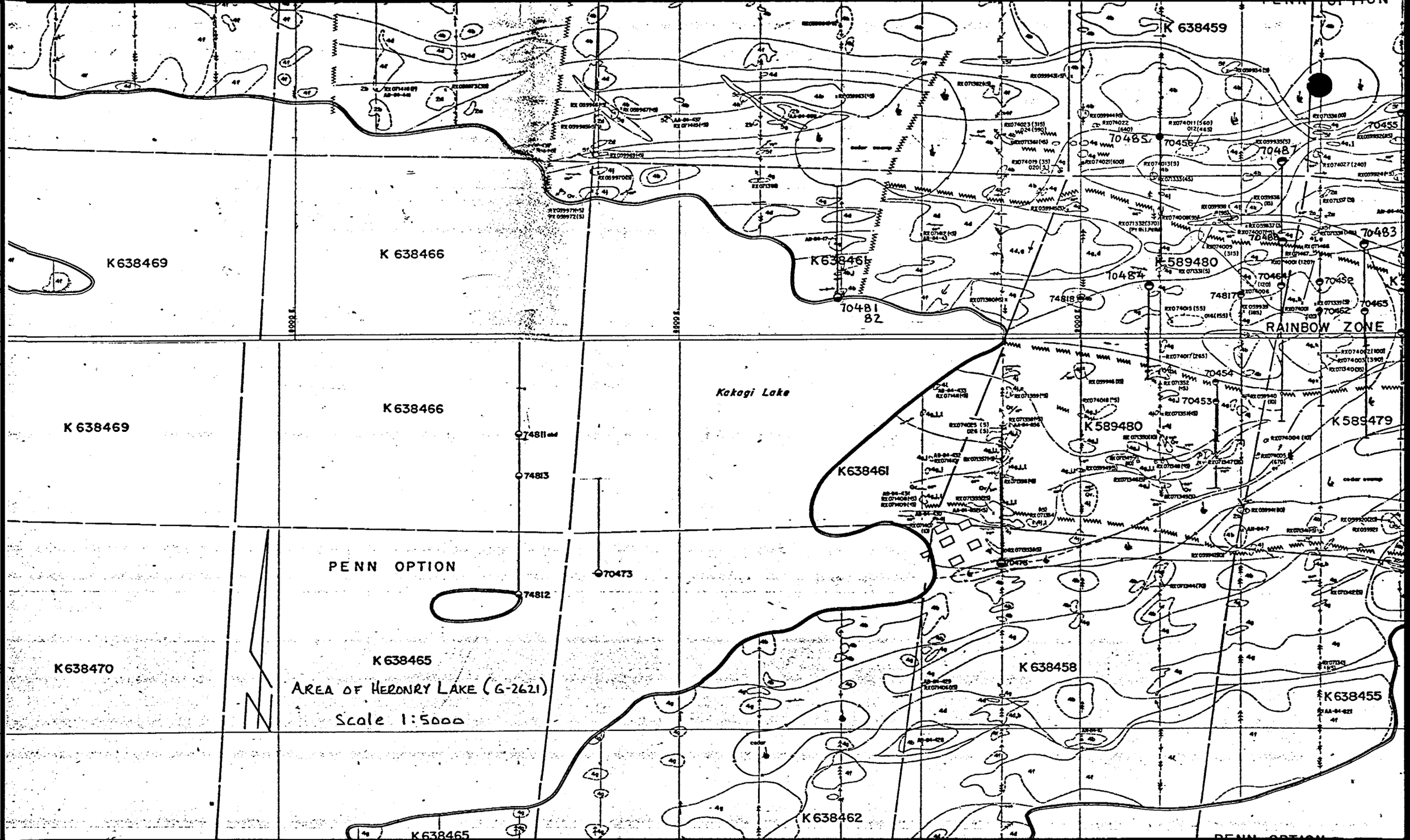
FROM M	TO M	**********DESCRIPTION**********
		fractures, decreasing towards end of sample.
201.39	202.39	Dark green to green. Weak hematitic staining. 15% tan leucoxene. 5% weakly dolomitic quartz carbonate veins and veinlets. Trace pyrite.
208.48	211.53	Locally coarse grained.
216.11	219.15	Dark forest green. Weakly dolomitic. Medium grained to coarse grained.
219.15	223.72	Hematitic stringers. 15% weakly dolomitic quartz carbonate veins. Locally with 15% streaky tan leucoxene, and 1% disseminated pyrite.
223.72	224.55	Transitional to peridotite. 3% disseminated and subhedral to cubic pyrite in 2 centimetre thick quartz carbonate vein with dolomitic rims.
224.55	226.07	FELSITE Dike. Contacts bordered by chloritic, quartz carbonate veins. Hematitic. Mauve, light brown. Very fine grained with stringers and inclusions of wallrock and chlorite. 5% subhedral and cubic pyrite. 5% quartz carbonate veinlets. Massive, very homogeneous. Mineralization concentrated near contacts.
226.07	248.11	PERIDOTITE Transitional gabbro to peridotite. Dark green to black. Fine grained to medium grained. Massive, homogeneous. Weakly locally foliated. 10% pale yellow streaky

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219867	208.48	210.01	1.53	TR	-	<.005	1.720
FX219868	210.01	211.53	1.52	TR	F57	.035	1.773
FX219869	211.53	213.25	1.72	TR	-	<.005	1.773
FX219870	213.25	214.58	1.33	TR	-	<.005	1.773
FX219871	214.58	216.11	1.53	TR	F57	<.005	1.773
FX219872	216.11	217.63	1.52	TR	-	<.005	1.773
FX219873	217.63	219.15	1.52	TR	F50	<.005	1.773
FX219874	219.15	220.67	1.52	TR	-	.010	1.788
FX219875	220.67	222.19	1.52	1	-	.010	1.803
FX219876	222.19	223.72	1.53	1	-	<.005	1.803
FX219877	223.72	224.55	.83	3	-	.055	1.849
FX219878	224.55	226.07	1.52	5	C35	.085	1.978
FX219879	226.07	226.77	.70	1	-	.070	2.027
FX219880	226.77	228.30	1.53	1	-	.010	2.042
FX219881	228.30	229.82	1.52	1	-	.005	2.050

**********DESCRIPTION**********

FROM M	TO M	
		leucoxene. Shot with 10% quartz carbonate veins and veinlets. 1 to 2% scattered and disseminated pyrite crystals. Moderately soft.
226.07	231.34	Locally smokey gray quartz carbonate veinlets.
231.34	232.87	Locally chloritic stringers with adjacent pyrite crystals.
234.39	235.91	Cross cutting quartz carbonate veins.
240.48	242.01	Locally light gray quartz carbonate vein.
248.11		Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX219882	229.82	231.34	1.52	2	F55	.010	2.065
FX219883	231.34	232.87	1.53	2	-	<.005	2.065
FX219884	232.87	234.39	1.52	1	-	<.005	2.065
FX219885	234.39	235.91	1.52	1	-	<.005	2.065
FX219886	235.91	237.43	1.52	1	-	.010	2.080
FX219887	237.43	238.96	1.53	1	-	<.005	2.080
FX219888	238.96	240.48	1.52	1	-	<.005	2.080
FX219889	240.48	242.01	1.53	1	-	<.005	2.080
FX219890	242.01	243.54	1.53	1	-	.010	2.096
FX219891	243.54	245.06	1.52	1	-	.010	2.111
FX219892	245.06	246.60	1.54	1	-	.055	2.196
FX219893	246.60	248.11	1.51	1	-	.010	2.211


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Kakagi Lake
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K589480
K589479
PENN OPTION
K638465
K638470
K638458
K638455
K638462
K638465
RAINBOW ZONE
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74813
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70465
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70453
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox JV	LATITUDE	:N 9603.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-26-87
PROPERTY	: Penn	DEPARTURE	:E 9685.0 M	TOWNSHIP	:	COMPLETED	: 02-27-87
BOREHOLE	: 70476-0	ELEVATION	: 1352.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589478	DRILL TYPE	: JKS 300
DEPTH	: 146.3 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 05 m E and 60 m S of number four post.

LEFT IN HOLE:5.18 m casing

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
6.10		-46.50	60.96		-46.50	121.92		-42.50	146.30		-40.50

**********DESCRIPTION**********

FROM M	TO M	DESCRIPTION
.00	5.42	OVERBURDEN Casing in sand and gravel.
5.42	15.29	PERIDOTITE Black fine grained to medium grained strongly to moderately magnetic massive to weakly foliated soapy very soft peridotite. Thin calcite carbonate quartz veinlets common. 5.42 6.82 20% veining. 12.66 14.16 Becoming dark green and slightly more siliceous down hole. 14.16 15.29 As above gradational to transition zone.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224960	5.42	6.82	1.40	TR	-	<.005	.000
FX224961	6.82	8.30	1.48	TR	-	<.005	.000
FX224962	8.30	9.27	.97	TR	F40	<.005	.000
FX224963	9.27	11.27	2.00	TR	-	<.005	.000
FX224964	11.27	12.66	1.39	TR	F35	<.005	.000
FX224965	12.66	14.16	1.50	TR	-	<.005	.000
FX224966	14.16	15.29	1.13	TR	-	<.005	.000

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES OFFICE
SEP 26 1988
RECEIVED

KENORA MINING DIV.
RECEIVED
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
15.29	22.70	PERIDOTITE								
		Transition zone to gabbro. Dark green fine grained to medium grained weakly to moderately foliated weakly magnetic peridotite to gabbro. 5 to 10% yellow green saussuritized feldspars. Thin quartz calcite carbonate veins common.	FX224967	15.29	17.06	1.77	TR	F45	<.005	.000
			FX224968	17.06	18.50	1.44	TR	-	<.005	.000
			FX224969	18.50	20.00	1.50	TR	F40	<.005	.000
			FX224970	20.00	21.34	1.34	TR	-	.005	.007
		21.34 22.70 5% quartz carbonate veins.	FX224971	21.34	22.70	1.36	TR	-	<.005	.007
22.70	23.89	VEIN								
		Predominantly highly irregular ankerite quartz veining with minor tourmaline cut by late quartz tourmaline vein 3 centimetres wide. Gabbro to peridotite inclusions contain 5% leucoxene.	FX224972	22.70	23.89	1.19	TR	-	.030	.042
23.89	38.97	GABBRO								
		Fine grained to medium grained dark green weakly to strongly magnetic gabbro with 5 to 15% disseminated fine grained magnetite and specularite. Numerous calcite veinlets.	FX224973	23.89	24.38	.49	TR	-	<.005	.042
			FX224974	24.38	25.76	1.38	TR	F42	<.005	.042
			FX224975	25.76	27.27	1.51	TR	-	.045	.110
			FX224976	27.27	28.73	1.46	I	-	.105	.264
		23.89 24.38 Gray in colour becoming green gray down hole.	FX224977	28.73	30.22	1.49	TR	-	<.005	.264
		24.38 25.76 Gradational to dark green.	FX224978	30.22	31.62	1.40	TR	F40	<.005	.264
		27.27 28.73 2 centimetre quartz vein with pyritic contacts.	FX224979	31.62	33.10	1.48	TR	-	.010	.278
			FX224980	33.10	34.50	1.40	TR	-	<.005	.278
		33.10 34.50 Magnetite and specularite becoming coarser grained.	FX224981	34.50	36.08	1.58	TR	-	.005	.286
			FX224982	36.08	37.51	1.43	TR	-	<.005	.286
		34.50 36.08 4 to 7% medium grained to coarse grained magnetite and specularite.	FX224983	37.51	38.97	1.46	TR	-	<.005	.286
		37.51 38.97 Gradational to medium grained to coarse grained massive saussuritized gabbro.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
38.97	49.27	GABBRO								
		Medium grained to coarse grained massive saussuritized yellow green gabbro to quartz gabbro with 4 to 7% magnetite and specularite. Moderately to strongly magnetic. Thin calcite quartz veinlets common.	FX224984	38.97	40.40	1.43	TR	-	.005	.293
			FX224985	40.40	41.86	1.46	TR	-	.005	.301
			FX224986	41.86	43.33	1.47	TR	-	<.005	.301
			FX224987	43.33	44.86	1.53	TR	-	<.005	.301
			FX224988	44.86	46.26	1.40	TR	-	<.005	.301
			FX224989	46.26	47.77	1.51	TR	-	<.005	.301
			FX224990	47.77	49.27	1.50	TR	-	<.005	.301
		47.77 49.27 Sharply gradational lower contact.								
49.27	56.56	GABBRO								
		Fine grained dark green basaltic looking gabbro with numerous thin calcite veins. Locally weakly to moderately magnetic. Up to 4% magnetite and specularite.	FX224991	49.27	50.73	1.46	TR	-	<.005	.301
			FX224992	50.73	52.18	1.45	TR	-	.005	.308
			FX224993	52.18	53.65	1.47	TR	-	<.005	.308
		53.65 55.06 Medium grained.	FX224994	53.65	55.06	1.41	TR	-	<.005	.308
		55.06 56.56 Locally medium grained.	FX224995	55.06	56.56	1.50	TR	-	.005	.316
56.56	59.94	GABBRO								
		As to 49.27 metres.	FX224996	56.56	58.29	1.73	TR	-	<.005	.316
		58.29 59.94 Sharply gradational lower contact.	FX224997	58.29	59.94	1.65	TR	-	<.005	.316
59.94	67.05	GABBRO								
		Fine grained dark green weakly foliated non- magnetic basaltic looking gabbro.	FX224998	59.94	60.96	1.02	TR	-	.005	.321
			FX224999	60.96	62.46	1.50	TR	F42	.010	.336
			FX225000	62.46	64.00	1.54	TR	-	.005	.343
			FX225001	64.00	65.50	1.50	TR	-	.005	.351
		65.50 67.05 Sharply gradational lower contact.	FX225002	65.50	67.05	1.55	TR	-	.010	.366

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
67.05	77.12	GABBRO								
		As to 49.27 but non-magnetic. Medium grained to coarse grained yellow green massive saussuritized very homogeneous gabbro. Occasional thin quartz carbonate vein.	FX225003	67.05	68.32	1.27	TR	-	.005	.373
			FX225004	68.32	69.82	1.50	TR	-	.010	.388
			FX225005	69.82	71.28	1.46	TR	-	<.005	.388
			FX225006	71.28	72.84	1.56	TR	-	<.005	.388
		75.70 77.12 Gradational to non- saussuritized.	FX225007	72.84	74.31	1.47	TR	-	<.005	.388
			FX225008	74.31	75.70	1.39	TR	-	<.005	.388
			FX225009	75.70	77.12	1.42	TR	-	<.005	.388
77.12	95.71	GABBRO								
		Dark green massive fine grained to medium grained gabbro with 5 to 8% calcite quartz veins to 1 centimetre wide.	FX225010	77.12	78.60	1.48	TR	-	.010	.402
			FX225011	78.60	80.01	1.41	TR	-	<.005	.402
		81.56 82.94 Quartz vein 2 centimetres wide.	FX225012	80.01	81.56	1.55	TR	-	.010	.418
		82.94 84.40 Minor pitting of surface possibly amygdaloidal. 11 centimetre white quartz vein. Few specks chalcopyrite in fracture.	FX225013	81.56	82.94	1.38	TR	-	.010	.432
			FX225014	82.94	84.40	1.46	TR	-	.035	.483
			FX225015	84.40	85.81	1.41	TR	-	.010	.497
		94.54 95.71 Becoming foliated down hole.	FX225016	85.81	87.36	1.55	TR	-	.005	.505
			FX225017	87.36	88.71	1.35	TR	-	.010	.518
			FX225018	88.71	90.26	1.55	TR	-	.015	.541
			FX225019	90.26	91.61	1.35	TR	-	.015	.562
			FX225020	91.61	93.16	1.55	TR	-	.075	.678
			FX225021	93.16	94.54	1.38	TR	-	.010	.692
			FX225022	94.54	95.71	1.17	TR	-	.025	.721
95.71	102.78	GABBRO								
		Fine grained to medium grained moderately foliated gabbro. Thin quartz carbonate calcite veins common.	FX225023	95.71	97.54	1.83	TR	F40	<.005	.721
			FX225024	97.54	99.09	1.55	TR	-	<.005	.721
		95.71 97.54 Fine grained with 17 centimetre quartz carbonate vein parallel to foliation.	FX225025	99.09	100.49	1.40	TR	F45	<.005	.721
			FX225026	100.49	101.94	1.45	TR	-	.005	.728

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	100.49	101.94 5% quartz carbonate veins. 1 centimetre vein folded parallel to core axis.	FX225027	101.94	102.78	.84	TR	F52	<.005	.728
	101.94	102.78 Gradational to peridotite.								
102.78	105.91	PERIDOTITE								
		Transition zone to peridotite. Dark green fine grained soft non- magnetic transition zone between gabbro and peridotite. Moderately foliated.	FX225028	102.78	103.45	.67	TR	-	.005	.732
			FX225029	103.45	104.88	1.43	TR	F50	<.005	.732
			FX225030	104.88	105.91	1.03	TR	F50	<.005	.732
	102.78	103.45 5% irregular thin ankerite quartz veins.								
	104.88	105.91 15% carbonate calcite quartz veins parallel to foliation. Becoming magnetic down hole. Gradational to peridotite.								
105.91	118.75	PERIDOTITE								
		Fine grained to medium grained black moderately soapy very soft well- foliated peridotite. Thin carbonate quartz calcite veins common.	FX225031	105.91	106.68	.77	TR	-	<.005	.732
			FX225032	106.68	107.80	1.12	TR	-	<.005	.732
			FX225033	107.80	109.32	1.52	TR	F50	.005	.739
	105.91	106.68 20% quartz carbonate veins to 3 centimetres wide parallel to foliation.	FX225034	109.32	110.76	1.44	TR	-	<.005	.739
			FX225035	110.76	112.17	1.41	TR	-	<.005	.739
	109.32	110.76 5 centimetre quartz vein with ankerite and minor pyrite at vein contacts. Minor clay alteration at 110.74 metres. Possibly fault gouge.	FX225036	112.17	113.60	1.43	TR	-	<.005	.739
			FX225037	113.60	115.10	1.50	TR	-	<.005	.739
			FX225038	115.10	116.48	1.38	TR	F45	<.005	.739
			FX225039	116.48	118.00	1.52	TR	-	<.005	.739
	113.60	115.10 Several 1 to 4 centimetre quartz carbonate veins.	FX225040	118.00	118.75	.75	TR	F50	<.005	.739
	115.10	116.48 Fine grained green peridotite locally more gabbroic looking.								
118.75	124.05	PERIDOTITE								

FROM M	TO M	**********DESCRIPTION**********
		Transition zone to gabbro. Dark green soft fine grained to medium grained strongly foliated peridotite to gabbro. 20% carbonate dolomite calcite quartz veinlets parallel to foliation. Very weakly magnetic.
119.43	120.95	8 centimetre quartz vein with ankerite at contacts.
122.42	124.05	Several dolomite carbonate veins to 6 centimetres wide. 20% coarse grained carbonate dolomite crystals. Gradational to gabbro.
124.05	133.90	GABBRO
		Fine grained dark to light green gray gabbro slightly bleached adjacent to numerous thin quartz carbonate veins. Well foliated. Locally basaltic looking.
124.05	125.31	Quartz dolomite vein 6 centimetres wide.
125.31	126.86	15% carbonate quartz calcite dolomite veinlets parallel to foliation.
126.86	128.22	Dark green. Locally strongly magnetic. 12 centimetre discontinuous quartz carbonate vein with pyritic stringers.
128.22	129.77	Few stringers and minor disseminated pyrite. Few quartz carbonate veins. Slightly bleached looking.
131.20	132.75	15% angular ferromag clots stretched parallel to core axis. 5 centimetre carbonate vein.
132.75	133.90	20 centimetres of discontinuous carbonate quartz black quartz chlorite veining. Sharply gradational lower contact.

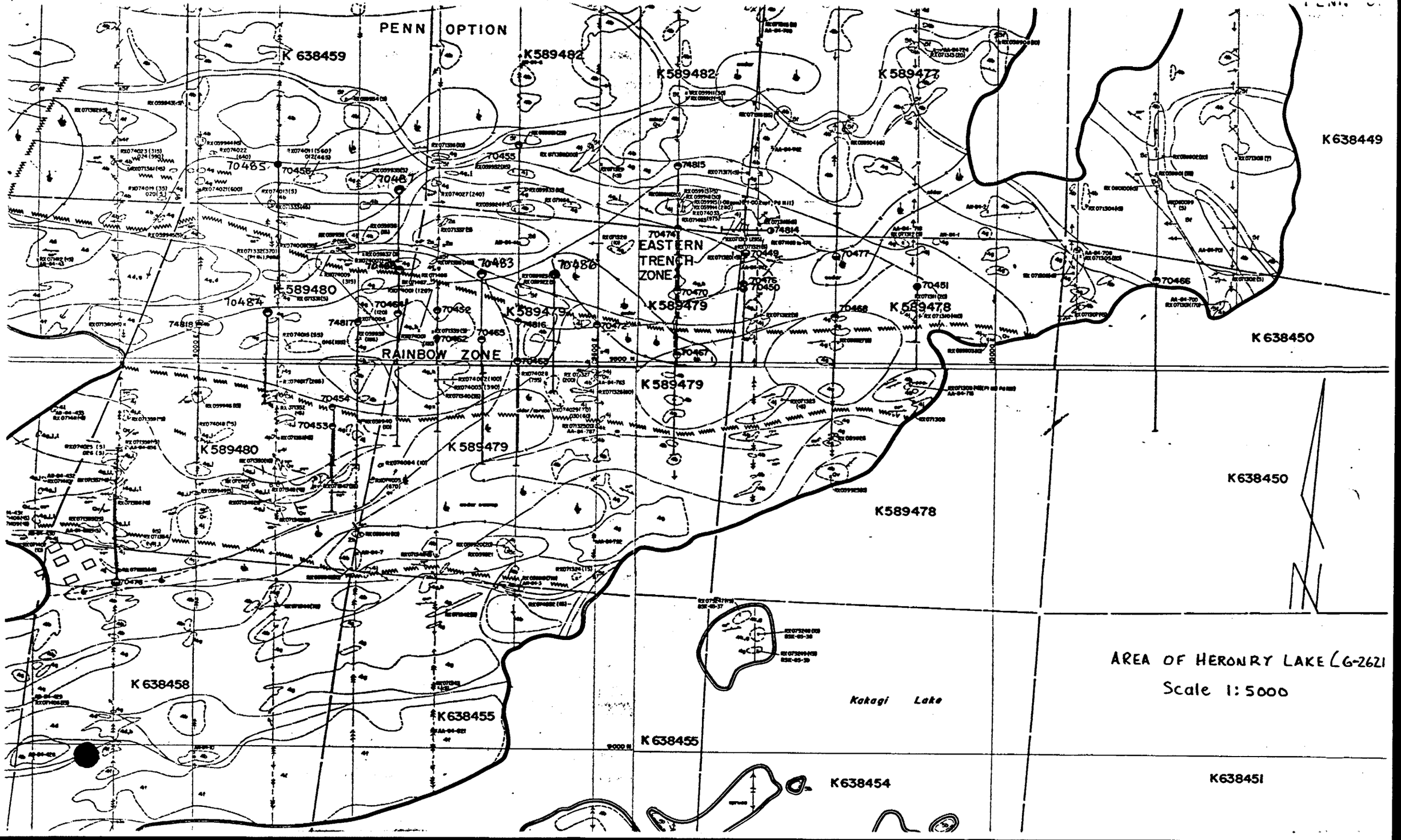
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX225041	118.75	119.43	.68	TR	-	<.005	.739
FX225042	119.43	120.95	1.52	TR	F50	<.005	.739
FX225043	120.95	122.42	1.47	TR	F45	<.005	.739
FX225044	122.42	124.05	1.63	TR	-	<.005	.739
FX225045	124.05	125.31	1.26	TR	F45	<.005	.739
FX225046	125.31	126.86	1.55	TR	F45	.020	.770
FX225047	126.86	128.22	1.36	1	-	.105	.913
FX225048	128.22	129.77	1.55	2	-	.115	1.091
FX225049	129.77	131.20	1.43	TR	-	.015	1.113
FX225050	131.20	132.75	1.55	TR	F45	.020	1.144
FX225051	132.75	133.90	1.15	TR	-	.030	1.178

**********DESCRIPTION**********

FROM M	TO M	
133.90	146.30	GABBRO

Massive mid-green medium grained homogeneous gabbro with 5% disseminated specularite. Occasional thin quartz calcareous vein.
142.92 144.38 5 centimetre vuggy quartz vein.
146.30 Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX225052	133.90	135.66	1.76	TR	-	.025	1.222
FX225053	135.66	137.03	1.37	TR	-	.020	1.250
FX225054	137.03	138.48	1.45	TR	-	.015	1.271
FX225055	138.48	139.94	1.46	TR	-	.015	1.293
FX225056	139.94	141.38	1.44	TR	-	.030	1.337
FX225057	141.38	142.92	1.54	TR	-	.020	1.367
FX225058	142.92	144.38	1.46	TR	-	.015	1.389
FX225059	144.38	145.45	1.07	TR	F40	.015	1.405
FX225060	145.45	146.30	.85	TR	-	.010	1.414


PENN OPTION
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Kakagi Lake
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AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 9638.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-28-87
PROPERTY	: Penn	DEPARTURE	:E 9800.0 M	TOWNSHIP	:	COMPLETED	: 03-01-87
BOREHOLE	: 70477-0	ELEVATION	: 1342.3 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589478	DRILL TYPE	: J.K. Smit 300
DEPTH	: 68.3 M	LOGGED BY	: M. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 25 m south & 115 m east of post #4.

LEFT IN HOLE:6.43 m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
6.43		-42.50	68.27		-42.50						

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	6.43	OVERBURDEN 6.43 Metres of casing.								
6.43	9.04	GABBRO Green, medium grained to coarse grained. Massive, very homogeneous. Weak pervasive hematitic staining. Iron carbonatized. locally quartz carbonate stringers. Trace pyrite. 7.51 9.04 Gradational sharp contact between gabbro and peridotite.	FX219894 FX219895	6.43 7.51	7.51 9.04	1.08 1.53	TR TR	- -	<.005 <.005	.000 .000
9.04	12.57	PERIDOTITE								

**********ANALYSES**********

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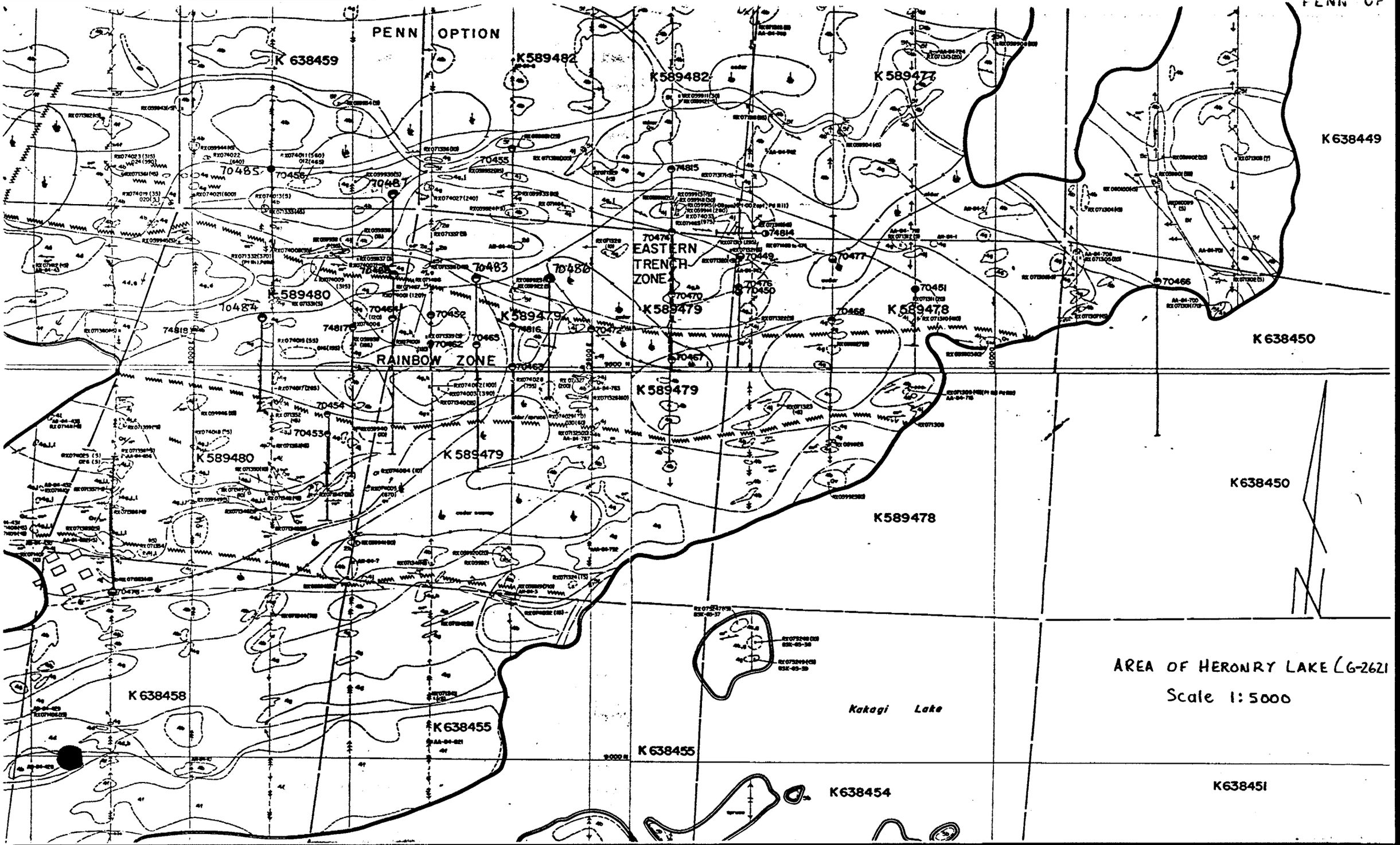
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FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Very dark green to black. Fine grained to medium grained. Massive, very homogeneous. Weakly foliated. Weakly iron carbonatized. Soapy surface. 5 to 7% dolomitic quartz carbonate veinlets and blebs. Locally chloritic clots. Magnetic.	FX219896	9.04	10.51	1.47	TR	F50	<.005	.000
			FX219897	10.51	12.19	1.68	TR	-	<.005	.000
			FX219898	12.19	12.57	.38	TR	-	<.005	.000
		9.04 12.57 Weakly hematitic staining (dolomitic?) in blebby quartz carbonate.								
12.57	12.67	FAULT								
		Green gray muddy fault gouge with adjacent rusty iron oxidized quartz carbonate veinlet.	FX219899	12.57	12.67	.10	1	F50	<.005	.000
12.67	13.82	PERIDOTITE								
		As at 9.04 to 12.57 metres. Weakly bleached with rusty iron oxide. Scattered cubic pyrite up to 4 millimetres.	FX219899	12.67	13.82	1.15	1	F50	<.005	.000
13.82	14.85	LAMPROPHYRE								
		Dike. Black, fine grained with black, shiny, chlorite crystals. Massive, homogeneous. Contacts are bordered by quartz carbonate veinlets. 2% pyrite locally adjacent to contacts.	FX219900	13.82	14.85	1.03	2	C30	.010	.010
14.85	22.55	PERIDOTITE								
		As at 9.04 to 12.57 metres.								
		14.85 15.63 Locally 3 centimetre thick dolomitic, chloritic quartz carbonate veins. Locally 2% disseminated pyrite concentrated near contact with dike.	FX219901	14.85	15.63	.78	2	-	<.005	.010
			FX219902	15.63	16.77	1.14	TR	-	<.005	.010
			FX219903	16.77	18.29	1.52	TR	-	<.005	.010
			FX219904	18.29	19.84	1.55	TR	-	<.005	.010
			FX219905	19.84	21.34	1.50	TR	-	<.005	.010

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	15.63 16.77	2 centimetre thick quartz carbonate vein with wallrock inclusions.	FX219906	21.34	22.55	1.21	TR	-	<.005	.010
	16.77 18.29	Locally shot with chloritic quartz carbonate.								
	21.34 22.55	Patchy fine grained peridotite, dark gray brown, parallel to core axis with a sharp contact.								
22.55	22.61	FAULT								
		Muddy blue gray chloritic gouge. Chloritic sheaves.	FX219907	22.55	22.61	.06	TR	-	<.005	.010
22.61	47.25	PERIDOTITE								
		As at 9.04 to 12.57 metres. Black.	FX219907	22.61	22.97	.36	TR	-	<.005	.010
	22.61 22.97	Fine grained, dark gray brown peridotite parallel to core axis.	FX219908	22.97	24.38	1.41	1	-	<.005	.010
	22.97 24.34	1% scattered and disseminated pyrite.	FX219909	24.38	25.91	1.53	TR	-	<.005	.010
	27.43 28.96	15% blebby iron carbonate.	FX219910	25.91	27.43	1.52	TR	-	<.005	.010
	28.96 30.48	2 centimetre thick chloritic quartz carbonate vein at 15 degrees to core axis.	FX219911	27.43	28.96	1.53	TR	-	<.005	.010
			FX219912	28.96	30.48	1.52	TR	-	.040	.071
	42.67 44.20	Locally with chloritic, pale gray quartz carbonate vein with trace pyrite crystals.	FX219913	30.48	32.01	1.53	TR	-	.020	.102
			FX219914	32.01	33.53	1.52	TR	-	.280	.527
	45.72 47.25	1% scattered pyrite.	FX219915	33.53	35.05	1.52	TR	-	.005	.535
			FX219916	35.05	36.58	1.53	TR	-	<.005	.535
			FX219917	36.58	38.10	1.52	TR	-	<.005	.535
			FX219918	38.10	39.62	1.52	TR	-	<.005	.535
			FX219919	39.62	41.15	1.53	TR	F57	<.005	.535
			FX219920	41.15	42.67	1.52	TR	-	<.005	.535
			FX219921	42.67	44.20	1.53	TR	-	<.005	.535
			FX219922	44.20	45.72	1.52	TR	-	<.005	.535
			FX219923	45.72	47.25	1.53	1	-	.010	.550

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
47.25	58.27	PERIDOTITE As at 22.61 to 47.25 metres, but not magnetic. 50.30 54.86 1% scattered pyrite crystals.	FX219924	47.25	48.77	1.52	TR	-	.010	.565
			FX219925	48.77	50.30	1.53	TR	-	<.005	.565
			FX219926	50.30	51.82	1.52	1	-	<.005	.565
			FX219927	51.82	53.35	1.53	1	-	.010	.581
			FX219928	53.35	54.86	1.51	1	-	<.005	.581
			FX219929	54.86	56.50	1.64	TR	-	<.005	.581
			FX219930	56.50	57.46	.96	TR	-	<.005	.581
			FX219931	57.46	58.27	.81	TR	-	<.005	.581
58.27	59.04	FAULT Blue gray, chloritic muddy fault gouge. Schistose, talcy. Stretched quartz carbonate blebs. Rubbly dolomitic quartz carbonate vein.	FX219932	58.27	59.04	.77	TR	F44	<.005	.581
59.04	61.52	PERIDOTITE As at 47.25 to 58.27 metres.	FX219933	59.04	59.95	.91	TR	-	<.005	.581
			FX219934	59.95	60.96	1.01	TR	-	<.005	.581
			FX219935	60.96	61.52	.56	TR	-	<.005	.581
61.52	62.70	LAMPROPHYRE Dike. Sharp contact at 5 degrees to core axis. Black, fine grained, massive and very homogeneous. 6 to 8% very fine disseminated pyrite. Locally rusty oxide staining adjacent to fractures. Iron carbonatized.	FX219936	61.52	61.87	.35	7	-	<.005	.581
			FX219937	61.87	62.70	.83	7	-	<.005	.581
62.70	68.27	PERIDOTITE As at 47.25 to 58.27 metres.	FX219938	62.70	65.39	2.69	TR	-	<.005	.581

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	62.70	65.39 Weak pervasive hematitic staining.	FX219939	65.39	66.88	1.49	TR	-	<.005	.581
	66.88	68.27 Locally dolomitic quartz carbonate veinlets.	FX219940	66.88	68.27	1.39	TR	-	<.005	.581
	68.27	Foot of hole.								


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Kakagi Lake
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9377.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-21-86
PROPERTY	: Penn Option	DEPARTURE	:E 8300.0 M	TOWNSHIP	:	COMPLETED	: 02-24-86
BOREHOLE	: 74B11-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K63B466	DRILL TYPE	: Boyles 37A
DEPTH	: 79.9 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 40 m west and 100 m north of post 2. Hole abandoned due to excessive overburden.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP

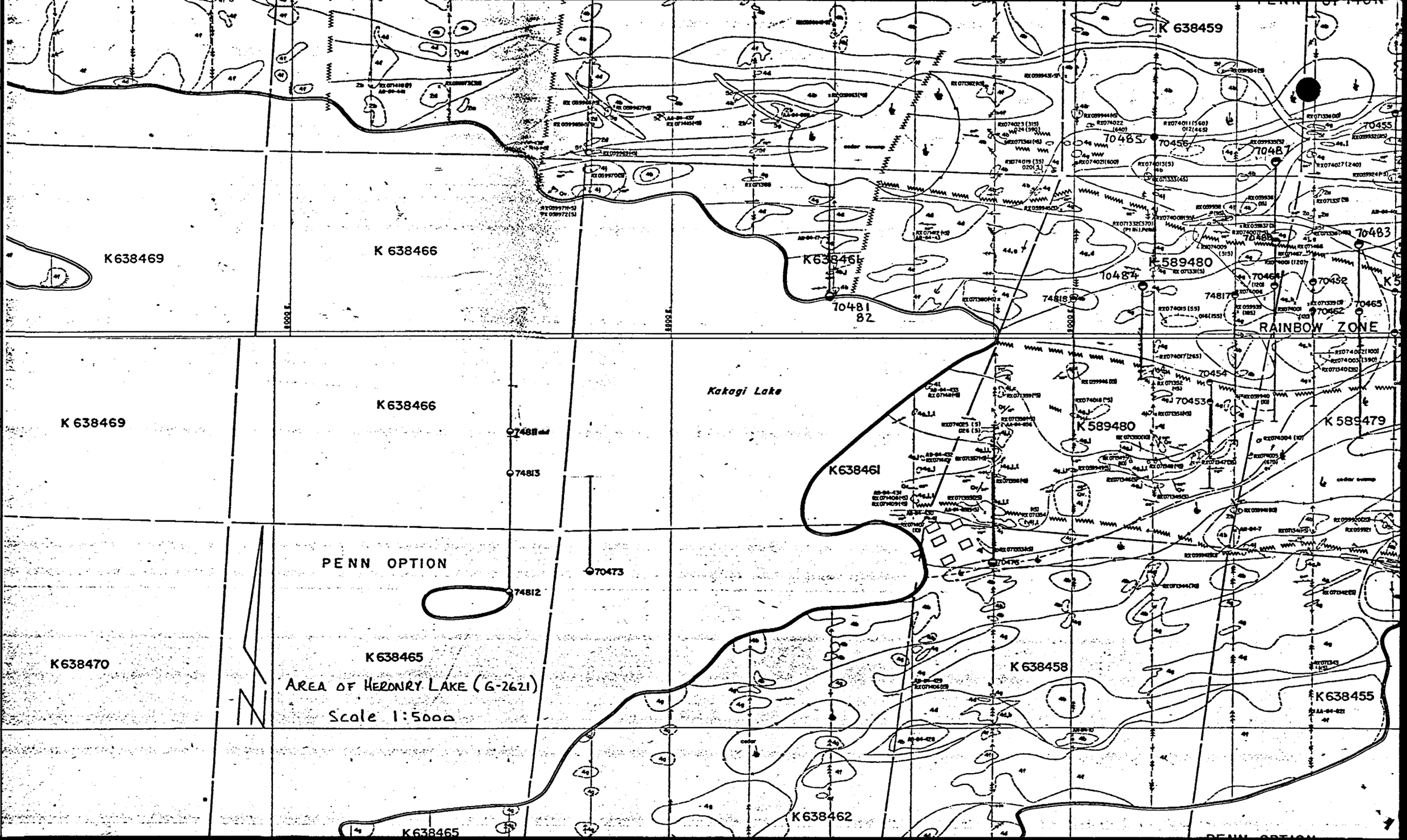
**********DESCRIPTION**********

FROM M	TO M	
.00	79.86	OVERBURDEN Casing through 36.6 m of water followed by overburden of mud, sand, and a few boulders. Abandoned. Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M

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AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
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**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9670.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-13-86
PROPERTY	: penn option	DEPARTURE	:E 9717.0 M	TOWNSHIP	:	COMPLETED	: 03-14-86
BOREHOLE	: 74814-0	ELEVATION	: 1345.9 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 265.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589477	DRILL TYPE	: Boyles 37A
DEPTH	: 83.5 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 25m east and 10m north of post #3. Casing 3.05m into bedrock, left in hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.00	265.0	-46.00	30.50	265.0	-45.00	61.00	265.0	-46.00	83.50	265.0	-45.00

**********DESCRIPTION**********

FROM M	TO M	
.00	79.11	GABBRO
		Weakly to moderately altered gabbro. Medium grained to coarse grained, gray green, moderately foliated. Consists of stretched clots of chlorite and iron carbonate rich felsic clots. 20 to 30% disseminated fine grained iron carbonate, mainly in the felsic clots and 10% limonite clots up to 2 millimetres in size. 1% light yellow leucoxene. Soft. 40 to 60% chlorite. Rare quartz carbonate veins.
		6.72 7.66 With fewer limonite clots.
		7.66 15.05 1 to 2% limonite clots, trace disseminated fine grained pyrite.
		15.05 16.55 Rare limonite clots.
		16.55 19.55 No limonite clots, weakly to moderately

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX163914	.00	1.00	1.00	0	F10	<.010	.000
FX163915	1.00	2.00	1.00	0	-	<.010	.000
FX163916	2.00	3.05	1.05	0	-	<.010	.000
FX163917	3.05	4.50	1.45	0	F05	<.010	.000
FX163918	4.50	6.00	1.50	0	-	<.010	.000
FX163919	6.00	6.72	.72	0	F05	<.010	.000
FX163920	6.72	7.66	.94	0	-	<.010	.000
FX163921	7.66	9.05	1.39	TR	-	<.010	.000
FX163922	9.05	10.55	1.50	TR	-	<.010	.000
FX163923	10.55	12.05	1.50	TR	-	<.010	.000
FX163924	12.05	13.55	1.50	TR	F05	<.010	.000
FX163925	13.55	15.05	1.50	TR	-	<.010	.000
FX163926	15.05	16.55	1.50	TR	-	<.010	.000

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FROM M	TO M	**********DESCRIPTION**********
		foliated. Moderately hard.
19.55	21.05	As above with 1% quartz carbonate as contorted veins and patches.
21.05	26.57	As at 16.55.
26.57	27.16	As above with 15% quartz carbonate veins and streaks up to 7 centimetres thick with sharp contacts. Gabbro is strongly carbonatized with 30 to 50% fine grained disseminated iron carbonate. 2% disseminated pyrite as crystals up to 3 millimetres.
27.16	28.05	As at 16.55. 1% pyrite, 2% leucoxene, dark gray.
28.05	28.65	Medium grained, weakly foliated, moderately hard gabbro. Dark gray. more equigranular. Does not have clotty appearence. 1 to 2% leucoxene. Feldspars less altered. 5% quartz carbonate veins up to 3 centimetre thick with sharp contacts. 20 to 30% fine grained iron carbonate. Trace pyrite.
28.65	30.15	As above with 1% disseminated pyrite as crystals up to 2 millimetres.
30.15	31.66	As at 28.05 with 15 centimetre silicified section at top. Minor quartz carbonate veins up to 1 centimetre thick.
31.66	33.10	As at 28.05. 1% pyrite.
33.10	33.80	Strongly foliated and contorted with 10% quartz carbonate as streaks, patches and veins. Chloritic. Moderately hard. 2% fine grained leucoxene, trace pyrite. Strongly carbonatized.
33.80	35.26	Medium grained to coarse grained gabbro. Strongly carbonatized with 20 to 35%

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX163927	16.55	18.05	1.50	TR	-	<.010	.000
FX163928	18.05	19.55	1.50	TR	-	<.010	.000
FX163929	19.55	21.05	1.50	TR	-	<.010	.000
FX163930	21.05	22.55	1.50	TR	-	<.010	.000
FX163931	22.55	24.05	1.50	TR	-	<.010	.000
FX163932	24.05	25.55	1.50	TR	-	<.010	.000
FX163933	25.55	26.57	1.02	TR	-	<.010	.000
FX163934	26.57	27.16	.59	2	C50	<.010	.000
FX163935	27.16	28.05	.89	1	-	<.010	.000
FX163936	28.05	28.65	.60	TR	C32	<.010	.000
FX163937	28.65	30.15	1.50	TR	-	<.010	.000
FX163938	30.15	31.66	1.51	TR	-	<.010	.000
FX163939	31.66	33.10	1.44	1	-	<.010	.000
FX163940	33.10	33.80	.70	TR	F25	<.010	.000
FX163941	33.80	35.26	1.46	TR	F40	<.010	.000
FX163942	35.26	36.78	1.52	TR	-	<.010	.000
FX163943	36.78	37.80	1.02	1	-	.020	.020
FX163944	37.80	38.80	1.00	TR	-	<.010	.020
FX163945	38.80	39.86	1.06	2	F42	.030	.052
FX163946	39.86	41.33	1.47	TR	F15	<.010	.052
FX163947	41.33	42.83	1.50	TR	-	<.010	.052
FX163948	42.83	44.18	1.35	1	-	.010	.066
FX163949	44.18	45.08	.90	TR	-	<.010	.066
FX163950	45.08	45.74	.66	3	-	.175	.181
FX163951	45.74	46.94	1.20	TR	-	.070	.265
FX163952	46.94	47.63	.69	TR	F35	<.010	.265
FX163953	47.63	48.23	.60	TR	-	.070	.307
FX163954	48.23	49.25	1.02	4	-	1.035	1.363
FX163955	49.25	50.21	.96	TR	-	.140	1.497
FX163956	50.21	50.61	.40	TR	-	.030	1.509
FX163957	50.61	51.22	.61	2	-	5.125	4.636
FX163958	51.22	51.87	.65	2	-	.040	4.662

**********DESCRIPTION**********

FROM M	TO M	
		disseminated iron carbonate, primarily replacing feldspar. Has spotted appearance. Weakly foliated. 60% altered feldspar. 1% light yellow leucoxene. 5% quartz carbonate veins and veinlets up to 1 centimetre thick at various angles to core axis. Trace pyrite.
35.26	36.78	As above with trace to 1% disseminated pyrite
36.78	37.80	As above with a ribboned quartz carbonate vein sub parallel to core axis. 1% pyrite.
37.80	38.80	As at 33.80 with 5% quartz carbonate veinlets at various angles. 30% iron carbonate as streaks and disseminated.
38.80	39.86	As at 33.80. Weakly to strongly foliated and contorted. with 30% quartz carbonate as streaks, patches, and veins up to 8 centimetres thick. The veins have pyritic halos up to 10 centimetres thick. Strongly carbonatized, 2% pyrite.
39.86	42.83	As at 33.80. Weakly contorted.
42.83	44.18	As at 33.80. Feldspars becoming sericitized, 1% pyrite.
44.18	45.08	Altered gabbro. Medium grained, gray green to pale gray green. Hard, silicified, strongly carbonatized with 30 to 35% iron carbonate as disseminations and streaks. Feldspar sericitized. 5% gray quartz carbonate veins , up to 10 centimetres thick, and veinlets. Trace pyrite.
45.08	45.28	As above with 5% pyrite as crystals up to 2 millimetres.
45.28	45.59	White quartz carbonate vein with 1% pyrite. Minor fuchsitic gabbro inclusions.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX163959	51.87	52.86	.99	TR	F07	.010	4.671
FX163960	52.86	53.59	.73	2	C35	.020	4.686
FX163961	53.59	54.60	1.01	TR	-	<.010	4.686
FX163962	54.60	55.28	.68	TR	-	<.010	4.686
FX163963	55.28	56.70	1.42	TR	-	<.010	4.686
FX163964	56.70	57.78	1.08	TR	F07	.030	4.718
FX163965	57.78	59.28	1.50	TR	F07	<.010	4.718
FX163966	59.28	60.43	1.15	TR	-	<.010	4.718
FX163967	60.43	61.92	1.49	TR	-	.040	4.778
FX163968	61.92	63.40	1.48	1	-	2.540	8.537
FX163969	63.40	64.90	1.50	TR	F07	.020	8.567
FX163970	64.90	66.17	1.27	1	F15	<.010	8.567
FX163971	66.17	67.27	1.10	2	-	.030	8.600
FX163972	67.27	68.73	1.46	3	-	.070	8.702
FX163973	68.73	69.70	.97	TR	-	<.010	8.702
FX163974	69.70	70.96	1.26	TR	-	.030	8.740
FX163975	70.96	72.42	1.46	3	-	.060	8.828
FX163976	72.42	73.93	1.51	1	-	.040	8.888
FX163977	73.93	74.79	.86	TR	-	.030	8.914
FX163978	74.79	76.11	1.32	2	-	.100	9.046
FX163979	76.11	76.65	.54	2	-	.030	9.062
FX163980	76.65	77.72	1.07	1	-	.030	9.094
FX163981	77.72	79.11	1.39	2	C30	.070	9.192

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********
	45.59	45.74 As at 45.08.
45.74	46.94	As at 33.80 with 10% quartz carbonate veins up to 1 centimetre thick.
46.94	47.63	As above with 20% quartz carbonate veins up to 2 centimetres thick.
47.63	48.23	As at 33.80 but coarse grained and chloritic. In part silicified. 15% iron carbonate and quartz carbonate veins up to 4 centimetres thick, at various angles. 2% pyrite as disseminated crystals up to 2 millimetres.
48.23	49.25	Silicified gabbro. Medium grained, massive to weakly foliated. Hard, gray to green gray. Strongly carbonatized with 30% disseminated fine grained to medium grained iron carbonate. 4% disseminated fine grained pyrite. 5% quartz carbonate veins up to 2.5 centimetres thick. Pyrite is more abundant within 5 centimetre of quartz carbonate veins
49.25	50.21	Altered gabbro. Strongly carbonatized, hard, weakly foliated. 10 to 15% quartz carbonate veins and veinlets. Trace pyrite. Gray green, medium grained, 1 to 2% leucoxene, chloritic.
50.21	50.61	Quartz carbonate vein. Light pink. 5% light green streaks, some black chlorite streaks. Trace pyrite.
50.61	51.22	Bleached gabbro. Pale gray, fine grained to medium grained, strongly silicified and carbonatized. Very hard. 2% very fine grained disseminated pyrite.
51.22	51.87	Medium grained, gray green and hard with 30

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		to 35% pervasive iron carbonate. Weakly foliated. 5% hematitized spots, 2% disseminated fine grained pyrite, 2 to 3% quartz carbonate veinlets.								
51.87	52.86	Medium grained, gray green, hard with 5% hematitized spots, 5 to 8% quartz carbonate veinlets and streaks at various angles to core. Mottled appearence. 30 to 35% pervasive iron carbonate. 1% leucoxene, trace pyrite, weakly foliated.								
52.86	53.59	Very chloritic and moderately foliated. Possibly folded. Hard with 40% white to light gray quartz and quartz carbonate veins. Two generations of veining. Oldest are generally 35 degrees to core axis while youngest is variable in attidude and consists mainly of white quartz. 2% pyrite, in part surrounded by oxidation halos..								
53.59	54.60	As at 51.87.								
54.60	55.28	As above but only 3 to 5% quartz carbonate veins.								
55.28	56.70	Medium grained, gray green and moderately hard. 50% altered gray to light green feldspar. Weakly foliated. 20% pervasive iron carbonate. Minor quartz carbonate veins and veinlets.								
56.70	57.78	As above but moderately foliated with 8% quartz carbonate veins up to 2 centimetres thick at various angles to core axis.								
57.78	59.28	Mottled, medium grained, gray green, weakly to moderately foliated. 1 to 2% leucoxene, 20% pervasive iron carbonate alteration.								

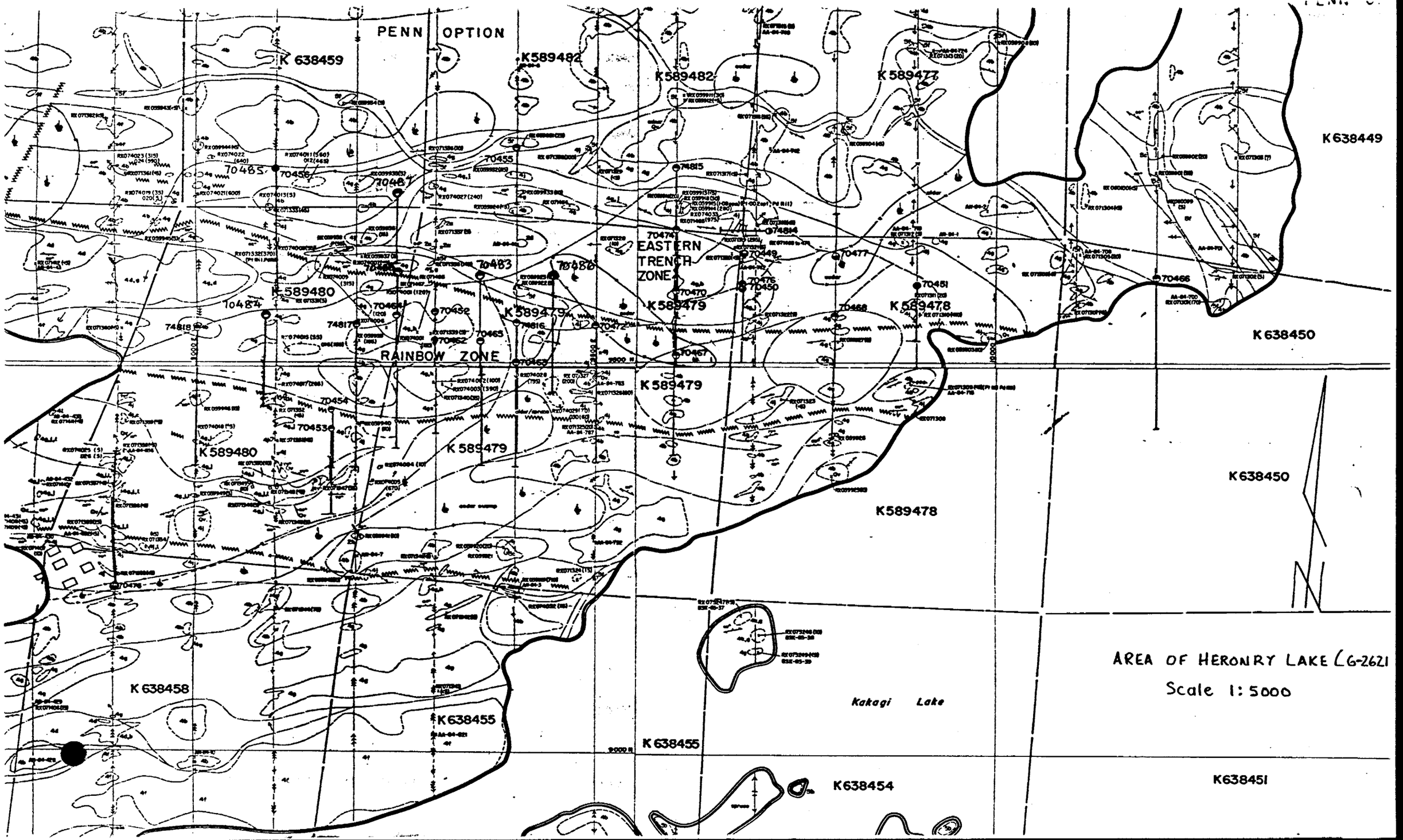
FROM M	TO M	**********DESCRIPTION**********
		Hard. Feldspars are light green in colour and are stretched. 3% quartz carbonate veinlets at various angles. Trace pyrite.
59.28	60.43	As above becoming strongly chloritic.
60.43	61.92	Green, fine grained to medium grained, strongly chloritic, moderately hard. 3 to 5% light yellow leucoxene, weakly foliated. 30% quartz carbonate veins, streaks and patches. Some veins sub parallel to core axis, others at various angles. Trace pyrite and rare chalcopyrite.
61.92	63.40	Gray green, moderately hard, medium grained, weakly foliated. Strongly carbonatized. 10% quartz and quartz carbonate veins, veinlets and streaks. 1 to 2% leucoxene, 1% pyrite. Rare fuchsite as alteration along one quartz carbonate vein.
63.40	64.90	Gray green, mottled with light green streaks and clots , moderately hard. 2 to 3% quartz carbonate veins and veinlets, weakly foliated, strong pervasive iron carbonate alteration. Trace pyrite.
64.90	66.17	Gray green to green gray, fine grained to medium grained, weakly foliated, moderately hard, weakly to moderately carbonatized. 3 to 5% quartz carbonate veins and veinlets. 1% disseminated pyrite. In part chloritic.
66.17	67.27	As above with 10% quartz carbonate veins up to 1 centimetre thick. Veins are sub parallel to core axis , contorted, or at various angles to core axis. 1 to 2% disseminated pyrite as crystals up to 1

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********
		millimetre.
67.27	68.73	Gray green, medium grained, moderately hard, weakly foliated to massive. 30 to 40% disseminated fine grained to medium grained iron carbonate. 3% disseminated pyrite as crystals up to 2 millimetres.
68.73	70.96	As above with trace pyrite.
70.96	72.42	As at 67.27 with 3% pyrite as disseminated crystals up 4 millimetres.
72.42	73.93	As at 67.27 with 15% light gray quartz carbonate veins up to 14 centimetres thick and with black tourmaline streaks. 1% disseminated pyrite.
73.93	74.79	As at 67.27. Trace pyrite.
74.79	76.65	As at 67.27 with 2% disseminated pyrite as crystals up to 4 millimetres. 5% quartz and quartz carbonate veins up to 3 centimetres thick, locally with black tourmaline streaks.
76.65	77.72	Medium grained, dark gray, massive, hard. 15% gray mineral with lattice of light gray lines produced either by polysynthetic twinning? or replacement along crystal cleavage planes. 20% fine grained disseminated iron carbonate. 1% fine grained disseminated pyrite and chalcopyrite. Minor quartz carbonate veinlets
77.72	79.11	As above with 5% quartz carbonate veins up to 2 centimetre thick, most having the same attitude. 2% pyrite, mainly as disseminations flanking quartz carbonate veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU FPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
79.11	83.52	GABBRO								
		Altered. Silicified and bleached to a light gray colour. Very hard.	FX163982	79.11	80.03	.92	2	-	.040	9.228
			FX163983	80.03	81.43	1.40	TR	-	.030	9.270
		79.11 80.03 As above with 10% quartz carbonate veins up to 12 centimetres thick and as streaks. 2% pyrite as crystals up to 4 millimetres.	FX163984	81.43	82.77	1.34	TR	-	<.010	9.270
			FX163985	82.77	83.52	.75	TR	-	.020	9.285
		80.03 83.52 As at 76.65. Trace pyrite. Foot of hole.								


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
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70455
74815
74814
70474
EASTERN
TRENCH
ZONE
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74818
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70465
K638450
RAINBOW ZONE
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K638458
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Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9750.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-14-86
PROPERTY	: Penn Option	DEPARTURE	:E 9600.0 M	TOWNSHIP	:	COMPLETED	: 03-16-86
BOREHOLE	: 74815-0	ELEVATION	: 1350.5 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589482	DRILL TYPE	: Boyles 37A
DEPTH	: 153.6 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 90m north and 80m west of post #2. Casing 1.81m into bedrock,left in hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
7.70	175.0	-46.00	61.00	175.0	-46.00	121.90	175.0	-44.00			
30.50	175.0	-46.00	91.40	175.0	-46.00	152.40	175.0	-42.00			

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
.00	7.72	OVERBURDEN Overburden of clay with some coarse gravel at the bottom.								
7.72	9.80	GABBRO Medium grained to coarse grained, massive, moderately hard, dark gray green. Weakly calcareous. Feldspars gray in colour and are altered. Mafics have been chloritized. 1% light yellow leucoxene.	FX163986 FX163987	7.72 8.72	8.72 9.80	1.00 1.08	0 0	- -	<.010 <.010	.000 .000
9.80	10.30	LAMPROPHYRE Mafic dike. Fine grained, dark gray green, with chilled	FX163988	9.80	10.30	.50	0	C55	<.010	.000

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
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JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

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PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		margins. 1% pyrite as crystals up to 1.5 millimetres. Minor quartz carbonate veinlets.								
10.30	24.83	GABBRO								
		Medium grained to coarse grained, massive, moderately hard, dark gray green. Weakly calcareous. Feldspars are gray in colour and are altered. Mafic minerals have been altered to chlorite. 1% light yellow leucoxene.	FX163989	10.30	11.80	1.50	TR	-	<.010	.000
			FX163990	11.80	13.30	1.50	0	-	<.010	.000
			FX163991	13.30	14.80	1.50	0	-	<.010	.000
			FX163992	14.80	16.30	1.50	0	-	<.010	.000
			FX163993	16.30	17.80	1.50	0	-	<.010	.000
			FX163994	17.80	19.30	1.50	0	-	<.010	.000
			FX163995	19.30	20.80	1.50	0	-	<.010	.000
			FX163996	20.80	22.30	1.50	0	-	<.010	.000
			FX163997	22.30	23.80	1.50	0	-	<.010	.000
			FX163998	23.80	24.83	1.03	0	-	<.010	.000
24.83	42.12	PERIDOTITE								
		Soft, talcose, dark gray to black. Minor light green talc seams. Fine grained to medium grained.	FX163999	24.83	25.76	.93	0	F62	<.010	.000
			FX164000	25.76	26.90	1.14	0	-	<.010	.000
		Not magnetic to weakly magnetic.	FX158529	26.90	27.80	.90	0	-	<.010	.000
		24.83 25.76 Moderately foliated.	FX158530	27.80	29.35	1.55	0	F58	<.010	.000
		25.76 27.80 Massive to weakly foliated.	FX158531	29.35	30.45	1.10	0	-	<.010	.000
		27.80 29.35 Weakly to moderately foliated, weakly to moderately calcareous. 5% contorted white quartz carbonate veins, streaks and patches.	FX158532	30.45	31.70	1.25	0	F48	<.010	.000
			FX158533	31.70	33.18	1.48	0	-	<.010	.000
			FX158534	33.18	34.75	1.57	0	-	<.010	.000
		29.35 30.45 As above without any quartz carbonate.	FX158535	34.75	36.32	1.57	0	-	<.010	.000
		30.45 31.70 5% disseminated iron carbonate, weakly calcareous, weakly foliated. 2 to 3% quartz carbonate veins and veinlets up to 5 millimetres thick.	FX158536	36.32	37.60	1.28	0	F55	<.010	.000
			FX158537	37.60	38.50	.90	0	-	<.010	.000
			FX158538	38.50	39.60	1.10	0	-	<.010	.000
			FX158539	39.60	40.70	1.10	1	F55	<.010	.000
		31.70 33.18 As above with 5% quartz carbonate veins,	FX158540	40.70	41.60	.90	2	-	.035	.031

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
		mainly sub parallel to core axis. In part contorted.	FX158541	41.60	42.12	.52	1	F47	.030	.047
	33.18 34.75	Weakly to moderately foliated, 10% fine grained disseminated iron carbonate.								
	34.75 36.32	As above, strongly contorted and folded. With 15% greyish white quartz carbonate as streaks and patches, usually with diffuse contacts.								
	36.32 37.60	Moderately foliated, 5 to 10% iron carbonate.								
	37.60 38.50	As above with 5% quartz carbonate veins.								
	38.50 39.60	Weakly foliated, in part contorted and folded. 5% fine grained disseminated iron carbonate. 2 to 3% quartz carbonate patches and veins.								
	39.60 40.70	Moderately foliated, 10% disseminated fine grained iron carbonate, 1% disseminated pyrite as fine grained crystals.								
	40.70 41.60	As above with 5% irregular quartz carbonate veins, 2% disseminated pyrite as crystals up to 2 millimetres.								
	41.60 42.12	Moderately to strongly foliated, 15% fine grained disseminated iron carbonate, 10% white iron carbonate veins, veinlets and streaks, especially at bottom of section. 1% pyrite.								
42.12	44.65	PERIDOTITE								
		Transition zone from peridotite to gabbro. Strongly foliated fine grained chloritic, streaky appearence, soft, dark gray green. Minor quartz veins and quartz carbonate veins. 5 to 10% fine grained disseminated iron	FX158542	42.12	43.76	1.64	0	F54	<.010	.047
			FX158543	43.76	44.65	.89	0	F52	<.010	.047

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		carbonate in the felsic streaks. Weakly calcareous.								
44.65	46.50	GABBRO								
		Fine grained to medium grained, dark gray, hard, 15 to 20% fine grained disseminated iron carbonate. Weakly foliated. 3% quartz carbonate veins up to 1 centimetre thick and with some weak fuchsite alteration of enclosing gabbro locally present.	FX158544	44.65	45.07	.42	0	-	<.010	.047
			FX158545	45.07	46.50	1.43	0	-	<.010	.047
		44.65 45.07 White quartz carbonate veining, primarily as one vein 22 centimetres thick. 40% very chloritic gabbro.								
46.50	55.58	GABBRO								
		Fine grained, massive, dark green gray. Contact with above medium grained gabbro is gradational. Moderately hard. 1% disseminated leucoxene, 10 to 15% fine grained disseminated iron carbonate, 5% quartz carbonate veinlets with rare, weak fuchsite alteration halos.	FX158546	46.50	48.00	1.50	0	-	<.010	.047
			FX158547	48.00	49.50	1.50	0	-	<.010	.047
			FX158548	49.50	50.90	1.40	0	-	<.010	.047
			FX158549	50.90	51.45	.55	3	-	.090	.097
			FX158550	51.45	53.95	2.50	1	-	<.010	.097
			FX158551	53.95	54.92	.97	1	F55	.030	.126
			FX158552	54.92	55.58	.66	5	-	.725	.604
		48.00 50.90 2% quartz carbonate veinlets.								
		50.90 51.45 Slightly grayer, with 3 to 5% fine grained disseminated magnetite in part replaced by light gray skeletal leucoxene. 3% disseminated pyrite as crystals up to 4 millimetres.								
		51.45 53.95 As above with 1% pyrite and 8% titaniferous? magnetite, locally replaced by light gray skeletal leucoxene.								
		53.95 54.92 As above, weakly to moderately foliated. Minor blue quartz. 5 to 10% disseminated fine grained iron carbonate.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	54.92	55.58 Strongly silicified and carbonatized adjacent to quartz carbonate vein, gray green to light gray in central part of section. Very hard, moderately foliated. Much of section is now quartz and iron carbonate crystals which is chlorite rich towards contacts. 5% fine grained disseminated pyrite. Alteration zone represented by this section has fairly sharp contacts.								
55.58	58.13	QUARTZ GABBRO								
		Quartz gabbro. Medium grained with some coarse grained sections. Dark gray, magnetic with 8 to 10% magnetite becoming replaced by light gray skeletal leucoxene 2% free quartz grains. Hard. weakly foliated to massive. 20% fine grained disseminated iron carbonate, 3% quartz carbonate veinlets, 5% white quartz carbonate veins up to 3 centimetres thick. 1% pyrite.	FX158553	55.58	56.92	1.34	1	-	.060	.685
			FX158554	56.92	58.13	1.21	8	-	.240	.975
		56.92 58.13 Gray to pale gray, silicified, carbonatized with 8% pyrite as coarse grained crystals up to 5 millimetres commonly associated with skeletal leucoxene. 20 to 30% disseminated iron carbonate. Locally bleached. Minor quartz carbonate veins.								
58.13	61.66	QUARTZ GABBRO								
		Weakly altered. Bleached pyritic contacts adjacent to 3 to 10% quartz carbonate veins.	FX158555	58.13	59.39	1.26	8	-	.620	1.756
		58.13 59.39 As above with 10% quartz carbonate veins	FX158556	59.39	60.50	1.11	TR	F42	<.010	1.756
			FX158557	60.50	61.22	.72	1	F43	.160	1.871

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		with diffuse contacts and bleaching of enclosing gabbro. 10% skeletal leucoxene. 8% fine grained to coarse grained pyrite. Last 26 centimetres becoming less bleached and with less pyrite.	FX158558	61.22	61.66	.44	TR	-	<.010	1.871
	59.39 60.50	10 to 12% ilmeno magnetite locally replaced by leucoxene. coarse grained to medium grained, hard, massive to weakly foliated, trace pyrite, 10 to 15% iron carbonate.								
	60.50 61.22	As above with 5% quartz carbonate veins up to 1.5 centimetres thick. 1% pyrite.								
	61.22 61.66	Fine grained, massive to weakly foliated, magnetic, dark gray, hard. 5 to 8% ilmeno magnetite, trace pyrite.								
61.66	65.18	GABBRO								
		Weakly altered as from 58.13 to 61.66 metres. medium grained, dark gray, weakly foliated, hard, magnetic. 5% ilmeno magnetite, locally replaced by skeletal leucoxene. 20 to 30% iron carbonate, 5% quartz carbonate veins with bleached alteration halos with 1% pyrite, trace chalcopyrite.	FX158559	61.66	62.16	.50	1	-	.160	1.951
			FX158560	62.16	63.05	.89	5	-	.475	2.374
			FX158561	63.05	64.11	1.06	3	-	.270	2.660
			FX158562	64.11	65.18	1.07	1	-	.110	2.778
	62.16 63.05	10% quartz carbonate veins with bleached pyritic halos uo to 2 centimetres thick. 2 to 3% light gray skeletal leucoxene. 5% pyrite as medium grained to coarse grained crystals up to 4 millimetres and as fine grained disseminations close to quartz carbonate veins.								
	63.05 64.11	Strongly silicified and carbonatized, moderately bleached. Medium grained to								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		coarse grained, light gray to gray, weakly foliated, hard to very hard. 5 to 8% quartz carbonate veins up to 1.5 centimetres thick. 3% pyrite as crystals up to 4 millimetres.								
		64.11 65.18 Medium grained to fine grained. 3% quartz carbonate veins up to 5 millimetres thick with thin bleached pyritic halos. 1% pyrite.								
65.18	76.36	GABBRO								
		Fine grained, dark gray, massive, moderately hard. Weakly calcareous. Trace disseminated chalcopyrite, pyrite. 2 to 3% quartz carbonate veinlets and veins. 3 to 5% light gray to light yellow skeletal leucoxene.	FX158563	65.18	66.68	1.50	TR	-	.030	2.823
			FX158564	66.68	68.18	1.50	TR	-	.020	2.853
			FX158565	68.18	69.68	1.50	TR	-	.020	2.883
			FX158566	69.68	71.18	1.50	TR	-	.030	2.928
		74.90 76.36 Weakly foliated, weakly sericitized. 1% light yellow leucoxene. 5% quartz carbonate veins and streaks. 15 to 20% fine grained disseminated iron carbonate.	FX158567	71.18	72.68	1.50	TR	-	.060	3.018
			FX158568	72.68	74.18	1.50	TR	-	<.010	3.018
			FX158569	74.18	74.90	.72	TR	-	<.010	3.018
			FX158570	74.90	76.36	1.46	TR	F45	<.010	3.018
76.36	77.78	GABBRO								
		Altered. Pale gray to fuchsitic green carbonatized and silicified locally fuchsitic gabbro.	FX158571	76.36	76.71	.35	TR	F48	.030	3.029
			FX158572	76.71	77.28	.57	2	-	.070	3.068
		76.36 76.71 Pale gray, bleached with 10% diffuse quartz carbonate veins and weak fuchsite alteration. Moderately foliated, strongly carbonatized. Trace pyrite. Several black tourmaline streaks at bottom.	FX158573	77.28	77.56	.28	TR	-	.070	3.088
			FX158574	77.56	77.78	.22	0	-	.040	3.097
		76.71 77.28 Light gray, strongly bleached, carbonatized and silicified. Weakly foliated. 5 to 10% chlorite. Last 9 centimetres are free from mafics. 2% very fine grained disseminated								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		pyrite. Minor quartz carbonate veinlets.								
	77.28 77.56	Moderately foliated, light green to gray with 7 centimetre thick quartz carbonate tourmaline vein at top. Vein is about 30% black tourmaline as streaks and patches. Strongly carbonatized. Trace chalcopyrite, pyrite.								
	77.56 77.78	Pale gray, weakly foliated, silicified, bleached. 10% fine grained disseminated iron carbonate. Hard. With 5% quartz carbonate veinlets.								
77.78	78.87	QUARTZ GABBRO								
		Medium grained, gray green, weakly to moderately foliated, moderately hard. In part chloritic. 10% quartz carbonate veins up to 5 centimetres thick. 15 to 20% disseminated iron carbonate. 3 to 5% quartz grains.	FX158575	77.78	78.87	1.09	0	F45	.150	3.260
78.87	83.02	GABBRO								
		Fine grained, weakly foliated to massive, dark gray, hard. 10 to 15% disseminated fine grained iron carbonate. 2 to 3% leucoxene. 3 to 5% quartz carbonate veinlets. Trace chalcopyrite, pyrite.	FX158576	78.87	80.40	1.53	TR	-	.080	3.383
			FX158577	80.40	81.75	1.35	TR	-	<.010	3.383
			FX158578	81.75	83.02	1.27	TR	-	<.010	3.383
83.02	86.88	QUARTZ GABBRO								
		Medium grained to coarse grained, gray to pale gray green. Light gray to green altered feldspar. Weakly foliated and hard. 20 to 30% fine grained to medium grained iron carbonate. Mafics altered to chlorite. 2 to	FX158579	83.02	84.48	1.46	0	F46	.040	3.441
			FX158580	84.48	85.86	1.38	0	-	<.010	3.441
			FX158581	85.86	86.88	1.02	0	F45	<.010	3.441

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		3% light gray green skeletal leucoxene. 2 to 5% quartz. 5% quartz carbonate veins and veinlets up to 5 millimetres thick.								
		85.86 86.88 Pale gray, 60% altered feldspar.								
86.88	89.66	QUARTZ GABBRO								
		Weakly altered. Carbonatized and fuchsitic adjacent to numerous quartz carbonate veins.	FX158582	86.88	87.05	.17	0	-	.450	3.518
		86.88 87.05 Quartz carbonate vein. Rare black tourmaline, minor lime green fuchsite alteration of gabbro inclusions. Composite ribboned vein.	FX158583	87.05	87.78	.73	0	F45	<.010	3.518
			FX158584	87.78	88.15	.37	TR	-	.030	3.529
			FX158585	88.15	88.98	.83	0	-	<.010	3.529
			FX158586	88.98	89.66	.68	0	-	<.010	3.529
		87.05 87.78 Chloritic, with 20% quartz carbonate patches, streaks and veins. 2% black tourmaline veinlets.								
		87.78 88.15 Quartz carbonate vein. Composite vein with first 18 centimetres being light gray quartz with some black tourmaline streaks. The balance is coarse iron carbonate and interstitial quartz, with some lime green streaks. 5% black tourmaline streaks and veinlets. Trace pyrite.								
		88.15 88.98 With 10% quartz as patches and streaks.								
89.66	97.88	QUARTZ GABBRO								
		Halo alteration. Very weakly altered gabbro as above.	FX158587	89.66	90.08	.42	1	-	<.010	3.529
		89.66 90.08 Chloritic, dark green, medium grained to coarse grained, hard. 4% skeletal leucoxene. 1% disseminated chalcopyrite.	FX158588	90.08	91.58	1.50	0	-	<.010	3.529
			FX158589	91.58	93.00	1.42	0	-	<.010	3.529
			FX158590	93.00	94.50	1.50	0	-	<.010	3.529
		91.58 97.88 Medium grained to coarse grained, dark green	FX158591	94.50	96.00	1.50	0	-	<.010	3.529

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		gray, 5% quartz, weakly foliated to massive, moderately hard. 25% fine grained disseminated iron carbonate. 1 to 2% light gray, locally skeletal , leucoxene. Minor quartz carbonate veins up to 5 millimetres. 5 centimetre thick quartz vein at 92.82.	FX158592	96.00	97.50	1.50	0	-	.030	3.574
			FX158593	97.50	97.88	.38	0	-	.070	3.600
97.88	109.05	QUARTZ GABBRO								
		Moderately altered. Moderately carbonatized and silicified especially adjacent to quartz carbonate veins.	FX158594	97.88	98.66	.78	TR	-	.010	3.608
		97.88 98.66 Coarse grained to medium grained, 3 to 5% quartz, hard, massive. 20 to 30% disseminated iron carbonate. Trace leucoxene. Trace disseminated pyrite, chalcopyrite. 2 to 3% quartz carbonate veins with very weak lime green alteration of enclosing gabbro.	FX158595	98.66	99.89	1.23	1	-	.215	3.873
			FX158596	99.89	101.08	1.19	1	-	.500	4.469
			FX158597	101.08	102.22	1.14	TR	-	.100	4.582
			FX158598	102.22	102.64	.42	2	-	.180	4.657
			FX158599	102.64	103.32	.68	TR	-	.150	4.759
			FX158600	103.32	104.55	1.23	2	-	.230	5.042
			FX188001	104.55	106.05	1.50	1	-	n/a	n/a
			FX188002	106.05	107.55	1.50	1	-	.060	5.132
			FX188003	107.55	109.05	1.50	TR	-	.010	5.147
		98.66 99.89 As above with 1% disseminated pyrite, 5% quartz carbonate veins up to 4 centimetres thick. locally with acicular tourmaline crystals and with bleached, silicified and pyritic alteration halos , commonly with weak lime green fuchsite alteration.								
		99.89 101.08 As above. Lime green alteration envelopes a little stronger and more distinct.								
		101.08 101.70 Medium grained to coarse grained, gray green, weakly to moderately foliated. Strongly carbonatized. with 3 to 5% black tourmaline as patches and crystals scattered throughout. One 4 centimetre thick quartz carbonate vein at 101.16. No								

FROM M	TO M	**********DESCRIPTION**********
		alteration envelope. Trace pyrite.
101.70	102.00	70% quartz carbonate tourmaline as veins and patches. Gabbro is bleached to light green. 15% black tourmaline as aggregates of tiny crystals and as streaks. 1% fine grained disseminated pyrite.
102.00	102.22	As at 101.08.
102.22	102.64	Highly altered gabbro or possibly felsite dike. very similar to 76.71. Contacts to less altered gabbro sharp. Fine grained, light gray, 15% chlorite. Hard to very hard. Near contacts it is bleached and strongly silicified with mafics obliterated. 2% very fine grained pyrite, mainly in the silicified areas. 15 to 20% fine grained iron carbonate. A 5 millimetre thick quartz carbonate vein sub parallel to core axis.
103.32	104.55	5% quartz carbonate veins up to 1 centimetre thick and with bleached and pyritic alteration envelopes up to 2 centimetres thick, usually with a lime green tint. minor black tourmaline in the veins. 30 to 35% iron carbonate. 2% disseminated fine grained pyrite.
104.55	107.55	Gray to pale gray, strongly carbonatized. 3 to 5% light gray skeletal leucoxene. Generally pervasive bleaching. Mottled. Very strongly bleached to a light green colour around 3% narrow quartz carbonate veins, at various angles. 1% pyrite. Some tourmalinization of gabbro locally present.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	DESCRIPTION
	107.55	109.05 As above, trace pyrite.
109.05	131.40	QUARTZ GABBRO
		Halo alteration. Weakly carbonatized and silicified especially adjacent to vein contacts. Locally fuchsitic at vein contacts.
	109.05 110.55	Coarse grained to medium grained, gray, mottled, with 3% quartz carbonate patches veins. Trace pyrite, chalcopyrite.
	110.55 111.95	As above with 1% pyrite. Strongly carbonatized with 30% fine grained iron carbonate.
	111.95 113.00	As above with 5% quartz carbonate veins at various angles and up to 5 millimetres thick. 2% disseminated pyrite. Becoming dark gray and chloritic.
	113.00 113.60	Dark gray, medium grained hard, 30% fine grained iron carbonate, massive. 5% quartz carbonate veins up to 5 millimetres thick. Alteration envelopes are very thin. Trace pyrite.
	113.60 114.02	Medium grained, gray to pale gray, mottled. 35% iron carbonate. 2% black tourmaline as bands, scattered small crystals, streaks and veinlets. Some localized bleaching. Trace pyrite. Minor quartz carbonate veins.
	114.02 114.48	As above. Medium grained to coarse grained, 4% tourmaline. Weakly to moderately foliated.
	114.48 115.00	As above. Bleached with 25% gray granular

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
FX188004	109.05	110.55	1.50	TR	-	.010	5.162
FX188005	110.55	111.95	1.40	1	-	.020	5.190
FX188006	111.95	113.00	1.05	2	-	.160	5.358
FX188007	113.00	113.60	.60	TR	-	2.245	6.705
FX188008	113.60	114.02	.42	TR	-	.030	6.718
FX188009	114.02	114.48	.46	TR	F42	<.010	6.718
FX188010	114.48	115.00	.52	TR	-	.140	6.791
FX188011	115.00	115.76	.76	0	F43	<.010	6.791
FX188012	115.76	116.87	1.11	0	-	<.010	6.791
FX188013	116.87	117.67	.80	0	-	<.010	6.791
FX188014	117.67	118.92	1.25	0	-	<.010	6.791
FX188015	118.92	119.57	.65	TR	F40	<.010	6.791
FX188016	119.57	121.00	1.43	0	F40	.040	6.848
FX188017	121.00	122.11	1.11	0	-	<.010	6.848
FX188018	122.11	122.96	.85	1	-	1.150	7.825
FX188019	122.96	123.90	.94	1	-	.020	7.844
FX188020	123.90	125.40	1.50	2	-	1.225	9.682
FX188021	125.40	126.90	1.50	TR	-	.080	9.802
FX188022	126.90	128.40	1.50	TR	F48	<.010	9.802
FX188023	128.40	129.90	1.50	TR	F48	<.010	9.802
FX188024	129.90	131.40	1.50	0	-	.040	9.862

FROM M	TO M	**********DESCRIPTION**********
		quartz carbonate veins with diffuse contacts.
115.00	115.76	Medium grained to coarse grained, gray to dark gray, moderately foliated. 1 to 2% tourmaline. several granular quartz carbonate veins up to 2 centimetres thick. In part mottled.
115.76	116.87	Medium grained, massive to weakly foliated, dark gray, chloritic. 25 to 30% iron carbonate. Moderately hard. 3% quartz carbonate veins up to 3 millimetres thick.
116.87	117.87	Medium grained to coarse grained, moderately foliated, 1 to 2% tourmaline. Mottled. Gray to light gray. Some locallized bleaching with trace fuchsite alteration.
117.87	118.92	As at 115.76, with 5% quartz carbonate veins, locally vuggy.
118.92	119.57	Moderately to strongly foliated, chloritic, strongly carbonatized, with central bleached zone, 20 centimetres thick, having numerous tourmaline veinlets and minor lime green fuchsite streaks. 5% quartz carbonate as streaks, bands and patches within the bleached zone. Trace pyrite.
119.57	121.00	Moderately to strongly foliated.
121.00	122.11	Weakly foliated to massive.
122.11	122.96	Some veins have bleached alteration envelopes up to 1.5 centimetres thick. 1% disseminated pyrite as crystals up to 2 millimetres.

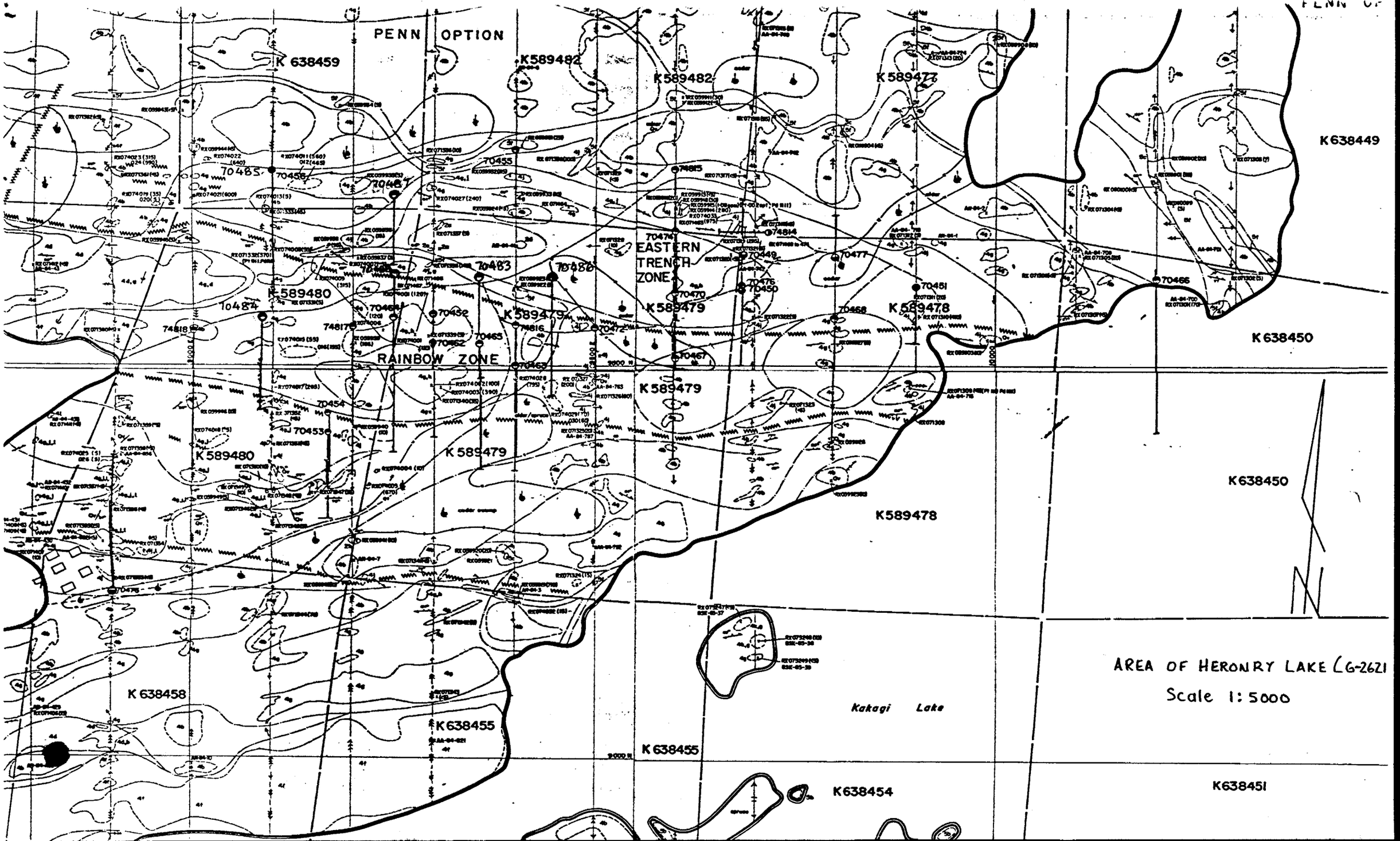
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	122.96	123.99 1% pyrite, trace chalcopyrite.								
	123.99	125.40 Weakly foliated to massive with 2% disseminated pyrite as crystals up to 2 millimetres.								
	125.40	126.90 Massive to weakly foliated, trace very fine grained pyrite in thin quartz carbonate vein alteration envelopes.								
	126.90	129.90 Weakly to moderately foliated, 1% tourmaline as disseminated crystals, 5% quartz carbonate veins up to 5 millimetres. Several light gray strongly bleached and silicified bands up to 16 centimetres thick. Trace pyrite.								
	129.90	131.40 Massive to weakly foliated. 3% quartz carbonate veins and veinlets with some bleached and silicified alteration envelopes up to 1 centimetre thick, 20% iron carbonate.								
131.40	140.40	GABBRO								
		Fine grained gray green massive gabbro with occasional quartz carbonate vein.	FX18B025	131.40	132.90	1.50	0	-	.115	10.034
	131.40	132.90 3 to 5% quartz carbonate veins up to 5 millimetres thick with sharp contacts. 20 to 25% fine grained disseminated iron carbonate.	FX18B026	132.90	134.40	1.50	0	-	<.010	10.034
			FX18B027	134.40	135.90	1.50	0	F40	<.010	10.034
			FX18B028	135.90	137.40	1.50	0	-	.020	10.064
			FX18B029	137.40	138.90	1.50	0	-	<.010	10.064
			FX18B030	138.90	140.40	1.50	0	-	<.010	10.064
	132.90	134.40 As above with 10 to 15% iron carbonate.								
	134.40	135.90 Massive to moderately foliated, 15% iron carbonate, 5% white quartz carbonate veins up to 1.5 centimetres thick with sharp contacts.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	135.90	137.40 10% iron carbonate, 3% quartz carbonate veins.								
	137.40	138.90 5% disseminated iron carbonate, 2 to 3% quartz carbonate veins.								
	138.90	140.40 As above, weakly calcareous.								
140.40	144.90	GABBRO								
		Weakly altered. Weakly carbonatized and silicified esperially adjacent to quartz carbonate veins with minor tourmaline.	FX188031	140.40	141.90	1.50	0	-	.030	10.109
			FX188032	141.90	143.40	1.50	0	F48	<.010	10.109
			FX188033	143.40	144.90	1.50	0	F30	.075	10.222
	140.40	141.90 Massive to weakly foliated, 5 to 10% iron carbonate, 3% white to light pink quartz carbonate veins up to 1.5 centimetres thick.								
	141.90	143.40 Weakly to moderately foliated, 3 to 5% quartz carbonate veins. 2% tourmaline as streaks and veinlets and in quartz carbonate veins. Locally contorted. 10% iron carbonate.								
	143.40	144.90 Moderately to strongly foliated and contorted. 5% quartz carbonate veins, some of which are contorted and have 1 to 2% black tourmaline streaks. 15% iron carbonate.								
144.90	153.62	GABBRO								
		Massive to weakly foliated gray green fine grained to medium grained gabbro.	FX188034	144.90	146.40	1.50	0	-	<.010	10.222
			FX188035	146.40	147.90	1.50	0	-	<.010	10.222
			FX188036	147.90	149.40	1.50	0	-	.010	10.237
			FX188037	149.40	150.90	1.50	0	-	<.010	10.237
	144.90	149.40 Weakly foliated to massive. Dark gray green. 5% iron carbonate. 3 to 5% diffuse								

FROM M	TO M	**********DESCRIPTION**********
		quartz carbonate veins.
149.40	150.90	As above. Quartz carbonate vein contacts are sharp.
150.90	153.62	Gray green to dark gray green, 3% quartz carbonate veins, 5 to 8% fine grained disseminated iron carbonate. Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188038	150.90	152.40	1.50	0	-	<.010	10.237
FX188039	152.40	153.62	1.22	0	-	.060	10.310


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
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EASTERN
TRENCH
ZONE
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70472
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RAINBOW ZONE
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K638450
K589478
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Kakagi Lake
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K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9550.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-19-86
PROPERTY	: Penn Option	DEPARTURE	:E 9200.0 M	TOWNSHIP	:	COMPLETED	: 03-21-86
BOREHOLE	: 74817-0	ELEVATION	: 1359.1 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: Boyles 37A
DEPTH	: 251.2 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 145m south and 80m west of post #1. Casing left in hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.00	175.0	-45.00	91.40	175.0	-44.00	182.90	175.0	-42.00			
31.70	175.0	-45.00	121.90	175.0	-43.00	213.40	175.0	-40.00			
61.00	175.0	-45.00	153.60	175.0	-43.00	251.20	175.0	-34.00			

**********DESCRIPTION**********

FROM M	TO M	
.00	3.05	OVERBURDEN Overburden of gravel and boulders.
3.05	10.04	GABBRO Dark green, medium grained, chloritic, hard, weakly foliated. Feldspar green in colour and altered. Minor quartz carbonate veins up to 5 millimetres thick. Trace to 1% yellow leucoxene. Trace pyrite. 3.05 7.46 5 to 10% disseminated iron carbonate. 7.46 10.04 Weakly to moderately calcareous.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188286	3.05	4.54	1.49	TR	F45	.390	.581
FX188287	4.54	6.02	1.48	TR	-	.015	.603
FX188288	6.02	7.46	1.44	TR	-	.005	.611
FX188289	7.46	8.98	1.52	TR	F45	.005	.618
FX188290	8.98	10.04	1.06	TR	-	.005	.623

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ASSESSMENT FILES OFFICE
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JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
10.04	43.37	GABBRO								
		Fine grained, dark green, chloritic, weakly foliated to massive. Probably fine grained equivalent of above gabbro. Gradational contact. Moderately hard, weakly to moderately calcareous, 2 to 3% quartz carbonate veins some sub parallel to core. 1% leucoxene.	FX188291	10.04	11.46	1.42	0	-	.015	.645
			FX188292	11.46	12.96	1.50	0	-	.015	.667
			FX188293	12.96	14.46	1.50	0	-	.015	.690
			FX188294	14.46	15.96	1.50	0	-	.010	.705
			FX188295	15.96	17.46	1.50	0	-	.010	.720
		14.46 18.96 Weakly magnetic. 1 to 2% fine grained disseminated magnetite grains.	FX188296	17.46	18.96	1.50	0	-	.010	.735
			FX188297	18.96	20.46	1.50	0	-	.010	.750
		18.96 20.46 As above with 2 to 5% iron carbonate.	FX188298	20.46	21.96	1.50	TR	-	.010	.765
		20.46 21.96 As at 14.46. Trace disseminated pyrite.	FX188299	21.96	23.46	1.50	0	-	.015	.787
		21.96 32.46 Minor quartz carbonate patches and veinlets. Weakly magnetic. Magnetite in part altered to light gray leucoxene. Chloritic to very chloritic. Trace pyrite.	FX188300	23.46	24.96	1.50	TR	-	.010	.802
			FX188301	24.96	26.46	1.50	TR	-	.010	.817
			FX188302	26.46	27.96	1.50	TR	-	.005	.825
			FX188303	27.96	29.46	1.50	TR	-	.020	.855
		38.46 43.37 Moderately to strongly calcareous. Minor quartz carbonate veins up to 5 millimetres thick.	FX188304	29.46	30.96	1.50	TR	-	.020	.885
			FX188305	30.96	32.46	1.50	TR	-	.010	.900
			FX188306	32.46	33.96	1.50	TR	-	.010	.915
			FX188307	33.96	35.46	1.50	TR	-	<.005	.915
			FX188308	35.46	36.96	1.50	TR	-	<.005	.915
			FX188309	36.96	38.46	1.50	TR	-	.010	.930
			FX188310	38.46	39.96	1.50	TR	-	.005	.937
			FX188311	39.96	41.46	1.50	TR	-	.005	.945
			FX188312	41.46	42.51	1.05	TR	-	.005	.950
			FX188313	42.51	43.37	.86	TR	-	.040	.984
43.37	49.13	GABBRO								
		Medium grained to fine grained, weakly to moderately foliated, gray green, moderately hard, chloritic. 1 to 2% quartz carbonate veins up to 6 millimetres thick.	FX188314	43.37	44.20	.83	TR	-	.005	.988
			FX188315	44.20	45.70	1.50	TR	F35	.015	1.011
			FX188316	45.70	46.60	.90	TR	-	.005	1.015
		43.37 44.20 5 to 10% iron carbonate, weakly mottled due	FX188317	46.60	48.10	1.50	TR	-	.020	1.045

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU FPM	PPM*N
		to clots of altered feldspar crystals. Trace pyrite. Some hematitization of quartz carbonate veins.	FX188318	48.10	49.13	1.03	TR	-	<.005	1.045
		44.20 46.60 All crystal boundaries diffuse. 5% iron carbonate. In part calcareous. Weakly mottled. Trace pyrite.								
		46.60 48.10 60% light green to gray feldspar. Mottled. Weakly foliated. 15 to 25% fine grained disseminated iron carbonate. Trace pyrite.								
49.13	54.32	GABBRO								
		Altered. Strongly hematitized and silicified fine grained to medium grained gabbro.	FX188319	49.13	49.99	.86	1	-	.240	1.252
		49.13 49.99 Strongly carbonatized with 30 to 35% iron carbonate. Hematitization of iron carbonate in quartz carbonate veins and 5% disseminated hematite grains, after iron carbonate. Hematite is red brown in colour. Some yellow orange limonite on fractures. 2 to 3% quartz carbonate veins up to 1 centimetre thick. 1% fine grained disseminated pyrite.	FX188320	49.99	51.30	1.31	TR	-	.575	2.005
			FX188321	51.30	51.67	.37	TR	-	.025	2.014
			FX188322	51.67	52.11	.44	1	F00	.115	2.065
			FX188323	52.11	52.83	.72	1	F00	.565	2.472
			FX188324	52.83	53.70	.87	1	F00	.430	2.846
			FX188325	53.70	54.32	.62	2	F00	.550	3.187
		49.99 51.30 Weakly bleached, hard, hematitized, very strongly carbonatized with 30 to 40% fine grained disseminated iron carbonate. Pale reddish gray. Iron carbonate in quartz carbonate veins almost totally replaced by hematite. 5 to 10% red brown hematite. Moderately foliated. 1% pyrite, locally oxidized. 1 to 2% yellow leucoxene.								
		51.30 51.67 As above, more strongly hematitized.								

FROM M	TO M	**********DESCRIPTION**********
	51.67 52.11	Gray brown, very strongly hematitized. With 4 centimetre thick quartz vein with some hematitized iron carbonate. In part foliated sub parallel to core. 1% pyrite in part oxidized.
	52.11 52.83	35 to 40% iron carbonate, moderately to strongly hematitized, 1% oxidized pyrite, mottled, brown gray in colour.
	52.83 53.70	Strongly hematitized, dark brown gray, fine grained to medium graineds strongly carbonatized. moderately foliated with foliation angle changing rapidly from 20 degrees to sub parallel to core axis. 1 to 2% streaked out leucoxene. 1% oxidized pyrite
	53.70 54.32	As above with 2% oxidized pyrite, formally as crystals up to 2 millimetre.
54.32	58.38	GABBRO
		Altered. Strongly foliated, fine grained, 30% fine grained disseminated iron carbonate, moderately hard, strongly hematitized with numerous red, yellow and brown bands, streaks, patches and disseminated. Reddish gray to gray brown in colour.
	54.32 54.57	Quartz chlorite hematite iron carbonate vein. Ribboned, with 10% orange yellow limonite.
	54.57 55.27	2% oxidized pyrite.
	57.04 57.68	Chloritic, moderately foliated, 30 to 35% iron carbonate. Weakly sericitic . Green to reddish green. Some strong hematitization along a fracture decreasing slowly away

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188326	54.32	54.57	.25	0	F00	1.270	3.504
FX188327	54.57	55.27	.70	2	F07	.380	3.770
FX188328	55.27	56.08	.81	0	F15	.140	3.884
FX188329	56.08	57.04	.96	0	F10	.170	4.047
FX188330	57.04	57.68	.64	TR	F30	<.005	4.047
FX188331	57.68	58.38	.70	TR	-	<.005	4.047

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		from it.								
	57.68	58.38 Weakly hematitized. 2 to 3% disseminated fine grained hematite. Slightly reddish gray. 30 to 35% iron carbonate.								
58.38	84.38	GABBRO								
		Halo alteration. Weakly silicified and hematitized with gash type dolomite quartz carbonate veins common. medium grained, pale green gray, moderately hard, weakly foliated, mottled. 50 to 60% light gray to green feldspar. Weakly hematitized in places. 20 to 25% fine grained disseminated iron carbonate, trace disseminated pyrite.	FX188332	58.38	59.34	.96	TR	-	.010	4.057
			FX188333	59.34	60.84	1.50	TR	-	<.005	4.057
			FX188334	60.84	61.42	.58	TR	-	<.005	4.057
			FX188335	61.42	61.82	.40	2	F42	.655	4.319
			FX188336	61.82	62.22	.40	TR	-	.005	4.321
			FX188337	62.22	63.72	1.50	TR	-	<.005	4.321
			FX188338	63.72	65.08	1.36	TR	-	<.005	4.321
			FX188339	65.08	66.58	1.50	TR	-	.010	4.336
			FX188340	66.58	67.46	.88	0	-	.005	4.340
			FX188341	67.46	68.96	1.50	0	-	<.005	4.340
			FX188342	68.96	69.06	.10	0	-	<.005	4.340
			FX188343	69.06	69.76	.70	0	-	<.005	4.340
			FX188344	69.76	71.32	1.56	0	-	.005	4.348
			FX188345	71.32	72.65	1.33	TR	-	<.005	4.348
			FX188346	72.65	74.15	1.50	TR	-	.005	4.355
			FX188347	74.15	75.30	1.15	TR	-	.025	4.384
			FX188348	75.30	75.86	.56	TR	-	<.005	4.384
			FX188349	75.86	76.14	.28	TR	-	.685	4.576
			FX188350	76.14	76.64	.50	TR	-	.010	4.581
			FX188351	76.64	77.16	.52	TR	-	.005	4.583
			FX188352	77.16	78.82	1.66	TR	F42	.010	4.600
			FX188353	78.82	79.35	.53	TR	F20	.475	4.852
			FX188354	79.35	79.71	.36	2	-	.690	5.100
			FX188355	79.71	80.47	.76	TR	F28	.015	5.112
			FX188356	80.47	81.43	.96	0	F38	.010	5.121
		61.42 61.82 Reddish brown, strongly hematitized, 2% fine grained disseminated pyrite.								
		65.08 67.46 Not mottled. Fine grained to medium grained, weakly foliated to massive, weakly hematitized in part.								
		67.46 68.96 Fine grained to medium grained, gray, moderately hard, massive to weakly foliated. 30% light green feldspar. Generally diffuse crystal boundaries. 3 to 5% fine grained disseminated iron carbonate. 3% quartz carbonate veins up to 5 millimetres thick.								
		68.96 69.06 As above, weakly to moderately calcareous.								
		69.06 69.76 As at 67.46.								
		69.76 71.32 As above, weakly foliated with 10% iron carbonate as rhombic crystals up to 1 millimetre. Blocky. Locally weakly hematitized.								
		71.32 74.15 Fine grained, dark reddish gray. Moderately								

FROM M	TO M	**********DESCRIPTION**********
		hard, weakly foliated to massive, 10 to 20% fine grained disseminated iron carbonate, mainly as rhombic crystals locally up to 1 millimetre. 5 to 8% red brown hematite as streaks, veinlets, and disseminated. Trace pyrite.
74.15	75.86	As above, fine grained to medium grained.
75.86	76.14	Quartz vein, hematitized. Light reddish gray. Trace pyrite.
76.14	77.16	As at 71.32 with 3 to 5% moderately hematitized quartz carbonate veins up to 5 millimetres thick. Trace to 1% pyrite.
78.82	79.35	Weakly to moderately hematitized with 5% ribboned quartz tourmaline veining. trace to 1% pyrite.
79.35	79.71	Folded and contorted reddish quartz iron carbonate hematite veining. 2% pyrite.
80.47	81.43	Moderately to strongly hematitized with 10 to 15% red brown fine grained to medium grained disseminated hematite. 10% fine grained disseminated iron carbonate. Brownish gray in colour.
81.43	82.17	As above with 10% ribboned and broken pink quartz carbonate veins and patches, in part strongly hematitized. Weakly contorted.
82.17	82.99	As above. Folded and contorted. 20% reddish quartz carbonate veins, in part vuggy. Chloritic. Trace pyrite.
82.99	84.38	Moderately to strongly hematitized with 20% hematitic feldspar. Brown gray near bottom with some small white iron carbonate patches.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
FX188357	81.43	82.17	.74	0	F15	<.005	5.121
FX188358	82.17	82.99	.82	TR	-	<.005	5.121
FX188359	82.99	84.38	1.39	0	F40	.010	5.135

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
84.38	89.95	GABBRO								
		Sub-halo alteration. Very weakly altered gabbro with numerous brecciated angular patches of carbonate.	FX188360	84.38	85.90	1.52	0	F40	.005	5.143
		84.38 87.40 With 5 to 10% white clots of strongly carbonatized feldspar up to 5 millimetres in size. 20 centimetre thick carbonatized zone at 84.62 with light buff iron carbonate veins up to 6 centimetres thick and with some tourmaline streaks.	FX188361	85.90	87.40	1.50	0	F36	.010	5.158
			FX188362	87.40	88.90	1.50	0	F40	.005	5.165
			FX188363	88.90	89.95	1.05	0	F45	<.005	5.165
		87.40 88.90 As above, cut by 17 centimetre thick gray aphanitic dike with sharp irregular contacts at 87.67.								
		88.90 89.95 As above with only minor white altered feldspar clots.								
89.95	95.10	GABBRO								
		Fine grained to medium grained gray green weakly to moderately foliated gabbro with 10 to 20% carbonate dolomite quartz stockworks. Contacts slightly bleached and locally fuchsitic.	FX188364	89.95	90.55	.60	0	-	.020	5.177
			FX188365	90.55	90.90	.35	TR	-	.035	5.189
			FX188366	90.90	92.37	1.47	0	F45	.010	5.204
			FX188367	92.37	93.12	.75	TR	-	.020	5.219
			FX188368	93.12	93.82	.70	TR	-	<.005	5.219
			FX188369	93.82	95.10	1.28	TR	F40	<.005	5.219
		89.95 90.55 5% irregular contorted quartz carbonate streaks and veins.								
		90.55 90.90 Green, medium grained with 50% light buff quartz carbonate as contorted masses and 10% white quartz tourmaline veins up to 3 centimetres thick. Trace pyrite, weakly fuchsitic, minor sericite.								
		90.90 92.37 Medium grained, gray green to green gray, 10 to 15% iron carbonate, weakly sericitic. Locally weakly hematitized. 3 to 5% numerous								

FROM M	TO M	**********DESCRIPTION**********
		quartz carbonate veinlets at many angles to core and in part contorted.
92.37	93.12	Green gray, medium grained, 10 to 15% fine grained disseminated iron carbonate, 3% quartz carbonate veinlets. Trace pyrite.
93.12	93.82	As above with 30% contorted masses and veinlets of brownish white quartz carbonate with minor black tourmaline. Trace pyrite.
93.82	95.10	As at 92.37.
95.10	101.32	GABBRO
		Halo alteration. Weakly silicified medium grained to locally coarse grained gabbro with few dolomite quartz veins. Feldspars saussuritized.
95.10	96.23	As above with 3 to 5% quartz carbonate veins up to 4 centimetres thick. Trace pyrite.
96.23	96.63	As at 92.37 with 10% contorted quartz carbonate veins with minor fuchsite streaks. 2% fine grained disseminated pyrite.
96.63	96.90	As at 92.37 with 10% quartz carbonate veins up to 1.5 centimetres thick.
96.90	98.10	Medium grained, gray green, weakly to moderately foliated, weakly sericitic. Chloritic. Weakly hematitized. Trace disseminated pyrite. 3 to 5% fine grained disseminated iron carbonate.
98.10	99.54	As above with 5 to 8% quartz carbonate veins up to 2 centimetres thick, locally contorted. moderately foliated.
99.54	100.38	As at 96.90. Moderately to strongly foliated with 10% quartz carbonate vein

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU P*M	PPM*M
FX188370	95.10	96.23	1.13	TR	F40	.010	5.230
FX188371	96.23	96.63	.40	2	-	.175	5.300
FX188372	96.63	96.90	.27	TR	-	.015	5.304
FX188373	96.90	98.10	1.20	TR	F40	<.005	5.304
FX188374	98.10	99.54	1.44	TR	F43	.005	5.312
FX188375	99.54	100.38	.84	TR	F45	.010	5.320
FX188376	100.38	101.32	.94	TR	F38	<.005	5.320

FROM M	TO M	**********DESCRIPTION**********
		stockwork.
	100.38	101.32 As at 96.90.
101.32	111.61	GABBRO
		Altered. Medium grained gabbro with feldspars saussuritized and sericitized. 10 to 25% spotty hematite alteration. Abundant dolomite quartz carbonate veins which are hematitized.
	101.32	101.75 As above with 15% weakly contorted quartz carbonate veins up to 1.5 centimetres thick and generally parallel to foliation. Trace pyrite. Moderately to strongly foliated.
	101.75	102.03 As above with 30% light reddish buff quartz carbonate veins and streaks. weakly to moderately hematitized.
	102.03	103.06 Reddish gray green, moderately to strongly hematitized, medium grained, moderately to strongly foliated. With 10% red brown hematite spots, 15% light reddish tan quartz carbonate as contorted streaks and veins with diffuse contacts. Trace pyrite.
	103.06	104.85 Reddish gray green, with 40% light brown to white quartz carbonate as strongly contorted, weakly folded veins with diffuse contacts. Gabbro is strongly carbonatized with 25% iron carbonate. 2% fine grained disseminated pyrite.
	104.85	105.67 As at 96.90. Slightly reddish. 5% light tan, weakly contorted quartz carbonate veins and veinlets. Weakly sericitic.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188377	101.32	101.75	.43	TR	F35	<.005	5.320
FX188378	101.75	102.03	.28	0	-	<.005	5.320
FX188379	102.03	103.06	1.03	TR	F43	.020	5.341
FX188380	103.06	103.82	.76	2	-	.195	5.489
FX188381	103.82	104.85	1.03	2	-	.140	5.633
FX188382	104.85	105.67	.82	TR	F45	.020	5.649
FX188383	105.67	106.79	1.12	TR	F47	.030	5.683
FX188384	106.79	107.58	.79	0	F44	.045	5.719
FX188385	107.58	109.05	.47	0	F42	<.005	5.719
FX188386	108.05	109.40	1.35	0	-	<.005	5.719
FX188387	109.40	110.59	1.19	0	F44	<.005	5.719
FX188388	110.59	111.61	1.02	TR	-	<.005	5.719

FROM M	TO M	**********DESCRIPTION**********
		Trace pyrite.
105.67	106.79	Medium grained, reddish gray green to slightly emerald green . Up to 5% light lime green sericite. Weakly fuchsitic. 3% fine grained disseminated iron carbonate, 5% light reddish brown to light buff quartz carbonate veins up to 2 centimetres thick. Trace pyrite.
106.79	107.58	Reddish gray green, weakly to moderately hematitized, weakly fuchsitic. With 5% light lime green sericite streaks. 5 to 10% red brown hematite spots. 5% quartz carbonate veins up to 3 centimetres thick and with numerous hematite patches.
107.58	108.05	As above with 15% contorted quartz carbonate veins, streaks and patches up to 1.5 centimetres thick.
108.05	109.40	Reddish gray green. 15% iron carbonate as fine grained stretched grains, 2 to 3% light green sericite. Moderately hematitized with 10 to 15% dark red brown hematite spots up to 1 millimetre. 2 to 3% contorted quartz carbonate veins with numerous dark red brown patches, mainly near contacts.
109.40	110.59	As above, strongly hematitized with 20 to 25% dark red brown hematite spots . Strongly chloritic. Weakly fuchsitic at bottom with an associated decrease in hematite.
110.59	111.61	Slightly reddish gray green. Very weakly hematitized. Trace pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
111.61	153.70	GABBRO								
		Weakly altered. Weak pervasive hematite alteration. Weakly silicified with 10 to 40% dolomite quartz carbonate veins. Locally weakly fuchsitic.	FX188389	111.61	113.14	1.53	TR	F46	.010	5.734
			FX188390	113.14	114.40	1.26	TR	-	<.005	5.734
			FX188391	114.40	115.78	1.38	TR	-	.035	5.782
			FX188392	115.78	116.84	1.06	0	F37	<.005	5.782
			FX188393	116.84	118.04	1.20	0	F40	<.005	5.782
			FX188394	118.04	119.60	1.56	TR	F37	<.005	5.782
			FX188395	119.60	121.05	1.45	1	-	<.005	5.782
			FX188396	121.05	122.55	1.50	0	-	<.005	5.782
			FX188397	122.55	124.04	1.49	TR	-	.005	5.790
			FX188398	124.04	125.40	1.36	TR	-	<.005	5.790
			FX188399	125.40	125.76	.36	TR	-	<.005	5.790
			FX188400	125.76	126.34	.58	TR	-	<.005	5.790
			FX188401	126.34	127.12	.78	TR	F40	<.005	5.790
			FX188402	127.12	128.62	1.50	TR	-	<.005	5.790
			FX188403	128.62	130.06	1.44	TR	-	<.005	5.790
			FX188404	130.06	131.56	1.50	TR	F40	<.005	5.790
			FX188405	131.56	132.28	.72	0	F30	<.005	5.790
			FX188406	132.28	133.76	1.48	0	-	<.005	5.790
			FX188407	133.76	134.98	1.22	0	-	.010	5.802
			FX188408	134.98	136.21	1.23	TR	F38	<.005	5.802
			FX188409	136.21	137.43	1.22	TR	-	<.005	5.802
			FX188410	137.43	138.58	1.15	TR	F25	<.005	5.802
			FX188411	138.58	140.08	1.50	TR	F30	<.005	5.802
			FX188412	140.08	140.77	.69	TR	-	<.005	5.802
			FX188413	140.77	142.16	1.39	TR	F24	<.005	5.802
			FX188414	142.16	143.56	1.40	TR	-	<.005	5.802
			FX188415	143.56	145.06	1.50	TR	-	<.005	5.802
			FX188416	145.06	146.56	1.50	0	F20	<.005	5.802
			FX188417	146.56	146.70	.14	0	-	<.005	5.802
111.61	114.40	As above with 5 to 8% light buff quartz carbonate veins.								
114.40	115.78	Gray green. Minor disseminated iron carbonate, 40% strongly contorted masses of white to light reddish gray quartz. Trace pyrite.								
115.78	116.84	Minor disseminated iron carbonate, 10% strongly contorted light buff quartz carbonate veins and veinlets, weakly sericitic.								
116.84	118.04	Weakly to moderately hematitized with numerous light brown spots. Minor disseminated iron carbonate. Weakly sericitic. 15% buff contorted quartz carbonate masses, veins and veinlets.								
118.04	119.60	Gray green, medium grained, weakly sericitic. 5% weakly contorted buff quartz carbonate veins up to 8 centimetres thick, locally sub parallel to core. 5% disseminated iron carbonate as fine grained rhombic crystals. Trace pyrite.								
119.60	121.05	As above. 1% disseminated pyrite. Quartz carbonate veins in part contorted.								
121.05	122.55	Slightly reddish green with 40% diffuse streaks and patches of quartz carbonate, generally sympathetic to the foliation.								

FROM M	TO M	**********DESCRIPTION**********
		Minor disseminated iron carbonate.
122.55	124.04	Strongly to moderately foliated, green, medium grained, 2 to 5% fine grained disseminated iron carbonate. 10% contorted and chotic light buff to light orange quartz carbonate patches and veins . Several black tourmaline veins up to 4 millimetres thick. Trace pyrite.
124.04	125.40	Mottled brown gray to grass green. Medium grained, trace to 1% fine grained disseminated pyrite, 2 to 3% light orange quartz carbonate veins, generally sub parallel to core.
125.40	125.76	Fine grained, bleached, moderately hematitized, mottled brown to light green, trace pyrite, 2 to 3% quartz carbonate veins.
125.76	126.34	Pale green with stained pale brown patches from weak hematitization. 15% light tan quartz carbonate streaks with diffuse contacts and several quartz veins up to 2.5 centimetres thick. Trace pyrite.
126.34	127.12	Brownish green gray, moderately foliated, 5 to 8% light tan quartz carbonate streaks with diffuse contacts and generally sub parallel to foliation. Trace pyrite.
127.12	128.62	Slightly brownish gray, medium grained, moderately foliated, sericitic, minor quartz carbonate veins, trace pyrite.
128.62	130.06	As above, becoming moderately chloritic. With 5% dark green chlorite streaks. 2 to

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188418	146.70	147.74	1.04	TR	F20	.005	5.807
FX188419	147.74	149.04	1.30	TR	F25	<.005	5.807
FX188420	149.04	150.42	1.38	TR	F27	<.005	5.807
FX188421	150.42	151.42	1.00	TR	-	<.005	5.807
FX188422	151.42	152.82	1.40	0	-	<.005	5.807
FX188423	152.82	153.70	.88	0	F35	<.005	5.807

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		3% light orange quartz carbonate veins up to 2 centimetres thick.								
130.06	131.56	As above. One 4 millimetre thick vein has 4 centimetre thick strongly hematitized and limonitic alteration halo.								
131.56	133.76	Medium grained, gray to gray green, 10 to 15% chlorite streaks. Minor light orange quartz carbonate veins up to 1 centimetre thick parallel to foliation.								
133.76	134.98	As above with 2 to 3% weakly contorted quartz carbonate veins and veinlets.								
134.98	136.21	Fine grained to medium grained, green gray, mottled with some weakly hematitized brownish gray patches. 5 to 8% light orange, strongly contorted and folded quartz carbonate veins up to 2 centimetres thick. Trace pyrite.								
136.21	137.43	As above with 15% crenulated and contorted quartz carbonate veins with diffuse contacts and generally sub parallel or at a low angle to core axis.								
137.43	140.77	Medium grained, mottled, gray green with brownish gray green patches. Weakly hematitized. Moderately foliated. Minor disseminated iron carbonate. 3 to 5% light buff quartz carbonate veins up to 1 centimetre thick, in part folded and contorted. Trace to 1% fine grained disseminated pyrite.								
140.77	142.16	As above with 5 to 8% strongly contorted wispy quartz carbonate veins and streaks.								
142.16	143.56	As at 137.43. Folded. With 10% folded and								

FROM M	TO M	********** DESCRIPTION **********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	********** ANALYSES ********** AU PPM	PPM*M
		contorted light orange quartz carbonate veins up to 4 centimetres thick.								
143.56	145.06	As above. Gray green to green with brownish patches.								
145.06	146.06	Medium grained to fine grained, gray green, weakly to moderately foliated, 5 to 10% fine grained disseminated iron carbonate. Weakly to moderately hematitized with scattered dark red brown hematite streaks and spots. 3 to 5% light tan quartz carbonate veins up to 2 centimetres thick, in part contorted.								
146.06	146.62	Medium grained, gray green, weakly foliated. 5% contorted light tan quartz carbonate veins up to 2 centimetres thick.								
146.62	147.74	As at 145.06. Weakly carbonatized. Trace pyrite.								
147.74	149.04	Medium grained to fine grained, gray green, strongly carbonatized with 25 to 30% iron carbonate. 5% mottled and contorted light tan quartz carbonate veins. Trace disseminated pyrite.								
149.04	150.42	As above, weakly to moderately hematitized. Becoming brownish green gray. Moderately foliated.								
150.42	151.42	As above. Strongly oxidized with 15 to 30% limonite and hematite as fine grained disseminated spots. Brown green to yellow brown in colour. Trace oxidized pyrite. Possibly a fault.								
151.42	152.82	As above with 40% limonite and hematite. Yellow brown in colour. In part blocky								

FROM M	TO M	**********DESCRIPTION**********
		with 25% ground core. Possibly a fault.
152.82	153.70	Fine grained to medium grained, brownish gray, moderately to weakly hematitized. Moderately foliated. Minor quartz carbonate veins.
153.70	165.00	GABBRO
		Halo alteration with abundant dolomite veining.
153.70	154.68	Slightly brownish gray, fine grained to medium grained, moderately to strongly foliated. 5 to 8% fine grained disseminated iron carbonate.
154.68	155.73	As above with 5% light orange contorted quartz carbonate veins.
155.73	156.78	Brownish gray, with 40% fine grained iron carbonate. Weakly to moderately foliated. 5% wispy light orange quartz carbonate veins up to 2 centimetres thick.
156.78	157.56	Dark gray brown. 30% fine grained disseminated iron carbonate. Moderately chloritic.
157.56	158.33	As above with 3% light orange contorted quartz carbonate veins.
158.33	158.97	Dark brown gray to dark gray. 25 to 30% iron carbonate. With 10% light orange to light tan quartz carbonate veins, in part sub parallel to core and with diffuse contacts.
158.97	159.72	Dark gray, 25% fine grained disseminated iron carbonate. 2 to 3% quartz carbonate veins up to 4 millimetres. Trace pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188424	153.70	154.68	.98	0	F34	<.005	5.807
FX188425	154.68	155.73	1.05	0	-	<.005	5.807
FX188426	155.73	156.78	1.05	0	-	<.005	5.807
FX188427	156.78	157.56	.78	0	F33	<.005	5.807
FX188428	157.56	158.33	.77	0	-	<.005	5.807
FX188429	158.33	158.97	.64	0	F35	<.005	5.807
FX188430	158.97	159.72	.75	TR	-	<.005	5.807
FX188431	159.72	160.90	1.18	0	-	<.005	5.807
FX188432	160.90	162.24	1.34	0	-	.005	5.814
FX188433	162.24	163.04	.80	0	-	.015	5.826
FX188434	163.04	163.94	.90	TR	-	<.005	5.826
FX188435	163.94	165.00	1.06	TR	-	<.005	5.826

FROM M	TO M	**********DESCRIPTION**********
	159.72 162.24	Fine grained to medium grained, dark gray, weakly to moderately foliated. Minor disseminated iron carbonate. 3 to 5% weakly contorted quartz carbonate veins up to 1 centimetre thick.
	162.24 163.04	As above with 40% weakly contorted light orange quartz carbonate masses and veins, generally sub parallel to foliation and in part folded.
	163.04 163.94	As above. Quartz carbonate veins contorted and generally sub parallel to core with one main vein about 4 centimetres thick and having numerous small folds and wisps. Trace pyrite.
	163.94 165.00	Dark greenish gray, fine grained to medium grained, minor disseminated iron carbonate. 3% contorted quartz carbonate veinlets, generally sub parallel to foliation. Trace pyrite.
165.00	171.18	GABBRO
		Altered. Moderately silicified and weakly fuchsitic gabbro with patchy hematite alteration. Feldspars saussuritized and sericitized. 5 to 10% dolomite quartz carbonate veins with tourmaline.
	165.00 165.94	As to 165.00 metres.
	165.94 167.18	Gray green to dark lime green. Weakly fuchsitic. Trace to 5% light yellow green sericite. 1% disseminated pyrite as crystals up to 4 millimetres. 3% fine grained disseminated iron carbonate. 5%

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
FX188436	165.00	165.94	.94	TR	F38	<.005	5.826
FX188437	165.94	167.18	1.24	1	F37	<.005	5.826
FX188438	167.18	168.16	.98	TR	F33	.010	5.836
FX188439	168.16	168.86	.70	0	F35	<.005	5.836
FX188440	168.86	170.36	1.50	TR	-	.095	5.978
FX188441	170.36	171.18	.82	TR	-	<.005	5.978

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU FPM	PPM*M
		quartz carbonate veins up to 2 centimetres thick.								
167.18	167.43	Lime green, fine grained, moderately fuchsitic, 5 to 10% light yellow green sericite . 5% quartz carbonate veins locally with some black tourmaline streaks. Trace pyrite. Trace disseminated iron carbonate.								
167.43	167.96	Strongly altered equivalent of above. Fine grained, yellow brown, very strongly oxidized with 70% brown to yellow brown limonite.								
167.96	168.16	Strongly foliated, lime green, strongly sericitic, weakly to moderately fuchsitic. 20% gray iron carbonate streaks and wisps with diffuse contacts. Trace pyrite.								
168.16	168.86	Dark lime green, medium grained, 15 to 20% light yellow green sericite, weakly fuchsitic, moderately foliated. 5% quartz carbonate veins with diffuse contacts.								
168.86	170.36	Mottled limey gray green, medium grained, 5 to 8% fine grained disseminated iron carbonate. 3 to 5% light yellow green sericite. 3 to 5% weakly contorted quartz carbonate veins up to 3 centimetres thick. Trace pyrite. One quartz vein 8 centimetres thick with numerous acicular green tourmaline crystals.								
170.36	171.18	As above with 5 to 8% quartz carbonate veins.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
171.18	172.56	QUARTZ FELDSPAR PORPHYRY Altered. Fine grained, leucocratic, massive to weakly foliated, moderately hard, trace disseminated pyrite. Contacts are sharp. Strongly bleached and weakly fuchsitic. 171.18 171.65 Light brown with pale lime green streaks, weakly hematitized. 5% quartz tourmaline veining. 171.65 172.56 Pale lime green with 20% diffuse light brown spots.	FX188442 FX188443	171.18 171.65	171.65 172.56	.47 .91	TR TR	C80 -	.020 .020	5.987 6.006
172.56	173.13	GABBRO Altered. Weakly fuchsitic as to 171.18 metres. Mottled dark brownish lime green. 3 to 8% light yellow green sericite, weakly fuchsitic, weakly to moderately hematitized with up to 10% red brown spots and streaks. 10 to 15% disseminated iron carbonate. 5% quartz carbonate veins.	FX188444	172.56	173.13	.57	0	-	.030	6.023
173.13	173.58	QUARTZ FELDSPAR PORPHYRY Altered. Fine grained leucocratic brown quartz feldspar porphyry with pervasive hematite alteration. More altered than quartz feldspar porphyry at 171.18 metres. 5% disseminated pyrite. 5% black quartz tourmaline veins up to 1 centimetre thick.	FX188445	173.13	173.58	.45	5	-	2.340	7.076
173.58	180.47	GABBRO Altered. Moderately silicified weakly fuchsitic and	FX188446	173.58	174.29	.71	0	F24	.025	7.094

**********DESCRIPTION**********

FROM M	TO M	
		locally strongly hematitized gabbro. Medium grained weakly to moderately foliated, green gray, trace disseminated fine grained iron carbonate.
173.58	174.29	Light gray green, 3 to 5% iron carbonate, 5% light yellow green sericite, weakly fuchsitic. Weakly to moderately hematitized along foliation planes. 2 to 3% quartz carbonate veins.
174.29	174.96	Pale green gray, 3 to 5% light yellow green sericite. Mottled. trace pyrite. Locally weakly fuchsitic.
174.96	175.69	Strongly hematitized. Dark brown to buff. With 20% quartz carbonate tourmaline as irregular contorted veins and masses, in part vuggy. 5% black tourmaline. Trace fuchsite.
175.69	177.22	Medium grained to coarse grained, pale grass green to gray green. Weakly to moderately fuchsitic, weakly foliated. 2 to 3% quartz carbonate veins up to 2 centimetres thick.
177.22	178.74	As above with some hematitization along fractures.
178.74	179.29	Medium grained to coarse grained, pale gray green.
179.29	180.47	As above with 2 to 3% quartz tourmaline veins up to 3 centimetres thick. 1% disseminated pyrite as crystals up to 3 millimetres. First 20 centimetres moderately hematitized with some associated ochre limonite.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188447	174.29	174.96	.67	TR	-	.010	7.100
FX188448	174.96	175.69	.73	0	-	.015	7.111
FX188449	175.69	177.22	1.53	0	-	.105	7.272
FX188450	177.22	178.74	1.52	0	-	<.005	7.272
FX188451	178.74	179.29	.55	0	F35	<.005	7.272
FX188452	179.29	180.47	1.18	1	-	.015	7.290

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
180.47	182.25	FAULT								
		Oxidized red brown possible fault gouge.								
		180.47 181.05 Yellow brown, medium grained, strongly altered with 40 to 50% ochre limonite, 5% hematite as disseminated streaks and grains. Chloritic to very chloritic. Last 20 centimetres leached and porous with sandy texture.	FX188453	180.47	181.05	.58	0	-	<.005	7.290
			FX188454	181.05	181.65	.60	0	-	<.005	7.290
			FX188455	181.65	182.25	.60	0	-	.025	7.305
		181.05 181.65 Strongly chloritic, leached, porous, soft, moderately to strongly limonitic. Dark yellow brown. With 15% quartz veins with some acicular green tourmaline. thin vein of open-space filling magnesite..								
		181.65 182.25 Chloritic, limonitic, hematitic. Yellow brown to brownish gray. 10 to 50% hematite and limonite. 3 to 5% quartz carbonate veins up to 1 centimetre thick.								
182.25	184.37	GABBRO								
		Altered. As to 180.47 metres.								
		182.25 183.45 Pale green gray, fine grained to medium grained, minor disseminated iron carbonate, weakly foliated to massive, hard. Weakly silicified. 2 to 3% light buff quartz carbonate veins up to 4 centimetres thick.	FX188456	182.25	183.45	1.20	0	-	.005	7.311
			FX188457	183.45	183.70	.25	0	-	.045	7.322
			FX188458	183.70	184.37	.67	0	F40	.030	7.342
		183.45 183.70 Weakly banded iron carbonate, quartz and black tourmaline. In part vuggy with light brown crystalline iron carbonate.								
		183.70 183.90 Massive dark green chlorite with hematite								

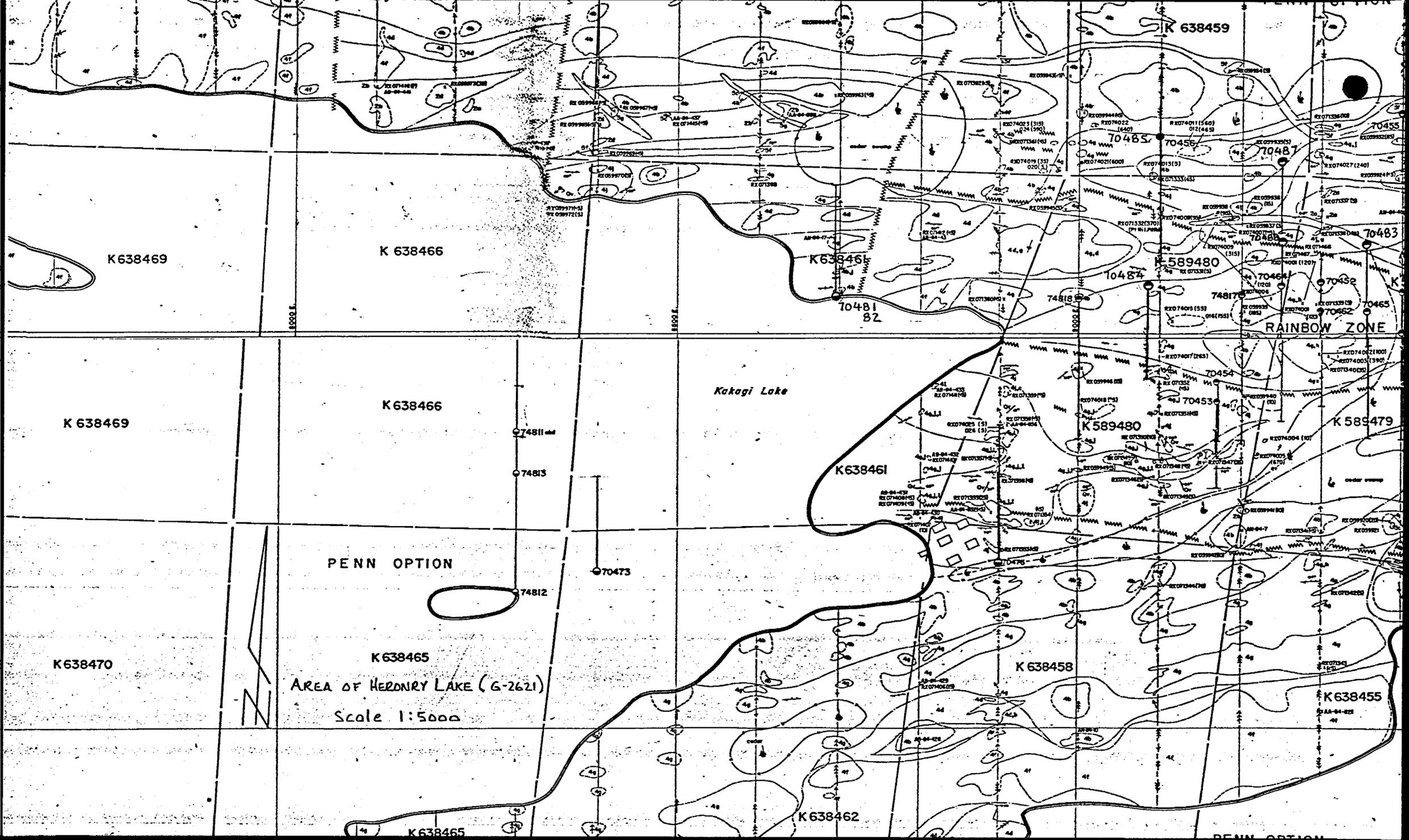
FROM M	TO M	**********DESCRIPTION**********
		limonite seams and patches.
	183.90 184.37	Strongly altered gabbro. Fine grained to medium grained. 60% ochre limonite. Chloritic, weakly to moderately foliated. Yellow brown.
184.37	192.10	GABBRO
		Transition zone from gabbro to peridotite. Becoming more ultramafic down hole.
	184.37 185.87	Dark green gray, fine grained to medium grained, moderately foliated. 3 to 5% fine grained disseminated iron carbonate. 1% fine grained disseminated pyrite. 5% irregular and contorted light buff quartz carbonate veins.
	185.87 187.15	Dark green gray, medium grained, chloritic, 25 to 30% fine grained disseminated iron carbonate. mafic gabbro. Soft to moderately hard. Minor quartz carbonate veins.
	187.15 188.58	As above, weakly hematitized.
	188.58 189.34	Brown green, strongly leached, porous, chloritic, moderately to strongly foliated. Blocky. In part earthy and very soft.
	189.34 190.60	As at 185.87. Weakly to moderately leached and porous . In part very blocky, becoming weakly talcose.
	190.60 192.10	Dark gray green to gray black, medium grained mafic gabbro becoming peridotitic. Chloritic to very chloritic,

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188459	184.37	185.87	1.50	1	F35	<.005	7.342
FX188460	185.87	187.15	1.28	0	F40	<.005	7.342
FX188461	187.15	188.58	1.43	0	-	<.005	7.342
FX188462	188.58	189.34	.76	0	F40	<.005	7.342
FX188463	189.34	190.60	1.26	0	F43	<.005	7.342
FX188464	190.60	192.10	1.50	0	-	<.005	7.342

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		25 to 30% fine grained iron carbonate, soft, weakly talcose. Change is gradual.								
192.10	251.16	PERIDOTITE								
		Dark gray black to dark black green, very chloritic, 30 to 35% fine grained iron carbonate disseminated in streaks and patches. Mottled, soft, talcose, 2 to 3% quartz carbonate talc veins up to 1 centimetre thick. Fine grained to medium grained, weakly to moderately foliated, weakly magnetic, trace disseminated pyrite.	FX188465	192.10	193.24	1.14	TR	F55	<.005	7.342
			FX188466	193.24	194.74	1.50	TR	-	<.005	7.342
			FX188467	194.74	196.24	1.50	TR	-	<.005	7.342
			FX188468	196.24	197.74	1.50	TR	F53	<.005	7.342
			FX188469	197.74	199.24	1.50	TR	-	<.005	7.342
			FX188470	199.24	200.74	1.50	TR	-	<.005	7.342
			FX188471	200.74	202.24	1.50	TR	-	<.005	7.342
			FX188472	202.24	203.74	1.50	TR	F47	<.005	7.342
			FX188473	203.74	205.24	1.50	TR	-	<.005	7.342
			FX188474	205.24	206.74	1.50	TR	-	<.005	7.342
			FX188475	206.74	208.24	1.50	TR	-	<.005	7.342
			FX188476	208.24	209.74	1.50	TR	-	.005	7.349
			FX188477	209.74	211.24	1.50	TR	-	<.005	7.349
			FX188478	211.24	212.74	1.50	TR	-	<.005	7.349
			FX188479	212.74	214.24	1.50	TR	-	<.005	7.349
			FX188480	214.24	215.74	1.50	TR	-	<.005	7.349
			FX188481	215.74	217.24	1.50	TR	-	<.005	7.349
			FX188482	217.24	218.74	1.50	TR	-	<.005	7.349
			FX188483	218.74	220.24	1.50	TR	-	.010	7.364
			FX188484	220.24	221.74	1.50	TR	-	<.005	7.364
			FX188485	221.74	223.24	1.50	TR	-	<.005	7.364
			FX188486	223.24	224.74	1.50	TR	-	<.005	7.364
			FX188487	224.74	226.24	1.50	TR	-	<.005	7.364
			FX188488	226.24	227.74	1.50	TR	-	<.005	7.364
			FX188489	227.74	229.24	1.50	TR	-	<.005	7.364
			FX188490	229.24	230.74	1.50	TR	-	<.005	7.364
			FX188491	230.74	232.24	1.50	TR	-	<.005	7.364
192.10	196.24	Not magnetic.								
208.24	221.74	10 to 15% iron carbonate as disseminated medium grained rhombic crystals, weakly foliated, locally massive.								
221.74	224.74	15 to 20% fine grained to medium grained iron carbonate, commonly as rhombic crystals.								
224.74	226.24	As above, in part blocky.								
226.24	227.74	As at 221.74 with 5% white quartz carbonate veins up to 8 centimetres thick and with diffuse contacts.								
227.74	237.86	As at 221.74.								
237.86	238.64	As above, moderately foliated, in part blocky. With 1% disseminated pyrite crystals up to 3 millimetres.								
238.64	239.60	Moderately to strongly foliated, in part brecciated with fragments cemented by 10% white quartz carbonate talc. Blocky.								
239.60	242.01	Moderately to strongly foliated, fractured, weakly hematitized with iron carbonate and pyrite oxidized to brown								

FROM M	TO M	**********DESCRIPTION**********
		hematite. Several fault gouge filled fractures up to 5 centimetres thick. 2 to 3% quartz carbonate veins.
242.01	243.15	Moderately foliated with 3% quartz carbonate veins up to 1 centimetre thick parallel to foliation.
243.15	251.16	10 to 15% fine grained to medium grained disseminated iron carbonate. Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188492	232.24	233.74	1.50	TR	-	<.005	7.364
FX188493	233.74	235.24	1.50	TR	-	<.005	7.364
FX188494	235.24	236.74	1.50	TR	-	<.005	7.364
FX188495	236.74	237.86	1.12	TR	-	<.005	7.364
FX188496	237.86	238.64	.78	1	-	<.005	7.364
FX188497	238.64	239.60	.96	TR	F42	<.005	7.364
FX188498	239.60	242.01	2.41	TR	-	<.005	7.364
FX188499	242.01	243.15	1.14	TR	F47	<.005	7.364
FX188500	243.15	244.13	.98	TR	-	<.005	7.364
FX188501	244.13	245.16	1.03	TR	-	<.005	7.364
FX188502	245.16	246.66	1.50	TR	-	<.005	7.364
FX188503	246.66	248.16	1.50	TR	F47	<.005	7.364
FX188504	248.16	249.66	1.50	TR	-	<.005	7.364
FX188505	249.66	251.16	1.50	TR	F47	<.005	7.364


K 638459
K638469
K 638466
K638461
K 589480
70485
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70483
70481
82
74818
74817
70465
70462
RAINBOW ZONE
70454
70453
K 589479
Kakagi Lake
74811
74813
70473
74812
PENN OPTION
K638470
K638465
K638458
K638455
K638462
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9550.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-22-86
PROPERTY	: Penn Option	DEPARTURE	:E 9000.0 M	TOWNSHIP	:	COMPLETED	: 03-24-86
BOREHOLE	: 74818-0	ELEVATION	: 1341.4 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: Boyles 37A
DEPTH	: 248.1 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 125m south and 20m east of post #4. Casing left in hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
7.30	175.0	-45.00	91.40	175.0	-45.00	182.90	175.0	-44.00			
30.50	175.0	-47.00	121.90	175.0	-46.00	213.40	175.0	-44.00			
61.00	175.0	-47.00	152.40	175.0	-45.00	246.90	175.0	-43.00			

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	6.54	OVERBURDEN Casing through overburden of gravel and boulders.								
6.54	23.50	GABBRO Medium grained to fine grained, dark green, massive to weakly foliated, moderately hard, chloritic, weakly to moderately calcareous. feldspars gray in colour with diffuse crystal boundaries. Trace to 1% light yellow leucoxene . Trace pyrite. Rare quartz carbonate veins and veinlets up to 5 millimetres thick. 6.54 8.04 In part leached and porous.	FX188506	6.54	8.04	1.50	TR	-	<.010	.000
			FX188507	8.04	9.54	1.50	TR	-	<.010	.000
			FX188508	9.54	11.04	1.50	TR	-	<.010	.000
			FX188509	11.04	12.54	1.50	TR	-	<.010	.000
			FX188510	12.54	14.04	1.50	TR	-	<.010	.000
			FX188511	14.04	15.54	1.50	TR	-	<.010	.000
			FX188512	15.54	17.04	1.50	TR	-	<.010	.000

ONTARIO GEOLOGICAL SURVEY
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PAGE 1

FROM M	TO M	**********DESCRIPTION**********
	32.00	34.38 Slightly fresher appearance. Weak iron carbonate.
	34.38	35.30 Weakly hematitized, 10% fine grained disseminated iron carbonate.
	35.30	36.80 Gray green, 60% pale green altered feldspar with diffuse crystal boundaries. Crystalline, massive.
	36.80	38.30 As above with 5% white quartz veins and quartz carbonate veins, some sub parallel to core and up to 2 centimetres thick. 15 to 20% fine grained disseminated iron carbonate.
	38.30	39.80 As above. Veins commonly have black tourmaline streaks and veinlets and are up to 5 centimetres thick. Veins are at various angles to core.
	39.80	41.30 As at 35.30, becoming more chloritic and feldspars are less apparent. Minor iron carbonate.
	41.30	47.30 Fine grained to medium grained.
	47.30	48.38 As above, chloritic to strongly chloritic. With 2 to 3% light gray quartz carbonate veins and streaks.
	48.38	50.70 Medium grained, fairly fresh looking, 60% light green to pale green feldspar. Mafics are chilled. Contact with strongly altered gabbro fairly abrupt.
	50.70	51.78 Strongly chloritic. Upper 28 centimetres strongly contorted and folded. with trace native copper as specks and small leaves. 3 to 5% quartz carbonate streaks, patches and veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188532	39.80	41.30	1.50	TR	-	<.010	.083
FX188533	41.30	42.80	1.50	TR	-	<.010	.083
FX188534	42.80	44.30	1.50	TR	-	<.010	.083
FX188535	44.30	45.80	1.50	TR	-	<.010	.083
FX188536	45.80	47.30	1.50	TR	-	.010	.098
FX188537	47.30	48.38	1.08	TR	-	<.010	.098
FX188538	48.38	49.74	1.36	TR	-	<.010	.098
FX188539	49.74	50.70	.96	TR	-	<.010	.098
FX188540	50.70	51.78	1.08	TR	-	<.010	.098

**********DESCRIPTION**********

FROM M	TO M	
51.78	93.49	DIORITE
		Green gray to pale green gray, fine grained to medium grained, massive, hard, moderately to strongly calcareous. More felsic in appearance than gabbro with less chlorite and 5 to 10% interstitial quartz. 1 to 2% light yellow leucoxene. Contact with gabbro is gradational. Trace disseminated pyrite. Minor quartz carbonate veins.
	58.40 59.20	With 5% quartz tourmaline veins up to 5 centimetres thick. 1% disseminated pyrite.
	59.20 60.50	Last 20 centimetres coarse grained. 2 to 3% quartz veins up to 3 centimetres thick.
	65.00 66.50	2% quartz carbonate veins up to 3 millimetres thick, in part sub parallel to core.
	68.00 69.50	3 to 4% quartz carbonate veins up to 4 centimetres thick.
	71.00 71.87	Feldspars starting to look fresher.
	71.87 72.87	Unaltered, medium grained, gray, 55% white feldspar crystals, 5% quartz and 40% dark green to green pyroxene. Trace disseminated pyrite. Hard to very hard. Not calcareous. Massive.
	75.25 87.41	As at 71.87. Last few centimetres rock changes rapidly to altered diorite with the feldspars not readily apparent and colour is uniform rather than spotted.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188541	51.78	53.00	1.22	TR	-	.010	.110
FX188542	53.00	54.50	1.50	TR	-	.010	.125
FX188543	54.50	56.00	1.50	TR	-	<.010	.125
FX188544	56.00	57.50	1.50	TR	-	.010	.140
FX188545	57.50	58.40	.90	TR	-	.020	.158
FX188546	58.40	59.20	.80	1	-	.070	.214
FX188547	59.20	60.50	1.30	TR	-	.040	.266
FX188548	60.50	62.00	1.50	TR	-	<.010	.266
FX188549	62.00	63.50	1.50	TR	-	<.010	.266
FX188550	63.50	65.00	1.50	TR	-	<.010	.266
FX188551	65.00	66.50	1.50	TR	-	<.010	.266
FX188552	66.50	68.00	1.50	TR	-	<.010	.266
FX188553	68.00	69.50	1.50	TR	-	<.010	.266
FX188554	69.50	71.00	1.50	TR	-	<.010	.266
FX188555	71.00	71.87	.87	TR	-	<.010	.266
FX188556	71.87	72.87	1.00	TR	-	<.010	.266
FX188557	72.87	73.75	.88	TR	-	<.010	.266
FX188558	73.75	75.25	1.50	TR	-	<.010	.266
FX188559	75.25	76.75	1.50	TR	-	<.010	.266
FX188560	76.75	78.25	1.50	TR	-	<.010	.266
FX188561	78.25	79.75	1.50	TR	-	<.010	.266
FX188562	79.75	81.25	1.50	TR	-	<.010	.266
FX188563	81.25	82.75	1.50	TR	-	<.010	.266
FX188564	82.75	84.25	1.50	TR	-	<.010	.266
FX188565	84.25	85.75	1.50	TR	-	<.010	.266
FX188566	85.75	86.56	.81	TR	-	<.010	.266
FX188567	86.56	87.41	.85	TR	-	<.010	.266
FX188568	87.41	88.90	1.49	TR	-	<.010	.266
FX188569	88.90	90.40	1.50	TR	-	<.010	.266
FX188570	90.40	91.90	1.50	TR	-	<.010	.266

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
			FX188571	91.90	93.49	1.59	TR	-	<.010	.266
93.49	98.76	GABBRO								
		Medium grained to coarse grained, gray green, massive to weakly foliated. Crystal boundaries diffuse. Rock strongly altered with crystal textures almost totally obliterated. 20 to 25% fine grained disseminated iron carbonate . Hard. 1 to 2% fine grained light yellow leucoxene. Minor quartz carbonate veins. Trace pyrite.	FX188572	93.49	95.05	1.56	TR	-	<.010	.266
			FX188573	95.05	95.43	.38	TR	-	<.010	.266
			FX188574	95.43	96.93	1.50	TR	-	<.010	.266
			FX188575	96.93	97.64	.71	TR	-	<.010	.266
			FX188576	97.64	98.76	1.12	TR	-	<.010	.266
		95.05 95.43 With 25% quartz carbonate veins up to 2 centimetres thick.								
		97.64 98.76 Mottled with a slight pinkish tinge. 3 to 5% diffuse quartz carbonate streaks and patches								
98.76	101.05	GABBRO								
		Weakly altered. Weakly carbonatized gabbro as above.	FX188577	98.76	99.48	.72	TR	F50	<.010	.266
		98.76 99.48 Weakly to moderately foliated.	FX188578	99.48	100.14	.66	TR	-	<.010	.266
		99.48 100.14 Moderately foliated with 10% contorted quartz carbonate veins up to 3 centimetres thick. weakly hematitized.	FX188579	100.14	101.05	.91	TR	-	<.010	.266
		100.14 101.05 Moderately hematitized mafic olivine gabbro. Medium grained, massive, soft , 20% iron carbonate. Mafic content increasing down hole.								
101.05	104.85	PYROXENITE								
		Medium grained to coarse grained, soft, 5 to 10% brown olivine crystals, massive, dark green. 2 to 3% quartz carbonate veins up to 5 millimetres thick. Trace pyrite.	FX188580	101.05	101.80	.75	TR	-	<.010	.266
			FX188581	101.80	103.14	1.34	0	-	<.010	.266
			FX188582	103.14	104.30	1.16	0	-	<.010	.266

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	AU PPM	PPM*M
	103.14	104.30 Fractured with several narrow bands of fault gouge. Very soft, earthy, strongly leached. Some limonite staining.	FX188583	104.30	104.85	.55	0	-	<.010	.266
		104.30 104.85 Becoming peridotitic.								
104.85	140.85	PERIDOTITE								
		Fine grained to medium grained, soft, talcose, weakly magnetic, dark bluish green, massive, weakly to moderately mottled. Minor quartz carbonate veinlets. 15 to 20% fine grained iron carbonate. Trace pyrite.	FX188584	104.85	106.35	1.50	TR	-	<.010	.266
			FX188585	106.35	107.85	1.50	TR	-	<.010	.266
			FX188586	107.85	109.35	1.50	TR	-	<.010	.266
			FX188587	109.35	110.85	1.50	TR	-	<.010	.266
		112.35 115.35 2 to 3% quartz carbonate veins up to 5 millimetres thick.	FX188588	110.85	112.35	1.50	TR	-	.005	.273
			FX188589	112.35	113.85	1.50	TR	-	<.010	.273
		125.85 127.35 2% quartz carbonate veins up to 5 millimetres thick.	FX188590	113.85	115.35	1.50	TR	-	<.010	.273
			FX188591	115.35	116.85	1.50	TR	-	<.010	.273
		128.85 134.85 2 to 3% quartz carbonate talc patches and veins up to 2 centimetres thick.	FX188592	116.85	118.35	1.50	TR	-	<.010	.273
			FX188593	118.35	119.85	1.50	TR	-	<.010	.273
		134.85 140.85 Minor quartz carbonate talc chlorite patches and streaks.	FX188594	119.85	121.35	1.50	TR	-	<.010	.273
			FX188595	121.35	122.85	1.50	TR	-	<.010	.273
			FX188596	122.85	124.35	1.50	TR	-	<.010	.273
			FX188597	124.35	125.85	1.50	TR	-	<.010	.273
			FX188598	125.85	127.35	1.50	TR	-	<.010	.273
			FX188599	127.35	128.85	1.50	TR	-	<.010	.273
			FX188600	128.85	130.35	1.50	TR	-	<.010	.273
			FX188601	130.35	131.85	1.50	TR	-	<.010	.273
			FX188602	131.85	133.35	1.50	TR	-	<.010	.273
			FX188603	133.35	134.85	1.50	TR	-	<.010	.273
			FX188604	134.85	136.35	1.50	TR	-	<.010	.273
			FX188605	136.35	137.85	1.50	TR	-	<.010	.273
			FX188606	137.85	139.35	1.50	TR	-	<.010	.273
			FX188607	139.35	140.85	1.50	TR	-	<.010	.273

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
140.85	146.09	PERIDOTITE								
		Transition zone from peridotite to gabbro.	FX1B8608	140.85	142.35	1.50	TR	-	<.010	.273
		140.85 146.09 Mottled, massive, weakly to very weakly magnetic, 20 to 25% iron carbonate.	FX1B8609	142.35	143.85	1.50	TR	-	<.010	.273
			FX1B8610	143.85	145.35	1.50	TR	-	<.010	.273
			FX1B8611	145.35	146.09	.74	TR	-	<.010	.273
146.09	149.16	GABBRO								
		Mafic gabbro, medium grained, massive, dark green, soft, not magnetic, chloritic, equigranular, 25 to 30% altered green feldspar. Trace pyrite. Gradational contact with peridotite.	FX1B8612	146.09	147.52	1.43	TR	-	<.010	.273
			FX1B8613	147.52	148.24	.72	TR	-	<.010	.273
			FX1B8614	148.24	149.16	.92	TR	F35	<.010	.273
		148.24 149.16 Hematitized. Dark brown green. 15 to 25% hematite and limonite spots. In part moderately foliated. Chloritic. Minor quartz carbonate veins up to 2 centimetres thick.								
149.16	150.74	GABBRO								
		Fine grained, dark green, massive, moderately hard, with 2 to 3% quartz veins up to 3 centimetres thick. 20 to 25% disseminated iron carbonate.	FX1B8615	149.16	150.74	1.58	0	-	.005	.281
150.74	152.46	GABBRO								
		Medium grained, mottled gray green to dark green, massive, hard.	FX1B8616	150.74	151.94	1.20	0	-	<.010	.281
			FX1B8617	151.94	152.46	.52	0	-	<.010	.281
		151.94 152.46 With 60% leucocratic pegmatite. Light gray, coarse grained, with 10% chloritic mafics, 15 to 20% interstitial quartz, 70								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
		to 75% light greenish feldspar. 1% disseminated pyrite as patches . With diffuse contacts. Minor quartz carbonate veins.								
152.46	154.98	GABBRO								
		Pegmatite. Coarse grained, leucocratic, light gray, 10 to 15% chlorite, 15 to 20% quartz, 5 to 8% skeletal gray to light brown leucoxene. Balance is light green to white feldspar. Mottled, hard, 5% quartz carbonate veins up to 3 centimetres thick.	FX188618	152.46	153.46	1.00	0	-	<.010	.281
			FX188619	153.46	154.98	1.52	0	-	<.010	.281
		153.46 154.98 Light gray to gray.								
154.98	160.98	GABBRO								
		Fine grained to medium grained, dark green to pale green, massive, mottled, with numerous leucocratic medium grained to coarse grained Patches and sections. Hard, 1 to 2% leucoxene, 2 to 3% quartz carbonate veins up to 3 centimetres thick.	FX188620	154.98	156.48	1.50	0	-	<.010	.281
			FX188621	156.48	157.98	1.50	0	-	<.010	.281
			FX188622	157.98	159.48	1.50	0	-	<.010	.281
			FX188623	159.48	160.98	1.50	0	-	<.010	.281
160.98	161.28	GABBRO								
		Pegmatite as at 152.46.	FX188624	160.98	161.28	.30	0	-	<.010	.281
161.28	168.30	GABBRO								
		Dark gray, medium grained, hard, massive, weakly mottled, minor quartz carbonate veins up to 4 millimetres thick, weakly to moderately calcareous.	FX188625	161.28	162.76	1.48	0	-	<.010	.281
			FX188626	162.76	164.16	1.40	0	-	.010	.295
		165.20 166.35 Last 35 centimetres with several bleached	FX188627	164.16	165.20	1.04	0	-	<.010	.295
			FX188628	165.20	166.35	1.15	0	-	<.010	.295

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		zones up to 8 centimetres thick.	FX188629	166.35	167.41	1.06	0	-	<.010	.295
166.35	168.30	Silicified, hard to very hard, medium grained to fine grained, mottled.	FX188630	167.41	168.30	.89	0	-	<.010	.295
168.30	168.80	GABBRO								
		Fine grained, dark green, moderately foliated, weakly calcareous, hard, 2 to 3% light gray leucoxene, with 2 to 3% quartz carbonate veins up to 1 centimetre thick.	FX188631	168.30	168.80	.50	0	F40	<.010	.295
168.80	170.94	TUFF								
		Dacite tuff and lapilli tuff. Fine grained, gray green to green, hard to very hard. Some chloritic layers. 2 to 3% limonite streaks and patches.	FX188632	168.80	170.00	1.20	0	F55	.005	.301
			FX188633	170.00	170.94	.94	0	-	<.010	.301
168.80	170.00	With angular to sub angular rock fragments up to 1 centimetre long. weakly to moderately foliated with what appears to be large fine grained diorite cobbles in the last 35 centimetres. Upper part is definently fragmental with a few chloritic muddy interbeds up to 2 centimetres thick.								
170.94	177.52	GABBRO								
		Green gray, medium grained to fine grained, weakly foliated to massive, moderately hard to hard. No iron carbonate. weakly calcareous. 2 to 3% quartz veins and quartz carbonate veins up to 1.5 centimetres thick and as streaks and veinlets. Trace to 2% light gray fine grained leucoxene.	FX188634	170.94	172.45	1.51	0	-	<.010	.301
			FX188635	172.45	173.95	1.50	0	-	<.010	.301
			FX188636	173.95	175.50	1.55	0	-	<.010	.301
			FX188637	175.50	177.12	1.62	0	-	<.010	.301
			FX188638	177.12	177.52	.40	0	F70	<.010	.301
177.12	177.52	Bleached pale green gray. Medium grained,								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		moderately foliated.								
177.52	183.26	GABBRO								
		Fine grained, dark green, moderately hard, massive to weakly foliated, trace pyrite. Possibly basalt.	FX188639	177.52	177.76	.24	0	F70	.010	.303
		177.52 177.76 Strongly foliated with 60% white to dark gray quartz carbonate veins with dark green chlorite streaks and stringers. Minor limonite on fractures. Some sericite streaks.	FX188640	177.76	179.20	1.44	TR	F63	<.010	.303
			FX188641	179.20	180.64	1.44	TR	-	<.010	.303
			FX188642	180.64	182.09	1.45	TR	-	.040	.361
			FX188643	182.09	183.26	1.17	TR	-	.040	.408
		177.76 179.20 Moderately to weakly foliated. Minor quartz carbonate streaks and veinlets, strongly chloritic.								
		179.20 182.09 10 to 15% fine grained disseminated iron carbonate.								
		182.09 183.26 As above becoming pale green gray.								
183.26	184.55	GABBRO								
		Altered. Bleached pale gray green weakly carbonatized strongly silicified gabbro.	FX188644	183.26	184.55	1.29	0	-	.030	.447
		183.26 184.55 Pale green gray, some silicification around quartz carbonate veins. 2% veins up to 4 millimetres thick. Weakly carbonatized with up to 20% fine grained to very fine grained iron carbonate. Last 15 centimetres is strongly contorted and quartz carbonate rich.								
184.55	186.53	LAMPROPHYRE								

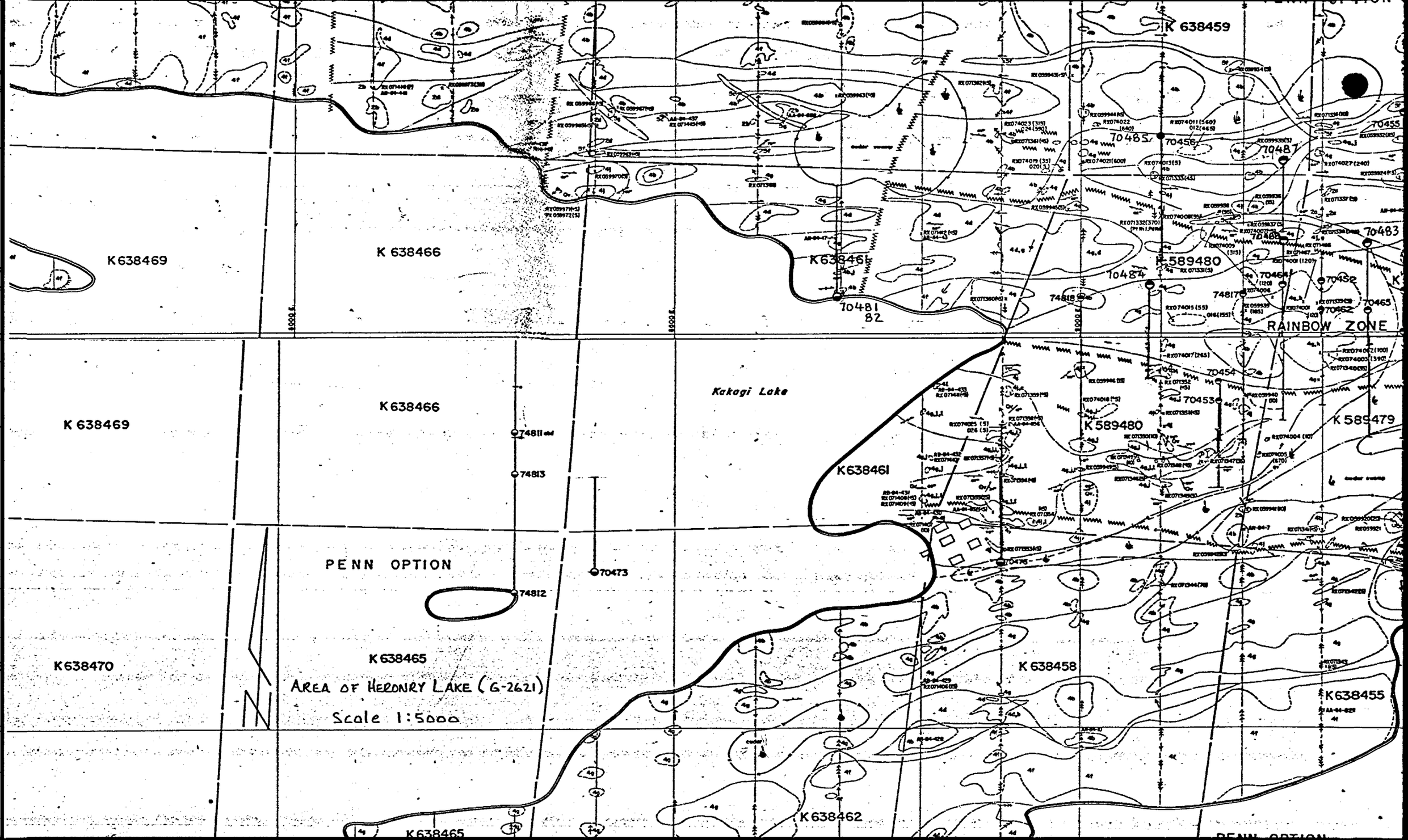
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Fine grained to medium grained, dark green to gray green. Chilled margins with sharp contacts. Mafic phenocrysts up to 1 millimetre in chilled margins. Hard, trace pyrite, 20% very fine grained disseminated iron carbonate.	FX188645	184.55	184.88	.33	TR	C25	.020	.454
			FX188646	184.88	185.83	.95	TR	-	.290	.729
			FX188647	185.83	186.53	.70	2	-	.020	.743
		184.88 185.63 With 2 to 3% quartz carbonate veins with bleached pyritic alteration halos up to several centimetres thick. 1% pyrite. Possibly highly altered gabbro.								
		185.63 185.83 Strongly contorted chloritic schistose gabbro inclusion or embayment. With 15% quartz carbonate streaks. Green, strongly foliated.								
		185.83 186.53 As at 184.88 with several small embayments as at 185.63 indicating dike is strongly interdigitated with enclosing gabbro. 2% very fine grained disseminated pyrite.								
186.53	187.30	GABBRO Altered. Green, chloritic, strongly foliated, contorted and folded with 60% intermixed quartz carbonate as patches, streaks and veins. Very chaotic appearance. Generally light green gray colour.	FX188648	186.53	187.30	.77	0	-	.270	.951
187.30	188.06	LAMPROPHYRE Fine grained, massive, dark gray. No chilled margins. Contacts are sharp but irregular. 1% fine grained disseminated pyrite, hard, intermediate in character. 15% fine grained disseminated iron carbonate.	FX188649	187.30	188.06	.76	0	-	.020	.966

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
188.06	190.50	GABBRO								
		Halo alteration. Weakly altered gabbro as to 187.30 metres with abundant carbonate veining.	FX188650	188.06	189.24	1.18	TR	-	.020	.990
			FX188651	189.24	190.50	1.26	TR	-	.010	1.002
190.50	223.00	GABBRO								
		Fine grained to medium grained, gray green, weakly magnetic, mottled with light green splotches, weakly foliated to massive. Minor quartz carbonate veins up to 5 millimetres thick. 10 to 15% iron carbonate.	FX188652	190.50	192.00	1.50	0	-	<.010	1.002
			FX188653	192.00	193.50	1.50	0	-	<.010	1.002
			FX188654	193.50	194.70	1.20	0	F46	<.010	1.002
			FX188655	194.70	195.33	.63	0	-	<.010	1.002
			FX188656	195.33	196.75	1.42	0	F55	<.010	1.002
			FX188657	196.75	198.25	1.50	0	-	<.010	1.002
			FX188658	198.25	199.75	1.50	0	F40	<.010	1.002
			FX188659	199.75	201.50	1.75	0	-	<.010	1.002
			FX188660	201.50	202.75	1.25	0	-	<.010	1.002
			FX188661	202.75	204.25	1.50	0	-	<.010	1.002
			FX188662	204.25	205.25	1.00	0	-	.010	1.012
			FX188663	205.25	206.50	1.25	0	F47	<.010	1.012
			FX188664	206.50	208.00	1.50	0	F40	<.010	1.012
			FX188665	208.00	209.50	1.50	0	-	<.010	1.012
			FX188666	209.50	211.00	1.50	0	-	<.010	1.012
			FX188667	211.00	212.50	1.50	0	F40	<.010	1.012
			FX188668	212.50	214.00	1.50	0	F40	<.010	1.012
			FX188669	214.00	215.50	1.50	0	-	<.010	1.012
			FX188670	215.50	217.00	1.50	0	F32	<.010	1.012
			FX188671	217.00	218.50	1.50	0	F36	<.010	1.012
			FX188672	218.50	220.00	1.50	0	-	<.010	1.012
			FX188673	220.00	221.50	1.50	0	-	<.010	1.012
			FX188674	221.50	223.00	1.50	0	C45	<.010	1.012
		188.06 189.24 Strongly to moderately foliated, in part very chloritic. Upper 45 centimetres strongly contorted, gradually becoming less contorted and foliated. 20% quartz carbonate as contorted and broken veins, patches and discontinuous streaks and veinlets. Trace pyrite.								
		189.24 190.50 3 to 5% contorted quartz carbonate veins up to 1 centimetre thick. 10 to 15% fine grained disseminated iron carbonate. Trace pyrite.								
		193.50 194.70 10% weakly to moderately contorted quartz carbonate veins and stringers up to 4 centimetres thick. Chloritic.								
		194.70 195.33 2 to 3% weakly to moderately contorted quartz carbonate veins up to 4 millimetres thick, generally sub parallel to core.								
		196.75 198.25 Minor quartz carbonate veins up to 3 centimetres thick.								
		199.75 201.50 Becoming weakly mottled.								
		201.50 204.25 Very weakly mottled, massive. 10%								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		disseminated fine grained iron carbonate. Minor quartz carbonate veins up to 3 centimetres thick.								
204.25	205.25	Becoming moderately mottled.								
205.25	206.50	2 to 3% quartz carbonate veins up to 5 centimetres thick.								
208.00	209.50	3% quartz carbonate veins up to 2 centimetres thick and generally parallel to foliation.								
211.00	212.50	3% quartz carbonate veins up to 6 centimetres thick.								
212.50	214.00	2 to 3% quartz carbonate veins up to 1.5 centimetres thick, generally parallel to foliation.								
215.50	217.00	Weakly to moderately mottled, moderately to strongly foliated, 2 to 3% quartz carbonate veins up to 2 centimetres thick.								
217.00	218.50	As above becoming less mottled.								
218.50	221.50	Fine grained to medium grained, gray green, moderately foliated, moderately hard. Minor disseminated iron carbonate. Minor quartz carbonate veins and veinlets at various angles to core.								
221.50	222.54	As above cut by 20 centimetre thick fine grained mafic dike that is green in colour with 5% fine grained disseminated iron carbonate. Sharp contacts. At 222.11.								
222.54	222.79	As at 218.50 but strongly foliated and contorted with 20% contorted quartz carbonate patches and veins.								
222.79	223.00	As at 218.50. 25 to 30% iron carbonate.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
223.00	223.74	LAMPROPHYRE Silicified. Fine grained, dark gray green, with slight purplish tint. Massive, hard with 20% fine grained disseminated iron carbonate. Weakly magnetic. Diffuse contacts. Minor quartz veins up to 1 centimetre thick.	FX188675	223.00	223.74	.74	0	-	<.010	1.012
223.74	228.90	GABBRO Fine grained to medium grained, gray green, moderately foliated, moderately hard. Minor disseminated iron carbonate. Weakly magnetic. 223.74 224.50 5 to 10% disseminated iron carbonate, 3% quartz carbonate veins up to 5 millimetres thick and at various angles to core. 224.50 227.50 As above with 3 to 5% iron carbonate.	FX188675	223.74	224.50	.76	0	-	<.010	1.012
			FX188676	224.50	226.00	1.50	0	-	<.010	1.012
			FX188677	226.00	227.50	1.50	0	F38	<.010	1.012
			FX188678	227.50	228.90	1.40	0	-	<.010	1.012
228.90	229.78	LAMPROPHYRE As to 223.74 metres. Fine grained, green gray, massive, weakly magnetic, hard. 20% fine grained disseminated iron carbonate. Trace chalcopyrite. sharp contacts.	FX188679	228.90	229.78	.88	0	C55	<.010	1.012
229.78	233.50	GABBRO As at 223.74. 232.00 233.50 Becoming fg.	FX188680	229.78	230.50	.72	0	-	<.010	1.012
			FX188681	230.50	232.00	1.50	0	-	<.010	1.012
			FX188682	232.00	233.50	1.50	0	-	<.010	1.012
233.50	245.66	GABBRO Becoming soft and slightly soapy feeling down hole.	FX188683	233.50	235.00	1.50	0	-	<.010	1.012

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Possibly transtion zone to peridotite. Fine grained equivalent of gabbro at 227.74. Weakly foliated, moderately hard, moderately to strongly calcareous, weakly magnetic, dark green gray, chloritic, with 2 to 3% quartz carbonate veins with diffuse contacts and up to 5 millimetres thick.	FX188684	235.00	236.50	1.50	0	-	<.010	1.012
			FX188685	236.50	238.00	1.50	0	-	<.010	1.012
			FX188686	238.00	239.50	1.50	0	F48	<.010	1.012
			FX188687	239.50	241.00	1.50	0	-	<.010	1.012
			FX188688	241.00	242.50	1.50	0	-	<.010	1.012
			FX188689	242.50	243.75	1.25	0	-	<.010	1.012
			FX188690	243.75	245.23	1.48	0	-	<.010	1.012
			FX188691	245.23	245.66	.43	0	-	<.010	1.012
245.66	246.91	LAMPROPHYRE Silicified as to 223.74 metres. Dark gray, fine grained, moderately hard, massive, very strongly calcareous, weakly magnetic. 1% very fine grained disseminated pyrite.	FX188692	245.66	246.91	1.25	1	-	<.010	1.012
246.91	248.11	GABBRO As at 233.50. Possibly transition zone to peridotite.	FX188693	246.91	248.11	1.20	0	-	<.010	1.012


K 638459
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K 638466
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70462
RAINBOW ZONE
K 638469
K 638466
Kakagi Lake
74811
74813
74812
70473
PENN OPTION
K 589480
K 589479
70454
70453
K638461
K638470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638455
K638462
K638465
PENN OPTION

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 8035.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-26-86
PROPERTY	: Crow	DEPARTURE	:E 4790.0 M	TOWNSHIP	:	COMPLETED	: 03-27-86
BOREHOLE	: 74819-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K 777750	DRILL TYPE	: Boyles 37A
DEPTH	: 76.2 M	LOGGED BY	: A.Aubut	GRID NAME	: Crow	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 140m west and 160m south of post #1. Casing left in hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.60	355.0	-47.00	32.00	355.0	-47.00	61.00	355.0	-46.00	76.20	355.0	-45.00

**********DESCRIPTION**********

FROM M	TO M	
.00	3.66	OVERBURDEN Casing through overburden of boulders.
3.66	4.84	LAPILLI TUFF Dacite lapilli tuff debris flow. Green gray, very hard. Rounded to sub rounded dacite cobbles up to 10 centimetres in size. Matrix to framework supported. Matrix is poorly sorted fine grained to coarse grained tuff. Not foliated. 5 to 8% fine grained disseminated iron carbonate. Numerous quartz carbonate veinlets.
4.84	15.50	LAPILLI TUFF

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188694	3.66	4.84	1.18	0	-	.010	.012

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AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********
		As above but altered. Weakly to strongly carbonatized silicified and bleached with quartz tourmaline veins.
4.84	5.42	Slightly pinkish.
5.42	5.96	Strongly bleached and carbonatized. Light green, 20 to 25% fine grained iron carbonate, weakly foliated, 5% disseminated fine grained to medium grained pyrite. 13 centimetre quartz vein with 5% black tourmaline at 5.67.
5.96	6.91	Gray green.
6.91	7.65	As at 5.42 with 3% disseminated black tourmaline crystals in lapilli tuff. quartz tourmaline vein is 4 centimetres thick. 4% pyrite. Trace fuchsite. Limonite on fractures.
7.65	8.83	Trace pyrite.
8.83	9.43	Strongly bleached, silicified and carbonatized. Mottled light pink to light green . Trace disseminated black tourmaline. 3% disseminated pyrite. One black tourmaline veinlet and a 5 millimetre thick quartz carbonate vein.
9.43	10.01	10 to 15% iron carbonate. Matrix supported.
10.01	10.52	As at 8.83 with 5 centimetre thick quartz carbonate tourmaline vein.
11.60	11.82	Strongly bleached and carbonatized. Light green. 4% pyrite.
11.82	12.18	Quartz vein with 5% black tourmaline veinlets, minor carbonate, 10% bleached lapilli tuff fragments with disseminated pyrite. Sharp contacts.
12.18	12.90	Strongly to moderately bleached. Strongly carbonatized with 15 to 20% fine grained iron carbonate. light green to pale gray.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188695	4.84	5.42	.58	0	-	.010	.018
FX188696	5.42	5.96	.54	5	C45	.240	.147
FX188697	5.96	6.91	.95	0	-	<.005	.147
FX188698	6.91	7.65	.74	4	-	.340	.399
FX188699	7.65	8.83	1.18	TR	-	.015	.417
FX188700	8.83	9.43	.60	3	-	.265	.576
FX188701	9.43	10.01	.58	0	-	.020	.587
FX188702	10.01	10.52	.51	3	C55	1.370	1.286
FX188703	10.52	11.60	1.08	4	-	.010	1.297
FX188704	11.60	11.82	.22	TR	C50	1.980	1.732
FX188705	11.82	12.18	.36	2	-	.490	1.909
FX188706	12.18	12.90	.72	0	-	.470	2.247
FX188707	12.90	13.76	.86	2	-	.010	2.256
FX188708	13.76	14.36	.60	1	-	.520	2.568
FX188709	14.36	15.50	1.14	0	-	.200	2.796

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		In part slightly orangy. A 1 centimetre thick black tourmaline quartz vein at 12.62. Trace fuchsite. 2% fine grained disseminated pyrite.								
	13.76	14.36 Strongly bleached and carbonatized, light green, 2% fine grained disseminated pyrite. Two quartz veins up to 5 centimetres thick and one quartz tourmaline vein 1.5 centimetres thick.								
	14.36	15.50 Weakly to moderately bleached, mottled, 10 to 15% iron carbonate, 2 to 3% quartz veins up to 1 centimetre thick. 1% disseminated pyrite. Trace fuchsite.								
15.50	16.03	GABBRO								
		Medium grained, gray green, altered, chloritic. Feldspars are pale green in colour. Massive, moderately hard, 15 to 20% very fine grained disseminated iron carbonate.	FX188710	15.50	16.03	.53	TR	-	<.005	2.796
16.03	16.66	TUFF								
		Fine grained, massive, dark green gray, moderately hard, diffuse contacts. Probably a partially digested xenolith. Trace iron carbonate, trace dissemirated pyrite	FX188711	16.03	16.66	.63	TR	-	.005	2.799
16.66	32.03	QUARTZ GABBRO								
		Medium grained, massive, gray green, mottled, 40% fresh white feldspar crystals, 3 to 5% scattered Bluish quartz grains. Weakly calcareous, trace pyrite.	FX188712	16.66	17.86	1.20	TR	-	<.005	2.799
			FX188713	17.86	19.36	1.50	TR	-	<.005	2.799
			FX188714	19.36	20.27	.91	TR	-	<.005	2.799

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
16.66	19.36	Chloritic, green to gray green, feldspars pale green. Moderately to strongly calcareous, moderately hard, trace pyrite, mottled.	FX188715	20.27	21.67	1.40	TR	-	<.005	2.799
			FX188716	21.67	23.00	1.33	TR	-	<.005	2.799
			FX188717	23.00	24.50	1.50	TR	-	<.005	2.799
			FX188718	24.50	26.00	1.50	TR	-	<.005	2.799
19.36	20.27	As above, fractured.	FX188719	26.00	27.50	1.50	TR	-	.005	2.806
20.27	21.67	Becoming less chloritic and altered.	FX188720	27.50	29.00	1.50	TR	-	.015	2.829
26.00	27.50	First 25 centimetres leucocratic anorthositic fine grained gabbro with sharp rolling lower contact and gradual upper contact.	FX188721	29.00	30.17	1.17	TR	-	<.005	2.829
			FX188722	30.17	31.33	1.16	TR	-	<.005	2.829
			FX188723	31.33	32.03	.70	TR	-	<.005	2.829
27.50	29.00	Becoming chilled and epidotized.								
29.00	30.17	Chloritic and epidotized. Dark green.								
30.17	31.33	Medium grained to coarse grained with pegmatitic patches. Generally altered with 10 to 15% unaltered feldspar. 2 centimetre thick quartz vein at 30.80 with pyritic and calcareous alteration halo up to 5 centimetres thick.								
31.33	32.03	As at 30.17 with decreasing quartz content.								
32.03	76.20	GABBRO								
		Medium grained to coarse grained, massive, 40% white to light green feldspar. Gray green, mottled, hard. No carbonate. Weakly layered sequence. Trace pyrite.	FX188724	32.03	33.32	1.29	TR	-	<.005	2.829
			FX188725	33.32	33.58	.26	TR	F43	<.005	2.829
33.32	33.58	Strongly foliated, very chloritic with 25% quartz as patches and streaks. Strongly calcareous.	FX188726	33.58	34.25	.67	TR	-	<.005	2.829
			FX188727	34.25	35.05	.80	TR	C20	<.005	2.829
			FX188728	35.05	35.65	.60	TR	-	<.005	2.829
			FX188729	35.65	36.45	.80	TR	-	<.005	2.829
34.25	35.05	Beginning of new layer. First 15 centimetres fine grained and leucocratic plus is in sharp contact with unit above.	FX188730	36.45	37.77	1.32	TR	-	<.005	2.829
			FX188731	37.77	38.65	.88	TR	C16	<.005	2.829
35.65	36.45	Minor quartz patches. In part altered and	FX188732	38.65	40.15	1.50	TR	-	<.005	2.829
			FX188733	40.15	41.65	1.50	TR	-	<.005	2.829

FROM M	TO M	**********DESCRIPTION**********
		very chloritic. Coarse grained . Bottom of cycle.
36.45	38.65	Top of cycle. 10 centimetre thick fine grained leucocratic top. Medium grained.
43.15	43.83	One cycle. Fine grained at top to coarse grained at bottom..
43.83	44.96	Medium grained to fine grained.
44.96	47.52	Coarse grained to medium grained.
47.52	48.42	Top of new cycle. Fine grained, slightly leucocratic relative to rest of section. Contact diffuse. Fine grained to medium grained.
48.42	49.90	Medium grained.
49.90	51.60	Chloritic, epidotized, gray green.
51.60	52.94	Top of new cycle (?) with first 6 centimetres fine grained. leucocratic with 70% white feldspar. Contact sharp. Becomes progessively coarser down section.
53.92	55.22	Medium grained to coarse grained.
55.22	56.72	Top of new cycle. Contact fairly sharp. With 10 centimetre thick pegmatite dike. Light pink with only 5% mafics. Becoming chloritic and epidotized.
56.72	57.48	Chloritic. Feldspars epidotized to pale green
60.30	67.85	Medium grained to coarse grained, weakly to strongly chilled and epidotized, gray green with scattered fresh pegmatitic patches and bands.
67.85	73.25	Gray green, strongly chilled and epidotized, medium grained to fine grained, locally up to 10% unaltered white feldspar, weakly calcareous.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188734	41.65	43.15	1.50	TR	-	.020	2.859
FX188735	43.15	43.83	.68	TR	-	<.005	2.859
FX188736	43.83	44.96	1.13	TR	-	<.005	2.859
FX188737	44.96	46.46	1.50	TR	-	<.005	2.859
FX188738	46.46	47.52	1.06	TR	-	<.005	2.859
FX188739	47.52	48.42	.90	TR	C23	.005	2.863
FX188740	48.42	49.90	1.48	TR	-	<.005	2.863
FX188741	49.90	50.60	.70	TR	-	<.005	2.863
FX188742	50.60	51.60	1.00	TR	-	<.005	2.863
FX188743	51.60	52.94	1.34	TR	C52	<.005	2.863
FX188744	52.94	53.92	.98	TR	-	<.005	2.863
FX188745	53.92	55.22	1.30	TR	-	<.005	2.863
FX188746	55.22	56.72	1.50	TR	C36	<.005	2.863
FX188747	56.72	57.48	.76	TR	-	<.005	2.863
FX188748	57.48	58.96	1.48	TR	-	<.005	2.863
FX188749	58.96	60.30	1.34	TR	-	<.005	2.863
FX188750	60.30	61.80	1.50	TR	-	<.005	2.863
FX188751	61.80	63.30	1.50	TR	-	<.005	2.863
FX188752	63.30	64.80	1.50	TR	-	<.005	2.863
FX188753	64.80	66.30	1.50	TR	-	<.005	2.863
FX188754	66.30	67.85	1.55	TR	-	<.005	2.863
FX188755	67.85	69.33	1.48	TR	-	<.005	2.863
FX188756	69.33	70.77	1.44	TR	-	<.005	2.863
FX188757	70.77	71.75	.98	TR	-	<.005	2.863
FX188758	71.75	73.25	1.50	TR	-	<.005	2.863
FX188759	73.25	74.75	1.50	TR	-	<.005	2.863
FX188760	74.75	76.20	1.45	TR	-	<.005	2.863

**********INCO LIMITED**********

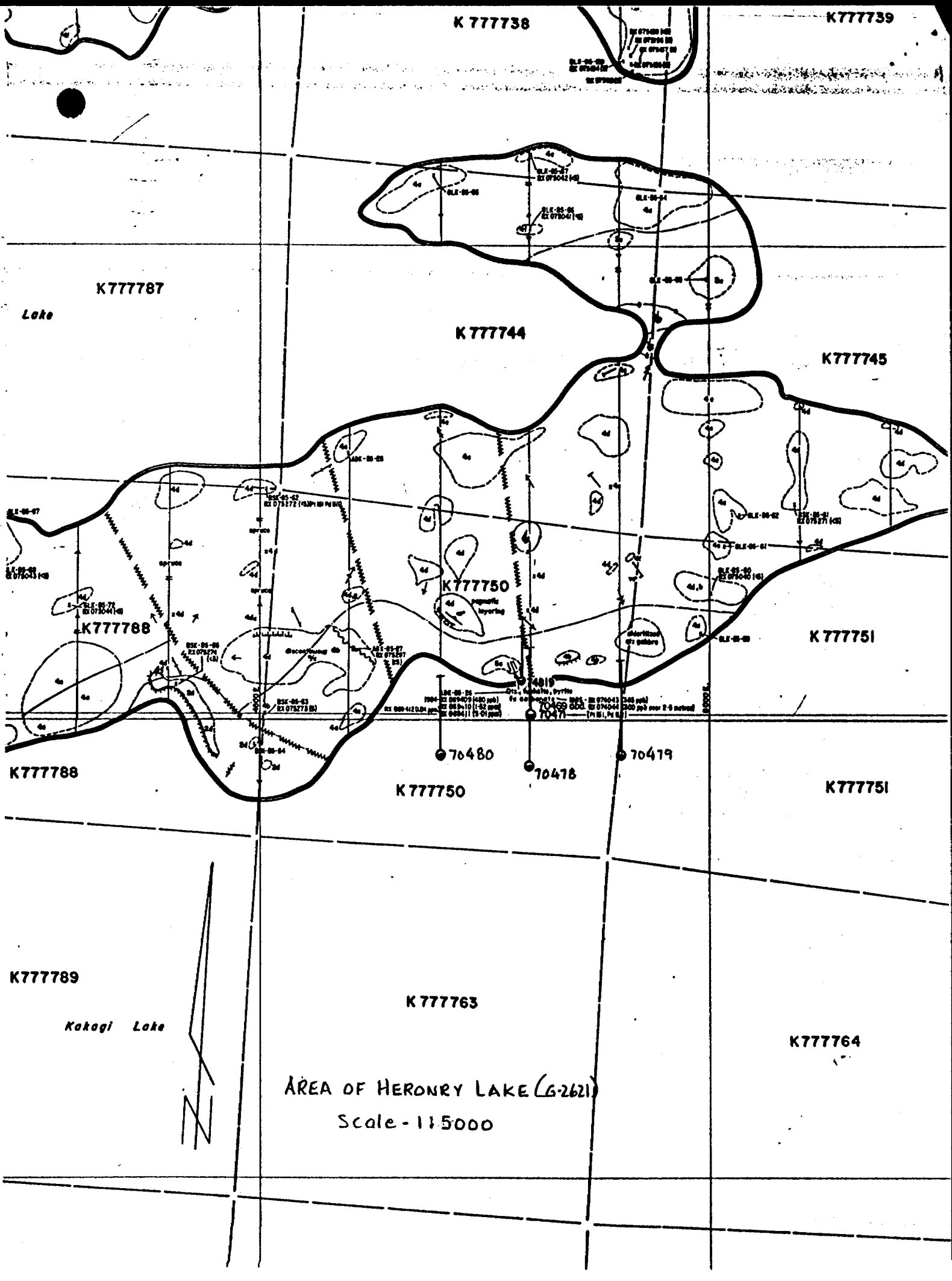
FIELD EXPLORATION DIAMOND DRILL LOG

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FROM M	TO M	**********DESCRIPTION**********
73.25	76.20	Moderately to strongly chilled and epidotized, medium grained. Foot of hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M


K777738
K777739
K777787
Lake
K777744
K777745
K777750
K777788
K777751
74819
70469
70471
70480
70478
70479
K777788
K777750
K777751
K777789
K777763
Kakagi Lake
K777764
AREA OF HERONRY LAKE (G-2621)
Scale - 1:5000

********** NORTHGATE EXPLORATION LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 7945.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/04/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 4800.0 M	TOWNSHIP	:	COMPLETED	: 03/08/88
BOREHOLE	: 70478-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K777750	DRILL TYPE	: Longyear 38
DEPTH	: 249.0 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 275m E and 300m S of Post#1

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
30.48		-56.00	121.96		-56.00	243.92		-49.00			
60.96		-55.50	182.88		-53.50						

**********DESCRIPTION**********

FROM M	TO M	
.00	21.34	WATER
21.34	31.70	OVERBURDEN Sand, gravel and boulders of dacite tuff and gabbro.
31.70	46.63	AGGLOMERATE Dacite agglomerate. Green gray fine grained matrix supported tuff with 10% black, weakly pyritic, sub rounded, stretched mafic clasts up to 5 millimetres. Green to pale green lapilli to agglomerate sized stretched and locally boudinaged clasts of dacite tuff.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPB	PPB*M
FX254313	31.70	32.90	1.20	TR	F10	<.005	
FX254314	32.90	35.97	3.07	TR	F10	<.005	
FX254315	35.97	37.44	1.47	TR	F10	<.005	
FX254316	37.44	39.01	1.57	TR	F10	<.005	
FX254317	39.01	40.53	1.52	TR	F10	<.005	

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FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Fragments are locally mineralized with up to 3% disseminated pyrite. Rare cross cutting contorted calcareous stringers. Locally quartz carbonate veinlets with pale buff green alteration halos with trace to 1% fine disseminated pyrite. Trace scattered pyrite. Weakly silicified. Poorly foliated. Moderately hard.	FX254318	40.53	42.06	1.53	TR	F10	<.005	
			FX254319	42.06	44.01	1.95	TR	F10	<.005	
			FX254320	44.01	45.11	1.10	TR	F10	<.005	
			FX254321	45.11	46.63	1.52	TR	F10	<.005	
		45.11 46.63 Gradational lower contact into dacite tuff.								
46.63	51.21	TUFF								
		Dacite tuff. Green gray, fine grained matrix with 15 to 20 % intermediate to felsic subangular clasts up to 4 millimetres. Stretched mafic clasts up to 10 millimetres (5:1, length:width). Strongly calcareous. Poorly foliated. Locally up to 2% minor quartz calcite stringers cross cutting foliation with weak buff alteration halos. Trace pyrite.	FX254322	46.63	48.16	1.53	TR	F14	<.005	
			FX254323	48.16	49.68	1.52	TR	F24	<.005	
			FX254324	49.68	51.21	1.53	TR	F12	<.005	
		49.68 51.21 Gradational lower contact into dacite lapilli tuff to agglomerate.								
51.21	62.84	AGGLOMERATE								
		Dacite agglomerate as at 31.70 to 46.63 metres.	FX254325	51.21	52.77	1.56	TR	F10	<.005	
		61.63 62.84 Gradational lower contact into weakly to moderately altered dacite lapilli tuff.	FX254326	52.77	54.25	1.48	TR	F10	<.005	
			FX254327	54.25	55.75	1.50	TR	F10	<.005	
			FX254328	55.75	57.14	1.39	TR	F10	<.005	
			FX254329	57.14	58.80	1.66	TR	F16	<.005	
			FX254330	58.80	60.35	1.55	TR	F10	<.005	
			FX254331	60.35	61.63	1.28	TR	F9	<.005	
			FX254332	61.63	62.84	1.21	1	F10	<.005	

**********DESCRIPTION**********

FROM M	TO M	
62.84	98.14	LAPILLI TUFF

Moderately altered dacite lapilli tuff. Green gray to pale gray, fine grained matrix with lapilli sized dacite tuff clasts. Weakly to locally moderately foliated. Scattered quartz carbonate veins up to 7 centimetres thick with intensely altered buff sericitic halos cut foliation. Veins are rimmed by tourmaline crystals and iron carbonate. Inclusions of white iron carbonate and black tourmaline with fine disseminated pyrite are noted. Alteration is most intense adjacent to the quartz carbonate veins. 5% green very weakly fuchsitic altered mafic clasts. 3 to 5% disseminated and euhedral pyrite. A weak red brown hematitic stain is found locally.

Locally silicified. Moderately hard.

62.84 63.57 2.5 centimetre quartz carbonate vein bounded by a 22 centimetre alteration halo with 5% disseminated, stringer euhedral pyrite. Fuchsite and iron carbonate.

63.57 64.14 7 centimetre quartz carbonate vein with inclusions of altered tuff. 36 centimetre alteration halo. Possible visible gold along a tourmaline stringer.

64.14 65.66 Strongly silicified, pale gray green. Scattered quartz carbonate veinlets with minor sericitized, fuchsite alteration halos. No tourmaline.

65.66 67.05 3 centimetre quartz carbonate vein with 23 centimetre sericitized, fuchsite alteration halo and 3% disseminated and euhedral pyrite. No tourmaline. Minor brown iron carbonate stringers perpendicular to core

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254333	62.84	63.57	.73	5	F22	.260	
FX254334	63.57	64.14	.57	2	F15	.470	
FX254335	64.14	65.66	1.52	1	F18	.005	
FX254336	65.66	67.05	1.39	3	F*	<.005	
FX254337	67.05	68.61	1.56	TR	F15	<.005	
FX254338	68.61	69.89	1.28	TR	F10	<.005	
FX254339	69.89	71.47	1.58	TR	F10	.010	
FX254340	71.47	72.95	1.48	TR	F14	<.005	
FX254341	72.95	74.50	1.55	TR	F12	<.005	
FX254342	74.50	76.02	1.52	TR	F14	.005	
FX254343	76.02	77.46	1.44	TR	F10	.025	
FX254344	77.46	78.98	1.52	1	F8	<.005	
FX254345	78.98	80.39	1.41	TR	F14	<.005	
FX254346	80.39	81.37	.98	1	F10	<.005	
FX254347	81.37	81.96	.59	2	F16	.055	
FX254348	81.96	83.45	1.49	TR	F14	<.005	
FX254349	83.45	84.98	1.53	TR	F10	<.005	
FX254350	84.98	86.52	1.54	TR	F10	<.005	
FX254351	86.52	87.96	1.44	TR	F8	<.005	
FX254352	87.96	89.50	1.54	TR	F10	<.005	
FX254353	89.50	90.95	1.45	TR	F10	<.005	
FX254354	90.95	92.46	1.51	TR	F15	<.005	
FX254355	92.46	93.88	1.42	TR	F17	<.005	
FX254356	93.88	95.43	1.55	TR	F10	<.005	
FX254357	95.43	96.93	1.50	TR	F16	<.005	
FX254358	96.93	98.14	1.21	TR	F13	<.005	

FROM M	TO M	**********DESCRIPTION**********
		axis.
	67.05	68.61 Moderately silicified with weakly pervasive brown iron carbonate. Locally iron carbonate stringers adjacent to smokey quartz carbonate veinlets.
	68.61	69.89 Locally 1 centimetre thick hematitic quartz calcite veinlet parallel to core axis with a buff alteration halo.
	69.89	74.50 Weakly calcareous dacite agglomerate. Moderately silicified and hard.
	74.50	76.02 Locally a weakly hematitic quartz carbonate veinlet sub parallel to core axis with buff alteration halo cut by minor quartz stringers.
	77.46	78.98 Moderately calcareous. Locally 3 millimetre quartz carbonate veinlet with 1% pyrite and possible sphalerite.
	80.39	81.37 3 millimetre quartz tourmaline veinlet with buff alteration halo and 1% disseminated pyrite.
	81.37	81.96 3 centimetre quartz vein with inclusions of sericitized, fuchsite tuff. 3% disseminated and cubic pyrite at edge of vein. Scattered quartz carbonate veinlets with minor alteration halos. Pale gray and silicified tuff.
	81.96	86.52 Moderately calcareous with calcite stringers.
	86.52	92.46 Minor quartz carbonate veinlet sub parallel to core axis with buff alteration halo, cut by quartz iron carbonate stringers.
	96.93	98.14 Gradational lower contact into strongly altered tuff.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
98.14	99.00	TUFF Strongly altered dacite tuff. Pale buff green, very fine grained with stretched clasts. Weakly to moderately sericitized, fuchsite, moderately calcareous silicified. Boudinaged quartz carbonate veins. Hard. Sharp lower contact with fine grained gabbro basalt.	FX254359	98.14	99.00	.86	TR	F14	<.005	
99.00	99.76	GABBRO Dark green, fine grained to medium grained, massive, gabbro / basalt. 50% light coloured feldspathic crystals. Strongly calcareous. 1% fine disseminated pyrite. Scattered quartz carbonate veinlets. Moderately soft. Sharp lower contact with well foliated tuff.	FX254360	99.00	99.76	.76	1	F*	.005	
99.76	104.21	LAPILLI TUFF Dark green, fine grained, well foliated and to dacite lapilli tuff. Pale green, boudinaged quartz calcite veinlets parallel foliation. Locally pale brown iron carbonate adjacent to contact with dacite tuff. Moderately calcareous. Moderately soft. Trace fine disseminated pyrite.	FX254361	99.76	101.15	1.39	TR	C11	<.005	
			FX254362	101.15	102.72	1.57	TR	F7	<.005	
			FX254363	102.72	104.21	1.49	TR	F0	<.005	
104.21	105.27	GABBRO As at 99.00 to 99.76 metres. Sharp lower contact with well foliated dacite lapilli tuff.	FX254364	104.21	105.27	1.06	1	F0	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
105.27	107.43	LAPILLI TUFF And to dacite lapilli tuff as at 99.76 to 104.21 metres.	FX254365	105.27	106.28	1.01	TR	F7	<.005	
			FX254366	106.28	107.43	1.15	TR	F7	<.005	
107.43	108.09	GABBRO As at 99.00 to 99.76 metres. Sharp lower contact with foliated dacite lapilli tuff.	FX254367	107.43	108.09	.66	1	F*	<.005	
108.09	110.47	LAPILLI TUFF And to dacite lapilli tuff as at 99.76 to 104.21 metres. Well foliated with 12 centimetre quartz iron carbonate vein hosting scattered tourmaline and inclusions of tuff 108.79 110.47 Minor interfingering gabbro.	FX254368	108.09	108.79	.70	TR	F26	<.005	
			FX254369	108.79	110.47	1.68	TR	F18	<.005	
110.47	114.80	GABBRO Gabbro as at 99.00 to 99.76 metres. Scattered tourmaline bearing quartz carbonate veinlets with trace disseminated pyrite. 113.73 114.80 Rare chalcopyrite stringers in quartz carbonate veinlets. Sharp lower contact with foliated lapilli tuff.	FX254370	110.47	112.00	1.53	1	F*	.005	
			FX254371	112.00	112.87	.87	1	F*	.005	
			FX254372	112.87	113.73	.86	1	F*	<.005	
			FX254373	113.73	114.80	1.07	1	F*	<.005	
114.80	115.70	LAPILLI TUFF And to dacite lapilli tuff as at 99.76 to 104.21 metres. Scattered 1 millimetre pyrite cubes.	FX254374	114.80	115.70	.90	1	C20	.005	
115.70	116.22	GABBRO								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Dark green, fine grained with 50% medium grained black chlorite and pyroxene crystals. Massive, strongly calcareous. Locally with hematitic staining. 2% fine disseminated and stringer pyrite locally altered to specularite. Scattered calcite quartz veins and veinlets	FX254375	115.70	116.22	.52	2	F8	<.005	
116.22	121.89	AGGLOMERATE								
		Dacite agglomerate as at 31.70 to 46.63 metres.	FX254376	116.22	117.94	1.72	TR	F11	<.005	
		120.54 121.89 Weakly sheared lower contact with fine grained gabbro. Minor gouge.	FX254377	117.94	119.01	1.07	TR	F22	<.005	
			FX254378	119.01	120.54	1.53	TR	F11	<.005	
			FX254379	120.54	121.89	1.35	TR	C30	<.005	
121.89	122.80	GABBRO								
		Gabbro as at 115.70 to 116.22 metres.	FX254380	121.89	122.80	.91	TR	F0	<.005	
122.80	135.86	AGGLOMERATE								
		Dacite agglomerate as at 31.70 to 46.63 metres.	FX254381	122.80	124.16	1.36	TR	F0	<.005	
		Fragments of feldspar porphyry.	FX254382	124.16	125.36	1.20	TR	F15	<.005	
		124.16 125.36 Quartz carbonate veinlets with intense buff alteration halos. Weakly iron carbonate and fuchsite. Trace disseminated pyrite.	FX254383	125.36	125.97	.61	TR	F25	<.005	
			FX254384	125.97	127.51	1.54	TR	F25	.005	
			FX254385	127.51	128.01	.50	TR	F25	.010	
			FX254386	128.01	130.68	2.67	TR	F25	.010	
		127.51 128.01 Pervasive feldspar porphyry clasts.	FX254387	130.68	132.08	1.40	TR	F11	.005	
		132.08 133.50 Locally tourmaline bearing quartz carbonate veinlets cut by hematitic stained quartz carbonate vein.	FX254388	132.08	133.50	1.42	TR	F22	<.005	
			FX254389	133.50	134.68	1.18	TR	F10	<.005	
			FX254390	134.68	135.86	1.18	1	F*	<.005	
		134.68 135.86 Locally 4 millimetre wide band of cubic pyrite crystals.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
135.86	137.05	GABBRO								
		As at 115.70 to 116.22 metres.	FX254391	135.86	137.05	1.19	1	F*	<.005	
137.05	150.52	AGGLOMERATE								
		Dacite agglomerate as at 31.70 to 46.63 metres. Locally	FX254392	137.05	139.29	2.24	2	F22	<.005	
		1 to 2% disseminated and euhedral pyrite.	FX254393	139.29	140.44	1.15	2	F*	<.005	
		137.05 139.29 2% scattered disseminated and euhedral	FX254394	140.44	140.81	.37	3	F*	<.005	
		pyrite. Locally quartz carbonate vein with	FX254395	140.81	141.26	.45	1	F23	<.005	
		very weak pale green alteration halo	FX254396	141.26	142.74	1.48	TR	F14	<.005	
		hosting fine disseminated pyrite.	FX254397	142.74	144.28	1.54	TR	F17	<.005	
		139.29 140.44 Large silicified fragment of fine grained	FX254398	144.28	145.69	1.41	1	F27	<.005	
		gabbro / basalt.	FX254399	145.69	147.35	1.66	TR	F26	<.005	
		140.44 140.81 3% euhedral and cubic pyrite up to 3	FX254400	147.35	148.84	1.49	TR	F20	<.005	
		millimetres in quartz gabbro fragment.	FX254401	148.84	150.52	1.68	TR	F17	<.005	
		140.81 141.26 5 millimetre quartz carbonate vein with 8								
		centimetre pale green alteration halo								
		hosting 1% cubic pyrite.								
		144.28 150.52 Scattered quartz carbonate veinlets and								
		stringers with minor alteration halos.								
150.52	163.65	LAPILLI TUFF								
		Green, very fine grained matrix with 20% fine grained	FX254402	150.52	151.91	1.39	TR	F15	<.005	
		black mafic clasts and 40% light felsic clasts.	FX254403	151.91	153.47	1.56	TR	F26	.005	
		Foliated. Moderately iron carbonatized. Moderately	FX254404	153.47	154.96	1.49	TR	F24	<.005	
		calcareous. Trace to 1% disseminated and locally	FX254405	154.96	156.65	1.69	TR	F20	<.005	
		euhedral pyrite. Scattered quartz carbonate veins	FX254406	156.65	158.27	1.62	TR	F27	.010	
		hosting 1 to 2% euhedral and disseminated pyrite,	FX254407	158.27	159.72	1.45	1	F33	.150	
		locally with weak alteration halos. Moderately soft.	FX254408	159.72	161.21	1.49	2	F34	<.005	
		158.27 159.72 Tourmaline bearing quartz carbonate	FX254409	161.21	162.42	1.21	TR	F33	<.005	

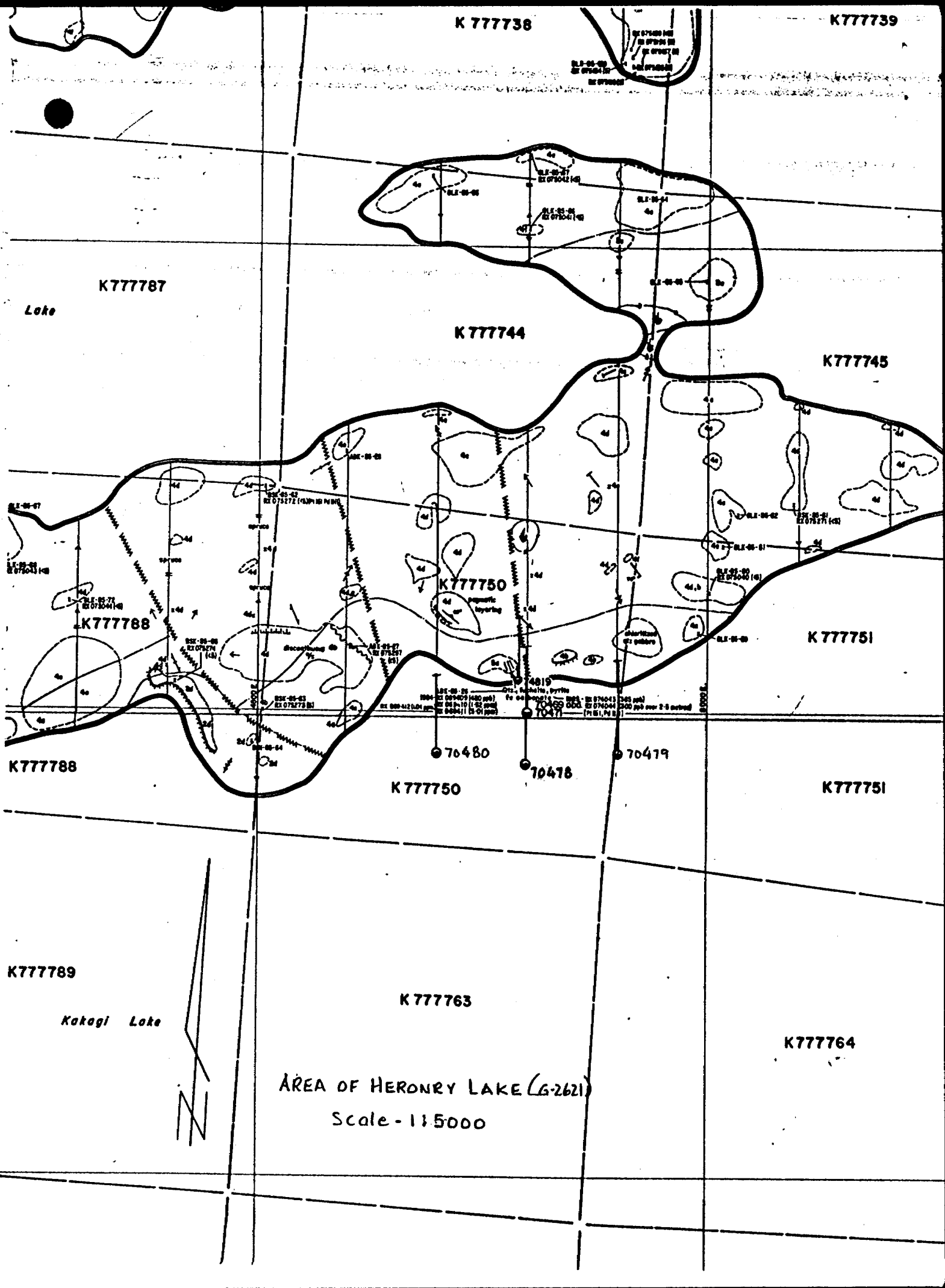
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		stringers with narrow intense fuchsite and pyritic alteration halos. Increasing intensity of bleaching of tuff downhole.	FX254410	162.42	163.65	1.23	1	F33	<.005	
163.65	174.80	LAPILLI TUFF								
		Altered lapilli tuff as above with locally intense buff to green fuchsite alteration adjacent to boudinaged quartz carbonate veinlets cut by second generation quartz veinlets with iron carbonate rims. Moderately altered pale gray tuff with 2% disseminated and euhedral pyrite.	FX254411	163.65	164.65	1.00	2	F40	.070	
			FX254412	164.65	166.15	1.50	2	F40	.005	
			FX254413	166.15	167.74	1.59	1	F28	.010	
			FX254414	167.74	168.95	1.21	1	F13	.020	
			FX254415	168.95	169.83	.88	2	F16	.235	
			FX254416	169.83	170.71	.88	2	F40	<.005	
			FX254417	170.71	172.06	1.35	2	F32	<.005	
			FX254418	172.06	173.46	1.40	TR	F34	.005	
			FX254419	173.46	174.80	1.34	TR	F30	<.005	
		164.65 166.15 Strongly foliated.								
		167.74 168.95 Moderately altered and contorted. Moderately sericitic.								
		168.95 172.06 Strongly altered and contorted. Strongly silicified with boudinaged tourmaline bearing quartz carbonate veins. 5% fuchsite streaks. 2% disseminated and euhedral pyrite. Relict clast texture.								
		172.06 173.46 Pale gray with 10% quartz carbonate veinlets and minor alteration halos parallel and cross cutting foliation.								
		173.46 174.80 Grading into dacite lapilli tuff to agglomerate. Moderately iron carbonate matrix with 10% zoned calcite crystals up to 6 millimetres across.								
174.80	187.37	AGGLOMERATE								
		Dacite agglomerate as at 150.52 to 164.65 metres. Moderately to locally strongly calcareous. Moderately	FX254420	174.80	176.89	2.09	TR	F30	<.005	
			FX254421	176.89	178.55	1.66	TR	F28	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		iron carbonate. scattered quartz calcite veins and stringers. Stretched feldspar porphyry, dacite tuff, dacite lapilli tuff, fine grained gabbro clasts. No indication of brittle deformation of clasts. Locally up to 1% disseminated and euhedral pyrite. Soft to locally moderately hard.	FX254422	178.55	179.95	1.40	TR	F30	<.005	
			FX254423	179.95	181.42	1.47	TR	F23	<.005	
			FX254424	181.42	182.91	1.49	1	F26	<.005	
			FX254425	182.91	184.32	1.41	TR	F25	<.005	
			FX254426	184.32	185.82	1.50	TR	F20	<.005	
			FX254427	185.82	187.37	1.55	TR	F20	<.005	
187.37	187.67	SAND								
		Sand seam. Green gray, fine grained, strongly calcareous with trace to 1% fine disseminated pyrite. Locally medium grained with subangular quartz fragments up to 4 millimetres. Rare organic material. Weakly cemented by muddy gouge at bottom of sample.	FX254428	187.37	187.67	.30	TR	F*	.035	
187.67	237.13	AGGLOMERATE								
		Dacite agglomerate as at 174.80 to 187.67 metres. Weakly iron carbonate.	FX254429	187.67	188.72	1.05	TR	F30	<.005	
			FX254430	188.72	190.21	1.49	1	F30	<.005	
205.28	206.88	Well foliated, with 15% stretched calcareous pods and stringers.	FX254431	190.21	191.73	1.52	TR	F30	<.005	
			FX254432	191.73	193.33	1.60	TR	F26	<.005	
209.85	211.55	Quartz calcite vein with clots of chlorite. 2 to 3% pyrite. Rare chalcopyrite	FX254333	193.33	194.74	1.41	TR	F18	.260	
			FX254434	194.74	196.25	1.51	TR	F30	.005	
214.28	215.80	Strongly calcareous. Very poorly foliated. 4 centimetre quartz calcite vein with inclusions of tuff.	FX254435	196.25	197.74	1.49	TR	F34	<.005	
			FX254436	197.74	199.27	1.53	TR	F28	<.005	
			FX254437	199.27	200.76	1.49	TR	F27	<.005	
215.80	217.32	Scattered zoned calcite crystals.	FX254438	200.76	202.24	1.48	TR	F17	<.005	
217.32	220.34	Moderately well foliated.	FX254439	202.24	203.76	1.52	TR	F30	<.005	
220.34	221.89	Weakly iron carbonate.	FX254440	203.76	205.28	1.52	TR	F25	<.005	
221.89	235.60	Moderately silicified. Hard.	FX254441	205.28	206.88	1.60	TR	F19	<.005	
235.60	237.13	Scattered calcite stringers cross cutting foliation.	FX254442	206.88	208.28	1.40	TR	F20	<.005	
			FX254443	208.28	209.85	1.57	TR	F16	<.005	

FROM M	TO M	**********DESCRIPTION**********
237.13	240.18	GABBRO
		Gabbro as at 99.00 to 99.76 metres. Scattered cross cutting quartz carbonate veinlets and stringers. 20% calcite pods.
239.41	240.18	Boudinaged quartz carbonate vein 3 centimetres thick with inclusions of gabbro and chlorite. 2 millimetre of muddy gouge parallel to foliation. Strongly calcareous. Sharp lower contact at quartz carbonate vein.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
				**********ANALYSES**********			
FX254444	209.85	211.55	1.70	1	F19	<.005	
FX254445	211.55	212.75	1.20	TR	F18	<.005	
FX254446	212.75	214.28	1.53	TR	F25	<.005	
FX254447	214.28	215.80	1.52	TR	F*	<.005	
FX254448	215.80	217.32	1.52	TR	F16	<.005	
FX254449	217.32	218.85	1.53	TR	F17	<.005	
FX254450	218.85	220.34	1.49	TR	F20	<.005	
FX254451	220.34	221.89	1.55	TR	F20	<.005	
FX254452	221.89	223.42	1.53	TR	F20	.010	
FX254453	223.42	224.94	1.52	TR	F20	.010	
FX254454	224.94	226.44	1.50	TR	F16	<.005	
FX254455	226.44	227.99	1.55	TR	F16	<.005	
FX254456	227.99	229.37	1.38	TR	F30	<.005	
FX254457	229.37	231.04	1.67	TR	F20	<.005	
FX254458	231.04	232.53	1.49	TR	F20	<.005	
FX254459	232.53	234.09	1.56	TR	F23	<.005	
FX254460	234.09	235.60	1.51	TR	F23	.005	
FX254461	235.60	237.13	1.53	TR	F18	.005	
FX254462	237.13	238.71	1.58	TR	F*	<.005	
FX254463	238.71	239.41	.70	TR	F*	<.005	
FX254464	239.41	240.18	.77	TR	F15	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
240.18	248.59	AGGLOMERATE								
		Dacite agglomerate as at 174.80 to 187.67 metres.	FX254465	240.18	241.68	1.50	TR	F18	.005	
			FX254466	241.68	243.23	1.55	TR	F23	<.005	
			FX254467	243.23	244.75	1.52	TR	F22	<.005	
			FX254468	244.75	246.28	1.53	TR	F35	<.005	
			FX254469	246.28	247.31	1.03	TR	F30	<.005	
			FX254470	247.31	248.59	1.28	TR	F30	<.005	
248.59	249.02	BASALT								
		Dark green, very fine grained with 15% 0.5 millimetre crystals of iron carbonate. Massive. Cut by quartz iron carbonate veinlets and stringers strongly silicified. Hard. Trace fine disseminated pyrite. Foot of hole.	FX254471	248.59	249.02	.43	TR	F*	<.005	


K 777738
K777739
K777787
Lake
K777744
K777745
K777750
K777788
K777751
70480
70478
70419
K777788
K777750
K777751
K777789
K777763
Kakagi Lake
K777764
AREA OF HERONRY LAKE (G-2621)
Scale - 1:5000

**********IN' 'IMITED**********
FIELD EXPLOR. N DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 7960.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/08/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 4900.0 M	TOWNSHIP	:	COMPLETED	: 03/11/88
BOREHOLE	: 70479-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K777750	DRILL TYPE	: Longyear 38
DEPTH	: 194.5 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 378m E and 280m S of Post#1. Lake hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
37.80		-53.50	60.96		-52.50	121.92		-52.00	194.46		-49.00

**********DESCRIPTION**********

FROM M	TO M	
.00	17.68	WATER
17.68	38.01	OVERBURDEN Medium grained to coarse grained sand, gravel and boulders.
38.01	47.67	AGGLOMERATE Weakly to moderately altered dacite agglomerate. Green gray to dark gray, fine grained matrix. Very poorly to poorly foliated. Feldspar porphyry, dacite tuff and lapilli tuff clasts present. Clasts are stretched 3:1 with no brittle deformation noted. 1% iron carbonate in

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254472	38.01	39.48	1.47	TR	F*	.005	
FX254473	39.48	41.37	1.89	TR	F*	<.005	
FX254474	41.37	42.79	1.42	TR	F*	<.005	
FX254575	42.79	44.48	1.69	TR	F*	.040	
FX254476	44.48	46.01	1.53	TR	F*	<.005	

ONTARIO GEOLOGICAL SURVEY
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AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

70479-0
PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		matrix. Moderately to strongly silicified. Trace fine disseminated pyrite. Clasts are locally moderately calcareous. Scattered tourmaline bearing quartz carbonate veinlets with weak buff to pale green alteration halos. Moderately hard to hard.	FX254477	46.01	46.29	.28	1	F*	<.005	
			FX254478	46.29	47.67	1.38	TR	F18	<.005	
		38.01 39.48 Locally broken core.								
		44.48 46.01 Pale gray altered agglomerate adjacent to quartz calcite veinlets with iron carbonate and calcareous alteration halos.								
		46.01 46.29 14 centimetre quartz vein with calcareous stringers and inclusions of pyritic tuff.								
47.67	47.92	GRAVEL								
		Gravel seam.	FX254479	47.67	47.92	.25	TR	F*	<.005	
47.92	88.09	AGGLOMERATE								
		Dacite agglomerate as at 38.01 to 47.67 metres.	FX254480	47.92	48.92	1.00	TR	F19	<.005	
		60.35 61.66 Quartz carbonate veinlets with narrow buff iron carbonate alteration halos.	FX254481	48.92	50.41	1.49	TR	F18	<.005	
			FX254482	50.41	51.89	1.48	TR	F17	<.005	
		64.59 66.09 10% calcareous stringers.	FX254483	51.89	53.12	1.23	TR	F25	<.005	
		66.09 67.58 Locally boudinaged quartz carbonate veins with intense buff calcareous alteration halos with a brecciated appearance cut by quartz stringers. Locally 1% euhedral pyrite up to 4 millimetres.	FX254484	53.12	54.62	1.50	TR	F18	<.005	
			FX254585	54.62	56.09	1.47	TR	F12	<.005	
			FX254486	56.09	57.63	1.54	TR	F14	<.005	
			FX254487	57.63	59.12	1.49	TR	F21	.005	
			FX254488	59.12	60.35	1.23	TR	F25	<.005	
		67.58 68.89 Foliated with locally contorted calcareous stringers.	FX254489	60.35	61.66	1.31	TR	F0	<.005	
			FX254490	61.66	63.17	1.51	TR	F0	<.005	
		68.89 74.64 Patchy&wispy alteration adjacent to contorted quartz carbonate veinlets and stringers.	FX254491	63.17	64.59	1.42	TR	F0	<.005	
			FX254492	64.59	66.09	1.50	TR	F14	<.005	
			FX254493	66.09	67.58	1.49	TR	F0	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
	74.64	75.83 Locally up to 1% scattered 1 millimetre pyrite cubes.	FX254494	67.58	68.89	1.31	TR	F34	.005	
			FX254595	68.89	70.06	1.17	TR	F20	<.005	
	78.64	79.54 Wispy alteration halos adjacent to contorted quartz carbonate veinlets and stringers.	FX254496	70.06	71.70	1.64	TR	F20	<.005	
			FX254497	71.70	73.20	1.50	TR	F*	<.005	
	79.54	83.81 Alteration becoming more intense downhole. Percentage of quartz carbonate veinlets stringers increasing. Strongly silicified.	FX254498	73.20	74.64	1.44	TR	F*	<.005	
			FX254499	74.64	75.83	1.19	1	F*	.010	
			FX254500	75.83	77.15	1.32	TR	F*	.010	
	83.81	85.23 Foliated gray to pale gray tuff with 15% stretched black chlorite clots. scattered quartz calcite stringers with minor alteration halos.	FX254501	77.15	78.64	1.49	TR	F*	.005	
			FX254502	78.64	79.54	.90	TR	F*	<.005	
			FX254503	79.54	80.82	1.28	TR	F*	.010	
			FX254504	80.82	82.23	1.41	TR	F*	.025	
	86.40	88.09 As at 79.54 to 83.81 metres. Alteration cut by quartz stringers limited to the halo.	FX254505	82.23	83.81	1.58	TR	F*	<.005	
			FX254506	83.81	85.23	1.42	TR	F5	.005	
			FX254507	85.23	86.40	1.17	TR	F10	<.005	
			FX254508	86.40	88.09	1.69	TR	F10	<.005	
88.09	90.17	AGGLOMERATE								
		Altered dacite agglomerate. Intense buff alteration adjacent to boudinaged quartz carbonate veinlets and stringers cut by quartz stringers limited to the halo. Locally wispy alteration adjacent to quartz carbonate stringers, locally microfaulted. Weak fuchsite. 1% cubic pyrite.	FX254509	88.09	89.62	1.53	TR	F24	.005	
			FX254510	89.62	90.17	.55	1	F25	.005	
90.17	93.68	LAMPROPHYRE								
		Lamprophyre dike. Black, fine grained, massive with 10% black micaceous flakes. Strongly calcareous, up to 20%. 5% fine disseminated, euhedral and cubic pyrite. Dark chill margins. Becomes strongly foliated towards end of entry.	FX254511	90.17	92.12	1.95	5	F*	.005	
			FX254512	92.12	93.68	1.56	5	F20	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		92.12 93.68 Strongly foliated, becoming mylonized.								
93.68	106.60	AGGLOMERATE								
		Altered dacite agglomerate as at 88.09 to 90.17 metres.	FX254513	93.68	95.11	1.43	TR	F21	<.005	
		97.98 99.51 Strongly silicified, hard.	FX254514	95.11	96.54	1.43	TR	F15	<.005	
		99.51 101.05 Quartz carbonate veinlets and alteration halos, decreasing population.	FX254515	96.54	97.98	1.44	TR	F15	<.005	
			FX254516	97.98	99.51	1.53	TR	F15	<.005	
		101.05 105.25 Very poorly foliated.	FX254517	99.51	101.05	1.54	TR	F20	<.005	
		105.25 106.60 Sharp lower contact with crystal tuff.	FX254518	101.05	102.48	1.43	TR	F20	<.005	
			FX254519	102.48	104.03	1.55	TR	F20	<.005	
			FX254520	104.03	105.25	1.22	TR	F*	<.005	
			FX254521	105.25	106.60	1.35	TR	F*	<.005	
106.60	110.81	TUFF								
		Dacite coarse grained crystal tuff. Dark green gray.	FX254522	106.60	108.05	1.45	1	F*	<.005	
		Fine grained to medium grained with 10% black mafic	FX254523	108.05	109.44	1.39	TR	F*	<.005	
		clasts up to 0.5 millimetres. Scattered calcareous pods	FX254524	109.44	110.81	1.37	1	F*	<.005	
		and stringers. Massive. Locally quartz calcite veinlets hosting 2% fine disseminated and euhedral pyrite. Moderately calcareous and silicified. Hard.								
		108.05 109.44 40% blebby calcite.								
		109.44 110.81 Sharp lower contact with agglomerate. Concentration of cubic and euhedral pyrite up to 2 millimetres in last 25 centimetres before contact.								
110.81	116.66	AGGLOMERATE								
		Weakly to moderately altered dacite agglomerate as at	FX254525	110.81	112.28	1.47	TR	F*	<.005	
		38.01 to 47.67 metres. Pale green gray.	FX254526	112.28	113.81	1.53	TR	F17	<.005	

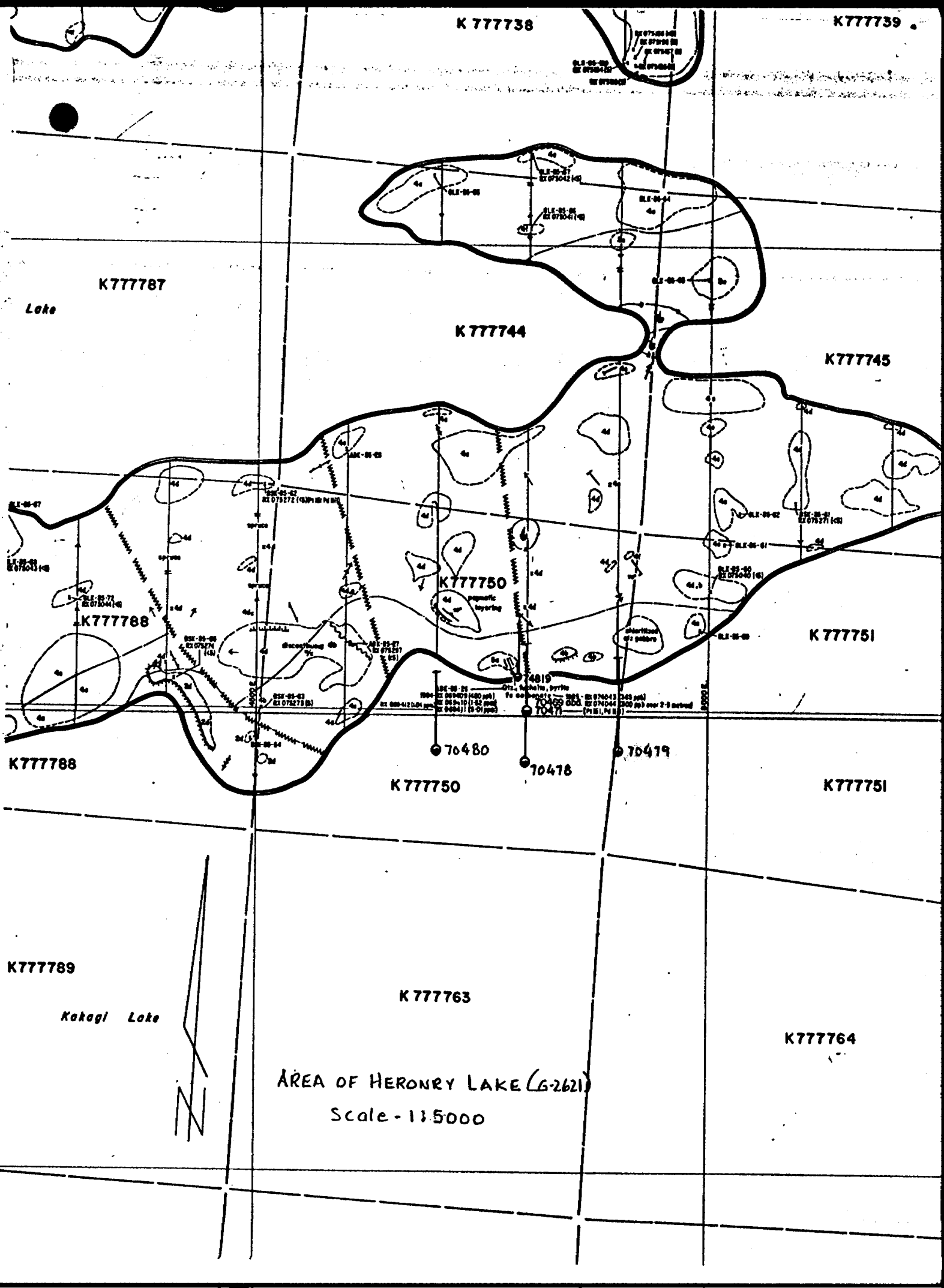
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX254527	113.81	115.21	1.40	TR	F18	.005	
			FX254528	115.21	116.66	1.45	TR	F19	<.005	
116.66	119.25	TUFF								
		Dacite coarse grained crystal tuff as at 106.60 to 110.81 metres.	FX254529	116.66	118.02	1.36	TR	F26	<.005	
			FX254530	118.02	119.25	1.23	TR	F*	<.005	
119.25	121.04	TUFF								
		Altered dacite tuff. Fine grained to medium grained. Moderately well foliated. Bleached to a pale green, with alteration intensity increasing towards quartz carbonate veins perpendicular to core axis with scattered quartz carbonate veinlets and stringers. alteration halos are pale green to buff sericitic with brown hematitic staining and scattered pyrite cubes. Moderately iron carbonate, moderately sericitic.	FX254531	119.25	120.05	.80	1	F52	.020	
			FX254532	120.05	121.04	.99	TR	F41	<.005	
		120.05 121.04 Alteration intensity decreasing.								
121.04	148.26	AGGLOMERATE								
		Weakly altered agglomerate as at 38.01 to 47.67 metres. Dark green gray. Silicified. Scattered quartz calcite veinlets and stringers. Moderately to locally strongly calcareous. Poorly foliated. Locally zoned calcite crystals. Hard.	FX254533	121.04	122.51	1.47	TR	F30	<.005	
			FX254534	122.51	124.04	1.53	TR	F30	<.005	
			FX254535	124.04	125.53	1.49	TR	F18	<.005	
			FX254536	125.53	126.80	1.27	TR	F14	<.005	
			FX254537	126.80	128.32	1.52	TR	F16	.025	
		126.80 133.15 Locally weakly altered pyritic halos adjacent to quartz calcite veinlets. Patches of zoned calcite crystals 3 to 4 millimetres.	FX254538	128.32	130.09	1.77	TR	F20	.010	
			FX254539	130.09	131.65	1.56	TR	F25	<.005	
			FX254540	131.65	133.15	1.50	TR	F20	<.005	
			FX254541	133.15	134.64	1.49	TR	F15	<.005	
		139.01 140.62 Dark gray with rare chalcopyrite in quartz	FX254542	134.64	136.17	1.53	TR	F25	<.005	

FROM M	TO M	**********DESCRIPTION**********
		calcite stringers. Weakly calcareous.
	142.16	143.71 Locally buff green brecciated quartz carbonate veins.
	143.71	145.19 Agglomerate becoming green gray, strongly calcareous.
	146.73	148.26 Gradational lower contact into coarse grained crystal tuff.
148.26	152.64	TUFF
		Altered coarse grained dacite crystal tuff as at 119.25 to 121.04 metres. Strongly calcareous. Poorly foliated. Locally intense alteration halos adjacent to tourmaline bearing quartz carbonate veinlets. Pyrite mineralization concentrated adjacent to veinlets, decreasing in intensity along with alteration. Locally zoned calcite crystals.
152.64	178.59	AGGLOMERATE
		Weakly altered dacite agglomerate as at 121.04 to 148.26 metres.
	161.59	163.17 Well foliated with boudinaged tourmaline bearing quartz carbonate vein 4 centimetre thick parallel to foliation.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254543	136.17	137.65	1.48	TR	F20	.005	
FX254544	137.65	139.01	1.36	TR	F16	<.005	
FX254545	139.01	140.62	1.61	TR	F30	<.005	
FX254546	140.62	142.16	1.54	TR	F30	<.005	
FX254547	142.16	143.71	1.55	TR	F16	<.005	
FX254548	143.71	145.19	1.48	TR	F18	<.005	
FX254549	145.19	146.73	1.54	TR	F18	<.005	
FX254550	146.73	148.26	1.53	TR	F28	<.005	
FX254551	148.26	149.79	1.53	1	F*	<.005	
FX254552	149.79	151.14	1.35	1	F*	.010	
FX254553	151.14	152.64	1.50	1	F*	.020	
FX254554	152.64	154.13	1.49	TR	F24	<.005	
FX254555	154.13	155.68	1.55	TR	F25	<.005	
FX254556	155.68	157.23	1.55	TR	F20	<.005	
FX254557	157.23	158.57	1.34	TR	F20	<.005	
FX254558	158.57	160.00	1.43	TR	F15	<.005	
FX254559	160.00	161.59	1.59	TR	F18	<.005	
FX254560	161.59	163.17	1.58	TR	F12	.005	
FX254561	163.17	164.75	1.58	TR	F20	<.005	
FX254562	164.75	166.32	1.57	TR	F27	<.005	
FX254563	166.32	167.92	1.60	TR	F23	<.005	
FX254564	167.92	169.51	1.59	TR	F29	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX254565	169.51	171.09	1.58	TR	F29	<.005	
			FX254566	171.09	172.59	1.50	TR	F30	<.005	
			FX254567	172.59	174.04	1.45	TR	F40	<.005	
			FX254568	174.04	175.71	1.67	TR	F32	<.005	
			FX254569	175.71	177.05	1.34	TR	F30	<.005	
			FX254570	177.05	178.59	1.54	TR	F33	<.005	
178.59	182.36	TUFF								
		Weakly altered dacite coarse grained crystal tuff as at 106.60 to 110.81 metres. Strongly calcareous. Scattered quartz calcite veinlets with wispy alteration halos. Very weakly foliated.	FX254571	178.59	179.51	.92	TR	F34	<.005	
			FX254572	179.51	181.15	1.64	TR	F*	.005	
			FX254573	181.15	182.36	1.21	TR	F*	.005	
		181.15 182.36 Strongly iron carbonate. Weakly to moderately calcareous. Gradational increasing alteration of tuff downhole.								
182.36	189.94	LAPILLI TUFF								
		Altered dacite lapilli tuff as at 119.25 to 121.04 metres. Moderately to strongly iron carbonate. 1 to 2% disseminated and euhedral pyrite up to 1 millimetre.	FX254574	182.36	183.09	.73	TR	F21	<.005	
			FX254575	183.09	183.56	.47	TR	F80	.040	
			FX254576	183.56	184.98	1.42	2	F51	.030	
		183.09 183.56 Quartz vein 21 centimetres thick with tourmaline inclusions. Boudinaged quartz carbonate veins veinlets parallel the quartz vein, but have intense alteration halos.	FX254577	184.98	186.52	1.54	2	F42	.075	
			FX254578	186.52	187.44	.92	2	F32	.005	
			FX254579	187.44	188.83	1.39	2	F24	<.005	
			FX254580	188.83	189.94	1.11	2	F25	<.005	
		183.56 186.52 Intense fuchsite, iron carbonate buff alteration adjacent to tourmaline bearing quartz veins with iron carbonate rims. 2% euhedral and disseminated pyrite in veins and alteration.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		188.83 189.94 Quartz vein as at 183.56 to 184.98 metres.								
189.94	194.46	AGGLOMERATE								
		Very weakly altered dacite agglomerate as at 152.64 to 178.59 metres.	FX254581	189.94	191.54	1.60	TR	F30	<.005	
		191.54 192.98 Poorly foliated.	FX254582	191.54	192.98	1.44	TR	F25	<.005	
		192.98 194.46 Foot of hole.	FX254583	192.98	194.46	1.48	TR	F25	<.005	


K 777738
K777739
K777787
Lake
K777744
K777745
K777750
K777788
K777751
74819
70469
70471
70480
70478
70419
K777788
K777750
K777751
K777789
K777763
Kakagi Lake
K777764
AREA OF HERONRY LAKE (G-2621)
Scale - 1:5000

**********INC[illegible]IMITED**********
FIELD EXPLOR[illegible]I DIAMOND DRILL LOG

PROJECT	: Fort Knox J.V.	LATITUDE	:N 7960.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/12/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 4700.0 M	TOWNSHIP	:	COMPLETED	: 03/15/88
BOREHOLE	: 70480-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K777750	DRILL TYPE	: Longyear 38
DEPTH	: 170.1 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 180m E and 280m s of Post#1. Lake hole.

LEFT IN HOLE:

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
24.38		-59.00	60.96		-57.50	130.45		-59.50	170.08		-56.50

**********DESCRIPTION**********

FROM M	TO M	
.00	17.68	WATER
17.68	26.99	OVERBURDEN Coarse grained sand, gravel and boulders.
26.99	30.93	TUFF Andesite to dacite tuff. Dark green gray fine grained matrix with 1 to 2 millimetre clasts. 30% black mafic clasts and 30% pale green to white feldspathic clasts. Poorly foliated. Weakly to moderately calcareous with calcite stringers. Locally brown iron oxide staining along fractures. Moderately soft. Trace to 1% euhedral

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254584	26.99	28.17	1.18	TR	F43	<.005	
FX254585	28.17	29.65	1.48	TR	F22	<.005	
FX254586	29.65	30.93	1.28	1	F17	<.005	

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ASSESSMENT FILES
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KENORA
MINING DIV.
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JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		pyrite.								
		26.99 28.17 Locally broken core.								
		29.65 30.93 1% disseminated and euhedral pyrite. Sharp lower contact with quartz feldspar porphyry.								
30.93	35.75	QUARTZ FELDSPAR PORPHYRY								
		Gray, very fine grained siliceous matrix hosting 50% pale green to white feldspar phenocrysts up to 3 millimetres. 5% black chlorite in matrix. Scattered blue quartz eyes. Massive. Locally buff alteration halos adjacent to chlorite bearing quartz calcite veinlets. Silicified, hard.	FX254587	30.93	32.38	1.45	TR	C31	.005	
			FX254588	32.38	33.77	1.39	TR	F*	<.005	
			FX254589	33.77	35.75	1.98	TR	F*	<.005	
		32.38 33.77 Broken core.								
		33.77 35.75 Sharp lower contact with melanogabbro. Broken core.								
35.75	61.94	GABBRO								
		Dark green, massive with 20% pale green to white feldspathic crystals set in a fine grained matrix. 20% black chlorite and pyroxene crystals. 2 to 3% blue quartz eyes. Trace to 1% disseminated pyrite. Locally gabbro is cut by quartz carbonate veins up to 2 centimetres thick. Moderately hard.	FX254590	35.75	37.51	1.76	TR	F*	<.005	
			FX254591	37.51	38.72	1.21	TR	F*	<.005	
			FX254592	38.72	40.25	1.53	TR	F*	<.005	
			FX254593	40.25	41.85	1.60	TR	F*	<.005	
			FX254594	41.85	43.36	1.51	TR	F*	.005	
			FX254595	43.36	44.91	1.55	TR	F*	<.005	
		35.75 37.51 Fine grained, black massive gabbro.	FX254596	44.91	46.47	1.56	TR	F*	<.005	
		40.25 43.36 Moderately to strongly calcareous.	FX254597	46.47	47.95	1.48	1	F*	<.005	
		44.91 47.95 Fine grained, black gabbro locally with 2% euhedral and cubic pyrite. Strongly calcareous with 10% calcareous pods.	FX254598	47.95	49.68	1.73	TR	F*	<.005	
			FX254599	49.68	51.08	1.40	TR	F*	<.005	
			FX254600	51.08	52.58	1.50	TR	F*	<.005	
		47.95 49.68 Locally altered to buff green adjacent to quartz carbonate veins.	FX254601	52.58	54.31	1.73	TR	F*	.005	
			FX254602	54.31	56.09	1.78	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		56.09 58.95 Fine grained, black gabbro with 2% euhedral and cubic pyrite up to 2 millimetres. Strongly calcareous.	FX254603	56.09	57.58	1.49	1	F*	<.005	
			FX254604	57.58	58.95	1.37	2	F*	.005	
			FX254605	58.95	60.29	1.34	TR	F*	.005	
			FX254606	60.29	61.94	1.65	TR	F*	.005	
61.94	74.06	GABBRO								
		Melanogabbro. Dark green to gray, fine grained to medium grained with 10% white feldspathic crystals. Moderately to strongly calcareous with trace to 1% disseminated pyrite. Massive. Moderately soft. Mineralization predominantly concentrated adjacent to quartz calcite veins.	FX254607	61.94	63.48	1.54	TR	F*	.005	
			FX254608	63.48	64.98	1.50	TR	F*	.005	
			FX254609	64.98	66.45	1.47	TR	F*	<.005	
			FX254610	66.45	67.26	.81	1	F*	.005	
			FX254611	67.26	67.54	.28	TR	F*	<.005	
			FX254612	67.54	67.98	.44	TR	F*	<.005	
		67.26 67.54 18 centimetre quartz vein with calcareous stringers.	FX254613	67.98	69.49	1.51	TR	F*	<.005	
			FX254614	69.49	71.00	1.51	2	F*	<.005	
		72.54 74.06 Grades into quartz bearing gabbro.	FX254615	71.00	72.54	1.54	TR	F21	.005	
			FX254616	72.54	74.06	1.52	1	F20	<.005	
74.06	83.24	GABBRO								
		Gabbro as at 35.75 to 61.94 metres. Grades into melanogabbro.	FX254617	74.06	75.59	1.53	TR	F*	<.005	
			FX254618	75.59	77.12	1.53	TR	F39	<.005	
		75.59 77.12 Locally weakly foliated.	FX254619	77.12	78.64	1.52	TR	F*	.005	
			FX254620	78.64	80.17	1.53	TR	F*	<.005	
			FX254621	80.17	81.69	1.52	TR	F*	.005	
			FX254622	81.69	83.24	1.55	TR	F*	.005	
83.24	84.73	GABBRO								
		Melanogabbro as at 61.94 to 74.06 metres. Foliated. Strongly calcareous with quartz carbonate vein parallel to foliation. Iron carbonate alteration adjacent to	FX254623	83.24	84.73	1.49	2	F30	<.005	

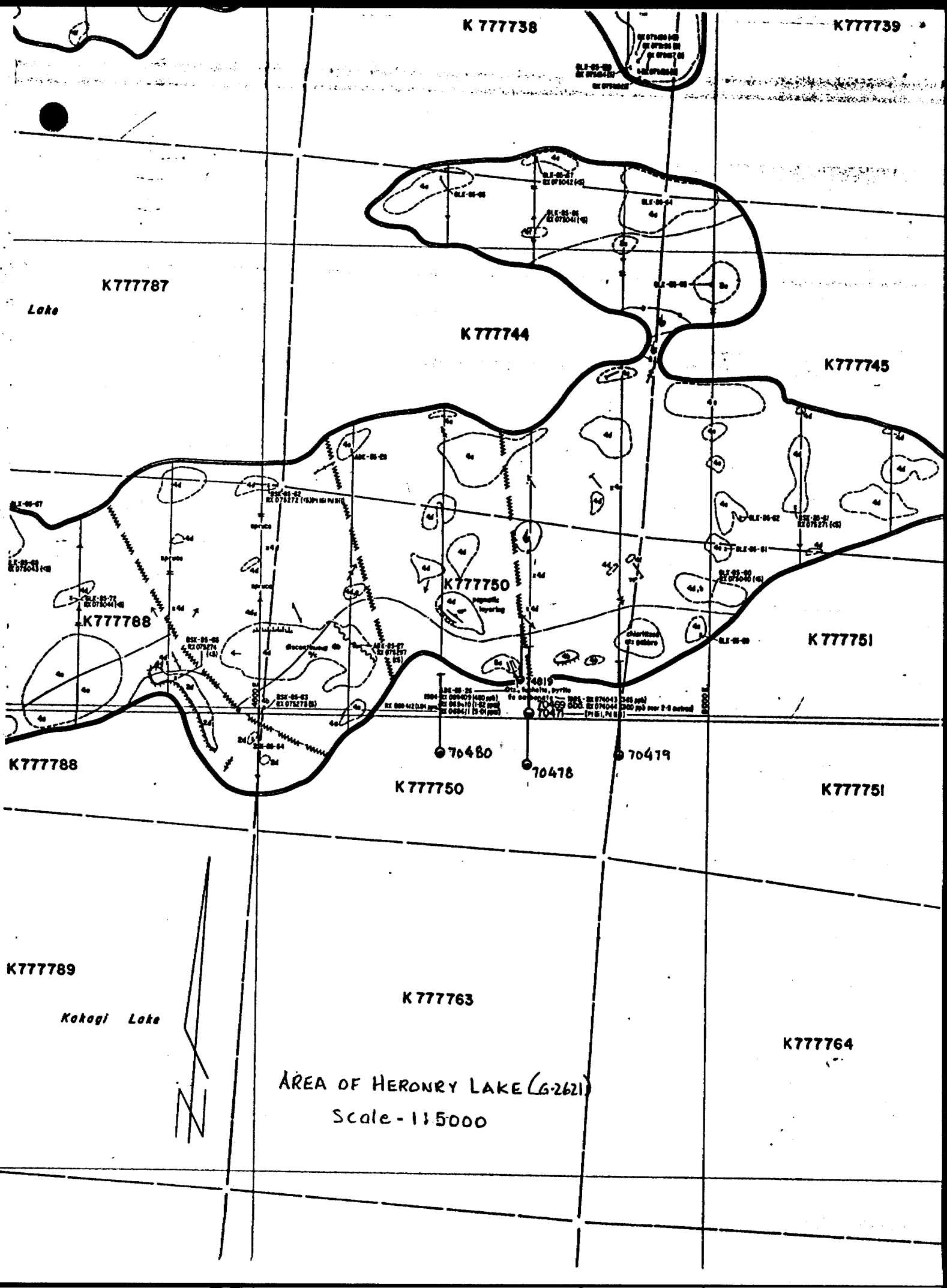
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		vein with 2 to 3% euhedral pyrite.								
84.73	92.30	GABBRO								
		Gabbro as at 74.06 to 83.24 metres.	FX254624	84.73	86.22	1.49	TR	F*	<.005	
		89.32 90.76 Becoming medium grained. Locally foliated.	FX254625	86.22	87.78	1.56	TR	F*	<.005	
			FX254626	87.78	89.32	1.54	TR	F*	.005	
			FX254627	89.32	90.76	1.44	TR	F47	.010	
			FX254628	90.76	92.30	1.54	TR	F*	.005	
92.30	95.40	GABBRO								
		Melanogabbro as at 83.24 to 84.73 metres. Strongly calcareous.	FX254629	92.30	93.88	1.58	1	F25	.005	
			FX254630	93.88	95.40	1.52	2	F35	<.005	
		93.88 95.40 8 centimetre quartz vein with iron carbonate rims and 2 to 3% euhedral pyrite.								
95.40	105.90	GABBRO								
		Gabbro as at 84.73 to 92.30 metres. Weakly foliated.	FX254631	95.40	96.90	1.50	TR	F20	<.005	
		Brecciated quartz carbonate veins up to 2 centimetres	FX254632	96.90	98.42	1.52	TR	F18	<.005	
		thick cut by iron carbonate stringers with alteration	FX254633	98.42	99.96	1.54	TR	F30	<.005	
		halos. Trace disseminated pyrite. Strongly calcareous.	FX254634	99.96	101.37	1.41	TR	F28	<.005	
		Moderately soft.	FX254635	101.37	102.88	1.51	TR	F37	<.005	
		96.90 98.42 Locally well foliated.	FX254636	102.88	104.33	1.45	TR	F*	<.005	
			FX254637	104.33	105.90	1.57	TR	F*	.005	
105.90	114.56	GABBRO								
		Melanogabbro as at 83.24 to 84.73 metres. Strongly	FX254638	105.90	107.40	1.50	TR	F*	<.005	
		calcareous. Scattered cross cutting quartz carbonate	FX254639	107.40	108.90	1.50	TR	F15	<.005	
		veinlets.	FX254640	108.90	110.37	1.47	TR	F*	.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX254641	110.37	112.14	1.77	TR	F*	<.005	
			FX254642	112.14	113.61	1.47	TR	F*	<.005	
			FX254643	113.61	114.56	.95	TR	F15	<.005	
114.56	117.23	GABBRO Altered gabbro. Moderately foliated. Gray to buff. Fine grained to medium grained with coarse grained chloritic crystals. Boudinaged quartz carbonate veins with intense iron carbonate and fuchsite alteration halos hosting trace to 1% disseminated and euhedral pyrite. 115.80 117.23 Intense buff, pyritic alteration halo surrounding a tourmaline rimmed quartz carbonate vein 3 centimetres thick cut by calcareous stringers. Alteration hosts scattered iron carbonate stringers. 3 to 4% disseminated and euhedral pyrite up to 1 millimetre.	FX254644	114.56	115.80	1.24	1	F14	<.005	
			FX254645	115.80	117.23	1.43	3	F20	.120	
117.23	123.45	TUFF Moderately altered dacite coarse grained crystal tuff. Gray, very fine grained matrix with 1 to 2 millimetre stretched felsic mafic clasts. Foliated. Silicified and weakly iron carbonate. Scattered quartz carbonate veinlets with weak fuchsite alteration halos. 2% fine disseminated and euhedral pyrite. Moderately soft.	FX254646	117.23	118.95	1.72	2	F35	.010	
			FX254647	118.95	120.47	1.52	TR	F15	.010	
			FX254648	120.47	121.88	1.41	TR	F19	<.005	
			FX254649	121.88	123.45	1.57	TR	F23	<.005	
123.45	130.23	TUFF Green gray coarse grained dacite crystal tuff to lapilli tuff. Weakly calcareous with calcite stringers. Massive.	FX254650	123.45	124.95	1.50	TR	F*	<.005	
			FX254651	124.95	126.49	1.54	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		locally poorly foliated. Moderately soft. Trace disseminated and euhedral pyrite. Scattered zoned calcite crystals up to 2 millimetres.	FX254652	126.49	127.81	1.32	TR	F*	<.005	
			FX254653	127.81	129.32	1.51	TR	F*	<.005	
			FX254654	129.32	130.23	.91	TR	F18	.005	
		126.49 127.81 Locally a 1 centimetre thick boudinaged dark green chloritic seam at 6 degrees to the core axis.								
		127.81 130.23 Boudinaged quartz calcite veinlet subparallel to core axis with inclusions of chlorite and trace disseminated pyrite. Sharp lower contact with moderately altered tuff.								
130.23	139.49	TUFF								
		Moderately altered coarse grained crystal dacite tuff as at 117.23 to 123.45 metres. Scattered tourmaline crystals in intense fuchsite alteration halos adjacent to boudinaged quartz carbonate veinlets and stringers. 1 to 2% disseminated and euhedral pyrite.	FX254655	130.23	131.67	1.44	1	F16	.005	
			FX254656	131.67	133.21	1.54	1	F20	<.005	
			FX254657	133.21	134.77	1.56	1	F22	<.005	
			FX254658	134.77	136.40	1.63	1	F22	<.005	
			FX254659	136.40	137.95	1.55	1	F16	.240	
			FX254660	137.95	139.49	1.54	1	F16	<.005	
139.49	146.42	TUFF								
		Dacite coarse grained crystal to lapilli tuff as at 123.45 to 130.23 metres.	FX254661	139.49	141.04	1.55	TR	F20	.005	
			FX254662	141.04	142.51	1.47	TR	F18	<.005	
		145.42 146.42 Locally wispy buff alteration adjacent to quartz carbonate vein and stringers with 1% pyrite concentrated in halo.	FX254663	142.51	143.97	1.46	TR	F20	<.005	
			FX254664	143.97	145.42	1.45	TR	F16	<.005	
			FX254665	145.42	146.42	1.00	1	F20	<.005	
146.42	147.49	LAMPROPHYRE								
		Lamprophyre dike. Black, fine grained, massive with 10%	FX254666	146.42	147.49	1.07	1	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		black micaceous flakes. Strongly calcareous. 5% fine disseminated, euhedral and cubic pyrite. Dark chill margins.								
147.49	152.25	TUFF								
		Dacite coarse grained crystal to lapilli tuff as at 139.49 to 146.42 metres. Moderately calcareous.	FX254667	147.49	149.07	1.58	TR	F30	<.005	
			FX254668	149.07	150.71	1.64	TR	F20	<.005	
			FX254669	150.71	152.25	1.54	TR	F25	.005	
152.25	153.62	LAMPROPHYRE								
		Lamprophyre dike as at 146.42 to 147.49 metres.	FX254670	152.25	153.62	1.37	1	F*	<.005	
153.62	159.30	AGGLOMERATE								
		Dacite agglomerate. Green gray to dark gray fine grained matrix with feldspar porphyry, dacite tuff and lapilli tuff clasts. very poorly to poorly foliated. Clasts stretched 3:1 with no brittle deformation noted. 1% iron carbonate in matrix. Moderately to strongly silicified. Trace fine disseminated pyrite.	FX254671	153.62	155.15	1.53	TR	F20	.005	
			FX254672	155.15	156.60	1.45	TR	F20	<.005	
			FX254673	156.60	158.11	1.51	TR	F20	<.005	
			FX254674	158.11	159.30	1.19	TR	F17	.005	
		158.11 159.30 Grading into dacite tuff.								
159.30	168.11	TUFF								
		Dacite coarse grained crystal to lapilli tuff as at 139.49 to 146.42 metres.	FX254675	159.30	159.64	.34	TR	F38	<.005	
			FX254676	159.64	161.05	1.41	TR	F21	.005	
		159.30 159.64 15 centimetre thick white quartz vein with inclusions of chlorite and iron carbonate adjacent to quartz veins hosting 1% disseminated and cubic pyrite.	FX254677	161.05	162.61	1.56	TR	F21	<.005	
			FX254678	162.61	164.09	1.48	TR	F*	<.005	
			FX254679	164.09	164.69	.60	TR	F45	<.005	
			FX254680	164.69	165.17	.48	2	F60	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	161.05	162.61 Poorly foliated.	FX254681	165.17	166.87	1.70	1	F22	<.005	
	164.09	164.69 Weakly altered. Iron carbonatized. Pale green.	FX254682	166.87	168.11	1.24	TR	F15	<.005	
	164.69	165.17 15 centimetre thick quartz vein with chlorite stylolites and iron carbonate rims with anorthosite iron carbonate alteration halo hosting 2% euhedral and disseminated pyrite.								
	165.17	166.87 Weakly altered. Iron carbonatized. Pale green.								
	166.87	168.11 Grading into dacite agglomerate.								
168.11	170.08	AGGLOMERATE								
		Dacite agglomerate as at 153.62 to 159.30 metres. Foot of hole at 170.08 metres.	FX254683	168.11	170.08	1.97	TR	F27	<.005	


K777738
K777739
K777787
Lake
K777744
K777745
K777750
K777788
K777751
70419
70480
70478
K777788
K777750
K777751
K777789
Kokogi Lake
K777763
K777764
AREA OF HERONRY LAKE (G-2621)
Scale - 1:5000
N

**********INCO LIMITED**********
FIELD EXPLOR / DIAMOND DRILL LOG

PROJECT	: Penn Option	LATITUDE	:N 9547.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/15/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 8698.0 M	TOWNSHIP	:	COMPLETED	: 03/20/88
BOREHOLE	: 70481-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K638461	DRILL TYPE	: Longyear 38
DEPTH	: 306.0 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 286m W and 156m S of Post#R.1

LEFT IN HOLE:6.70m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
6.70		-43.50	121.92		-42.50	243.84		-39.50			
60.96		-43.00	182.88		.00	300.23		-36.50			

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
										**********ANALYSES**********
.00	6.70	OVERBURDEN								
		Soil and boulders.								
6.70	32.38	GABBRO								
		Melanogabbro dark gray to locally black. Medium grained, massive. 75% chlorite, pyroxene crystals. 20% feldspathic crystals with calcareous pods and scattered stringers. Soft.	FX254684	6.70	8.33	1.63	0	F*	<.005	
			FX254685	8.33	9.85	1.52	0	F*	<.005	
			FX254686	9.85	11.36	1.51	0	F*	<.005	
			FX254687	11.36	12.80	1.44	0	F*	.010	
		21.63 22.20 3 centimetre thick buff clay seam.	FX254688	12.80	14.43	1.63	0	F*	<.005	
		22.20 23.35 14 centimetre composite quartz calcite vein with inclusions of pale green chlorite, buff leucoxene and stringers of calcite.	FX254689	14.43	15.83	1.40	0	F*	<.005	
			FX254690	15.83	17.30	1.47	0	F*	<.005	
			FX254691	17.30	18.78	1.48	0	F*	.010	

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KENORA
MINING DIV.
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AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Vuggy washed out calcareous seams occur at the top of the vein.	FX254692	18.78	20.31	1.53	0	F*	<.005	
			FX254693	20.31	21.63	1.32	0	F*	.005	
			FX254694	21.63	22.20	.57	0	F*	.005	
			FX254695	22.20	23.35	1.15	0	F*	.010	
			FX254696	23.35	24.83	1.48	0	F*	<.005	
			FX254697	24.83	26.41	1.58	0	F*	<.005	
			FX254698	26.41	27.95	1.54	0	F*	<.005	
			FX254699	27.95	29.52	1.57	0	F*	<.005	
			FX254700	29.52	31.01	1.49	0	F*	<.005	
			FX254701	31.01	32.38	1.37	0	F*	<.005	
32.38	35.55	GABBRO								
		Weakly altered gabbro. Green to pale green. Fine grained to medium grained with stretched mafic and feldspathic crystals. moderately well foliated. Strongly calcareous with quartz calcite stringers. Locally concentrations of black chlorite streaks. Pervasive composite quartz calcite veins with chlorite inclusions. Locally talcy. Soft.	FX254702	32.38	33.96	1.58	0	F66	<.005	
			FX254703	33.96	35.55	1.59	0	F74	<.005	
35.55	55.00	GABBRO								
		Melanogabbro as at 6.70 to 32.38 metres. Strongly calcareous.	FX254704	35.55	37.18	1.63	0	F*	<.005	
		41.72 43.17 Moderately calcareous.	FX254705	37.18	38.66	1.48	0	F*	<.005	
		44.67 46.12 Becoming weakly calcareous downhole.	FX254706	38.66	40.17	1.51	0	F*	<.005	
		50.63 55.00 Increasingly silicified, with accompanying feldspathic crystal content.	FX254707	40.17	41.72	1.55	0	F*	.005	
			FX254708	41.72	43.17	1.45	0	F*	.005	
			FX254709	43.17	44.67	1.50	0	F*	<.005	
			FX254710	44.67	46.12	1.45	0	F*	<.005	
			FX254711	46.12	47.71	1.59	0	F*	<.005	
			FX254712	47.71	49.12	1.41	0	F*	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX254713	49.12	50.63	1.51	0	F*	<.005	
			FX254714	50.63	52.09	1.46	0	F*	<.005	
			FX254715	52.09	53.55	1.46	0	F*	<.005	
			FX254716	53.55	55.00	1.45	0	F*	<.005	
55.00	70.41	GABBRO								
		Mesogabbro. 60% dark gray to black mafic chlorite and pyroxene crystals and 40% pale green to white feldspathic crystals. Medium grained, massive. Scattered quartz calcite stringers. Moderately silicified. Moderately hard to hard.	FX254717	55.00	56.50	1.50	0	F*	.005	
			FX254718	56.50	58.01	1.51	0	F*	.005	
			FX254719	58.01	59.45	1.44	0	F*	<.005	
			FX254720	59.45	60.88	1.43	0	F*	<.005	
			FX254721	60.88	62.48	1.60	0	F*	<.005	
		66.84 68.05 27 centimetres of lost core.	FX254722	62.48	63.97	1.49	0	F*	<.005	
		69.70 70.41 Concentrations of black chlorite crystals adjacent to 4 centimetre thick quartz veins with inclusions of feldspar and chlorite, cut by calcite stringers. Trace disseminated and stringer pyrite. Sharp gradational lower contact with leucogabbro.	FX254723	63.97	65.36	1.39	0	F*	.005	
			FX254724	65.36	66.84	1.48	0	F*	.005	
			FX254725	66.84	68.05	1.21	0	F*	.005	
			FX254726	68.05	69.70	1.65	0	F*	.005	
			FX254727	69.70	70.41	.71	TR	F*	<.005	
70.41	76.62	GABBRO								
		Leucogabbro. 70% pale green to white feldspathic crystals and 30% dark gray to black mafic crystals. Medium grained, massive with leopard skin texture. Scattered calcareous stringers. Locally clots of feldspar crystals. Trace disseminated euhedral pyrite up to 0.5 millimetres. Hard.	FX254728	70.41	72.07	1.66	TR	F*	.005	
			FX254729	72.07	73.68	1.61	TR	F*	.005	
			FX254730	73.68	75.15	1.47	TR	F*	<.005	
			FX254731	75.15	76.62	1.47	TR	F*	<.005	
		73.68 76.62 Locally concentrations of mafic and feldspathic crystals.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
76.62	78.58	GABBRO								
		Mesogabbro as at 55.00 to 70.41 metres. Scattered calcareous stringers and pods.	FX254732	76.62	78.58	1.96	TR	F*	.010	
78.58	84.44	GABBRO								
		Leucogabbro as at 70.41 to 76.62 metres.	FX254733	78.58	80.28	1.70	TR	F*	<.005	
		80.28 82.06 32 centimetre lost core. Ground and broken core.	FX254734	80.28	82.06	1.78	TR	F*	<.005	
			FX254735	82.06	83.16	1.10	TR	F*	<.005	
		83.16 84.44 Gradational lower contact with moderately altered gabbro.	FX254736	83.16	84.44	1.28	TR	F*	<.005	
84.44	86.74	GABBRO								
		Moderately altered gabbro. Gray, fine grained to medium grained with remnant gabbroic crystal textures weakly visible. Massive. Silicified, strongly iron carbonate. Pervasive erratic quartz carbonate veinlets and stringers with pyrite mineralized chloritic margins. Weakly to moderately foliated. 10% contorted buff altered feldspar crystals. Strongly calcareous. Hard.	FX254737	84.44	85.77	1.33	1	F40	<.005	
			FX254738	85.77	86.74	.97	1	F47	<.005	
		84.44 85.77 Rare pyrite altered to specularite. Scattered patches of unaltered leucogabbro.								
		85.77 86.74 Rare pyrite altered to specularite. Sharp lower contact with leucogabbro broken by a 3 centimetre thick feldspar bearing quartz vein.								
86.74	105.02	GABBRO								
		Leucogabbro as at 70.41 76.62 metres.	FX254739	86.74	88.29	1.55	0	F*	<.005	
		91.29 92.84 Locally weakly altered pink gabbro adjacent	FX254740	88.29	89.81	1.52	0	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		to pale green chlorite rimmed quartz carbonate vein.	FX254741	89.81	91.29	1.48	0	F*	<.005	
			FX254742	91.29	92.84	1.55	0	F*	<.005	
101.60	102.17	1.5 centimetre quartz carbonate vein with chloritic inclusions and 2% disseminated and euhedral pyrite.	FX254743	92.84	94.29	1.45	0	F*	<.005	
			FX254744	94.29	95.79	1.50	0	F*	.005	
			FX254745	95.79	97.22	1.43	0	F*	.005	
			FX254746	97.22	98.78	1.56	0	F*	.005	
			FX254747	98.78	100.29	1.51	0	F*	<.005	
			FX254748	100.29	101.60	1.31	0	F*	<.005	
			FX254749	101.60	102.17	.57	2	F*	<.005	
			FX254750	102.17	103.49	1.32	0	F*	<.005	
			FX254751	103.49	105.02	1.53	0	F*	.010	
105.02	126.49	GABBRO								
		Halo alteration in leucogabbro. As above with buff altered gabbro adjacent to quartz carbonate veins and veinlets.	FX254752	105.02	106.42	1.40	0	F*	<.005	
			FX254753	106.42	107.32	.90	0	F*	<.005	
			FX254754	107.32	108.06	.74	0	F*	<.005	
105.02	106.42	Locally alteration halo adjacent to 3 centimetre thick quartz iron carbonate vein	FX254755	108.06	109.12	1.06	0	F*	<.005	
			FX254756	109.12	109.94	.82	TR	F30	.030	
107.32	108.06	Moderately altered gabbro as at 84.44 to 86.74 metres.	FX254757	109.94	111.27	1.33	0	F*	<.005	
			FX254758	111.27	112.65	1.38	0	F*	<.005	
109.12	109.94	Intense iron carbonate alteration adjacent to composite quartz carbonate vein, diminishing at periphry of halo. Rusty brown iron oxide at quartz carbonate vein gabbro contact. Trace pyrite.	FX254759	112.65	114.08	1.43	0	F*	.005	
			FX254760	114.08	115.21	1.13	0	F*	.005	
			FX254761	115.21	116.62	1.41	0	F*	<.005	
			FX254762	116.62	118.18	1.56	0	F*	<.005	
			FX254763	118.18	119.16	.98	0	F*	<.005	
114.08	115.21	Moderately altered gabbro as at 84.44 to 86.74 metres.	FX254764	119.16	120.28	1.12	0	F*	<.005	
			FX254765	120.28	121.79	1.51	0	F*	<.005	
124.89	126.49	Moderately altered gabbro as at 84.44 to 86.74 metres. Sharp lower contact with basalt.	FX254766	121.79	123.41	1.62	0	F*	<.005	
			FX254767	123.41	124.89	1.48	0	F*	<.005	
			FX254768	124.89	126.49	1.60	0	F*	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
126.49	126.84	BASALT Dark green to dark gray, fine grained, massive. Strongly calcareous. 3% yellow leucoxene. Pervasive brown quartz iron carbonate stringers. Moderately soft. Increasing intensity of alteration downhole.	FX254769	126.49	126.84	.35	0	F*	<.005	
126.84	128.68	BASALT Altered basalt. Well foliated. Predominantly rusty brown with green. Fine grained with stretched chloritic streaks and calcareous pods. Strongly pervasive brown iron carbonate. Locally red hematitic staining. Scattered boudinaged quartz carbonate veinlets. Alteration most intense adjacent to quartz carbonate veinlets. 127.98 128.68 Alteration diminishing as basalt grades into peridotite.	FX254770	126.84	127.98	1.14	TR	F75	.015	
			FX254771	127.98	128.68	.70	TR	F68	.020	
128.68	152.60	PERIDOTITE Very weakly altered peridotite. Black with patchy green to buff olivine. Fine grained with medium grained black chlorite and pyroxene. Massive with 10 to 15% 0.5 millimetre pods of brown iron carbonate and stringers. 2% fine disseminated magnetite. Trace pyrite. Scattered quartz carbonate veinlets with inclusions of chlorite. Very soft. Moderately magnetic. 139.60 141.16 Locally weakly foliated.	FX254772	128.68	130.25	1.57	TR	F*	<.005	
			FX254773	130.25	131.76	1.51	TR	F*	.005	
			FX254774	131.76	133.50	1.74	TR	F*	<.005	
			FX254775	133.50	134.97	1.47	TR	F*	<.005	
			FX254776	134.97	136.55	1.58	TR	F*	<.005	
			FX254777	136.55	138.14	1.59	TR	F*	<.005	
			FX254778	138.14	139.60	1.46	TR	F*	<.005	
			FX254779	139.60	141.16	1.56	TR	F60	<.005	
			FX254780	141.16	142.65	1.49	TR	F*	<.005	
			FX254781	142.65	144.18	1.53	TR	F*	<.005	
			FX254782	144.18	145.69	1.51	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX254783	145.69	147.19	1.50	TR	F*	<.005	
			FX254784	147.19	148.74	1.55	TR	F*	<.005	
			FX254785	148.74	150.31	1.57	TR	F*	<.005	
			FX254786	150.31	151.79	1.48	TR	F*	<.005	
			FX254787	151.79	152.60	.81	TR	F*	.005	
152.60	153.53	PERIDOTITE Altered peridotite with narrow horizons of fault gouge. Green to pale green with pervasive brown red hematitic and iron carbonate staining. Fine grained to medium grained with moderate foliation. Cross cutting brown hematitic quartz carbonate veins. Hematitized pyrite cubes. Locally a 2 centimetre thick clot of feldspar. Gray fault gouge with crushed fragments of altered peridotite occur at 152.80 and 153.18 metres. Very soft. Weakly magnetic. 8 centimetre lost core. Locally ground core.	FX254788	152.60	153.53	.93	TR	F58	<.005	
153.53	166.45	PERIDOTITE Transitional gabbro to peridotite. Dark gray to black. Fine grained to medium grained with clots of chlorite. And 3% 0.5 millimetre white feldspar crystals. Massive. Scattered quartz iron carbonate feldspar veinlets and stringers with inclusions of chlorite. 5% fine disseminated magnetite. Trace euhedral pyrite. Strongly magnetic. Very soft. 162.42 163.90 22 centimetre lost core. Core ground. 165.27 166.45 38 centimetre lost core. Core ground. Weakly magnetic. Becoming altered.	FX254789	153.53	154.84	1.31	TR	F*	<.005	
			FX254790	154.84	156.36	1.52	TR	F*	<.005	
			FX254791	156.36	157.89	1.53	TR	F*	<.005	
			FX254792	157.89	159.44	1.55	TR	F*	<.005	
			FX254793	159.44	160.93	1.49	TR	F*	<.005	
			FX254794	160.93	162.42	1.49	TR	F*	<.005	
			FX254795	162.42	163.90	1.48	TR	F*	<.005	
			FX254796	163.90	165.27	1.37	TR	F*	.005	
			FX254797	165.27	166.45	1.18	TR	F59	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
166.45	168.41	PERIDOTITE Altered peridotite. Pale gray to gray, olive green. Well foliated, fine grained to medium grained with stretched black chlorite clots. 20% boudinaged quartz iron carbonate veins and veinlets with inclusions of chlorite and olivine , cut by calcareous stringers. Multiple generation veining. 3 to 5% fine grained leucoxene. Not magnetic. Strongly iron carbonate. Moderately soft. Sharp lower contact with altered basalt.	FX254798	166.45	168.41	1.96	TR	F*	.010	
168.41	171.50	BASALT Moderately altered basalt. Green with pervasive brown iron carbonate alteration. Fine grained, well foliated with 10:1 stretched feldspathic fragments. 10% boudinaged quartz iron carbonate veinlets and stringers parallel to foliation with scattered tourmaline stylolites and crystals. Cross cutting iron carbonate stringers. Trace euhedral pyrite. Moderately soft.	FX254799	168.41	169.61	1.20	TR	F70	.020	
			FX254800	169.61	171.50	1.89	TR	F70	.015	
171.50	172.11	DIKE Monzonite dike. Pale gray with 20% dark green chloritic stringers. Medium grained, massive. 5% fine grained iron carbonate crystals. 7 to 10% disseminated and euhedral pyrite up to 1 millimetre. Dike cu by pyrite bearing quartz carbonate vein with inclusions of basalt. Siliceous. Hard.	FX254801	171.50	172.11	.61	TR	F67	.155	
172.11	178.37	BASALT								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Moderately altered basalt as at 168.41 to 171.50 metres. 1% fine disseminated pyrite.	FX254802	172.11	173.64	1.53	1	F60	.015	
			FX254803	173.64	175.13	1.49	1	F76	.010	
			FX254804	175.13	176.73	1.60	1	F70	.005	
			FX254805	176.73	178.37	1.64	1	F70	.025	
178.37	179.79	DIKE								
		Feldspar porphyry dike. Pale buff green aphanitic to fine grained siliceous matrix with 30% white feldspar megacrysts. 7 to 10% fine disseminated and euhedral pyrite. 5% fine grained iron carbonate. Scattered quartz iron carbonate, locally vuggy, veinlets stringers. Sharp contacts with weak chill margins. Hard.	FX254806	178.37	179.79	1.42	5	F70	.325	
179.79	181.89	BASALT								
		Weakly altered basalt as at 168.41 to 171.50 metres. Locally intensely hematitic. Sharp contact with unaltered basalt broken by quartz carbonate vein.	FX254807	179.79	181.00	1.21	TR	F70	.020	
			FX254808	181.00	181.89	.89	TR	F67	<.005	
181.89	190.33	BASALT								
		Dark gray green. Massive and fine grained. Locally weakly foliated with stretched black chloritic clots, 1 to 2% pyrite. Trace to 1% fine disseminated pyrite in basalt. Moderately soft.	FX254809	181.89	183.42	1.53	TR	F*	<.005	
			FX254810	183.42	185.62	2.20	TR	F57	.005	
			FX254811	185.62	187.26	1.64	TR	F44	.005	
			FX254812	187.26	188.70	1.44	TR	F*	.010	
		187.26 188.70 5 to 7% pervasive 1 millimetre calcite crystals.	FX254813	188.70	190.33	1.63	TR	C60	.010	
		188.70 190.33 Sharp lower contact with dacite agglomerate								
190.33	207.99	AGGLOMERATE								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Dacite agglomerate. Gray, fine grained siliceous matrix hosting lapilli to agglomerate sized clasts of dacite tuff and lapilli tuff with rare monzonite fragments. Massive. Weakly to moderately calcareous with scattered quartz calcite stringers. Trace disseminated pyrite. Moderately hard.	FX254814	190.33	191.76	1.43	TR	F*	<.005	
			FX254815	191.76	193.55	1.79	TR	F*	<.005	
			FX254816	193.55	194.99	1.44	TR	F*	<.005	
			FX254817	194.99	196.37	1.38	TR	F*	<.005	
			FX254818	196.37	197.89	1.52	TR	F*	<.005	
			FX254819	197.89	199.34	1.45	TR	F*	<.005	
		203.92 205.51 Moderately altered buff to brown agglomerate adjacent to chlorite bearing quartz calcite feldspar vein. Locally 5 millimetre quartz carbonate veinlets with black chlorite and 1% disseminated and euhedral pyrite.	FX254820	199.34	200.85	1.51	TR	F*	<.005	
			FX254821	200.85	202.39	1.54	TR	F*	<.005	
			FX254822	202.39	203.92	1.53	TR	F*	<.005	
			FX254823	203.92	205.51	1.59	1	F*	<.005	
			FX254824	205.51	206.85	1.34	TR	F*	<.005	
			FX254825	206.85	207.99	1.14	TR	F*	.015	
207.99	215.18	BASALT								
		Basalt as at 181.89 to 198.33 metres. Strongly calcareous	FX254826	207.99	208.94	.95	TR	F*	<.005	
		207.99 208.94 Interfingering 30 centimetre medium grained gabbro dike.	FX254827	208.94	209.21	.27	1	F*	.005	
			FX254828	209.21	210.62	1.41	TR	F*	<.005	
		208.94 209.21 Mesogabbro dike. Gray, medium grained, massive with 40% black mafic crystals and 40% feldspathic crystals. 20% calcite crystals. 1 to 2% iron carbonate. 1% disseminated and euhedral pyrite. Moderately hard.	FX254829	210.62	212.26	1.64	TR	F*	<.005	
			FX254830	212.26	213.79	1.53	TR	F*	.005	
			FX254831	213.79	215.18	1.39	TR	F*	.005	
		213.79 215.18 Grading into weakly altered gabbro.								
215.18	222.65	GABBRO								
		Weakly altered gabbro. Gray green, medium grained, foliated with stretched black chloritic clots and altered yellow feldspar crystals. Locally up to 15% quartz iron carbonate veins and veinlets with black	FX254832	215.18	216.63	1.45	TR	F52	.075	
			FX254833	216.63	217.25	.62	TR	F54	.015	
			FX254834	217.25	218.63	1.38	TR	F54	<.005	
			FX254835	218.63	220.11	1.48	TR	F50	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		chloritic stylolites parallel to foliation. 5% iron carbonate. Trace fine disseminated pyrite. Moderately soft.	FX254836	220.11	221.58	1.47	TR	F53	.020	
			FX254837	221.58	222.65	1.07	TR	F47	<.005	
		216.63 217.25 Gray 30 centimetre quartz iron carbonate vein with inclusions of altered gabbro.								
		217.25 218.63 2% quartz carbonate veinlets.								
		218.63 220.11 7% quartz carbonate veinlets, locally with vuggy brown cavities.								
		220.11 221.58 7% quartz carbonate veins and veinlets. Locally contorted foliation.								
		221.58 222.65 Grading into unaltered melanogabbro.								
222.65	224.33	GABBRO								
		Melanogabbro. Dark gray, fine grained to medium grained massive. 70% black chlorite and pyroxene crystals. 5% calcareous pods. 25% feldspathic crystals. Locally weakly foliated. 1% fine disseminated magnetite. Very weakly magnetic. Soft.	FX254838	222.65	223.08	.43	2	F*	<.005	
			FX254839	223.08	224.33	1.25	TR	F58	.005	
		222.65 223.08 Locally very fine grained with 2% fine disseminated magnetite and 2% disseminated and euhedral pyrite. Scattered quartz crystals with brown calcareous rims. Moderately magnetic.								
224.33	224.64	SAND								
		Sand seam. Very fine grained to coarse grained sand and silt. Brown to red brown. 60% mafic grain , 40% felsic and quartz grain. Subangular to sub rounded. Poorly sorted. Quartz iron carbonate vein fragments up to 1 centimetre. 1% pyrite cubes up to 0.5 millimetres.	FX254840	224.33	224.64	.31	1	F*	.015	

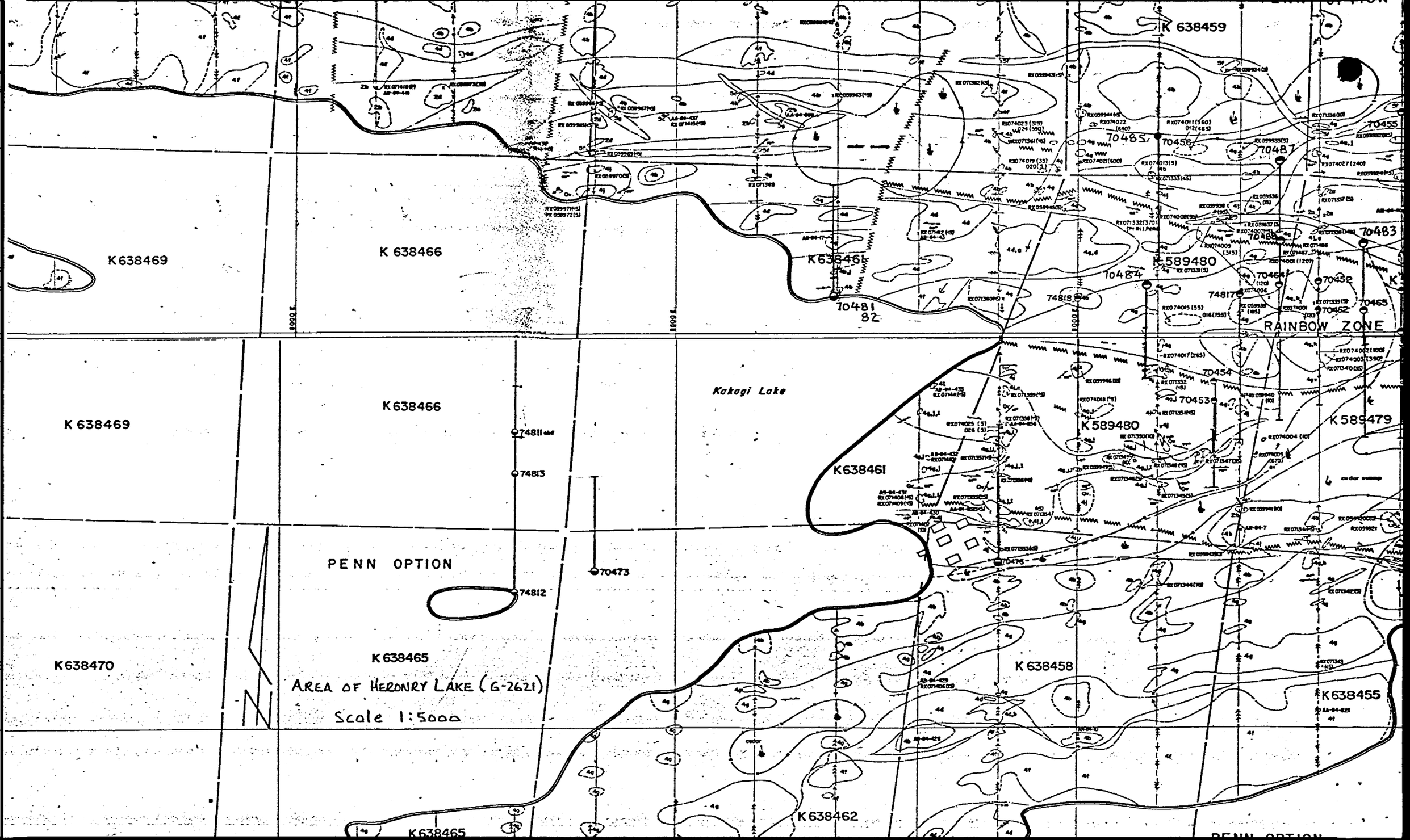
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
224.64	230.51	GABBRO								
		Melanogabbro as at 222.65 to 224.23 metres. Weakly magnetic. Weakly foliated.	FX254841	224.64	226.05	1.41	TR	F*	.015	
			FX254842	226.05	227.53	1.48	TR	F49	<.005	
		228.98 230.51 Grading into weakly altered gabbro.	FX254843	227.53	228.98	1.45	TR	F55	.005	
			FX254844	228.98	230.51	1.53	TR	F55	<.005	
230.51	241.11	GABBRO								
		Altered gabbro to peridotite as at 166.45 to 168.41 metres. 10% hematitic and boudinaged quartz carbonate veins and veinlets parallel to foliation.	FX254845	230.51	232.03	1.52	TR	F58	<.005	
			FX254846	232.03	233.53	1.50	TR	F55	.040	
			FX254847	233.53	235.04	1.51	TR	F55	.040	
		239.70 241.11 Contact at altered gabbro to peridotite and strongly altered gabbro bounded by chlorite bearing quartz carbonate vein with sericitic, buff to pale green alteration halo at 240.18 metres.	FX254848	235.04	236.63	1.59	TR	F53	<.005	
			FX254849	236.63	238.12	1.49	TR	F45	<.005	
			FX254850	238.12	239.70	1.58	TR	F50	<.005	
			FX254851	239.70	241.11	1.41	TR	F50	.005	
241.11	243.52	GABBRO								
		Strongly altered gabbro. Pale green to gray. Fine grained with stretched chlorite clots and buff altered feldspar crystals (10:1). Well foliated. 10 to 15% quartz calcite iron carbonate veins and veinlets parallel and cross cutting foliation, with black chlorite stylolites and bleached pale green to buff iron carbonate and sericitic alteration halos. Strongly silicified with 5% stretched yellow leucoxene. Hard. trace to 1% disseminated and euhedral pyrite. Faint remnant texture.	FX254852	241.11	242.22	1.11	1	F50	.100	
			FX254853	242.22	243.52	1.30	TR	C44	<.005	
		242.22 243.52 Sharp lower contact with altered								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		agglomerate.								
243.52	272.20	AGGLOMERATE								
		Altered dacite agglomerate. Pale green gray. Very fine grained, siliceous matrix with remnant stretched lapilli to agglomerate sized altered clasts. Moderately to well foliated. Locally strongly bleached to a buff to white. Locally intense hematitic alteration. 10% hematitic, tourmaline bearing quartz carbonate veins and veinlets with stringer buff sericitic alteration halos. Scattered orange carbonate stringers. Locally up to 10% iron carbonate crystals. Silicified. Trace pyrite, predominantly altered to hematite. hard.	FX254854	243.52	245.08	1.56	TR	F43	.020	
			FX254855	245.08	246.48	1.40	TR	F40	<.005	
			FX254856	246.48	248.03	1.55	1	F44	<.005	
			FX254857	248.03	249.62	1.59	TR	F*	<.005	
			FX254858	249.62	251.16	1.54	TR	F50	<.005	
			FX254859	251.16	252.59	1.43	TR	F60	<.005	
			FX254860	252.59	254.02	1.43	TR	F60	<.005	
			FX254861	254.02	255.42	1.40	TR	F68	<.005	
			FX254862	255.42	256.29	.87	TR	F62	<.005	
			FX254863	256.29	257.31	1.02	TR	F55	<.005	
			FX254864	257.31	258.87	1.56	TR	F50	<.005	
			FX254865	258.87	259.85	.98	TR	F55	.010	
			FX254866	259.85	261.52	1.67	TR	F54	<.005	
			FX254867	261.52	262.95	1.43	TR	F54	.005	
			FX254868	262.95	264.18	1.23	TR	F43	.125	
			FX254869	264.18	264.93	.75	1	F40	.015	
			FX254870	264.93	265.58	.65	2	F43	.135	
			FX254871	265.58	266.71	1.13	3	F40	.110	
			FX254872	266.71	268.12	1.41	2	F50	<.005	
			FX254873	268.12	269.46	1.34	3	F45	.205	
			FX254874	269.46	270.87	1.41	1	F46	.030	
			FX254875	270.87	272.20	1.33	1	F53	.060	
256.29	257.31	Strongly bleached and altered to buff sericitic with hematitic quartz carbonate stringers. 5% iron carbonate pods.								
258.87	259.85	Intense alteration and bleaching adjacent to strongly hematitic quartz carbonate vein. Locally strongly sericitic.								
264.18	268.12	1 to 3% euhedral and disseminated pyrite, locally hematitized. Locally strongly sericitic.								
268.12	269.46	Contorted foliation adjacent to strongly hematitic quartz carbonate vein with 3% disseminated pyrite bands. Strongly sericitic. Pale green to red. 4 millimetre pale red gouge at 16 degrees to core axis.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	269.46	270.87 Intense sericitic and hematitic. 1% disseminated pyrite. Locally crenulated.								
	270.87	272.20 Alteration becoming less intense down hole.								
272.20	281.03	AGGLOMERATE								
		Moderately altered agglomerate (?). Gray to emerald green, fine grained to medium grained, foliated with stretched green chlorite and altered buff feldspathic clasts. Pervasive pale brown iron carbonate. 10% tourmaline bearing quartz iron carbonate veins and veinlets parallel to foliation locally cut by late stage quartz carbonate veins. 2 to 3% fine disseminated pyrite. Locally weakly fuchsite. Moderately hard.	FX254876	272.20	273.71	1.51	3	F52	.145	
			FX254877	273.71	275.17	1.46	3	F51	.110	
			FX254878	275.17	276.58	1.41	5	F43	.085	
			FX254879	276.58	277.98	1.40	3	F66	.060	
			FX254880	277.98	279.50	1.52	2	F64	.040	
			FX254881	279.50	281.03	1.53	1	F40	.095	
	275.17	276.58 Strongly folded and contorted quartz carbonate vein with inclusions of altered agglomerate and 5% disseminated and euhedral pyrite. Moderately fuchsite.								
281.03	288.26	GABBRO								
		Halo alteration. Weakly altered gabbro. Dark green gray, very fine grained to medium grained. Weak gabbroic texture. foliated with 15% stretched black chlorite clots and 10% stretched altered yellow feldspar crystals. Moderately bleached to pale green, with rare fuchsite adjacent to 5% quartz carbonate veins and veinlets parallel to foliation. 10% pervasive iron carbonate. 1% disseminated pyrite. Moderately hard.	FX254882	281.03	282.86	1.83	1	F57	.005	
			FX254883	282.86	283.44	.58	1	F56	.010	
			FX254884	283.44	285.04	1.60	1	F45	<.005	
			FX254885	285.04	285.97	.93	3	F50	.005	
			FX254886	285.97	287.62	1.65	1	F50	<.005	
			FX254887	287.62	288.26	.64	1	F50	<.005	
	285.04	285.97 30% quartz iron carbonate feldspar veins parallel to foliation.								
	285.97	287.62 Locally folded and contorted veinlets.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
										**********ANALYSES**********
	287.62	288.26 Increasing intensely of alteration. Gabbro texture fading.								
288.26	289.12	GABBRO								
		Intensely altered gabbro. Pale gray to buff with a stringer pervasive brown red hematitic alteration. Well foliated with red boudinaged chloritic and hematitic quartz iron carbonate veins and veinlets parallel to foliation. Locally strongly sericitic. 20% iron carbonate. Sharp lower contact with feldspar porphyry.	FX254888	288.26	289.12	.86	TR	F48	.025	
289.12	292.66	FELDSPAR PORPHYRY								
		Hematitic feldspar porphyry dike. Red brown hematitic stained aphanitic, siliceous matrix with 30% white feldspar crystals up to 4 millimetres. 10 to 15% hematitic quartz carbonate veins and veinlets locally with up to 10% yellow altered feldspar. 5% hematitized red to black pyrite cubes up to 0.5 millimetres.	FX254889	289.12	290.94	1.82	3	F*	.090	
			FX254890	290.94	292.66	1.72	5	F*	.105	
	290.94	292.66 5% disseminated pyrite. Sharp lower contact with strongly altered agglomerate.								
292.66	293.58	AGGLOMERATE								
		Altered dacite agglomerate as at 243.52 to 272.20 metres.	FX254891	292.66	293.58	.92	TR	F60	.005	
293.58	298.86	AGGLOMERATE								
		Weakly altered dacite agglomerate. Scattered red brown hematitic quartz carbonate veinlets. Up to 15% iron carbonate crystals. Weakly foliated.	FX254892	293.58	295.05	1.47	TR	F*	<.005	
			FX254893	295.05	296.61	1.56	TR	F62	<.005	
			FX254894	296.61	297.39	.78	TR	F62	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	296.61	297.39 Strongly bleached to pale pink to buff with 10% strongly hematitic red brown quartz iron carbonate veins. Trace fuchsite. Well foliated.	FX254895	297.39	298.86	1.47	TR	F*	<.005	
298.86	306.02	AGGLOMERATE								
		Dacite agglomerate as at 191.76 to 207.99 metres.	FX254896	298.86	300.41	1.55	TR	F*	.020	
		298.86 300.41 Locally weakly hematitic quartz carbonate veinlets.	FX254897	300.41	301.90	1.49	TR	F*	.040	
			FX254898	301.90	302.97	1.07	TR	F*	<.005	
		300.41 301.90 3 centimetre quartz carbonate vein cross cutting weak foliation, with 3% tourmaline rims.	FX254899	302.97	304.35	1.38	TR	F*	<.005	
			FX254900	304.35	306.02	1.67	TR	F*	<.005	
		304.35 306.02 Foot of hole.								


K 638459
K638469
K 638466
K638461
K-589480
RAINBOW ZONE
K 638466
Kakagi Lake
K638469
74811
74813
K638461
K589480
K589479
PENN OPTION
70473
74812
K638470
K638465
K638458
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638455
K638462
K638465
PENN OPTION

**********INCO LIMITED**********

FIELD EXPLOR / DIAMOND DRILL LOG

PROJECT	: Penn Option	LATITUDE	:N 9547.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/20/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 8698.0 M	TOWNSHIP	:	COMPLETED	: 03/21/88
BOREHOLE	: 70482-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -60.0	GRID BEARING	:	CLAIM #	: K638461	DRILL TYPE	: Longyear 38
DEPTH	: 62.2 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 156m S and 286m W of Post#2.

LEFT IN HOLE:3.91 m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP

**********DESCRIPTION**********

FROM M	TO M		SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	3.91	OVERBURDEN Soil and boulders.								
3.91	43.44	GABBRO Melanogabbro. Dark gray to locally black. Medium grained. Massive. 75% dark mafic chlorite and pyroxene. 20% calcareous pods and scattered stringers. Soft. 6.73 8.38 Locally broken core. 10.03 11.49 Green with leached out calcareous vesicles. Locally broken core. 25.75 27.26 Locally quartz flooded with white and pink feldspar crystals up to 7 millimetre. 5% buff altered feldspar.	FX254901	3.91	5.20	1.29	TR	F*	<.005	
			FX254902	5.20	6.73	1.53	TR	F*	<.005	
			FX254903	6.73	8.38	1.65	TR	F*	<.005	
			FX254904	8.38	10.03	1.65	TR	F*	<.005	
			FX254905	10.03	11.49	1.46	TR	F*	<.005	
			FX254906	11.49	13.58	2.09	TR	F*	<.005	
			FX254907	13.58	15.12	1.54	TR	F*	<.005	
			FX254908	15.12	16.67	1.55	TR	F*	<.005	
			FX254909	16.67	18.19	1.52	TR	F*	<.005	

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FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
			FX254910	18.19	19.71	1.52	TR	F*	<.005	
			FX254911	19.71	21.24	1.53	TR	F*	<.005	
			FX254912	21.24	22.75	1.51	TR	F*	<.005	
			FX254913	22.75	24.22	1.47	TR	F*	<.005	
			FX254914	24.22	25.75	1.53	TR	F*	<.005	
			FX254915	25.75	27.26	1.51	TR	F*	<.005	
			FX254916	27.26	28.82	1.56	TR	F*	<.005	
			FX254917	28.82	30.29	1.47	TR	F55	<.005	
			FX254918	30.29	31.79	1.50	TR	F*	<.005	
			FX254919	31.79	33.24	1.45	TR	F*	<.005	
			FX254920	33.24	34.76	1.52	TR	F*	<.005	
			FX254921	34.76	36.27	1.51	TR	F*	.005	
			FX254922	36.27	37.77	1.50	TR	F*	<.005	
			FX254923	37.77	39.24	1.47	TR	F*	<.005	
			FX254924	39.24	40.75	1.51	TR	F*	<.005	
			FX254925	40.75	42.06	1.31	TR	F*	<.005	
			FX254926	42.06	43.44	1.38	TR	F*	<.005	
28.82	30.29	Weakly bleached to pale green adjacent to chlorite bearing quartz calcite vein.								
42.06	43.44	Grading into mesogabbro.								
43.44	58.46	GABBRO								
		Mesogabbro. 60% dark gray to black mafic crystals and 40% pale green to white feldspathic crystals. Medium grained, massive. Scattered quartz calcite stringers. Silicified. Hard.	FX254927	43.44	45.11	1.67	TR	F*	<.005	
			FX254928	45.11	46.44	1.33	TR	F*	<.005	
			FX254929	46.44	48.16	1.72	TR	F*	<.005	
			FX254930	48.16	49.64	1.48	TR	F*	<.005	
			FX254931	49.64	51.13	1.49	TR	F*	<.005	
			FX254932	51.13	52.62	1.49	TR	F*	<.005	
			FX254933	52.62	54.05	1.43	TR	F*	<.005	
			FX254934	54.05	55.48	1.43	TR	F*	<.005	
			FX254935	55.48	57.02	1.54	TR	F*	<.005	
			FX254936	57.02	58.46	1.44	TR	F*	<.005	
46.44	48.16	Locally pale green with 10% brown iron carbonate adjacent to quartz carbonate veinlets.								
54.05	55.48	Locally broken core.								
55.48	57.02	Patchy concentrations of feldspar crystals.								
57.02	58.46	Grading into leucogabbro.								

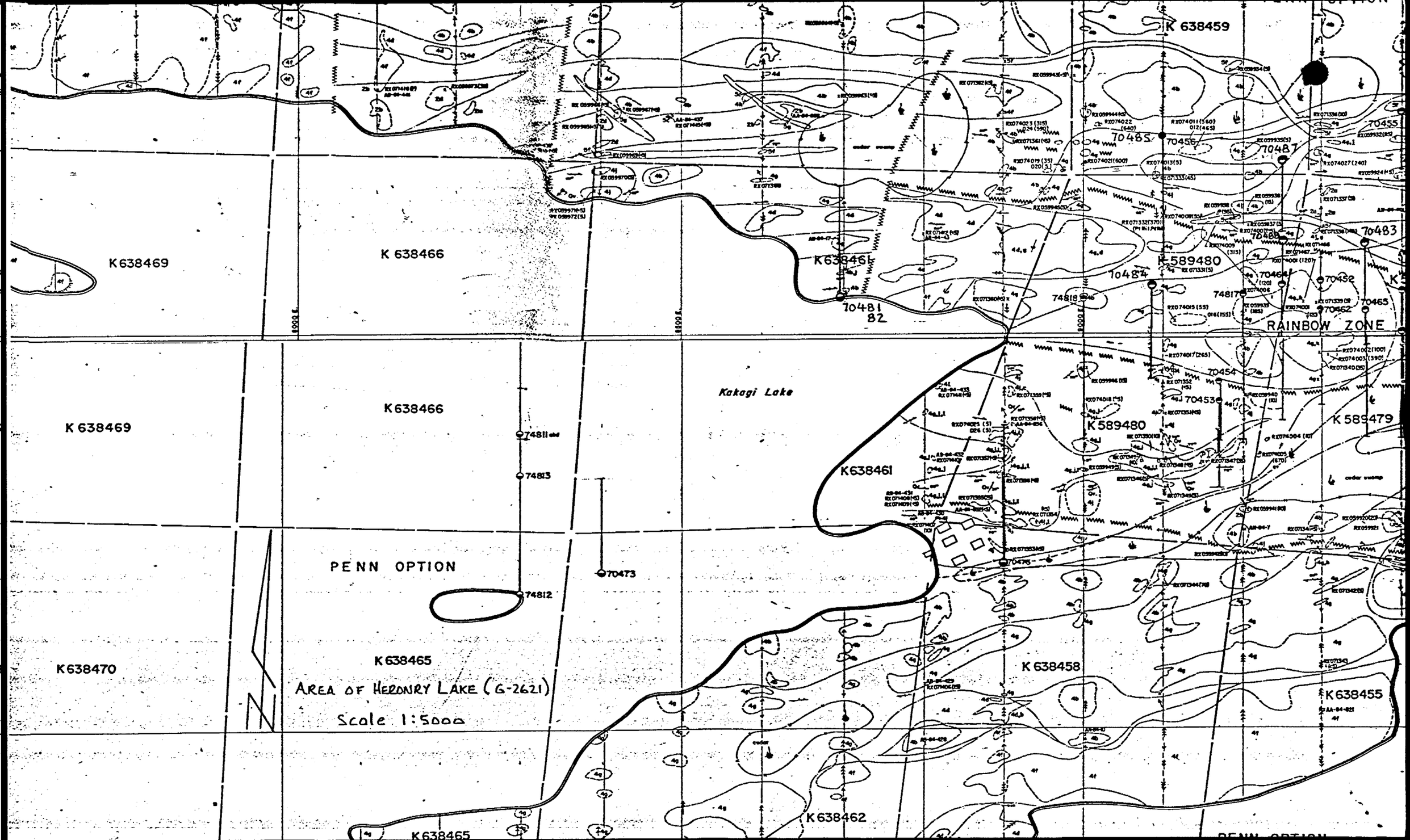
**********DESCRIPTION**********

FROM M	TO M	
58.46	62.18	GABBRO

Leucogabbro. 30% mafic chloritic crystals and 70% buff to white feldspathic crystals. Green to buff white, fine grained to medium grained, massive with leopard skin texture. Minor irregular brown patchs possibly leucoxene. Locally moderately chloritic along quartz calcite veinlets. Trace fine grained disseminated pyrite 61.57 62.18 Foot of hole. Borehole abandoned.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271566	58.46	60.05	1.59	TR	F*	n/a	
FX271567	60.05	61.57	1.52	TR	F*	n/a	
FX271568	61.57	62.18	.61	TR	F*	n/a	


K 638459
K638469
K 638466
K638461
70485
70456
70487
70455
70486
70483
K 589480
70484
74818
74817
70464
70452
70465
70481
82
RAINBOW ZONE
K638469
K 638466
Kakagi Lake
70454
70453
K 589480
K 589479
74811
74813
K638461
PENN OPTION
70473
74812
K638470
K638465
K 638458
K638455
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638462
K638465
PENN OPTION

**********IN '.IMITED**********

FIELD EXPLOI N DIAMOND DRILL LOG

70483-0
PAGE 1

PROJECT	: Penn Option	LATITUDE	:N 9623.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/22/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 9360.0 M	TOWNSHIP	:	COMPLETED	: 03/26/88
BOREHOLE	: 70483-0	ELEVATION	: 1356.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Longyear 38
DEPTH	: 307.2 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 77m E and 78m S of Post#1.

LEFT IN HOLE:2.70m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.05		-55.00	129.23		-42.50	243.23		-40.50			
60.96		-42.50	182.88		-42.00	307.24		-38.50			

**********DESCRIPTION**********

FROM M	TO M	
.00	2.70	OVERBURDEN Soil and boulders.
2.70	20.50	AGGLOMERATE Moderately altered dacite agglomerate. Gray, very fine grained siliceous matrix with stretched lapilli to agglomerate sized clasts of dacite tuff and lapilli tuff. Foliated with 10% stretched black chlorite clots. Extensive bleached, pale gray to buff alteration halo adjacent to tourmaline bearing quartz iron carbonate vein and veinlets. Moderately sericitic alteration with trace fuchsite. 5% stretched and altered buff feldspar.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN X	CR ANG	AU PPM	PPM*M
FX254937	2.70	4.22	1.52	TR	F39	<.005	
FX254938	4.22	5.71	1.49	TR	F45	<.005	
FX254939	5.71	7.39	1.68	TR	F36	.025	
FX254940	7.39	8.84	1.45	TR	F35	<.005	
FX254941	8.84	10.19	1.35	TR	F38	.035	
FX254942	10.19	11.53	1.34	TR	F35	.010	
FX254943	11.53	12.85	1.32	TR	F34	<.005	
FX254944	12.85	13.20	.35	TR	F41	.150	

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 26 1988
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70483-0
PAGE 1

KENORA
MINING DIV.
RECEIVED
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Locally up to 2% disseminated and euhedral pyrite occurring in veining and alteration. Moderately to strongly iron carbonate. Moderately blocky core. Moderately hard.	FX254945	13.20	14.26	1.06	TR	F34	.025	
			FX254946	14.26	15.81	1.55	2	F45	.475	
			FX254947	15.81	17.44	1.63	TR	F42	.055	
			FX254948	17.44	19.05	1.61	TR	F41	<.005	
			FX254949	19.05	20.50	1.45	TR	F40	.010	
		2.70 4.22 25 centimetres of leucogabbro at start of hole.								
		12.85 13.20 10 centimetre thick folded and contorted quartz iron carbonate vein with tourmaline stylolites and intense sericitic, buff alteration halo with rare fuchsite.								
		14.26 15.81 Locally brecciated appearance. 19 centimetres lost core.								
		15.81 17.44 Locally intense sericitic weakly fuchsite alteration adjacent to 10% weakly hematitic quartz carbonate veins with iron carbonate rims.								
		17.44 20.50 Grading into weakly altered agglomerate.								
20.50	32.25	AGGLOMERATE								
		Weakly altered dacite agglomerate. Gray green, fine grained siliceous matrix with stretched clasts of dacite tuff lapilli tuff. Locally narrow pale buff, bleached sericitic alteration halos adjacent to weakly boudinaged chlorite bearing quartz iron carbonate veins and veinlets parallel to foliation. 5% stretched black chloritic clots.	FX254950	20.50	22.09	1.59	0	F49	.005	
			FX254951	22.09	23.55	1.46	0	F44	<.005	
			FX254952	23.55	25.08	1.53	0	F48	.005	
			FX254953	25.08	26.52	1.44	0	F45	.075	
			FX254954	26.52	27.77	1.25	0	F45	.020	
			FX254955	27.77	29.21	1.44	0	F45	<.005	
			FX254956	29.21	30.74	1.53	0	F45	.020	
		Foliated. Moderately iron carbonate. Locally stretched altered buff feldspar crystals. Moderately hard. Locally blocky.	FX254957	30.74	32.25	1.51	0	F48	.045	
		25.08 26.52 5 centimetres lost core. 6 centimetres white to pale pink quartz veins with weakly iron carbonate margins and scattered tourmaline								

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PAGE 2

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		crystals.								
	26.52	27.77 20 centimetres lost core.								
	29.21	30.74 9 centimetres lost core.								
	30.74	32.25 10% quartz carbonate veins and veinlets with alteration halos. Agglomerate is pale gray green, and becomes more intensely altered down hole.								
32.25	37.38	AGGLOMERATE								
		Moderately altered dacite agglomerate as at 2.70 to 19.05 metres.	FX254958	32.25	33.77	1.52	0	F48	.020	
			FX254959	33.77	35.42	1.65	0	F49	.040	
	36.50	37.38 Locally concentrations of buff leucoxene in mafic fragments.	FX254960	35.42	36.50	1.08	0	F45	<.005	
			FX254961	36.50	37.38	.88	0	F46	.030	
37.38	38.13	FELDSPAR PORPHYRY								
		Moderately hematitic feldspar porphyry dike. Pale brown hematitic , aphanitic matrix with 20% weakly stretched white feldspar megacrysts. 15% pervasive fine iron carbonate crystals. Locally up to 10% black chlorite clots. weakly sericitic, silicified. Hard. Weakly foliated.	FX254962	37.38	38.13	.75	TR	F52	.020	
38.13	52.20	AGGLOMERATE								
		Moderately altered dacite agglomerate as at 32.25 to 37.38 metres.	FX254963	38.13	39.01	.88	0	F46	.010	
			FX254964	39.01	40.49	1.48	0	F46	.010	
	38.13	39.01 Pervasive agglomerate sized clasts of dacite crystal tuff.	FX254965	40.49	42.06	1.57	0	F46	<.005	
			FX254966	42.06	42.84	.78	0	F55	<.005	
	39.01	40.49 15% pervasive 0.5 millimetre iron carbonate crystals.	FX254967	42.84	44.33	1.49	0	F48	<.005	
			FX254968	44.33	45.74	1.41	0	F46	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									ANALYSES	
	42.06	42.84 Increasingly darker gray.	FX254969	45.74	47.22	1.48	0	F46	.015	
	42.84	44.33 Locally grading into mafic agglomerate.	FX254970	47.22	48.66	1.44	0	F49	.015	
	47.22	48.66 Locally pale brown quartz carbonate veinlets cut by late stage quartz carbonate veinlets.	FX254971	48.66	50.16	1.50	0	F57	<.005	
			FX254972	50.16	51.47	1.31	0	F55	<.005	
			FX254973	51.47	52.20	.73	0	F48	.010	
52.20	53.56	AGGLOMERATE Intensely altered dacite agglomerate. Buff, pale green to pink with green sericitic horizons and pale orange boudinaged quartz carbonate veinlets. Well foliated. Moderately sericitic. Fine grained, locally with stretched black chloritic clots and yellow leucoxene. Moderately hard. 5 to 7% iron carbonate. Grades into moderately altered agglomerate.	FX254974	52.20	53.56	1.36	0	F50	<.005	
53.56	62.83	AGGLOMERATE Moderately altered dacite agglomerate as at 2.70 to 19.05 metres. Pale gray with 10% pale orange quartz iron carbonate stringers.	FX254975	53.56	55.04	1.48	0	F50	.005	
			FX254976	55.04	55.91	.87	0	F*	.005	
			FX254977	55.91	56.67	.76	0	F*	.010	
	56.67	59.78 Grades into strongly silicified, dark gray green agglomerate with faint remnant agglomerate texture. Poorly foliated.	FX254978	56.67	58.23	1.56	0	F*	<.005	
			FX254979	58.23	59.78	1.55	0	F*	<.005	
			FX254980	59.78	61.41	1.63	0	F*	<.005	
	59.78	62.83 Grades into moderately altered dacite agglomerate as above.	FX254981	61.41	62.83	1.42	TR	F55	<.005	
62.83	72.82	AGGLOMERATE Weakly altered dacite agglomerate as at 22.09 to 32.25 metres.	FX254982	62.83	64.27	1.44	TR	F65	<.005	
			FX254983	64.27	65.76	1.49	TR	F55	<.005	
	67.36	67.99 Agglomerate sized clast of dacite crystal	FX254984	65.76	67.36	1.60	TR	F50	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		tuff. Strongly iron carbonate.	FX254985	67.36	67.99	.63	TR	F38	<.005	
	67.99	68.35 Brecciated quartz iron carbonate vein with inclusions of sericitic and chlorite stylolites.	FX254986	67.99	68.35	.36	TR	F38	.010	
	68.35	68.65 Dacite crystal tuff clast as above.	FX254987	68.35	68.65	.30	TR	F38	.005	
	68.65	70.04 10% brecciated quartz iron carbonate vein and veinlets as at 67.99 to 68.35 metres.	FX254988	68.65	70.04	1.39	TR	F38	<.005	
	70.04	71.43 5 centimetre quartz iron carbonate vein with black chlorite stylolites and green chlorite stringers. 1% fine disseminated pyrite.	FX254989	70.04	71.43	1.39	1	F54	<.005	
	71.43	72.82 Lower contact with altered gabbro bounded by quartz iron carbonate vein.	FX254990	71.43	72.82	1.39	TR	F50	.010	
72.82	74.25	GABBRO Weakly altered gabbro. Green to dark green very fine grained chloritic matrix hosting stretched pale green to white medium grained feldspar crystals. Strongly iron carbonate with 5% calcareous stringers. Locally rusty patches.	FX254991	72.82	74.25	1.43	TR	F46	.015	
74.25	77.01	GABBRO Melanogabbro. Dark green gray to black. Massive. 10 to 15% pervasive calcite crystals up to 0.5 millimetres. Scattered quartz carbonate veinlets and stringers. Moderately hard.	FX254992	74.25	75.78	1.53	TR	F56	.005	
		75.78 77.01 Sharp lower contact with silicified magnetic gabbro. 5 centimetre quartz carbonate vein with chloritic inclusions.	FX254993	75.78	77.01	1.23	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
77.01	92.06	GABBRO								
		Magnetic melanogabbro as above with 5 to 7% fine grained disseminated magnetite and 5% buff leucoxene. 1% disseminated pyrite.	FX254994	77.01	78.57	1.56	1	F*	<.005	
		90.60 92.06 Grading into mesogabbro.	FX254995	78.57	80.07	1.50	1	F*	<.005	
			FX254996	80.07	81.63	1.56	1	F62	.035	
			FX254997	81.63	83.13	1.50	1	F60	.025	
			FX254998	83.13	84.63	1.50	1	F*	.005	
			FX254999	84.63	86.02	1.39	1	F*	<.005	
			FX255000	86.02	87.51	1.49	1	F*	.010	
			FX300001	87.51	89.00	1.49	1	F*	.260	
			FX300002	89.00	90.60	1.60	1	F*	.010	
			FX300003	90.60	92.06	1.46	1	F*	<.005	
92.06	107.28	GABBRO								
		Mesogabbro. Dark green, medium grained mafic crystals with 50% pale green to white medium grained feldspar crystals. massive. 5 to 7% fine grained magnetite. 5% buff leucoxene. Silicified. Hard. Trace pyrite. Moderately magnetic.	FX300004	92.06	93.60	1.54	TR	F*	<.005	
			FX300005	93.60	95.05	1.45	TR	F*	.005	
			FX300006	95.05	96.52	1.47	TR	F*	.025	
			FX300007	96.52	98.04	1.52	TR	F*	.010	
			FX300008	98.04	99.56	1.52	TR	F*	.010	
		92.06 93.60 Locally olive green olivine stringers.	FX300009	99.56	101.05	1.49	TR	F*	.040	
		95.05 96.52 10% quartz calcite veinlets and veins with chloritic inclusions.	FX300010	101.05	102.55	1.50	TR	F*	.010	
			FX300011	102.55	104.05	1.50	TR	F*	<.005	
			FX300012	104.05	104.61	.56	TR	F*	<.005	
			FX300013	104.61	106.07	1.46	TR	F*	<.005	
			FX300014	106.07	107.28	1.21	TR	F*	.005	
107.28	110.76	GABBRO								
		Gabbro (basalt?). Dark green, fine grained, massive. Strongly calcareous with 15% 0.5 millimetre crystals. Scattered chloritic quartz calcite stringers. Weakly magnetic. 3% fine disseminated magnetite.	FX300015	107.28	108.92	1.64	TR	F*	.010	
			FX300016	108.92	110.76	1.84	TR	F*	.020	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
110.76	112.35	GABBRO Halo alteration. Stringer brown iron carbonate alteration adjacent to vuggy quartz calcite veinlets. Locally series of parallel pink quartz calcite stringers perpendicular to core axis truncated by dark green chlorite seams. Not magnetic.	FX300017	110.76	112.35	1.59	TR	F*	.005	
112.35	113.25	GABBRO Magnetic mesogabbro as at 93.60 to 107.28 metres.	FX300018	112.35	113.25	.90	TR	F*	.055	
113.25	115.11	GABBRO Altered gabbro. Pale buff to green bleached alteration halos adjacent to quartz iron carbonate veins with tourmaline rims. Up to 7% euhedral pyrite adjacent to veins, diminishing into moderately to weakly altered gabbro. 114.17 115.11 Intensely of alteration decreasing.	FX300019	113.25	114.17	.92	5	F53	1.410	
			FX300020	114.17	115.11	.94	2	F55	.095	
115.11	125.92	GABBRO Halo alteration. Dark green, medium grained gabbro with scattered , cross cutting pale orange quartz carbonate veinlets with weak buff alteration halos. Scattered red brown carbonate stringers. Trace to 1% euhedral pyrite. 116.49 118.09 10% quartz carbonate veinlets. 124.36 125.92 Frequency of quartz carbonate veinlets decreasing.	FX300021	115.11	116.49	1.38	TR	F*	.030	
			FX300022	116.49	118.09	1.60	TR	F*	<.005	
			FX300023	118.09	119.66	1.57	TR	F*	.015	
			FX300024	119.66	121.21	1.55	TR	F*	.010	
			FX300025	121.21	122.83	1.62	TR	F*	.030	
			FX300026	122.83	124.36	1.53	TR	F*	.110	
			FX300027	124.36	125.92	1.56	TR	F*	.065	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
125.92	139.60	GABBRO								
		Gabbro (basalt?) as at 107.28 to 112.35 metres. 15 to 20% iron carbonate crystals.	FX300028	125.92	127.41	1.49	TR	F*	.005	
			FX300029	127.41	128.97	1.56	TR	F*	.030	
		127.41 128.97 Locally 3 centimetre chlorite and biotite bearing quartz carbonate vein with minor tourmaline and weak buff alteration halo.	FX300030	128.97	130.44	1.47	TR	F*	.005	
			FX300031	130.44	132.08	1.64	TR	F*	.015	
			FX300032	132.08	133.65	1.57	TR	F*	<.005	
		130.44 136.68 5 to 10 % calcite pods and stringer.	FX300033	133.65	135.21	1.56	TR	F*	.005	
		136.68 139.60 10% iron carbonate crystals.	FX300034	135.21	136.68	1.47	TR	F*	<.005	
			FX300035	136.68	138.29	1.61	TR	F*	<.005	
			FX300036	138.29	139.60	1.31	TR	F*	<.005	
139.60	146.70	GABBRO								
		Halo alteration in gabbro as at 115.11 to 125.92 metres.	FX300037	139.60	140.84	1.24	TR	F*	<.005	
		139.60 140.84 10% quartz carbonate veinlets.	FX300038	140.84	141.72	.88	TR	F*	.005	
		141.72 142.21 10 centimetre quartz iron carbonate vein with tourmaline rims and altered buff to gray alteration halo cut by red iron carbonate stringers. 3 to 4% euhedral pyrite.	FX300039	141.72	142.21	.49	3	F*	5.300	
			FX300040	142.21	143.66	1.45	TR	F*	.015	
			FX300041	143.66	145.21	1.55	TR	F*	.020	
			FX300042	145.21	146.70	1.49	TR	F*	.005	
		142.21 143.66 5% quartz carbonate veinlets.								
		145.21 146.70 Becoming gray to pale gray.								
146.70	171.51	GABBRO								
		Weakly to moderately altered gabbro. Pale gray, fine grained, silicified, with 5 to 10% quartz carbonate veins and veinlets.	FX300043	146.70	148.23	1.53	TR	F*	.235	
			FX300044	148.23	149.67	1.44	TR	F*	.005	
			FX300045	149.67	150.94	1.27	TR	F*	.025	
		150.94 153.55 Series of quartz iron carbonate veins up to 5 centimetres thick with inclusions of tourmaline crystals and tourmaline rims.	FX300046	150.94	152.04	1.10	5	F*	1.840	
			FX300047	152.04	153.55	1.51	3	F*	.070	
			FX300048	153.55	154.94	1.39	1	F*	.020	

**********DESCRIPTION**********

FROM M	TO M	
		Intense orange to red mottled iron carbonate alteration halo with 10 to 12% disseminated and euhedral pyrite. Trace to 1% pyrite in veins.
154.94	156.49	Locally mottled buff to pale pink appearance adjacent to barren chlorite bearing quartz veins. 2% coarse grained euhedral and cubic pyrite in alteration halo.
156.49	157.87	2% euhedral and cubic pyrite up to 3 millimetres adjacent to 3 centimetre quartz vein with iron carbonate rims and scattered black tourmaline crystals.
157.87	158.68	Quartz iron carbonate veins as at 150.94 to 152.04 metres. 1% massive chalcopyrite in quartz carbonate vein. Pale gray gabbro
158.68	160.28	Locally up to 2% disseminated and euhedral pyrite forming loose stringers.
160.28	163.00	Scattered 1% euhedral pyrite in pale gabbro
163.00	163.88	Strongly bleached, iron carbonate alteration halo adjacent to quartz iron carbonate veinlets and stringers. 5% euhedral pyrite.
163.88	170.08	Pale gray mottled appearance with orange quartz iron carbonate stringers.
170.08	171.51	Grading to dark gray silicified gabbro. 10% pale orange quartz iron carbonate veinlets and stringers, locally with tourmaline rims.

171.51 178.12 GABBRO

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300049	154.94	156.49	1.55	2	F*	.200	
FX300050	156.49	157.87	1.38	2	F*	.015	
FX300051	157.87	158.68	.81	5	F*	3.140	
FX300052	158.68	160.28	1.60	2	F*	.045	
FX300053	160.28	161.76	1.48	1	F*	.005	
FX300054	161.76	163.00	1.24	1	F*	.050	
FX300055	163.00	163.88	.88	5	F*	.225	
FX300056	163.88	165.40	1.52	TR	F*	.020	
FX300057	165.40	167.03	1.63	TR	F*	.005	
FX300058	167.03	168.54	1.51	TR	F*	<.005	
FX300059	168.54	170.08	1.54	TR	F*	.005	
FX300060	170.08	171.51	1.43	TR	F*	.010	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Gabbro (basalt?). Fine grained, massive with scattered quartz calcite veinlets and stringers. 5% buff to yellow leucoxene. Locally moderately to strongly calcareous. Trace pyrite.	FX300061	171.51	173.13	1.62	TR	F*	<.005	
			FX300062	173.13	174.66	1.53	TR	F*	<.005	
			FX300063	174.66	176.17	1.51	TR	F*	<.005	
			FX300064	176.17	178.12	1.95	TR	F*	<.005	
		176.17 178.12 Gradational sharp lower contact into leucogabbro.								
178.12	188.29	GABBRO								
		Leucogabbro. Medium grained, massive. 70% white to locally pale green feldspathic crystals and 30% dark green to black chlorite. Leopard skin texture. 1% yellow leucoxene. Scattered quartz calcite veins and veinlets with chloritic inclusions. Silicified and hard.	FX300065	178.12	179.22	1.10	0	F*	<.005	
			FX300066	179.22	180.74	1.52	0	F*	<.005	
			FX300067	180.74	182.27	1.53	0	F*	.005	
			FX300068	182.27	183.79	1.52	0	F*	<.005	
			FX300069	183.79	185.32	1.53	0	F*	<.005	
			FX300070	185.32	186.87	1.55	0	F*	<.005	
			FX300071	186.87	188.29	1.42	0	F*	<.005	
188.29	204.41	GABBRO								
		Gabbro (basalt?) as at 171.51 to 178.12 metres. Scattered quartz calcareous veinlets and stringers. rare orange quartz iron carbonate veinlets and stringers. 10% calcite crystals.	FX300072	188.29	189.87	1.58	TR	F*	<.005	
			FX300073	189.87	191.41	1.54	TR	F*	<.005	
			FX300074	191.41	192.92	1.51	TR	F*	<.005	
			FX300075	192.92	194.46	1.54	TR	F*	<.005	
			FX300076	194.46	195.87	1.41	TR	F*	<.005	
			FX300077	195.87	197.51	1.64	TR	F*	<.005	
			FX300078	197.51	199.07	1.56	TR	F*	<.005	
			FX300079	199.07	200.56	1.49	TR	F*	<.005	
			FX300080	200.56	202.16	1.60	TR	F*	.020	
			FX300081	202.16	203.61	1.45	TR	F*	.015	
			FX300082	203.61	204.41	.80	TR	F*	.025	
		197.51 199.07 Locally with medium grained chlorite crystals.								
		200.56 202.16 Fine grained gabbro with 15% brown iron carbonate crystals.								
		202.16 204.41 Locally red brown hematitic quartz carbonate veinlets.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
204.41	212.57	GABBRO								
		Very weakly altered gabbro. Pale green to green, medium grained with cross cutting quartz carbonate veins and veinlets. Locally contorted. Strongly iron carbonate. Scattered buff leucoxene. Locally broken core.	FX300083	204.41	205.93	1.52	TR	F*	.005	
			FX300084	205.93	206.76	.83	TR	F56	<.005	
			FX300085	206.76	207.38	.62	TR	F*	<.005	
			FX300086	207.38	208.43	1.05	TR	F58	<.005	
			FX300087	208.43	209.02	.59	TR	F*	<.005	
			FX300088	209.02	210.56	1.54	TR	F*	.010	
			FX300089	210.56	212.57	2.01	2	F*	.020	
		204.41 205.93 10% quartz carbonate veinlets.								
		207.38 208.43 Locally contorted. Locally weakly foliated.								
		208.43 210.56 Fine grained, dark green with 15% dark red brown iron carbonate crystals and stringers								
		210.56 212.57 Silicified, with 10% contorted and folded chloritic quartz carbonate veinlets. 2 to 3% euhedral pyrite in weak iron carbonate alteration adjacent to quartz carbonate veinlets. Patchy boudinaged, pale orange quartz iron carbonate veins locally with pale fuchsite.								
212.57	214.27	BASALT								
		Fine grained, massive green basalt with 2% euhedral pyrite. Pale green altered aureole at lower contact.	FX300090	212.57	214.27	1.70	2	F*	.020	
			FX300110	214.26	242.85	28.59	TR	F*	<.005	
214.27	223.81	GABBRO								
		Halo alteration. Pale gray to black. Fine grained with medium grained buff to yellow altered feldspar. Weakly foliated. Locally up to 10% contorted quartz iron carbonate veinlets and stringers with bleached alteration halos. Strongly iron carbonate. 2% euhedral pyrite. Moderately hard.	FX300091	214.27	215.63	1.36	2	F*	.110	
			FX300092	215.63	217.13	1.50	TR	F*	.005	
			FX300093	217.13	218.85	1.72	TR	F*	<.005	
			FX300094	218.85	220.44	1.59	TR	F*	<.005	
			FX300095	220.44	222.09	1.65	TR	F*	.010	
			FX300096	222.09	223.81	1.72	TR	F*	.010	
		214.27 215.63 Interfingering basalt. 10% quartz carbonate veinlets.	FX300130	217.64	273.06	55.42	TR	F*	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	218.85	223.81 Pervasive rusty brown iron oxide staining. Vuggy brown iron carbonate stringers and weathered crystals. 10% quartz carbonate veins.								
223.81	224.30	GABBRO								
		Intensely altered gabbro. 50% bright emerald green, medium grained stretched fuchsite in pale buff to red feldspathic matrix. Pervasive brown iron carbonate and cross cutting quartz iron carbonate veinlets and stringers. 1 to 2% disseminated and euhedral pyrite up to 2 millimetres. Locally yellow altered feldspar crystals. Extensive quartz veining with iron carbonate clots hosting scattered tourmaline crystals. Adjacent altered gabbro is contorted, with 2% disseminated pyrite.	FX300097	223.81	224.30	.49	2	F*	.105	
224.30	227.31	QUARTZ CARBONATE VEIN								
		White, bullish quartz vein with wispy brown iron carbonate and cross cutting stringers. Locally pervasive pyritic and chloritic inclusions and stringers. Scattered fuchsite inclusions with 1% disseminated pyrite.	FX300098	224.30	225.74	1.44	1	F*	.015	
			FX300099	225.74	227.31	1.57	3	F*	.585	
		225.74 227.31 Pervasive chlorite inclusions with 3% euhedral pyrite.								
227.31	228.13	GABBRO								
		Intensely altered gabbro as at 223.81 to 224.30 metres.	FX300100	227.31	228.13	.82	3	F*	.065	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
228.13	232.20	GABBRO								
		Halo alteration as at 214.27 to 223.81 metres.	FX300101	228.13	229.59	1.46	1	F*	.005	
		228.13 232.20 Mottled appearance. Locally very weak foliation.	FX300102	229.59	230.72	1.13	1	F42	<.005	
			FX300103	230.72	232.20	1.48	1	F*	<.005	
232.20	236.75	GABBRO								
		Transitional gabbro to peridotite. Mottled gray to black with 10% quartz carbonate veinlets and stringers.	FX300104	232.20	233.70	1.50	1	F*	<.005	
			FX300105	233.70	235.18	1.48	1	F*	.005	
			FX300106	235.18	236.75	1.57	1	F*	<.005	
236.75	242.85	PERIDOTITE								
		Fine grained, massive, black peridotite. 5% black pyroxene crystals. 10% quartz carbonate veinlets. Locally up to 2% euhedral pyrite up to 5 millimetres. 3% iron carbonate crystals. Soft.	FX300107	236.75	238.25	1.50	TR	F*	<.005	
			FX300108	238.25	239.78	1.53	TR	F*	<.005	
			FX300109	239.78	241.26	1.48	TR	F*	<.005	
242.85	288.30	PERIDOTITE								
		Magnetic peridotite as above with 5 to 7% disseminated magnetite.	FX300111	242.85	244.35	1.50	1	F*	<.005	
			FX300112	244.35	245.88	1.53	2	F*	<.005	
		274.60 276.05 Locally ground core. 10 centimetres lost core.	FX300113	245.88	247.36	1.48	1	F*	<.005	
			FX300114	247.36	248.90	1.54	TR	F*	<.005	
		277.58 279.12 Locally 3 centimetre quartz iron carbonate vein and adjacent boudinaged quartz carbonate veinlets parallel to weak foliation.	FX300115	248.90	250.47	1.57	TR	F*	<.005	
			FX300116	250.47	251.98	1.51	TR	F*	.005	
			FX300117	251.98	253.47	1.49	TR	F*	.005	
			FX300118	253.47	255.08	1.61	TR	F*	<.005	
		279.12 280.80 Locally weakly foliated.	FX300119	255.08	256.55	1.47	TR	F*	<.005	
		282.28 285.29 Locally talcy adjacent to boudinaged and locally brecciated quartz carbonate veinlets. Locally broken core.	FX300120	256.55	258.01	1.46	TR	F*	<.005	
			FX300121	258.01	259.52	1.51	TR	F*	<.005	
			FX300122	259.52	261.11	1.59	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********
	286.78	288.30 Gradational lower contact with non-magnetitic gabbro.
288.30	291.37	GABBRO Melanogabbro. Dark gray to black. Medium grained, massive with patches of green olivine and 25% pale gray feldspar crystals. 2% quartz carbonate veinlets with chloritic inclusions. 2 to 3% iron carbonate crystals. Moderately hard. Trace disseminated pyrite.
291.37	294.46	GABBRO Subhalo alteration, as above but moderately silicified with pale orange quartz carbonate veins with chlorite inclusions. 5% brown iron carbonate crystals. 293.69 294.46 20% pale orange to white quartz iron

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX300123	261.11	262.58	1.47	TR	F*	<.005	
FX300124	262.58	264.26	1.68	TR	F*	<.005	
FX300125	264.26	265.68	1.42	TR	F*	<.005	
FX300126	265.68	267.22	1.54	TR	F*	<.005	
FX300127	267.22	268.74	1.52	TR	F*	<.005	
FX300128	268.74	270.16	1.42	TR	F*	<.005	
FX300129	270.16	271.64	1.48	TR	F*	<.005	
FX300131	273.06	274.60	1.54	TR	F*	<.005	
FX300132	274.60	276.05	1.45	TR	F*	.015	
FX300133	276.05	277.58	1.53	TR	F*	<.005	
FX300134	277.58	279.12	1.54	TR	F47	<.005	
FX300135	279.12	280.80	1.68	TR	F50	<.005	
FX300136	280.80	282.28	1.48	TR	F*	<.005	
FX300137	282.28	283.73	1.45	TR	F*	<.005	
FX300138	283.73	285.29	1.56	TR	F*	<.005	
FX300139	285.29	286.78	1.49	TR	F*	<.005	
FX300140	286.78	288.30	1.52	TR	F*	.005	
FX300141	288.30	289.77	1.47	TR	F*	<.005	
FX300142	289.77	291.37	1.60	TR	F*	<.005	
FX300143	291.37	292.43	1.06	TR	F*	<.005	
FX300144	292.43	293.69	1.26	TR	F*	<.005	
FX300145	293.69	294.46	.77	2	F*	.010	

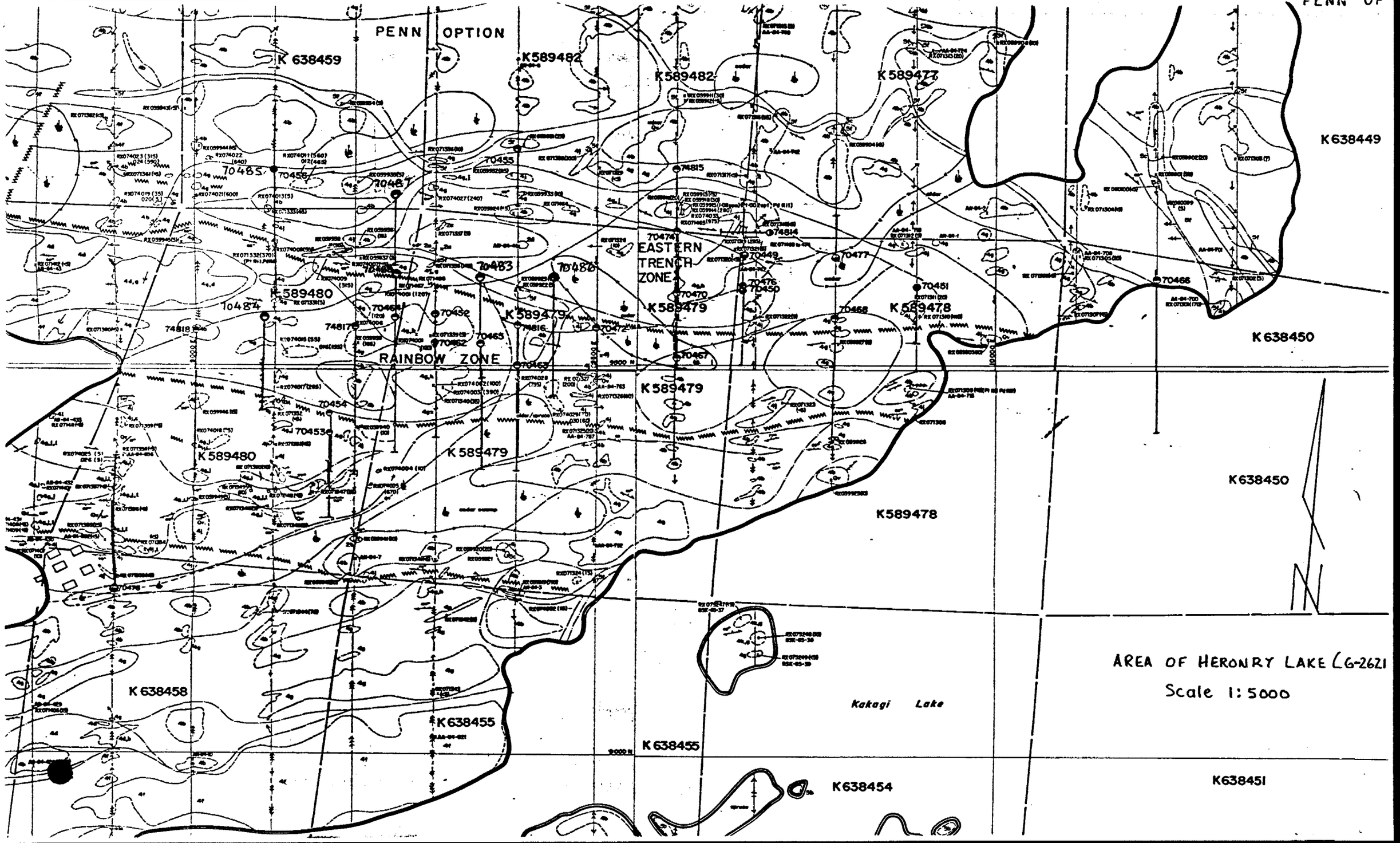
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		carbonate with vuggy stringers. Pervasive iron carbonate stringers. 10% iron carbonate crystals. 2% fine disseminated pyrite in gabbro.								
294.46	300.62	GABBRO								
		Halo alteration. Silicified gabbro with mottled pale gray brown to dark gray appearance. Fine grained, massive with 10% iron cut by crystals, 10% fine grained black chlorite. Locally 5% iron carbonate rimmed quartz carbonate veins and veinlets. 2 to 3% fine disseminated pyrite. Hard.	FX300146	294.46	295.77	1.31	2	F*	<.005	
			FX300147	295.77	297.58	1.81	2	F*	<.005	
			FX300148	297.58	299.10	1.52	2	F*	<.005	
			FX300149	299.10	300.62	1.52	3	F*	<.005	
		299.10 300.62 Locally weakly fuchsite adjacent to 10% quartz carbonate veins and veinlets with scattered tourmaline crystals. pyrite concentrated adjacent to veins, diminishing as fuchsite alteration decreases.								
300.62	307.24	GABBRO								
		Altered gabbro. Bright emerald green fuchsite with 5% green chlorite and 5 to 7% yellow altered feldspar crystals. Weakly foliated with cross cutting tourmaline bearing quartz iron carbonate veins and veinlets. Trace to 1% disseminated and euhedral pyrite. Silicified, hard. Late stage quartz carbonate veins and veinlets cut original veining. 5 to 7% iron carbonate. Locally weakly fuchsite, green intervals lacking quartz carbonate veining.	FX300150	300.62	302.10	1.48	1	F*	<.005	
			FX300151	302.10	302.85	.75	1	F*	<.005	
			FX300152	302.85	303.64	.79	2	F44	.010	
			FX300153	303.64	304.03	.39	1	F36	<.005	
			FX300154	304.03	304.63	.60	1	F55	<.005	
			FX300155	304.63	305.75	1.12	2	F42	<.005	
			FX300156	305.75	307.24	1.49	1	F46	.010	
		300.62 302.10 Weakly fuchsite.								

**********DESCRIPTION**********

FROM M	TO M	
302.85	303.64	10% pale orange quartz carbonate veins cut by late stage quartz carbonate veinlets hosting euhedral pyrite. Locally black chloritic stringers.
304.03	304.63	15% boudinaged quartz carbonate veinlets sub parallel to weak foliation, cut by tourmaline bearing quartz carbonate vein porphyry to core axis. Intense bleached, buff to pale red weakly hematitic, sericitic alteration halo adjacent to boudinaged quartz carbonate veinlets.
304.63	305.75	Minor 4 centimetre quartz carbonate vein with iron carbonate rims and tourmaline crystals cross cutting weak foliation. 2% fine disseminated pyrite.
305.75	307.24	Intensely of alteration decreasing. Becoming dark green. 20% yellow altered feldspar crystals. 15% dark green chlorite, weakly to moderately fuchsitic. Scattered dark red brown quartz carbonate stringers. Moderately hard to hard. 1% disseminated pyrite. Foot of hole.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
70455
74815
70461
74814
70474
EASTERN
TRENCH
ZONE
70449
70477
70483
70486
70476
70450
70470
70451
K589480
K589479
K589478
70484
70468
70432
74817
74818
74816
70472
70465
70462
70466
K638450
RAINBOW ZONE
70463
70457
70454
70453
K589479
K589480
K589479
K589478
K638450
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: PENN OPTION	LATITUDE	:N 9553.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03/23/88
PROPERTY	: CROW-PENN	DEPARTURE	:E 9093.0 M	TOWNSHIP	:	COMPLETED	: 03/25/88
BOREHOLE	: 70484-0	ELEVATION	: 1350.2 M	PROVINCE	: ONTARIO	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 355	COUNTRY	: CANADA	DRILLED BY	: D.W. COATES ENTERPRISES
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: LONGYEAR 38
DEPTH	: 251.8 M	LOGGED BY	: S. VIDITO	GRID NAME	:	TEST METHOD	: ACID
				CORE SIZE	: BQ	ASSAYED FOR	: Au

COMMENTS : Collar is 115m E and 138m S of Post#1.

LEFT IN HOLE:1.58 METERS OF BW CASING AND SHOE

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.66		-55.00	121.92		-55.00	251.76		-53.00			
60.96		-55.00	182.88		-54.00						

1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
.00	1.58	OVERBURDEN Casing through 1.58 metres of sand and gravel overburden and 2.08 metres of gabbro.	NS	.00	1.58	1.58			n/a	
1.58	17.07	GABBRO Sub halo alteration. Medium to dark green gray, medium grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% sub angular to elongate medium to dark green chloritic patchs, possibly altered pyroxene with 15 to 20% sub angular medium gray green carbonatized patchs, possibly altered feldspar, up to 5 millimetres long with 1 to 2% irregular yellow	FX271394	1.58	3.95	2.37	TR	-	.005	
			FX271395	3.95	4.86	.91	TR	-	<.005	
			FX271396	4.86	6.40	1.54	TR	-	<.005	
			FX271397	6.40	7.92	1.52	TR	-	<.005	
			FX271398	7.92	9.45	1.53	TR	-	.005	
			FX271399	9.45	10.97	1.52	TR	-	<.005	
			FX271400	10.97	12.50	1.53	TR	-	.005	

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AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********
		brown sericite spots up to 1 millimetre diameter. Locally moderately chloritic. Contains 1 to 2% pervasive calcite alteration. Locally contains brown yellow limonitic sections up to 5 centimetres from irregular fractures. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate veins locally with chloritic streaks and rims. Trace fine grained disseminated pyrite.
10.97	12.50	Locally contains extensive quartz carbonate veins.
14.02	15.54	Becoming more calcareous with decreasing iron carbonate alteration down hole.
15.54	17.07	Locally pervasive iron carbonate alteration grading down hole to halo altered gabbro.
17.07	35.36	GABBRO
		Halo altered gabbro. Medium to dark green gray, medium grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% sub angular to elongate medium to dark green chloritic patchs, possibly altered pyroxene with 15 to 20% sub angular medium gray green carbonatized patchs, possibly altered feldspar, up to 5 millimetres long with 1 to 2% irregular yellow brown sericite spots up to 1 millimetre diameter. Locally moderately chloritic. Contains 1 to 2% pervasive iron carbonate alteration. Locally contains brown yellow limonitic sections up to 5 centimetres from irregular fractures. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate veins locally with chloritic streaks and rims. Trace fine grained disseminated pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271401	12.50	14.02	1.52	TR	-	<.005	
FX271402	14.02	15.54	1.52	TR	-	<.005	
FX271403	15.54	17.07	1.53	TR	-	<.005	
FX271404	17.07	18.59	1.52	TR	-	<.005	
FX271405	18.59	20.12	1.53	TR	-	<.005	
FX271406	20.12	21.64	1.52	TR	-	<.005	
FX271407	21.64	23.16	1.52	TR	-	.005	
FX271408	23.16	24.69	1.53	TR	-	.005	
FX271409	24.69	26.21	1.52	TR	-	.005	
FX271410	26.21	27.74	1.53	TR	-	.010	
FX271411	27.74	29.26	1.52	TR	-	<.005	
FX271412	29.26	30.78	1.52	TR	-	<.005	
FX271413	30.78	32.31	1.53	TR	-	<.005	
FX271414	32.31	33.83	1.52	TR	-	<.005	
FX271415	33.83	35.36	1.53	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		23.16 24.69 Contains 20 centimetre wide quartz vein with minor iron carbonate and chloritic gabbro inclusions at 23.16.								
		26.21 27.74 Locally irregular quartz carbonate veins up to 4 centimetres wide at 27.13.								
		30.78 32.31 Quartz carbonate veins increasing down hole.								
35.36	43.74	GABBRO								
		Coarse grained altered gabbro grading to halo altered gabbro. Coarse grained sections with 10 to 15% sub angular light green gray carbonatized patchs and buff white feldspars with 5 to 10% irregular and sub angular medium to dark green chloritic patch up to 2 centimetres long. Locally moderately hematitized and bleached in silicified sections. Locally contains irregular and branching yellow brown patchs possibly leucoxene. Locally grading to medium grained halo altered gabbro with 2 to 3% light gray brown quartz carbonate veins. Contains 2 to 3% pervasive calcite and iron carbonate alteration. Trace medium grained disseminated pyrite.	FX271416	35.36	36.88	1.52	TR	-	<.005	
			FX271417	36.88	38.40	1.52	TR	-	<.005	
			FX271418	38.40	39.93	1.53	TR	-	.015	
			FX271419	39.93	41.45	1.52	TR	-	.010	
			FX271420	41.45	42.98	1.53	TR	-	<.005	
			FX271421	42.98	43.74	.76	TR	-	<.005	
		35.36 36.88 Coarse grained altered gabbro grading to medium grained halo altered gabbro down hole.								
		38.40 39.93 Grain size increasing down hole to coarse grained altered gabbro.								
		41.45 42.98 Grading to medium grained halo altered gabbro								
		42.98 43.74 Gabbro becoming indistinct grading to strongly altered gabbro down hole.								
43.74	45.42	GABBRO								
		Strongly altered gabbro. Composed of 10 to 15% irregular	FX271422	43.74	44.50	.76	TR	-	1.710	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		medium to dark green chloritic patchs with minor buff white patchs up to 1 centimetre long. Moderately silicified with weakly to moderately hematitized patchs. Locally strongly chloritic. contains 30 centimetre wide quartz iron carbonate vein with numerous irregular tourmaline and chlorite, streaks and rims up to 1 centimetre wide. Locally minor fuchsitic streaks along quartz carbonate veins. Contains 1% irregular gray to brown red quartz carbonate veins up to 2 centimetres wide. Contains 1 to 2% medium grained to coarse grained pyrite and chalcopyrite disseminated and in irregular streaks associated with quartz carbonate veins.	FX271423	44.50	45.42	.92	TR	-	.070	
		43.74 44.50 Locally strongly altered along 30 centimetre wide quartz carbonate vein.								
		44.50 45.42 Moderately hematitized and silicified grading to halo altered gabbro down hole.								
45.42	47.55	GABBRO								
		Halo altered gabbro. Medium to dark green gray, medium grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% sub angular to elongate medium to dark green chloritic patchs, possibly altered pyroxene with 15 to 20% sub angular medium gray green carbonatized patchs, possibly altered feldspar, up to 5 millimetres long with 1 to 2% irregular yellow brown sericite patchs up to 1 millimetre diameter. Locally moderately chloritic. Contains 1 to 2% pervasive iron carbonate alteration. Locally contains brown yellow limonitic sections up to 5 centimetres from irregular fractures. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate	FX271424	45.42	46.02	.60	TR	-	.005	
			FX271425	46.02	47.55	1.53	TR	-	.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		veins locally with chloritic streaks and rims. Trace fine grained disseminated pyrite.								
47.55	62.79	GABBRO								
		Medium to dark green, medium grained, moderately hard, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% sub angular medium to dark green chloritic patchs, possibly altered pyroxene with 20 to 25% green gray calcareous patchs, possibly carbonatized feldspars, up to 3 millimetres long. Contains up to 1% fine grained irregular leucoxene patchs. Locally leucocratic with 20 to 25% medium to dark green and 15 to 20% buff gray green patchs. Contains 1% cross cutting medium gray quartz carbonate veins up to 1 centimetre wide. Locally weakly bleached. Trace fine grained disseminated pyrite.	FX271426	47.55	49.07	1.52	TR	-	<.005	
			FX271427	49.07	50.60	1.53	TR	-	.010	
			FX271428	50.60	52.12	1.52	TR	-	.015	
			FX271429	52.12	53.64	1.52	TR	-	.055	
			FX271430	53.64	55.17	1.53	TR	-	.005	
			FX271431	55.17	56.69	1.52	TR	-	<.005	
			FX271432	56.69	58.22	1.53	TR	-	<.005	
			FX271433	58.22	59.74	1.52	TR	-	<.005	
			FX271434	59.74	61.20	1.46	TR	-	.005	
			FX271435	61.20	62.79	1.59	TR	-	.005	
		47.55 49.07 Locally leucocratic.								
		61.20 62.79 Becoming slightly more leucocratic with decreasing pervasive iron carbonate alteration down hole. Locally fine grained.								
62.79	75.59	GABBRO								
		Leucocratic gabbro. Dark green to buff white, medium grained, moderately hard, not magnetic, massive. Composed of 25 to 30% medium to dark green pyroxene with 20 to 25% buff white to light gray green feldspar grains up to 2 millimetres long. Locally weakly epidotized. Contains 1% irregular fine grained leucoxene patchs. Minor pervasive calcite alteration. Moderately calcareous along fractures and chloritic along quartz	FX271436	62.79	64.31	1.52	TR	-	<.005	
			FX271437	64.31	65.84	1.53	TR	-	<.005	
			FX271438	65.84	67.36	1.52	TR	-	.005	
			FX271439	67.36	68.88	1.52	TR	-	<.005	
			FX271440	68.88	70.14	1.26	TR	-	<.005	
			FX271441	70.14	71.93	1.79	TR	-	<.005	
			FX271442	71.93	73.46	1.53	TR	-	<.005	
			FX271443	73.46	74.98	1.52	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		veins. Minor disseminated calcite alteration. Contains 1% medium gray quartz calcite veinlets up to 4 centimetres wide with minor epidotized stringers up to 1 centimetre wide. Trace fine grained disseminated pyrite.	FX271444	74.98	75.59	.61	TR	-	<.005	
		62.79 64.31 Locally moderately chloritic.								
		64.31 65.84 As above.								
		70.14 71.93 Becoming moderately to strongly chloritic with pervasive calcite alteration down hole.								
		71.93 73.46 Becoming less strongly chloritic down hole.								
		74.98 75.59 Feldspar grains becoming moderately epidotized grading to sub halo alteration down hole.								
75.59	97.84	GABBRO								
		Sub halo alteration. Medium to dark green gray, medium grained, moderately soft, not magnetic, massive to weakly foliated. Composed of 20 to 25% sub angular to elongate medium to dark green chloritic patchs with 15 to 20% sub angular medium gray green weakly epidotized patchs up to 2 millimetres long. Locally limonite along fractures. Contains 1 to 2% pervasive calcite alteration with 1 to 2% irregular yellow brown sericite patchs up to 1 millimetre diameter. Locally moderately chloritic. Locally leucocratic in less altered sections. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate veins locally with chloritic streaks and rims. Trace fine grained disseminated pyrite.	FX271445	75.59	76.50	.91	TR	-	<.005	
			FX271446	76.50	78.03	1.53	TR	-	<.005	
			FX271447	78.03	79.55	1.52	TR	-	<.005	
			FX271448	79.55	81.08	1.53	TR	-	<.005	
			FX271449	81.08	82.60	1.52	TR	-	<.005	
			FX271450	82.60	84.12	1.52	TR	-	<.005	
			FX271451	84.12	85.44	1.32	TR	-	<.005	
			FX271452	85.44	87.17	1.73	TR	-	<.005	
			FX271453	87.17	88.70	1.53	TR	-	.005	
			FX271454	88.70	90.22	1.52	TR	-	.005	
			FX271455	90.22	91.74	1.52	TR	-	.010	
			FX271456	91.74	93.27	1.53	TR	-	<.005	
			FX271457	93.27	94.79	1.52	TR	-	.020	
			FX271458	94.79	96.32	1.53	TR	-	.005	
			FX271459	96.32	97.84	1.52	TR	-	<.005	
		75.59 76.50 Locally fine grained.								
		78.03 79.55 Locally weakly leucocratic.								
		81.08 82.60 Grains becoming indistinct down hole.								
		85.44 87.17 Locally moderately bleached up to 5								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		millimetres from quartz carbonate veins.								
87.17	88.70	Contains 20 centimetre wide quartz iron carbonate vein with irregular iron carbonate, chlorite, and tourmaline stringers up to 5 millimetres wide.								
90.22	91.74	Minor coarse grained pyrite clots associated with quartz calcite veins.								
93.27	94.79	Locally vuggy.								
94.79	96.32	As above.								
96.32	97.84	Becoming leucocratic down hole with decreasing epidotized and carbonatized feldspars.								
97.84	102.41	GABBRO								
		Sub halo altered leucocratic gabbro. Dark green to buff white, medium grained, moderately hard, not magnetic, massive. Composed of 25 to 30% medium to dark green pyroxene with 20 to 25% buff white to light gray green feldspar crystals up to 2 millimetres long. Locally weakly epidotized. Contains 1% irregular fine grained leucoxene patchs. Contains 1 to 2% pervasive calcite alteration. Locally moderately calcareous and chloritic along fractures. Contains 1% medium gray quartz calcite veinlets up to 4 centimetres wide with minor epidotized stringers up to 1 centimetre wide. Trace fine grained disseminated pyrite.	FX271460	97.84	99.36	1.52	TR	-	<.005	
99.36	100.89	Locally moderately chloritic with epidotized feldspars.	FX271461	99.36	100.89	1.53	TR	-	<.005	
			FX271462	100.89	102.41	1.52	TR	-	<.005	
102.41	106.98	GABBRO								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Sub halo alteration. Medium to dark green gray, medium grained, moderately soft, not magnetic, massive to weakly foliated. Composed of 20 to 25% sub angular to elongate medium to dark green chloritic patchs with 15 to 20% sub angular medium gray green weakly epidotized patchs up to 2 millimetres long. Locally limonite along fractures. Contains 1 to 2% pervasive calcite alteration with 1 to 2% irregular yellow brown sericite patchs up to 1 millimetre diameter. Locally moderately chloritic. Locally leucocratic in less altered sections. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate veins locally with chloritic streaks and rims. Trace fine grained disseminated pyrite.	FX271463	102.41	103.94	1.53	TR	-	<.005	
			FX271464	103.94	105.46	1.52	TR	-	<.005	
			FX271465	105.46	106.98	1.52	TR	-	<.005	
		105.46 106.98 Pervasive calcite alteration decreasing down hole grading to halo altered gabbro.								
106.98	112.23	GABBRO								
		Halo altered gabbro. Medium green, fine grained to medium grained, moderately hard, not magnetic, massive to weakly foliated. composed of 25 to 30% medium to dark green chloritic patchs with 15 to 20% medium gray green carbonatized patchs up to 3 millimetres long. Contains 1 to 2% pervasive iron carbonate alteration with minor sericitic patchs up to 1 millimetre wide. Minor irregular, cross cutting medium gray quartz iron carbonate veinlets up to 1 centimetre wide. Trace fine grained disseminated pyrite.	FX271466	106.98	108.31	1.33	TR	-	<.005	
			FX271467	108.31	110.03	1.72	TR	-	<.005	
			FX271468	110.03	111.56	1.53	TR	-	.010	
			FX271469	111.56	112.23	.67	TR	-	.005	
112.23	113.48	GABBRO								
		Strongly altered gabbro. Medium gray green, fine grained	FX271470	112.23	113.48	1.25	TR	-	.085	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		to medium grained, moderately hard, not magnetic, massive to weakly foliated. Composed of 20 to 25% medium to dark green patchs with 10 to 15% gray green carbonatized patchs up to 5 millimetres long. Extensive iron carbonate alteration with 1 to 2% irregular sericitic patchs up to 3 millimetres diameter. Contains 2 to 5% irregular and cross cutting gray green iron carbonate stringers up to 5 millimetres wide. Locally moderately fuchsitic along quartz carbonate veins. Contains up to 1% fine grained to medium grained euhedral to subhedral disseminated pyrite.								
113.48	114.76	DIKE								
		Possibly intensely altered feldspar porphyry. Medium gray brown, fine grained to medium grained, moderately hard, not magnetic, massive. Locally contains 5 to 6% sub rounded indistinct medium gray patchs, possibly altered feldspar phenocrysts, up to 5 millimetres long. Minor chloritic and fuchsitic clots up to 2 millimetres diameter. Contains 1 to 2% pervasive iron carbonate alteration. Minor quartz carbonate veins. Contains 1 to 2% fine grained to medium grained euhedral to subhedral disseminated pyrite.	FX271471	113.48	114.76	1.28	TR	-	.095	
114.76	118.17	GABBRO								
		Intensely altered gabbro. Light emerald green to medium green gray, fine grained to medium grained, moderately hard, not magnetic, massive and locally moderately to strongly foliated. Extensive fuchsite alteration with 2 to 5% pervasive iron carbonate alteration. Locally	FX271472	114.76	115.55	.79	TR	-	.065	
			FX271473	115.55	116.13	.58	TR	-	.040	
			FX271474	116.13	117.20	1.07	TR	-	<.005	
			FX271475	117.20	117.65	.45	TR	-	.005	
			FX271476	117.65	118.17	.52	TR	-	.015	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M

**********ANALYSES**********

contains 1 to 2% irregular yellow brown patchs, possibly sericitic, up to 2 millimetres long with minor brown red hematitic spots up to 1 millimetre diameter. Contains irregular and cross cutting medium gray to buff white quartz veinlets with iron carbonate rims and buff gray to brown red quartz carbonate veins up to 4 centimetres wide. Locally contains iron carbonate veinlets up to 20 centimetres wide with irregular chloritic, fuchsitic, iron carbonate and tourmaline stringers up to 1 centimetre wide. Locally acicular tourmaline in smokey quartz carbonate veins. Locally brown red limonite stain along fractures. Contains 1 to 2% disseminated pyrite.

116.13 117.20 Becoming slightly less fuchsitic down hole.

117.20 117.65 Extensive iron carbonate veinlets with 20 centimetre wide smokey quartz tourmaline vein.

117.65 118.17 Contorted foliation along quartz carbonate veins. Grading down hole to less fuchsitic strongly altered gabbro.

118.17 125.27 GABBRO

Strongly altered gabbro. Medium green to blue green, fine grained to medium grained, moderately hard, not magnetic, massive to weakly foliated. Composed of 20 to 25% sub angular blue green to medium green chloritic patchs with 15 to 20% medium gray green patchs up to 2 millimetres long. Locally mottled texture with irregular blue gray chloritic patchs up to 5 centimetres long with brown red and yellow brown patchs 2 to 3 centimetres long. Contains extensive iron carbonate

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271477	118.17	119.18	1.01	TR	-	<.005	
FX271478	119.18	120.70	1.52	TR	-	<.005	
FX271479	120.70	122.22	1.52	TR	-	<.005	
FX271480	122.22	123.75	1.53	TR	-	<.005	
FX271481	123.75	125.27	1.52	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********
		alteration. Locally 5 to 7% brown red to medium gray irregular, cross cutting stockwork quartz iron carbonate veinlets up to 4 centimetres wide. Trace fine grained to medium grained disseminated pyrite.
		119.18 120.70 Stockwork quartz carbonate veins.
		122.22 123.75 Blue green chlorite becoming medium green down hole.
		123.75 125.27 Grading to halo altered gabbro down hole.
125.27	137.46	GABBRO
		Halo altered gabbro. Medium green to blue green, fine grained to medium grained, moderately hard, not magnetic, massive to moderately foliated. Composed of 20 to 25% sub angular medium to dark green chloritic patchs with 15 to 20% light gray green patchs up to 2 millimetres long. Locally mottled texture with irregular medium green chloritic patchs up to 5 centimetres long with brown red and yellow brown patchs 2 to 3 centimetres long. Contains extensive iron carbonate alteration. Contains 2 to 5% irregular, cross cutting medium gray green quartz carbonate veins. Locally rusty along fractures and in irregular vuggy stringers up to 1 centimetre wide. Locally contains 10 to 15% medium to light gray green quartz carbonate veins with minor tourmaline stringers becoming contorted and faulted near fine grained brown gray dikes up to 60 centimetres wide. Dikes contain 1% disseminated pyrite with chloritic rims. Trace disseminated pyrite.
		126.80 128.32 Quartz carbonate veins becoming contorted and faulted down hole.
		129.84 131.37 Contains 60 centimetre wide fine grained

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271482	125.27	126.80	1.53	TR	-	<.005	
FX271483	126.80	128.32	1.52	TR	-	<.005	
FX271484	128.32	129.84	1.52	TR	-	.030	
FX271485	129.84	131.37	1.53	TR	-	.065	
FX271486	131.37	132.89	1.52	TR	-	.045	
FX271487	132.89	134.42	1.53	TR	-	.005	
FX271488	134.42	135.94	1.52	TR	-	<.005	
FX271489	135.94	137.46	1.52	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		dike with irregular sharp contacts.								
	131.37	132.89 Contains 20 centimetre wide dike, locally fuchsitic along contacts.								
	132.89	134.42 Becoming more chloritic down hole.								
	134.42	135.94 Medium to light brown stain in iron carbonate veinlets and in irregular patchs up to 1 millimetre diameter. Possibly altered iron carbonate.								
	135.94	137.46 As above.								
137.46	149.66	GABBRO								
		Gabbro to peridotite transition. Medium to dark green, fine grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% elongate dark green chloritic patchs with 15 to 20% medium green gray carbonatized patchs up to 3 millimetres long. Moderate pervasive iron carbonate alteration and locally weakly talcose. Contains 1 to 2% irregular, cross cutting buff gray quartz iron carbonate veinlets up to 1 centimetre wide. Trace coarse grained euhedral to subhedral pyrite concentrated along quartz carbonate veins.	FX271490	137.46	138.99	1.53	TR	-	<.005	
			FX271491	138.99	140.51	1.52	TR	-	<.005	
			FX271492	140.51	142.04	1.53	TR	-	.005	
			FX271493	142.04	143.56	1.52	TR	-	<.005	
			FX271494	143.56	145.08	1.52	TR	-	<.005	
			FX271495	145.08	146.61	1.53	TR	-	<.005	
			FX271496	146.61	148.13	1.52	TR	-	.005	
			FX271497	148.13	149.66	1.53	TR	-	.005	
	137.46	138.99 Not magnetic at gradational upper contact, becoming weakly magnetic down hole.								
	146.61	148.13 Increasing quartz carbonate veins down hole								
	148.13	149.66 Locally vuggy quartz carbonate veins.								
149.66	151.18	FAULT								
		2 Centimetre wide light green fault gouge with brecciated angular gabbro fragments up to 1 centimetre long.	FX271498	149.66	151.18	1.52	TR	-	<.005	

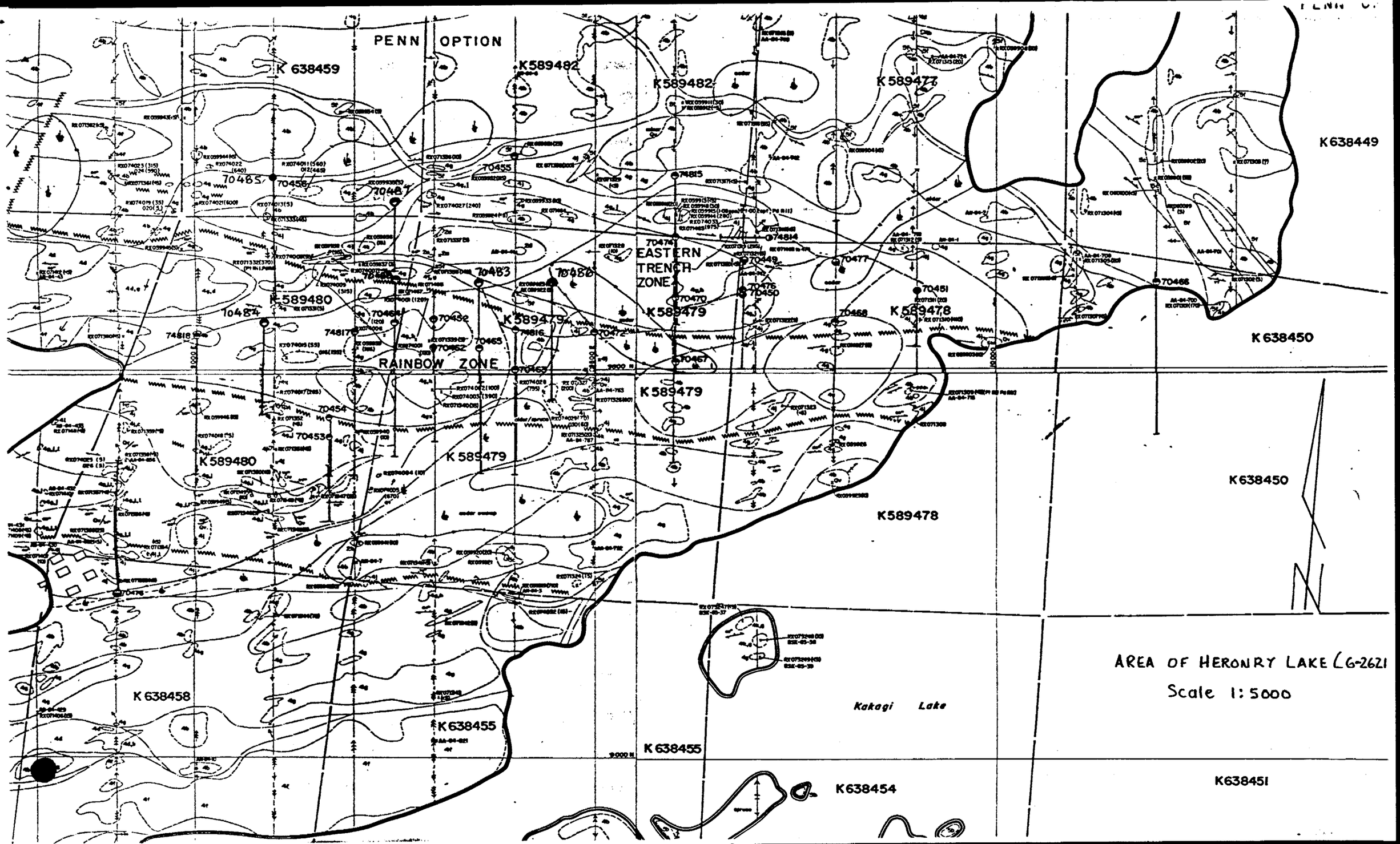
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		149.66 151.18 Minor talc in quartz carbonate veins.								
151.18	154.23	GABBRO								
		Gabbro to peridotite transition. Medium to dark green, fine grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% elongate dark green chloritic patchs with 15 to 20% medium green gray carbonatized patchs up to 3 millimetres long. Moderate pervasive iron carbonate alteration and locally weakly talcose. Contains 1 to 2% irregular, cross cutting buff gray quartz iron carbonate veinlets up to 1 centimetre wide locally with minor talc. Trace coarse grained euhedral to subhedral pyrite concentrated along quartz carbonate veins.	FX271499	151.18	152.70	1.52	TR	-	.005	
			FX271500	152.70	154.23	1.53	TR	-	<.005	
154.23	178.61	GABBRO								
		Halo altered gabbro. Medium green to blue green, fine grained to medium grained, moderately hard, weakly magnetic, massive to moderately foliated. Composed of 20 to 25% sub angular medium to dark green chloritic patchs with 15 to 20% light gray green patchs up to 2 millimetres long. Locally mottled texture with irregular medium green chloritic patchs up to 5 centimetres long with brown red and yellow brown patchs 2 to 3 centimetres long. Contains extensive iron carbonate alteration. Locally moderately chloritic along fractures. Contains 2 to 5% quartz iron carbonate veinlets with minor talc and chloritic streaks and rims. Trace disseminated pyrite.	FX271501	154.23	155.75	1.52	TR	-	.040	
			FX271502	155.75	157.28	1.53	TR	-	<.005	
			FX271503	157.28	158.80	1.52	TR	-	<.005	
			FX271504	158.80	160.32	1.52	TR	-	<.005	
			FX271505	160.32	161.85	1.53	TR	-	<.005	
			FX271506	161.85	163.37	1.52	TR	-	<.005	
			FX271507	163.37	164.90	1.53	TR	-	<.005	
			FX271508	164.90	166.42	1.52	TR	-	<.005	
			FX271509	166.42	167.94	1.52	TR	-	<.005	
			FX271510	167.94	169.47	1.53	TR	-	<.005	
			FX271511	169.47	170.99	1.52	TR	-	<.005	
			FX271512	170.99	172.52	1.53	TR	-	<.005	
			FX271513	172.52	174.04	1.52	TR	-	<.005	
		155.75 157.28 Quartz carbonate veins decreasing down hole	FX271514	174.04	175.56	1.52	TR	-	.015	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	160.32	161.85 Locally slightly bleached with light gray carbonatized patchs along quartz carbonate veins.	FX271515	175.56	177.09	1.53	TR	-	<.005	
			FX271516	177.09	178.61	1.52	TR	-	<.005	
	174.04	175.56 Moderately talcose. Quartz calcite veinlets increasing down hole with decreasing iron carbonate.								
	175.56	177.09 Vuggy quartz carbonate veins.								
	177.09	178.61 Pervasive iron carbonate alteration decreasing down hole with increasing calcite alteration grading to sub halo altered gabbro.								
178.61	203.00	GABBRO								
		Sub halo alteration. Medium to dark green gray, medium grained, moderately soft, weakly magnetic, massive to weakly foliated. Composed of 25 to 30% sub angular to elongate medium to dark green chloritic patchs, possibly altered pyroxene with 15 to 20% sub angular medium gray green carbonatized patchs, possibly altered feldspar, up to 5 millimetres long with 1 to 2% irregular yellow brown sericite patchs up to 1 millimetre diameter. Locally mottled texture with irregular medium to dark green chloritic and medium green gray carbonatized patchs up to 2 centimetres long. Locally moderately chloritic. Contains 1 to 2% pervasive calcite alteration. Locally contains brown yellow limonitic sections up to 5 centimetres from irregular fractures. Contains 1 to 3% irregular, cross cutting buff gray to gray green quartz carbonate veins locally with chloritic streaks and rims. Minor talcose quartz carbonate veins. Trace disseminated pyrite.	FX271517	178.61	180.14	1.53	TR	-	<.005	
			FX271518	180.14	181.66	1.52	TR	-	<.005	
			FX271519	181.66	183.18	1.52	TR	-	<.005	
			FX271520	183.18	184.71	1.53	TR	-	<.005	
			FX271521	184.71	186.23	1.52	TR	-	<.005	
			FX271522	186.23	187.76	1.53	TR	-	<.005	
			FX271523	187.76	189.28	1.52	TR	-	<.005	
			FX271524	189.28	190.80	1.52	TR	-	<.005	
			FX271525	190.80	192.33	1.53	TR	-	<.005	
			FX271526	192.33	193.85	1.52	TR	-	.005	
			FX271527	193.85	195.38	1.53	TR	-	<.005	
			FX271528	195.38	196.90	1.52	TR	-	<.005	
			FX271529	196.90	198.42	1.52	TR	-	.005	
			FX271530	198.42	199.45	1.03	TR	-	<.005	
			FX271531	199.45	201.47	2.02	TR	-	<.005	
			FX271532	201.47	203.00	1.53	TR	-	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	190.80	192.33 Mottled texture becoming less distinct down hole.								
	192.33	193.85 Locally strongly chloritic.								
	201.47	203.00 Pervasive calcite alteration decreasing down hole grading to halo altered gabbro with increasing iron carbonate alteration.								
203.00	217.02	GABBRO								
		Halo altered gabbro. Medium green, fine grained to medium grained, moderately hard, weakly magnetic, massive to weakly foliated. composed of 25 to 30% medium to dark green chloritic patchs with 15 to 20% medium gray green carbonatized patchs up to 3 millimetres long. Contains 1 to 2% pervasive iron carbonate alteration with minor sericitic patchs up to 1 millimetre wide. Minor irregular, cross cutting medium gray quartz carbonate veinlets up to 1 centimetre wide. Trace fine grained disseminated pyrite.	FX271533	203.00	204.52	1.52	TR	-	<.005	
			FX271534	204.52	206.04	1.52	TR	-	<.005	
			FX271535	206.04	207.57	1.53	TR	-	<.005	
			FX271536	207.57	209.09	1.52	TR	-	.005	
			FX271537	209.09	210.62	1.53	TR	-	.005	
			FX271538	210.62	212.14	1.52	TR	-	.010	
			FX271539	212.14	213.66	1.52	TR	-	<.005	
			FX271540	213.66	215.19	1.53	TR	-	.005	
			FX271541	215.19	216.10	.91	TR	-	.005	
			FX271542	216.10	217.02	.92	TR	-	<.005	
	204.52	206.04 Becoming slightly less chloritic down hole.								
	209.09	210.62 Locally calcareous.								
	216.10	217.02 Becoming medium green down hole to sharp lower contact with intensely altered gabbro								
217.02	251.76	AGGLOMERATE								
		Intensely altered agglomerate. Medium to light green, not magnetic, with variable compositions and textures, possibly bombs, in sections up to 30 centimetres wide. Moderately to strongly silicified. Locally contains 10 to 15% elongate and sub angular medium to dark green patchs possibly fragments up to 4 centimetres long in a	FX271543	217.02	218.24	1.22	TR	-	.020	
			FX271544	218.24	219.76	1.52	TR	-	.030	
			FX271545	219.76	221.28	1.52	TR	-	.005	
			FX271546	221.28	222.81	1.53	TR	-	<.005	
			FX271547	222.81	224.33	1.52	TR	-	.020	
			FX271548	224.33	225.86	1.53	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********
		fine grained, light to medium green, hard, not magnetic, massive to well foliated matrix. Locally bleached along quartz carbonate veins and weakly hematitized. Contains 1 to 2% irregular, cross cutting medium gray to buff white quartz iron carbonate and quartz calcite veinlets up to 2 centimetres wide locally up to 10 centimetres wide with irregular chloritic stringers and rims up to 1 millimetre wide irregular sericitic streaks up to 1 millimetre wide. Minor fuchsite associated with quartz carbonate veins. Locally calcareous along fractures. Trace fine grained disseminated pyrite.
225.86	227.38	Contains 10 centimetre wide quartz carbonate vein.
233.48	235.00	Locally moderately bleached.
235.00	236.52	Locally strongly silicified.
242.62	244.14	Becoming well foliated and less silicified down hole.
248.72	250.24	Becoming more silicified and less foliated down hole.
250.24	251.76	Locally bleached. Foot of hole at 251.76.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX271549	225.86	227.38	1.52	TR	-	<.005	
FX271550	227.38	228.90	1.52	TR	-	<.005	
FX271551	228.90	230.73	1.83	TR	-	<.005	
FX271552	230.73	231.95	1.22	TR	-	<.005	
FX271553	231.95	233.48	1.53	TR	-	.025	
FX271554	233.48	235.00	1.52	TR	-	<.005	
FX271555	235.00	236.52	1.52	TR	-	<.005	
FX271556	236.52	238.05	1.53	TR	-	<.005	
FX271557	238.05	239.57	1.52	TR	-	<.005	
FX271558	239.57	241.10	1.53	TR	-	<.005	
FX271559	241.10	242.62	1.52	TR	-	<.005	
FX271560	242.62	244.14	1.52	TR	-	<.005	
FX271561	244.14	245.67	1.53	TR	F50	<.005	
FX271562	245.67	247.19	1.52	TR	F50	<.005	
FX271563	247.19	248.72	1.53	TR	F45	<.005	
FX271564	248.72	250.24	1.52	TR	-	<.005	
FX271565	250.24	251.76	1.52	TR	-	<.005	


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70458
70455
74815
70474
EASTERN
TRENCH
ZONE
74814
70449
70477
70483
70480
70476
70450
70451
70466
K589480
70484
K589479
K589478
70468
K638450
74818
74817
74816
70462
70465
RAINBOW ZONE
70467
K589479
70454
70453
K589480
K589479
K589478
K638450
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********IN[illegible]LIMITED**********

FIELD EXPLOI[illegible]N DIAMOND DRILL LOG

PROJECT	: PENN OPTION	LATITUDE	:N 9750.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03/25/88
PROPERTY	: CROW-PENN	DEPARTURE	:E 9100.0 M	TOWNSHIP	:	COMPLETED	: 03/28/88
BOREHOLE	: 70485-0	ELEVATION	: 1368.0 M	PROVINCE	: ONTARIO	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 355	COUNTRY	: CANADA	DRILLED BY	: D.W. COATES ENTERPRISES
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K638459	DRILL TYPE	: LONGYEAR 38
DEPTH	: 309.7 M	LOGGED BY	: S. VIDITO	GRID NAME	:	TEST METHOD	: ACID
				CORE SIZE	: BQ	ASSAYED FOR	: Au

COMMENTS : COLLAR IS 115M E AND 50M N OF POST#4

LEFT IN HOLE:5.18 METERS OF BW CASING AND SHOE

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
6.10		-55.00	121.92		-51.00	243.84		-48.00			
60.96		-54.00	182.88		-50.00	304.80		-47.00			

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
.00	5.18	OVERBURDEN Casing through 5.18 metres of sand and gravel.	NS	.00	5.18	5.18			n/a	
5.18	7.27	DIKE Silicified dike. Light gray green, fine grained, hard, not magnetic massive. Contains 5 to 10% irregular chlorite patchs up to 1 millimetre diameter. Strongly silicified and locally weakly hematitized with minor fuchsite. Contains up to 5% pervasive iron carbonate alteration as irregular buff white patchs up to 1 millimetre diameter. 5 to 10% irregular cross cutting quartz iron carbonate veinlets with brown red hematite	FX271001	5.18	5.94	.76	1	-	1.660	
			FX271002	5.94	6.40	.46	2	-	2.330	
			FX271003	6.40	7.27	.87	1	-	.560	

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ASSESSMENT FILES
OFFICE
SEP 26 1988
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70485-0
PAGE 1

KENORA
MINING DIV.
RECEIVED
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********
		stain and dark green chloritic contacts parallel to core axis. Contains 2 to 3% medium grained euhedral to subhedral disseminated pyrite.
6.40	7.27	Minor quartz carbonate veins with strongly silicified zone up to 5 centimetres wide.
7.27	26.21	GABBRO
		Intensely altered gabbro. Medium to lime green locally with irregular brown red and brown yellow patchs, medium grained, moderately hard, not magnetic, weakly to moderately foliated. Composed of 25 to 30% sub rounded to elongate dark green chloritic patchs up to 3 millimetres long locally altered to fuchsite with 15 to 20% elongate irregular medium gray green iron carbonate patchs up to 2 millimetres long. Locally contains irregular moderate to strong pervasive hematitization with 1 to 2% irregular diffuse sericitic patchs up to 5 millimetres long parallel to foliation. Contains soft brown sections with minor elongate chloritic streaks up to 30 centimetres wide along vuggy fractures. Numerous irregular cross cutting medium gray to brown red quartz carbonate veins with iron carbonate rims up to 1 centimetre wide and 1 to 2% acicular tourmaline up to 5 millimetres long. Contains up to 1% fine grained to medium grained pyrite and chalcopyrite disseminated and in quartz carbonate veins.
7.27	7.92	Slightly bleached at sharp upper contact.
7.92	8.30	Brown yellow patchs up to 5 millimetres long parallel to foliation.
9.45	10.22	20 centimetre wide quartz iron carbonate vein with irregular tourmaline streaks up to 1

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271004	7.27	7.92	.65	TR	-	.060	
FX271005	7.92	8.30	.38	TR	F50	.030	
FX271006	8.30	9.45	1.15	TR	-	.020	
FX271007	9.45	10.22	.77	TR	F45	.040	
FX271008	10.22	10.97	.75	TR	-	.020	
FX271009	10.97	11.75	.78	TR	-	.005	
FX271010	11.75	12.50	.75	TR	F35	.035	
FX271011	12.50	13.25	.75	TR	-	.010	
FX271012	13.25	14.02	.77	TR	-	<.005	
FX271013	14.02	14.76	.74	TR	-	.025	
FX271014	14.76	15.45	.69	TR	F45	<.005	
FX271015	15.45	16.30	.85	TR	F50	<.005	
FX271016	16.30	17.07	.77	TR	F45	.065	
FX271017	17.07	17.87	.80	TR	F30	.040	
FX271018	17.87	18.51	.64	TR	F30	.020	
FX271019	18.51	19.35	.84	TR	F40	.665	
FX271020	19.35	20.12	.77	TR	F40	.030	
FX271021	20.12	20.87	.75	TR	F35	.125	
FX271022	20.87	21.64	.77	TR	F30	.020	
FX271023	21.64	22.40	.76	TR	F50	.005	
FX271024	22.40	23.16	.76	TR	F40	.015	
FX271025	23.16	23.93	.77	TR	F30	.005	
FX271026	23.93	24.69	.76	TR	F35	.010	
FX271027	24.69	25.45	.76	TR	F30	.020	

FROM M	TO M	**********DESCRIPTION**********
		centimetre wide.
10.22	10.97	Brown yellow section.
10.97	11.75	As above.
13.25	14.02	Locally strongly hematitized. Numerous quartz carbonate veins with acicular and massive tourmaline streaks.
18.51	19.35	5 millimetre wide granular pyrite veinlet with minor iron carbonate and tourmaline at 18.90.
20.12	20.87	Angular gabbro fragments up to 2 centimetres wide in irregular quartz carbonate veins at 17.20.
23.93	24.69	Foliation becoming more distinct down hole.
24.69	25.45	Contains 5 millimetre wide granular pyrite veinlet at 27.75.
25.45	26.21	Fuchsite decreasing down hole with extensive concordant quartz carbonate veins up to 2 centimetres wide.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271028	25.45	26.21	.76	TR	F35	<.005	

FROM M	TO M	
26.21	42.28	GABBRO
		Halo altered gabbro. Medium to dark green gray, fine grained to medium grained, moderately hard, not magnetic, moderately to well foliated. Composed of 25 to 30% medium to dark green chloritic patchs with 20 to 25% elongate medium gray iron carbonate patchs up to 3 millimetres long. Locally weakly to moderately hematitized and sericitized. Moderately chloritic along fractures. Locally up to 5% irregular concordant and minor cross cutting quartz iron carbonate veinlets up to 3 centimetres wide. Contains up to 1% pyrite disseminated and in concordant quartz carbonate veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271029	26.21	26.97	.76	TR	F40	<.005	
FX271030	26.97	27.74	.77	TR	F35	.005	
FX271031	27.74	28.50	.76	TR	F35	.005	
FX271032	28.50	29.26	.76	TR	F30	.005	
FX271033	29.26	30.02	.76	TR	F35	.005	
FX271034	30.02	30.79	.77	TR	F40	<.005	
FX271035	30.79	31.55	.76	TR	F35	<.005	
FX271036	31.55	32.31	.76	TR	F35	.005	
FX271037	32.31	33.07	.76	TR	F40	<.005	
FX271038	33.07	33.83	.76	TR	F35	.105	
FX271039	33.83	34.59	.76	TR	F55	.030	

FROM M	TO M	**********DESCRIPTION**********
	26.21	26.97 Halo alteration grading down hole from intensely altered gabbro.
	26.97	27.74 Contains 30 centimetre wide section with chlorite becoming blue gray with elongate red brown to brown gray patchs, possibly altered iron carbonate, at 27.02.
	32.31	33.07 Locally more chloritic in stringers up to 2 millimetres wide.
	33.07	33.83 Slightly more mineralized along quartz carbonate veins. Locally contains vuggy red brown stringers up to 1 millimetre wide.
	34.59	35.36 Iron carbonate patchs becoming slightly more hematitized down hole.
	41.45	42.28 Locally more chloritic with red brown vuggy iron carbonate veinlets at sharp lower contact.
42.28	47.55	LAPILLI TUFF Halo altered lapilli tuff. Medium gray to green gray with minor brown red and yellow brown patchs. contains 7 to 10% elongate medium to dark green chloritic and medium to dark gray patchs, possibly fragments, up to 3 centimetres long in a fine grained, medium gray to green gray, moderately hard, not magnetic, moderately to well foliated ash tuff matrix. Contains up to 5% pervasive iron carbonate alteration. Moderately bleached and silicified up to 2 centimetres from quartz carbonate veins. Locally weakly to moderately hematitized in irregular patchs and along quartz iron carbonate veinlets. Contains 1% irregular, cross cutting quartz iron carbonate veinlets up to 3 centimetres wide and

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271040	34.59	35.36	.77	TR	F35	.010	
FX271041	35.36	36.88	1.52	TR	F35	.010	
FX271042	36.88	38.40	1.52	TR	-	.010	
FX271043	38.40	39.93	1.53	TR	F35	.010	
FX271044	39.93	41.45	1.52	TR	F50	.010	
FX271045	41.45	42.28	.83	TR	F40	.025	
FX271046	42.28	42.98	.70	TR	F45	.100	
FX271047	42.98	43.74	.76	1	F30	.050	
FX271048	43.74	44.50	.76	TR	-	.110	
FX271049	44.50	45.26	.76	TR	-	.015	
FX271050	45.26	46.03	.77	TR	F35	.025	
FX271051	46.03	46.78	.75	TR	F45	.025	
FX271052	46.78	47.55	.77	TR	F35	.060	

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********
		minor tourmaline carbonate veinlets up to 1 millimetre wide. Locally 1% fine grained to medium grained pyrite disseminated and in quartz carbonate veins.
		42.98 43.74 Locally moderately bleached with 1% fine grained disseminated pyrite.
		43.74 44.50 Locally red brown and yellow brown along stringers and moderately hematitized in silicified sections.
		44.50 45.26 Moderately bleached.
		46.78 47.55 Fragments becoming more distinct down hole.
47.55	59.44	LAPILLI TUFF
		Highly altered. Contains 15 to 20% elongate medium to dark green chloritic and medium to dark gray fragments up to 3 centimetres long in a fine grained, medium gray to brown red, moderately hard, not magnetic, well foliated matrix. Locally strongly bleached and moderately hematitized with indistinct foliation and fragments. Contains up to 3% pervasive iron carbonate alteration. Minor fuchsite in streaks up to 1 millimetre wide parallel to foliation. Contains 1 to 2% irregular, cross cutting quartz iron carbonate veinlets up to 2 centimetres wide with irregular tourmaline rims up to 2 millimetres wide. Minor irregular tourmaline carbonate stringers up to 2 millimetres wide. Minor fine grained disseminated pyrite.
		47.55 48.31 Locally weakly hematitized.
		48.31 49.07 Contains 4 centimetre wide quartz iron carbonate vein at 48.75.
		49.07 49.83 Locally moderately bleached.
		50.60 51.36 As above.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271053	47.55	48.31	.76	TR	F50	.015	
FX271054	48.31	49.07	.76	TR	F50	.050	
FX271055	49.07	49.83	.76	TR	F45	.030	
FX271056	49.83	50.60	.77	TR	F35	.080	
FX271057	50.60	51.36	.76	TR	-	.025	
FX271058	51.36	52.12	.76	TR	F40	<.005	
FX271059	52.12	52.88	.76	TR	F50	.340	
FX271060	52.88	53.64	.76	TR	F35	.075	
FX271061	53.64	54.14	.50	TR	F35	.075	
FX271062	54.14	55.17	1.03	TR	F40	.020	
FX271063	55.17	55.93	.76	TR	F40	.035	
FX271064	55.93	56.69	.76	TR	F45	.005	
FX271065	56.69	57.46	.77	TR	F35	.010	
FX271066	57.46	58.22	.76	TR	F40	.010	
FX271067	58.22	58.67	.45	TR	F50	2.250	
FX271068	58.67	59.44	.77	TR	F55	.065	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	52.12	52.88 Becoming strongly bleached and moderately hematitized with less distinct fragments down hole.								
	54.41	55.17 Cross cutting medium gray quartz and light gray brown quartz iron carbonate veinlets.								
	56.69	57.46 Locally strongly hematitized.								
	57.46	58.22 Becoming slightly more chloritic.								
	58.67	59.44 Strongly bleached.								
59.44	74.07	GABBRO								
		Halo altered gabbro. Medium to dark green gray, fine grained to medium grained, moderately hard, not magnetic, moderately to well foliated. Composed of 25 to 30% medium to dark green chloritic patchs with 20 to 25% elongate medium gray iron carbonate patchs up to 3 millimetres long. Locally weakly to moderately hematitized and sericitized with minor fuchsite. Moderately chloritic along fractures. Locally up to 5% irregular concordant and minor cross cutting quartz iron carbonate veinlets up to 3 centimetres wide. Contains up to 1% pyrite disseminated and in concordant quartz carbonate veins.	FX271069	59.44	60.35	.91	TR	F40	.040	
			FX271070	60.35	61.26	.91	TR	F35	.005	
			FX271071	61.26	62.03	.77	TR	F40	<.005	
			FX271072	62.03	62.79	.76	TR	F35	<.005	
			FX271073	62.79	64.31	1.52	TR	F40	.010	
			FX271074	64.31	65.84	1.53	TR	F40	<.005	
			FX271075	65.84	67.36	1.52	TR	F40	<.005	
			FX271076	67.36	68.88	1.52	TR	F45	<.005	
			FX271077	68.88	70.41	1.53	TR	F50	<.005	
			FX271078	70.41	71.93	1.52	TR	-	.005	
			FX271079	71.93	73.46	1.53	TR	F40	.005	
			FX271080	73.46	74.07	.61	TR	-	<.005	
	59.44	60.35 Irregular locally lenticular concordant and cross cutting quartz carbonate veins. Well foliated at sharp upper contact with foliation becoming less distinct down hole.								
	60.35	61.26 Minor chalcopyrite and unidentified black metallic mineral.								
	64.31	65.84 Locally red brown to brown yellow.								
	65.84	67.36 As above.								
	67.36	68.88 Locally weakly fuchsitic.								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
74.07	77.27	TUFF								
		Possibly intensely altered lapilli tuff. Light to medium green gray, fine grained to medium grained, hard, not magnetic, massive to weakly foliated. Locally contains 5 to 10% irregular and elongate dark green and buff white patchs, possibly fragments, up to 2 centimetres long in a fine grained light to medium green gray matrix. Locally strongly silicified with weak to moderate pervasive hematitization. Contains 1 to 2% irregular, cross cutting quartz iron carbonate veinlets up to 3 centimetres wide with minor irregular tourmaline streaks up to 1 millimetre wide. Minor fine grained disseminated pyrite.	FX271081	74.07	74.98	.91	TR	-	.060	
			FX271082	74.98	75.74	.76	TR	-	.010	
			FX271083	75.74	76.51	.77	TR	-	.025	
			FX271084	76.51	77.27	.76	TR	-	<.005	
		74.07 74.98 Strongly siliceous with irregular gabbro inclusions at irregular sharp upper contact.								
		74.98 75.74 Locally less siliceous with weak foliation.								
		75.74 76.51 As above.								
		76.51 77.27 Locally moderately fractured with irregular vuggy yellow brown stringers up to 3 millimetres wide.								
77.27	80.31	LAPILLI TUFF								
		Halo altered lapilli tuff. Composed of 5 to 10% elongate medium to dark green chloritic and light gray green patchs possibly fragments in a fine grained, medium green gray to medium gray green, moderately hard, not magnetic, weakly foliated ash tuff matrix. Locally weakly bleached with weak to moderate hematite alteration. Contains 5 to 10% pervasive iron carbonate	FX271085	77.27	78.03	.76	TR	-	.005	
			FX271086	78.03	79.55	1.52	TR	F45	<.005	
			FX271087	79.55	80.31	.76	TR	-	.010	

FROM M	TO M	**********DESCRIPTION**********
		alteration. Minor irregular concordant and cross cutting quartz iron carbonate veinlets up to 1 centimetre wide. Minor irregular tourmaline carbonate stringers up to 2 millimetres wide throughout. Trace fine grained disseminated pyrite.
		79.55 80.31 Becoming more hematitized down hole.
80.31	90.74	LAPILLI TUFF
		Highly altered. Contains 15 to 20% elongate medium to dark green chloritic and medium to dark gray fragments up to 3 centimetres long in a fine grained, medium gray to brown red, moderately hard, not magnetic, well foliated matrix. Contains irregular light green siliceous patchs up to 3 centimetres diameter in more highly altered sections. Locally strongly bleached and moderately hematitized with indistinct foliation and fragments. Contains up to 3% pervasive iron carbonate alteration. Minor fuchsite in streaks up to 1 millimetre wide parallel to foliation. Contains 1 to 2% irregular, cross cutting quartz iron carbonate veinlets up to 2 centimetres wide with irregular tourmaline rims up to 2 millimetres wide. Minor irregular tourmaline carbonate stringers up to 2 millimetres wide. Minor fine grained disseminated pyrite.
		82.60 84.12 Locally becoming more bleached with less distinct foliation.
		84.12 84.89 Becoming strongly silicified down hole.
		84.89 85.65 Strongly bleached and moderately hematitized with indistinct fragments. Locally strongly silicified.
		85.65 86.41 As above. Numerous irregular quartz

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271088	80.31	81.08	.77	TR	F40	<.005	
FX271089	81.08	82.60	1.52	TR	F40	.005	
FX271090	82.60	84.12	1.52	TR	F45	.020	
FX271091	84.12	84.89	.77	TR	F30	<.005	
FX271092	84.89	85.65	.76	TR	-	<.005	
FX271093	85.65	86.41	.76	TR	-	.010	
FX271094	86.41	87.17	.76	TR	-	.025	
FX271095	87.17	87.93	.76	TR	-	<.005	
FX271096	87.93	88.70	.77	TR	F40	.015	
FX271097	88.70	89.46	.76	TR	F30	.090	
FX271098	89.46	90.22	.76	TR	-	.005	
FX271099	90.22	90.74	.52	TR	F40	.005	

FROM M	TO M	**********DESCRIPTION**********
		carbonate veins with tourmaline and red brown streaks at 86.11.
	86.41 87.17	Irregular quartz carbonate veins end at 86.72. Locally moderately silicified light green spots up to 3 centimetres diameter.
	88.70 89.46	Moderately bleached and hematitized with indistinct foliation and fragments.
	89.46 90.22	Minor concordant black chlorite veinlets up to 2 millimetres wide.
	90.22 90.74	Locally less hematitized concordant bands at sharp lower contact.
90.74	101.56	GABBRO
		Intensely altered gabbro. Medium green gray to light emerald green with irregular yellow brown streaks, fine grained to medium grained, moderately soft, not magnetic, weakly to moderately foliated. Extensive fuchsite and iron carbonate alteration. Locally weakly hematitized and sericitized in irregular diffuse lenses and streaks up to 3 centimetres long. Locally 1% concordant and cross cutting quartz iron carbonate veinlets up to 3 centimetres wide with sharp alteration halo parallel to vein contacts up to 3 centimetres wide. Quartz carbonate veins locally contain massive and acicular tourmaline. Trace fine grained to medium grained disseminated pyrite.
	90.74 91.75	Well foliated at upper contact with concordant highly altered lapilli tuff inclusions.
	91.75 92.51	Becoming less chloritic and more fuchsitic down hole.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271100	90.74	91.75	1.01	TR	F30	.015	
FX271101	91.75	92.51	.76	TR	F35	.015	
FX271102	92.51	93.27	.76	TR	F40	.025	
FX271103	93.27	94.03	.76	TR	F40	.005	
FX271104	94.03	94.79	.76	TR	F30	.005	
FX271105	94.79	95.56	.77	TR	F30	.005	
FX271106	95.56	96.32	.76	TR	F35	.005	
FX271107	96.32	97.08	.76	TR	F40	<.005	
FX271108	97.08	97.84	.76	TR	-	.015	
FX271109	97.84	98.60	.76	TR	F35	.005	
FX271110	98.60	99.36	.76	TR	F30	<.005	
FX271111	99.36	100.13	.77	TR	-	<.005	
FX271112	100.13	100.89	.76	TR	F30	.010	
FX271113	100.89	101.56	.67	TR	-	.015	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		93.27 94.03 Contains 30 centimetre wide section with 15 to 20% red brown patchs, possibly altered iron carbonate, at 93.47.								
		94.03 94.79 Locally moderately hematitized.								
		98.60 99.36 Locally slightly less fuchsitic.								
		99.36 100.13 Minor disseminated euhedral pyrite crystals up to 5 millimetres wide.								
		100.89 101.56 Contains 4 and 5 centimetre wide quartz iron carbonate tourmaline veins at 100.98 and 101.35.								
101.56	103.66	FELDSPAR PORPHYRY								
		Altered feldspar porphyry. Composed of 10 to 15% euhedral to subhedral buff white feldspar phenocrysts up to 5 millimetres long with a fine grained, brown red, moderately hard, not magnetic, massive groundmass. Contains extensive pervasive hematitization with 1 to 2% fine grained iron carbonate patchs up to 1 millimetre wide throughout. Locally bleached with indistinct crystals. Minor irregular quartz iron carbonate veinlets up to 5 millimetres wide. Contains up to 1% fine grained disseminated pyrite.	FX271114	101.56	102.41	.85	1	-	.015	
			FX271115	102.41	103.66	1.25	TR	-	.090	
103.66	131.67	GABBRO								
		Intensely altered gabbro. Medium green gray to light emerald green with irregular yellow brown streaks, fine grained to medium grained, moderately soft, not magnetic, weakly to moderately foliated. Extensive fuchsite and iron carbonate alteration. Locally weakly hematitized and sericitized in irregular diffuse lenses	FX271116	103.66	104.17	.51	TR	-	.010	
			FX271117	104.17	105.46	1.29	TR	F30	.010	
			FX271118	105.46	106.22	.76	TR	F35	.005	
			FX271119	106.22	106.98	.76	TR	F35	.015	
			FX271120	106.98	107.75	.77	TR	-	.010	
			FX271121	107.75	108.51	.76	TR	F45	.015	

FROM M	TO M	**********DESCRIPTION**********
		and streaks up to 3 centimetres long. Locally contains less altered sections with bluish chlorite. Locally 1% concordant and cross cutting quartz iron carbonate veinlets up to 3 centimetres wide with sharp alteration halo parallel to vein contacts up to 3 centimetres wide. Quartz carbonate veins locally contain massive and acicular tourmaline. Trace fine grained to medium grained disseminated pyrite.
103.66	104.17	Locally less fuchsitic at sharp upper contact.
106.22	106.98	Numerous irregular, cross cutting quartz carbonate veins with indistinct foliation down hole.
106.98	107.75	Contains 8 centimetre wide quartz carbonate vein at 106.50.
109.27	110.03	Foliation becoming more distinct with less quartz carbonate veins down hole.
111.56	113.08	Slightly less altered with bluish chlorite.
113.08	114.60	As above.
114.60	116.13	Becoming more fuchsitic and hematitized down hole.
116.13	117.65	Becoming more hematitized in irregular and diffuse patchs and streaks.
117.65	118.18	Contains lenticular sericitic and hematitized patchs up to 3 centimetres long with long axes parallel to foliation.
120.70	122.22	Locally 15 to 20% red brown spots up to 1 millimetre wide.
122.22	123.75	Locally less altered with bluish chlorite down hole.
125.27	126.80	Becoming more strongly fuchsitic and hematitized.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271122	108.51	109.27	.76	TR	F30	.015	
FX271123	109.27	110.03	.76	TR	F30	<.005	
FX271124	110.03	110.79	.76	TR	F35	.010	
FX271125	110.79	111.56	.77	TR	F35	.010	
FX271126	111.56	113.08	1.52	TR	F30	.010	
FX271127	113.08	114.60	1.52	TR	-	.005	
FX271128	114.60	116.13	1.53	TR	-	.025	
FX271129	116.13	117.65	1.52	TR	F35	.015	
FX271130	117.65	118.18	.53	TR	-	.005	
FX271131	118.18	120.70	2.52	TR	-	.010	
FX271132	120.70	122.22	1.52	TR	F30	.030	
FX271133	122.22	123.75	1.53	TR	-	<.005	
FX271134	123.75	125.27	1.52	TR	F35	.005	
FX271135	125.27	126.80	1.53	TR	F30	.010	
FX271136	126.80	128.32	1.52	TR	F30	<.005	
FX271137	128.32	129.84	1.52	TR	F30	.005	
FX271138	129.84	130.76	.92	TR	F40	.030	
FX271139	130.76	131.67	.91	TR	F40	.005	

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	129.84	130.76 Increasing sericitization in elongate weakly to moderately hematitized patchs down hole. Locally strongly fuchsitic.								
	130.76	131.67 As above.								
131.67	133.05	DIKE								
		Possibly felsite dike. Light gray brown to light gray green, fine grained, moderately hard, not magnetic, massive. Locally weak pervasive hematitization. Minor elongate fuchsitic patchs up to 2 millimetres long. Minor irregular, cross cutting quartz iron carbonate stringers up to 5 millimetres wide locally with fuzzy dark gray to black halos up to 3 millimetres wide. Contains up to 1% fine grained pyrite disseminated and in quartz carbonate veins. Minor fine grained disseminated chalcopyrite.	FX271140	131.67	133.05	1.38	1	-	.330	
133.05	138.23	GABBRO								
		Altered gabbro. Medium green gray to light lime green with irregular yellow brown streaks, fine grained to medium grained, moderately soft, not magnetic, weakly to moderately foliated. Locally fuchsitic in strongly altered sections with moderate iron carbonate alteration. weakly hematitized and sericitized in irregular diffuse lenses and streaks up to 3 centimetres long. Locally 1% concordant and cross cutting quartz iron carbonate veinlets up to 3 centimetres wide with sharp alteration halo parallel to vein contacts up to 3 centimetres wide. Quartz carbonate veins locally contain massive and acicular tourmaline. Trace fine grained to	FX271141	133.05	134.42	1.37	TR	-	.065	
			FX271142	134.42	135.94	1.52	TR	-	.145	
			FX271143	135.94	136.70	.76	1	F45	.140	
			FX271144	136.70	137.46	.76	TR	-	.075	
			FX271145	137.46	138.23	.77	TR	-	.120	

FROM M	TO M	**********DESCRIPTION**********
		medium grained disseminated pyrite.
	135.94 136.70	Strongly altered with numerous weakly hematitized quartz carbonate veins with irregular chloritic rims. Contains up to 1% medium grained to coarse grained disseminated pyrite.
	136.70 137.46	Numerous quartz iron carbonate veinlets with irregular chloritic streaks and rims.
	137.46 138.23	Fuchsite becoming less extensive down hole with increasing bluish chlorite locally with sericitic and hematitized patchs.
138.23	145.08	GABBRO
		Halo altered gabbro. Medium green to light green yellow, fine grained to medium grained, moderately hard, not magnetic, weakly foliated to massive. Contains 10 to 15% irregular, elongate light yellow green sericitic and medium to dark green chloritic patchs and streaks up to 3 centimetres long. Locally weakly to moderately hematitized in irregular streaks and patchs as well. Contains up to 5% pervasive iron carbonate alteration. Minor fuchsitic patchs. Locally contains sections with 15 to 20% red brown to yellow brown spots, possibly altered iron carbonate , up to 1 millimetre wide. Locally 2 to 3% irregular concordant and cross cutting, locally weakly hematitized, quartz iron carbonate veinlets up to 3 centimetres wide. Minor irregular tourmaline streaks in quartz carbonate veins and as concordant and cross cutting stringers. Trace euhedral to subhedral disseminated pyrite up to 3 millimetres wide
	138.99 140.51	Contains 20 centimetre wide section with

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271146	138.23	138.99	.76	TR	-	<.005	
FX271147	138.99	140.51	1.52	TR	-	<.005	
FX271148	140.51	142.04	1.53	TR	-	<.005	
FX271149	142.04	143.56	1.52	TR	-	.040	
FX271150	143.56	145.08	1.52	TR	-	.075	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN X	CR ANG	AU PPM	PPM*M
		brown red to yellow brown patchs at 139.20.								
	143.56	145.08 Becoming moderately bleached at sharp lower contact.								
145.08	146.24	DIKE								
		Possibly felsite dike. Light gray brown to light gray green, fine grained, moderately hard, not magnetic, massive. Contains 1 to 2% sub rounded quartz grains up to 2 millimetres diameter. Minor pervasive iron carbonate alteration. Locally weak pervasive hematitization. Minor elongate fuchsitic patchs up to 2 millimetres long. Minor concordant tourmaline stringers up to 1 millimetre wide. Minor irregular, cross cutting quartz iron carbonate stringers up to 5 millimetres wide locally with fuzzy dark gray to black halos up to 3 millimetres wide. Contains up to 1% fine grained pyrite disseminated and in quartz carbonate veins. Minor fine grained disseminated pyrite and chalcopyrite.	FX271151	145.08	146.24	1.16	TR	-	.160	
146.24	172.27	GABBRO								
		Halo altered gabbro. Medium green to light green yellow, fine grained to medium grained, moderately hard, not magnetic, weakly foliated to massive. Contains 10 to 15% irregular, elongate light yellow green sericitic and medium to dark green chloritic patchs and streaks up to 3 centimetres long. Locally weakly to moderately hematitized in irregular streaks and patchs as well. Contains up to 5% pervasive iron carbonate alteration. Minor fuchsitic patchs. Locally contains sections with 15 to 20% red brown to yellow brown spots, possibly	FX271152	146.24	147.13	.89	TR	-	.080	
			FX271153	147.13	149.66	2.53	TR	F40	.010	
			FX271154	149.66	151.18	1.52	TR	-	.005	
			FX271155	151.18	152.70	1.52	TR	F35	.015	
			FX271156	152.70	154.23	1.53	TR	-	<.005	
			FX271157	154.23	155.75	1.52	TR	-	<.005	
			FX271158	155.75	157.28	1.53	TR	F45	.010	
			FX271159	157.28	158.80	1.52	TR	F30	<.005	
			FX271160	158.80	160.32	1.52	TR	F45	.005	
			FX271161	160.32	161.85	1.53	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********
		altered iron carbonate , up to 1 millimetre wide. Locally 2 to 3% irregular concordant and cross cutting, locally weakly hematitized, quartz iron carbonate veinlets up to 3 centimetres wide. Minor irregular tourmaline streaks in quartz carbonate veins and as concordant and cross cutting stringers. Trace euhedral to subhedral disseminated pyrite up to 3 millimetres wide
146.24	147.13	Becoming locally moderately hematitized down hole.
155.75	157.28	Contains 20 centimetre wide quartz carbonate vein at 155.95.
158.80	160.32	Locally 15 to 20% brown yellow patchs in and up to 3 centimetres from quartz carbonate veins at 159.50.
160.32	161.85	Increasing sericitization down hole.
161.85	163.37	Locally moderately chloritic along irregular quartz carbonate veins.
166.52	167.94	Quartz vein with 2 to 3 centimetre wide brown yellow to red brown alteration halo at 166.97.
170.99	172.27	Extensive quartz carbonate veins with irregular tourmaline streaks and rims.
172.27	173.52	FELDSPAR PORPHYRY Altered feldspar porphyry. Composed of 7 to 10% euhedral to subhedral buff white feldspar phenocrysts up to 2 millimetres long with 1% sub rounded quartz grain up to 2 millimetres diameter in a fine grained, brown red, hard, not magnetic, massive groundmass. Strongly silicified and moderately hematitized. Minor pervasive iron carbonate alteration. Irregular light green

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX271162	161.85	163.37	1.52	TR	-	<.005	
FX271163	163.37	164.90	1.53	TR	-	<.005	
FX271164	164.90	166.42	1.52	TR	F50	<.005	
FX271165	166.42	167.94	1.52	TR	-	<.005	
FX271166	167.94	169.47	1.53	TR	-	.005	
FX271167	169.47	170.99	1.52	TR	F45	.010	
FX271168	170.99	172.27	1.28	TR	-	.010	
FX271169	172.27	173.52	1.25	TR	-	.090	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		micaceous stringers up to 1 millimetre wide. Locally 1% fine grained disseminated pyrite.								
173.52	175.56	GABBRO								
		Halo altered gabbro. Medium green to light green yellow, fine grained to medium grained, moderately hard, not magnetic, weakly foliated to massive. Contains 10 to 15% irregular, elongate light yellow green sericitic and medium to dark green chloritic patchs and streaks up to 3 centimetres long. Locally weakly to moderately hematitized in irregular streaks and patchs as well. Contains up to 5% pervasive iron carbonate alteration. Minor fuchsitic patchs. Locally contains sections with 15 to 20% red brown to yellow brown spots, possibly altered iron carbonate , up to 1 millimetre wide. Locally 2 to 3% irregular concordant and cross cutting, locally weakly hematitized, quartz iron carbonate veinlets up to 3 centimetres wide. Minor irregular tourmaline streaks in quartz carbonate veins and as concordant and cross cutting stringers. Trace euhedral to subhedral disseminated pyrite up to 3 millimetres wide 174.04 175.56 Locally fuchsitic in irregular quartz carbonate veins.	FX271170	173.52	174.04	.52	TR	-	.010	
			FX271171	174.04	175.56	1.52	TR	-	<.005	
175.56	195.38	GABBRO								
		Halo altered gabbro. Light to medium green gray, fine grained to medium grained, moderately soft, not magnetic, moderately to weakly foliated. Composed of 25 to 30% sub angular medium to dark green chloritic patchs up to 3 millimetres long with 20 to 25% medium gray to	FX271172	175.56	177.09	1.53	TR	-	<.005	
			FX271173	177.09	178.61	1.52	TR	-	.005	
			FX271174	178.61	180.14	1.53	TR	-	<.005	
			FX271175	180.14	181.66	1.52	TR	-	<.005	
			FX271176	181.66	183.18	1.52	TR	-	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		gray green patchs, possibly carbonatized feldspars, up to 3 millimetres long. Locally moderately chloritic with up to 5% irregular and elongate light gray green and yellow brown sericitic patchs up to 2 centimetres long. Locally 15% irregular concordant and cross cutting quartz iron carbonate veinlets up to 5 centimetres wide with irregular tourmaline streaks and rims up to 2 millimetres wide. Trace fine grained disseminated pyrite.	FX271177	183.18	184.71	1.53	TR	-	<.005	
			FX271178	184.71	186.23	1.52	TR	F45	<.005	
			FX271179	186.23	187.76	1.53	1	-	.010	
			FX271180	187.76	189.28	1.52	TR	F40	.005	
			FX271181	189.28	190.80	1.52	TR	F45	.200	
			FX271182	190.80	192.33	1.53	TR	-	<.005	
			FX271183	192.33	193.85	1.52	TR	F40	<.005	
			FX271184	193.85	195.38	1.53	TR	F40	<.005	
181.66	183.18	Contains 20 centimetre wide quartz carbonate vein with sub angular gabbro inclusions up to 5 centimetres long at 181.66.								
184.71	186.23	Contains 10 centimetre wide quartz carbonate vein at 185.20.								
186.23	187.76	Locally contains 1% medium grained disseminated euhedral to subhedral pyrite.								
187.76	189.28	Becoming moderately foliated down hole with elongate light gray green weakly sericitic patchs up to 2 centimetres long.								
195.38	217.84	GABBRO								
		Peridotite transition. Medium green to black, fine grained to medium grained, soft, weakly to moderately magnetic, weakly foliated. Locally mottled texture with irregular, elongate medium gray green carbonatized and dark green to black chloritic streaks up to 3 centimetres long. Locally composed of 25 to 30% sub angular medium to dark green chloritic patchs with 20 to 25% medium gray to gray green patchs, possibly carbonatized feldspars, up to 3 millimetres long. Strongly chloritic to talcose. Contains 5% irregular	FX271185	195.38	196.00	.62	TR	F40	<.005	
			FX271186	196.00	198.42	2.42	TR	F40	<.005	
			FX271187	198.42	199.95	1.53	TR	-	.005	
			FX271188	199.95	201.47	1.52	TR	-	<.005	
			FX271189	201.47	203.00	1.53	TR	-	<.005	
			FX271190	203.00	204.52	1.52	TR	F35	<.005	
			FX271191	204.52	206.05	1.53	TR	F45	<.005	
			FX271192	206.05	207.57	1.52	TR	F35	<.005	
			FX271193	207.57	209.09	1.52	TR	-	<.005	
			FX271194	209.09	210.62	1.53	TR	F45	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		concordant and cross cutting quartz iron carbonate veinlets up to 5 centimetres wide with irregular tourmaline streaks and up to 2% medium grained magnetite. Locally irregular iron carbonate talc veinlets up to 3 centimetres wide. Trace euhedral to subhedral disseminated pyrite up to 3 millimetres wide.	FX271195	210.62	212.14	1.52	TR	F25	.005	
			FX271196	212.14	213.66	1.52	TR	F40	<.005	
			FX271197	213.66	215.19	1.53	TR	F35	<.005	
			FX271198	215.19	216.71	1.52	TR	-	.020	
			FX271199	216.71	217.84	1.13	TR	F35	.015	
		201.47 203.00 Locally strongly magnetic along irregular quartz carbonate vein with 15 to 25% fine grained anhedral magnetite.								
		210.62 212.14 Locally strongly magnetic along quartz carbonate veins.								
		212.14 213.66 As above with diffuse magnetite halo up to 5 millimetres from veinlet.								
		213.66 215.19 Locally strongly chloritic streaks up to 5 millimetres wide parallel to foliation.								
217.84	219.88	FLOW								
		Possibly altered basalt. Medium to dark green, fine grained, moderately hard, weakly magnetic, massive. Locally contains 1 to 2% irregular chloritic spots up to 1 millimetre diameter. Locally slightly bleached and strongly silicified. Contains up to 1% irregular dark gray to buff white quartz iron carbonate veinlets up to 1 centimetre wide. Trace fine grained disseminated pyrite and chalcopyrite.	FX271200	217.84	218.24	.40	2	-	<.005	
			FX271201	218.24	219.09	.85	1	-	<.005	
			FX271202	219.09	219.88	.79	TR	-	.010	
		219.09 219.88 Strongly silicified becoming weakly bleached at sharp lower contact.								
219.88	268.53	GABBRO								
		Peridotite transition. Medium green to black, fine	FX271203	219.88	221.28	1.40	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********
		grained to medium grained, soft, weakly to moderately magnetic, weakly foliated. Locally mottled texture with irregular, elongate medium gray green carbonatized and dark green to black chloritic streaks up to 3 centimetres long. Locally composed of 25 to 30% sub angular medium to dark green chloritic patchs with 20 to 25% medium gray to gray green patchs, possibly carbonatized feldspars, up to 3 millimetres long. Strongly chloritic to talcose. Contains 5% irregular concordant and cross cutting quartz iron carbonate veinlets up to 5 centimetres wide with irregular tourmaline streaks and up to 2% medium grained magnetite. Locally irregular iron carbonate talc veinlets up to 3 centimetres wide. Trace euhedral to subhedral disseminated pyrite up to 3 millimetres wide.
224.33	225.86	Becoming less strongly foliated with increasing mottled texture down hole.
233.48	235.00	Numerous irregular iron carbonate talc veinlets.
238.05	239.57	Decreasing quartz iron carbonate and iron carbonate talc veinlets down hole.
244.14	245.67	Becoming less talcose and weakly sericitic down hole.
257.86	259.38	Locally weakly talcose.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX271204	221.28	222.81	1.53	TR	-	<.005	
FX271205	222.81	224.33	1.52	TR	F40	<.005	
FX271206	224.33	225.86	1.53	TR	-	<.005	
FX271207	225.86	227.38	1.52	TR	-	<.005	
FX271208	227.38	228.90	1.52	TR	-	.005	
FX271209	228.90	230.43	1.53	TR	-	<.005	
FX271210	230.43	231.95	1.52	TR	-	<.005	
FX271211	231.95	233.48	1.53	TR	-	.005	
FX271212	233.48	235.00	1.52	TR	-	<.005	
FX271213	235.00	236.52	1.52	TR	-	<.005	
FX271214	236.52	238.05	1.53	TR	-	<.005	
FX271215	238.05	239.57	1.52	TR	-	<.005	
FX271216	239.57	241.10	1.53	TR	-	<.005	
FX271217	241.10	242.60	1.50	TR	-	<.005	
FX271218	242.60	244.14	1.54	TR	-	<.005	
FX271219	244.14	245.67	1.53	TR	-	.020	
FX271220	245.67	247.19	1.52	TR	-	<.005	
FX271221	247.19	248.72	1.53	TR	-	<.005	
FX271222	248.72	250.24	1.52	TR	-	<.005	
FX271223	250.24	251.76	1.52	TR	-	<.005	
FX271224	251.76	253.29	1.53	TR	-	<.005	
FX271225	253.29	254.81	1.52	TR	-	<.005	
FX271226	254.81	256.34	1.53	TR	-	<.005	
FX271227	256.34	257.86	1.52	TR	-	<.005	
FX271228	257.86	259.38	1.52	TR	-	<.005	
FX271229	259.38	260.91	1.53	TR	-	<.005	
FX271230	260.91	262.43	1.52	TR	-	<.005	
FX271231	262.43	263.96	1.53	TR	-	<.005	
FX271232	263.96	265.48	1.52	TR	-	<.005	
FX271233	265.48	267.00	1.52	TR	-	<.005	
FX271234	267.00	268.53	1.53	TR	-	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
268.53	279.20	GABBRO								
		Halo altered gabbro. Medium to dark green gray, fine grained to medium grained, moderately hard, not magnetic, moderately to well foliated. Composed of 25 to 30% medium to dark green chloritic patchs with 20 to 25% elongate medium gray iron carbonate patchs up to 3 millimetres long. Locally weakly to moderately hematitized and sericitized. Moderately chloritic along fractures. Locally up to 5% irregular concordant and minor cross cutting quartz iron carbonate veinlets up to 3 centimetres wide. Contains up to 1% pyrite disseminated and in concordant quartz carbonate veins.	FX271235	268.53	270.05	1.52	TR	F50	<.005	
			FX271236	270.05	271.58	1.53	TR	F50	<.005	
			FX271237	271.58	272.43	.85	TR	F35	.020	
			FX271238	272.43	273.10	.67	1	-	.095	
			FX271239	273.10	274.62	1.52	TR	F40	.020	
			FX271240	274.62	276.15	1.53	TR	F35	.015	
			FX271241	276.15	277.67	1.52	TR	F40	.035	
			FX271242	277.67	279.20	1.53	TR	F35	.005	
		268.53 270.05 Becoming moderately foliated down hole with increasing quartz carbonate veins.								
		273.10 274.62 Strongly silicified. Locally contains 1 to 2% medium grained disseminated pyrite.								
		274.62 276.15 Becoming slightly more sericitic down hole.								
		277.67 279.20 Pervasive calcite alteration and quartz calcite veinlets increasing down hole with decreasing iron carbonate alteration.								
279.20	290.32	GABBRO								
		Sub halo altered gabbro. Medium to dark green gray, fine grained to medium grained, moderately soft, weakly magnetic, weakly foliated to massive. Composed of 25 to 30% medium to dark green chloritic patchs with 20 to 25% elongate medium gray iron carbonate patchs up to 3 millimetres long. Locally weakly to moderately hematitized and sericitized. Locally up to 5% pervasive calcite alteration with decreasing iron carbonate	FX271243	279.20	280.72	1.52	TR	-	<.005	
			FX271244	280.72	282.24	1.52	TR	-	<.005	
			FX271245	282.24	283.77	1.53	TR	-	<.005	
			FX271246	283.77	285.29	1.52	TR	-	.005	
			FX271247	285.29	286.82	1.53	TR	-	<.005	
			FX271263	286.82	288.34	1.52	TR	-	<.005	
			FX271248	288.34	289.10	.76	TR	-	<.005	
			FX271249	289.10	290.32	1.22	TR	-	<.005	

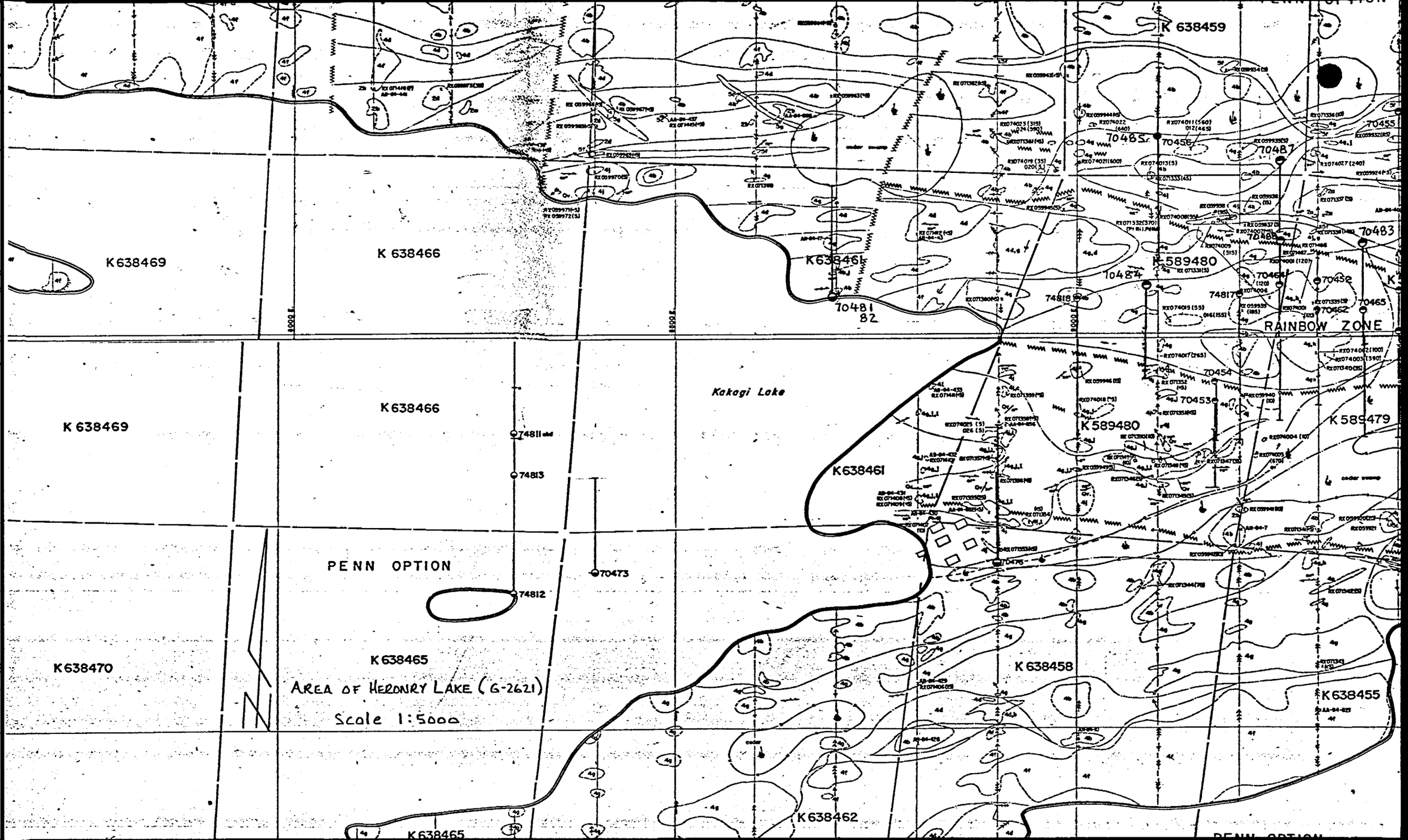
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		alteration down hole. Moderately chloritic along fractures. Locally up to 5% irregular concordant and minor cross cutting quartz calcite veinlets up to 3 centimetres wide. Contains up to 1% pyrite disseminated and in concordant quartz carbonate veins.								
		279.20 280.72 Locally moderately chloritic. Becoming more massive down hole.								
		285.29 286.82 Becoming more chloritic down hole.								
		289.10 290.32 Strongly chloritic at sharp lower contact.								
290.32	309.68	AGGLOMERATE								
		Contains 10 to 15% sub angular dark green to medium gray green fragments of variable composition and textures up to 4 centimetres long with 1 to 2% bomb sized fragments up to 10 centimetres wide in a fine grained medium to light green gray, hard, weakly magnetic, weakly foliated to massive lithic tuff matrix. Locally moderately to strongly silicified and bleached zones associated with quartz calcite veins. Locally contains up to 5% fine grained sericitic spots in less altered sections. Contains up to 2% pervasive calcite alteration and 5% irregular , cross cutting quartz calcite veinlets up to 2 centimetres wide. Trace fine grained to medium grained euhedral to subhedral pyrite associated with quartz carbonate veins.	FX271250	290.32	291.39	1.07	TR	-	.005	
			FX271251	291.39	292.91	1.52	TR	-	<.005	
			FX271252	292.91	294.44	1.53	TR	-	<.005	
			FX271253	294.44	295.96	1.52	TR	-	<.005	
			FX271254	295.96	297.48	1.52	TR	-	<.005	
			FX271255	297.48	299.01	1.53	TR	-	<.005	
			FX271256	299.01	300.53	1.52	TR	-	.015	
			FX271257	300.53	302.06	1.53	TR	-	.105	
			FX271258	302.06	303.58	1.52	TR	-	.030	
			FX271259	303.58	305.10	1.52	TR	-	.015	
			FX271260	305.10	306.63	1.53	TR	-	.030	
			FX271261	306.63	308.15	1.52	TR	-	.200	
			FX271262	308.15	309.68	1.53	TR	-	.030	
		291.39 292.91 Decreasing sericite down hole. Locally slightly bleached and moderately silicified								
		295.96 297.48 Locally slightly bleached.								
		300.53 302.06 Becoming moderately bleached at a 20 centimetre wide quartz calcite vein with angular iron carbonate fragments up to 3								

**********DESCRIPTION**********

FROM M	TO M	
		centimetres wide.
302.06	303.58	Becoming less bleached down hole. Minor fine grained disseminated pyrite.
306.63	308.15	Becoming strongly bleached down hole to a 20 centimetre wide quartz calcite vein.
308.15	309.68	Becoming less bleached down hole. Foot of hole at 309.68.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M


K 638459
K638469
K 638466
K638461
K 589480
RAINBOW ZONE
Kakagi Lake
K638469
K 638466
K 589480
K589479
K638461
PENN OPTION
K638470
K638465
K638458
K638455
K638462
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********IN' 'IMITED**********
FIELD EXPLOI N DIAMOND DRILL LOG

PROJECT	: Penn Option	LATITUDE	:N 9618.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/27/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 9445.0 M	TOWNSHIP	:	COMPLETED	: 03/30/88
BOREHOLE	: 70486-0	ELEVATION	: 1356.6 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Longyear 38
DEPTH	: 317.9 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 167m E and 82m S of Post#1.

LEFT IN HOLE:11.36m of BW casing and casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
11.36		-54.00	121.92		-48.50	243.84		-46.00			
60.96		-49.00	182.88		-48.00	317.91		-44.00			

**********DESCRIPTION**********

FROM M	TO M	
.00	11.36	OVERBURDEN Soil and boulders.
11.36	32.50	AGGLOMERATE Altered dacite lapilli tuff to agglomerate. Weakly bleached, pale gray to buff pale pink. Very fine grained, siliceous matrix with locally stretched chloritic clasts. 5 to 7% iron carbonate crystals, 5% pale pink boudinaged quartz iron carbonate veins, locally weakly to moderately hematitic, and veinlets parallel to foliation with intense bleached buff alteration halos. Alteration halos host rare stretched

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300157	11.36	12.31	.95	TR	F32	.040	
FX300158	12.31	13.13	.82	TR	F39	.100	
FX300159	13.13	14.63	1.50	TR	F38	.010	
FX300160	14.63	16.13	1.50	TR	F35	.125	
FX300161	16.13	17.68	1.55	TR	F*	.115	
FX300162	17.68	18.53	.85	TR	F*	<.005	
FX300163	18.53	19.26	.73	TR	F44	.015	
FX300164	19.26	20.73	1.47	TR	F42	.015	

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**********DESCRIPTION**********

FROM M	TO M	
		fuchsitic clasts and chloritic stringers. Weakly foliated. Hard. 10 to 15% iron carbonate, locally sericitic.
13.13	16.13	Pale gray with scattered quartz carbonate stringers with alteration halos.
18.53	19.26	Intensely hematitized boudinaged quartz iron carbonate veins and veinlets with intense alteration halos. Pale buff to pink gray with stretched chloritic clots. Moderately sericitic.
19.26	20.73	Locally bleached with 15% stretched black chloritic clots.
20.73	23.64	Fluctuating intensely of alteration possibly due to differing compositions of clasts. Strongly foliated. Cross cutting chloritic quartz carbonate stringers.
23.64	25.04	Stretched mafic clasts readily visible in weakly bleached pale gray matrix.
25.04	26.44	Weakly to moderately altered green gray with patchy strongly bleached areas.
26.44	27.75	Strongly bleached to buff with rare fuchsite altered chlorite.
27.75	28.86	Locally intensely hematitized adjacent to orange iron carbonate veinlets with intense bleached halo. Stretched clasts are readily visible in pale buff to green iron carbonate matrix.
28.86	29.24	Intensely altered pale green to buff sericitic alteration halo surrounding boudinaged quartz iron carbonate veins and veinlets with black chloritic margins. Locally concentrations of black chlorite

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300165	20.73	22.15	1.42	TR	F40	.015	
FX300166	22.15	23.64	1.49	TR	F40	.380	
FX300167	23.64	25.04	1.40	TR	F40	<.005	
FX300168	25.04	26.44	1.40	TR	F40	<.005	
FX300169	26.44	27.75	1.31	TR	F40	<.005	
FX300170	27.75	28.86	1.11	TR	F37	.005	
FX300171	28.86	29.24	.38	TR	F40	<.005	
FX300172	29.24	30.85	1.61	TR	F40	.015	
FX300173	30.85	31.35	.50	TR	F40	<.005	
FX300174	31.35	32.50	1.15	TR	F40	.035	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		clots. Weakly altered to fuchsite. 5% cross cutting pale orange iron carbonate stringers.								
	29.24 30.85	Strongly bleached to buff with rare fuchsite altered chlorite.								
	30.85 31.35	As at 28.86 to 29.24 metres.								
	31.35 32.50	Sharp lower contact with hematitic feldspar porphyry.								
32.50	39.66	FELDSPAR PORPHYRY								
		Red brown very fine grained to aphanitic siliceous hematitized matrix hosting 40% white feldspar megacrysts. massive. Weakly to moderately bleached to pale pink green adjacent to minor quartz carbonate stringers and at the contacts. Hard. 1% fine disseminated pyrite. Locally inclusions of dacite agglomerate.	FX300175	32.50	33.90	1.40	1	F*	.090	
			FX300176	33.90	35.35	1.45	1	F*	.090	
			FX300177	35.35	35.97	.62	1	F*	.080	
			FX300178	35.97	37.02	1.05	1	F*	.055	
			FX300179	37.02	38.57	1.55	1	F*	.080	
			FX300180	38.57	39.66	1.09	1	F*	.015	
	35.35 35.97	Locally bleached adjacent to altered dacite agglomerate inclusions.								
	35.97 39.66	Altered inclusions of dacite agglomerate. Pale green gray to green with stretched clasts forming moderate foliation. 2% euhedral pyrite. Very bleached and fuchsitic at contacts with feldspar porphyry. Feldspar porphyry bleached to pale green pink.								
39.66	57.74	GABBRO								
		Subhalo alteration. Pale gray to dark green with 30% stretched pale green to white feldspar crystals. moderately foliated. 5% concordant boudinaged and cross cutting quartz carbonate veinlets and stringers, locally	FX300181	39.66	41.21	1.55	1	F43	.050	
			FX300182	41.21	42.65	1.44	1	F40	.030	
			FX300183	42.65	44.20	1.55	1	F42	.095	
			FX300184	44.20	45.73	1.53	1	F40	.010	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		with inclusions of green chlorite and trace euhedral pyrite. Weakly to moderately iron carbonatized.	FX300185	45.73	47.17	1.44	1	F40	<.005	
		51.63 53.15 15% brown pervasive iron carbonate.	FX300186	47.17	48.68	1.51	TR	F40	.010	
		54.60 57.74 Transitional gabbro to peridotite. Locally 2% scattered euhedral pyrite.	FX300187	48.68	50.19	1.51	1	F43	.050	
			FX300188	50.19	51.63	1.44	1	F40	.005	
			FX300189	51.63	53.15	1.52	1	F40	.005	
			FX300190	53.15	54.60	1.45	1	F34	.030	
			FX300191	54.60	56.05	1.45	1	F40	.005	
			FX300192	56.05	57.74	1.69	2	F*	.175	
57.74	60.12	GABBRO								
		Halo alteration. Gabbro as above with 10% pale orange contorted quartz iron carbonate veinlets and stringers. Moderately iron carbonate.	FX300193	57.74	59.18	1.44	1	F*	.010	
			FX300194	59.18	60.12	.94	1	F37	.010	
60.12	63.40	GABBRO								
		Intensely altered gabbro. Pale green to buff fuchsitic altered gabbro. Quartz flooded. Scattered smokey quartz carbonate veinlets perpendicular to core axis. 1 to 2% disseminated and euhedral pyrite. 10% iron carbonate.	FX300195	60.12	60.42	.30	2	F*	.040	
			FX300196	60.42	60.83	.41	TR	F36	.010	
			FX300197	60.83	61.38	.55	2	F46	.100	
			FX300198	61.38	62.04	.66	2	F41	.030	
			FX300199	62.04	63.40	1.36	2	F*	.130	
		60.12 60.42 6 centimetre iron carbonate rimmed quartz vein with 5% tourmaline rods. 2% disseminated pyrite in fuchsitic alteration halo.								
		60.42 60.83 Silicified pale green fuchsite with pervasive pale orange iron carbonate.								
		60.83 61.38 Quartz flooded with 2% fine disseminated pyrite.								
		61.38 62.04 Locally halo alteration in gabbro. Minor quartz carbonate veinlets with fuchsite alteration halos hosting 2% disseminated								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		pyrite.								
	62.04	63.40 Quartz flooded fuchsite, locally cut by 6 centimetre tourmaline bearing quartz carbonate vein. 2% disseminated pyrite. Sharp lower contact with subhalo altered gabbro.								
63.40	76.41	GABBRO								
		Subhalo alteration. Dark green, medium grained foliated gabbro with 5% concordant and perpendicular quartz carbonate veinlets and stringers. 25% weakly altered yellow feldspar crystals. Up to 3% disseminated and euhedral pyrite.	FX300200	63.40	64.40	1.00	3	F29	.110	
			FX300201	64.40	66.45	2.05	1	F35	.010	
			FX300202	66.45	67.97	1.52	TR	F42	.010	
			FX300203	67.97	69.49	1.52	TR	F38	.005	
			FX300204	69.49	70.96	1.47	TR	F42	<.005	
			FX300205	70.96	72.54	1.58	TR	F34	<.005	
			FX300206	72.54	73.97	1.43	TR	F39	<.005	
			FX300207	73.97	75.59	1.62	TR	F42	.010	
			FX300208	75.59	76.41	.82	TR	F40	.010	
76.41	77.49	GABBRO								
		Altered gabbro. Gray to pale green, well foliated with boudinaged quartz iron carbonate veins with fuchsitic halos. 2% disseminated pyrite occurring in veins and halos. Locally buff to yellow sericitic stringers.	FX300209	76.41	77.49	1.08	TR	F33	.055	
77.49	90.14	GABBRO								
		Halo alteration as at 57.74 to 60.12 metres. Locally with pale gray bleached patches buff altered feldspar crystals and stretched black chlorite. Locally brecciated appearance with chlorite , quartz carbonate	FX300210	77.49	78.41	.92	TR	F35	.010	
			FX300211	78.41	80.00	1.59	TR	F36	.005	
			FX300212	80.00	81.36	1.36	TR	F36	.010	
			FX300213	81.36	82.62	1.26	TR	F30	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		infilling. 2% quartz carbonate veinlets and stringers. Moderately hard. Trace pyrite.	FX300214	82.62	84.00	1.38	TR	F40	.010	
		78.41 80.00 Locally brecciated and bleached areas.	FX300215	84.00	85.50	1.50	TR	F34	<.005	
		84.00 85.50 Locally sericitic. Scattered red hematitic quartz carbonate stringers.	FX300216	85.50	86.96	1.46	TR	F24	<.005	
			FX300217	86.96	88.40	1.44	TR	F34	<.005	
			FX300218	88.40	89.54	1.14	TR	F32	<.005	
		85.50 88.40 30% boudinaged chloritic quartz carbonate veinlets. Locally with brown iron carbonate alteration. 10% stretched yellow altered feldspar. Locally vuggy quartz carbonate veins.	FX300219	89.54	90.14	.60	TR	F19	<.005	
		88.40 89.54 Locally quartz carbonate veins with inclusions of fuchsite.								
		89.54 90.14 Bleached, pale gray green with buff alteration halo adjacent to quartz carbonate veins perpendicular to core axis. 15% iron carbonate.								
90.14	90.73	GABBRO								
		Altered gabbro. As at 76.41 to 77.49 metres. 7 centimetre quartz iron carbonate vein with fuchsitic inclusions and weathered vugs. 10% brown carbonate crystals. Trace pyrite.	FX300220	90.14	90.73	.59	TR	F20	<.005	
90.73	102.20	GABBRO								
		Halo alteration as at 77.49 to 90.14 metres. Locally bleached adjacent to quartz carbonate veinlets and stringers. Locally totally boudinaged quartz carbonate veinlets. Well foliated. Locally very blocky core.	FX300221	90.73	92.17	1.44	TR	F16	.010	
			FX300222	92.17	93.57	1.40	TR	F*	<.005	
			FX300223	93.57	95.15	1.58	1	F29	.010	
			FX300224	95.15	96.65	1.50	1	F28	.025	
		93.57 98.15 1% euhedral pyrite in locally bleached alteration.	FX300225	96.65	98.15	1.50	1	F34	.220	
			FX300226	98.15	99.54	1.39	2	F30	.535	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
	98.15	99.54 Locally intensely altered buff alteration patches with 3% euhedral pyrite up to 3 millimetre adjacent to quartz carbonate stringers.	FX300227	99.54	100.67	1.13	3	F*	.350	
			FX300228	100.67	102.20	1.53	2	F*	.275	
		100.67 102.20 As above.								
102.20	115.70	GABBRO								
		Gabbro (basalt?). Fine grained, massive with 5 to 7% calcite. Pale gray to gray. 5 to 7% quartz calcite veins and stringers. Moderately hard.	FX300229	102.20	103.63	1.43	1	F*	.005	
			FX300230	103.63	105.10	1.47	1	F*	.450	
			FX300231	105.10	105.90	.80	TR	F*	.015	
			FX300232	105.90	106.69	.79	TR	F*	<.005	
			FX300233	106.69	108.22	1.53	TR	F*	<.005	
			FX300234	108.22	109.72	1.50	TR	F*	<.005	
			FX300235	109.72	111.30	1.58	TR	F*	<.005	
			FX300236	111.30	112.77	1.47	TR	F*	<.005	
			FX300237	112.77	114.19	1.42	TR	F*	<.005	
			FX300238	114.19	115.70	1.51	TR	F*	.010	
115.70	121.31	GABBRO								
		Halo alteration in gabbro as at 90.73 to 102.20 metres. 15% pervasive iron carbonate crystals.	FX300239	115.70	117.34	1.64	1	F*	.005	
			FX300240	117.34	118.26	.92	1	F*	.090	
		118.26 119.75 Intensely bleached halos adjacent to chlorite bearing quartz iron carbonate veins. 3% disseminated and euhedral pyrite in veins.	FX300241	118.26	119.75	1.49	3	F*	.845	
			FX300242	119.75	121.31	1.56	1	F*	.050	
		119.75 121.31 Alteration less intense.								
121.31	135.07	GABBRO								
		Gabbro (basalt?) as at 102.20 to 115.70 metres. 5%	FX300243	121.31	122.83	1.52	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		quartz calcite veinlets and stringers. Trace disseminated pyrite. Moderately calcareous.	FX300244	122.83	124.36	1.53	TR	F*	<.005	
			FX300245	124.36	125.87	1.51	TR	F*	<.005	
			FX300246	125.87	127.41	1.54	TR	F*	<.005	
			FX300247	127.41	128.93	1.52	TR	F*	<.005	
			FX300248	128.93	130.45	1.52	TR	F*	<.005	
			FX300249	130.45	131.97	1.52	TR	F*	.010	
			FX300250	131.97	133.50	1.53	TR	F*	<.005	
			FX300251	133.50	135.07	1.57	TR	F*	.005	
135.07	138.07	GABBRO								
		Subhalo alteration as at 64.40 to 76.41 metres.	FX300252	135.07	136.55	1.48	TR	F*	<.005	
			FX300253	136.55	138.07	1.52	TR	F*	.010	
138.07	170.75	GABBRO								
		Halo alteration in gabbro as at 90.14 to 115.70 metres.	FX300254	138.07	139.68	1.61	3	F*	.320	
		Intense pale red hematitic alteration halos adjacent to	FX300255	139.68	141.10	1.42	1	F*	.010	
		10% hematitic quartz iron carbonate veins and veinlets	FX300256	141.10	142.92	1.82	TR	F*	.015	
		with trace to 3% disseminated pyrite. 15% pervasive iron	FX300257	142.92	144.19	1.27	TR	F*	<.005	
		carbonate crystals.	FX300258	144.19	145.81	1.62	TR	F*	<.005	
139.68	141.10	Alteration intensely decreasing.	FX300259	145.81	147.39	1.58	TR	F*	<.005	
141.10	144.19	20% strongly rusty brown altered iron	FX300260	147.39	147.82	.43	TR	F*	.015	
		carbonate, locally weathered out.	FX300261	147.82	149.21	1.39	TR	F*	.010	
147.39	147.82	6 centimetre quartz iron carbonate vein	FX300262	149.21	150.75	1.54	TR	F*	<.005	
		with chloritic inclusions and intense buff	FX300263	150.75	152.26	1.51	TR	F*	.005	
		alteration halo.	FX300264	152.26	153.92	1.66	TR	F*	<.005	
152.26	153.92	Locally grades to subhalo alteration.	FX300265	153.92	154.84	.92	1	F*	.080	
153.92	154.84	Locally intense fuchsitic alteration halos	FX300266	154.84	155.43	.59	2	F40	.345	
		adjacent to chloritics pale orange quartz	FX300267	155.43	157.00	1.57	TR	F*	<.005	
		carbonate veins.	FX300268	157.00	158.48	1.48	TR	F*	<.005	
154.84	155.43	Contorted 15 centimetre quartz carbonate	FX300269	158.48	159.98	1.50	TR	F*	.005	

FROM M	TO M	**********DESCRIPTION**********
		vein with 2% euhedral pyrite with inclusions of fuchsitic gabbro and 5% black chloritic stylolites. Gabbro hosts 10% quartz carbonate veinlets and 15% yellow altered feldspar.
155.43	161.51	5 to 7% pale orange quartz carbonate veinlets. 10% iron carbonate crystals.
161.51	162.48	Locally rusty brown iron carbonate crystals
162.48	166.71	Pervasive strongly rusty brown iron carbonate, locally weathered out adjacent to rusty fracture sub parallel to core axis. Locally weakly fuchsite alteration halos adjacent to quartz carbonate veinlets. Trace to 1% euhedral pyrite. 2 centimetres gray to green gouge at 163.98 metres.
170.75	171.72	GABBRO Intensely altered gabbro. Strongly bleached pale green with emerald green fuchsite streaks. Totally boudinaged quartz carbonate veins. 5% yellow altered feldspar. 1% euhedral pyrite concentrated at contact with alteration halo gabbro. Moderately iron carbonatized moderately foliated. Silicified, hard.
171.72	175.53	GABBRO Halo alteration in gabbro. Fine grained to medium grained, moderately foliated with stretched dark gray to black chlorite and 15% yellow sericitic altered feldspar. 3% quartz carbonate veinlets and stringers.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300270	159.98	161.51	1.53	TR	F*	<.005	
FX300271	161.51	162.48	.97	TR	F*	.005	
FX300272	162.48	163.98	1.50	TR	F*	<.005	
FX300273	163.98	164.58	.60	TR	F*	.050	
FX300274	164.58	165.31	.73	1	F*	<.005	
FX300275	165.31	166.74	1.43	TR	F*	<.005	
FX300276	166.74	168.01	1.27	TR	F*	<.005	
FX300277	168.01	169.45	1.44	TR	F*	<.005	
FX300278	169.45	170.75	1.30	TR	F*	<.005	
FX300279	170.75	171.72	.97	1	F34	<.005	
FX300280	171.72	173.32	1.60	TR	F40	<.005	
FX300281	173.32	174.77	1.45	TR	F42	<.005	
FX300282	174.77	175.53	.76	TR	F35	.010	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		10% iron carbonate crystals. Trace pyrite. Moderately hard.								
175.53	177.66	GABBRO								
		Strongly bleached gabbro. Uniformly pale gray with scattered quartz carbonate veinlets and 2% dark gray chlorite. Remnant gabbro texture present. Silicified, hard. 3% fine disseminated pyrite.	FX300283	175.53	176.74	1.21	3	F*	.055	
			FX300284	176.74	177.66	.92	2	F*	.035	
		176.74 177.66 4 centimetre quartz carbonate vein with weak fuchsitic inclusions and inclusions of contorted gabbro and chlorite hosting 2% disseminated pyrite. 10% iron carbonate crystals.								
177.66	179.52	QUARTZ FELDSPAR PORPHYRY								
		Quartz feldspar porphyry dike. Green gray siliceous, very fine grained to fine grained matrix with 5% round 2 to 3 millimetre quartz eyes and fine grained feldspar crystals. Locally bleached to pale green adjacent to pyritic quartz carbonate veins. 3% fine disseminated pyrite throughout with euhedral pyrite occurring in veins. 15 to 20% fine grained iron carbonate. Silicified, hard. Sharp contacts.	FX300285	177.66	179.52	1.86	2	F*	.160	
179.52	188.60	GABBRO								
		Halo alteration in gabbro as at 173.32 to 175.53 metres.	FX300286	179.52	181.07	1.55	2	F36	.095	
		179.52 181.07 2% disseminated pyrite.	FX300287	181.07	182.76	1.69	TR	F41	<.005	
		182.76 184.33 Locally a brecciated appearance to quartz carbonate veins.	FX300288	182.76	184.33	1.57	TR	F*	<.005	
			FX300289	184.33	185.79	1.46	TR	F34	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
185.79	187.26	10 centimetre granular quartz carbonate vein with iron carbonate stringers and brown iron carbonate patches. Inclusions of pale gray to gray chloritic gabbro.	FX300290	185.79	187.26	1.47	TR	F36	.005	
			FX300291	187.26	188.60	1.34	1	F*	.010	
187.26	188.60	Rusty brown fracture sub parallel to core axis. 1% scattered euhedral pyrite.								
188.60	191.37	QUARTZ CARBONATE VEIN								
		White quartz carbonate vein. 10% iron carbonate as white patches and brown stringers in bullish quartz vein. Locally trace blebby pyrite.	FX300292	188.60	189.67	1.07	TR	F*	<.005	
			FX300293	189.67	190.81	1.14	2	F*	.190	
189.67	190.81	Quartz vein with intensely altered and bleached buff to green fuchsitic altered gabbro inclusions with 2% euhedral and disseminated pyrite. Scattered black chloritic stylolites.	FX300294	190.81	191.37	.56	3	F*	.050	
190.81	191.37	50% chloritic inclusions with 3% fine disseminated pyrite.								
191.37	206.82	GABBRO								
		Intensely altered gabbro. Pale green to emerald green fuchsitic altered gabbro, locally with gray green very weakly fuchsitic patches. Medium grained. Locally weakly foliated, generally massive. 10% wispy and boudinaged quartz carbonate veinlets and stringers, locally hematitic and chloritic. Scattered milky quartz veins with tourmaline and trace pyrite. Silicified. 10% iron carbonate crystals. 1 to 2% euhedral pyrite up to 1 millimetre, fine disseminated pyrite.	FX300295	191.37	192.61	1.24	1	F*	.105	
			FX300296	192.61	193.88	1.27	1	F*	.010	
			FX300297	193.88	194.82	.94	TR	F*	.020	
			FX300298	194.82	195.78	.96	TR	F*	.010	
			FX300299	195.78	196.83	1.05	2	F*	<.005	
			FX300300	196.83	198.31	1.48	1	F*	.020	
			FX300301	198.31	199.84	1.53	TR	F47	<.005	
			FX300302	199.84	201.50	1.66	1	F48	<.005	
			FX300303	201.50	202.97	1.47	TR	F48	.020	
191.37	193.88	Locally hematitic quartz carbonate	FX300304	202.97	204.30	1.33	TR	F*	.385	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		stringers. 15% yellow sericitic altered feldspar. Weakly to moderately fuchsitic. 1% disseminated and euhedral pyrite.	FX300305	204.30	205.32	1.02	2	F*	.015	
			FX300306	205.32	206.82	1.50	1	F*	.055	
	193.88 194.82	Gray green, weakly fuchsite.								
	194.82 195.78	10 centimetre pale orange quartz iron carbonate vein with inclusions of gabbro cut by weakly hematitic quartz carbonate veinlets.								
	195.78 196.88	Gray green to gray. Moderately bleached with green fuchsitic patches. 2% euhedral pyrite.								
	198.31 199.84	Smokey 2 centimetre quartz carbonate vein with iron carbonate rims.								
	199.84 201.50	As at 195.78 to 196.88 metres.								
	201.50 204.30	2 centimetre smokey tourmaline bearing quartz carbonate vein with iron carbonate rims. Locally blow-out of quartz carbonate vein with intense buff alteration halo.								
	204.30 205.32	Strongly hematitic and fuchsitic alteration adjacent to 10 centimetre tourmaline bearing quartz vein with patchy iron carbonate. 2% euhedral pyrite up to 3 millimetres.								
	205.32 206.82	Gray green to gray, moderately bleached. 5% iron carbonate crystals.								
206.82	222.55	GABBRO								
		Altered gabbro. Gray to dark gray, fine grained to medium grained. Massive. Moderately bleached with weakly mottled appearance. Weak brown iron carbonate patches.	FX300307	206.82	208.38	1.56	1	F*	<.005	
			FX300308	208.38	209.79	1.41	1	F*	<.005	
			FX300309	209.79	211.31	1.52	1	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********
		10% wispy quartz iron carbonate veinlets and stringers with chloritic inclusions. 5% iron carbonate crystals. Very weakly calcareous. 1% fine disseminated pyrite. Moderately hard.
209.79	212.83	Locally 10 to 15% contorted weakly hematitic quartz carbonate veins.
214.33	215.86	Euhedral pyrite up to 5 millimetres.
215.86	217.37	Locally fuchsite alteration halo with 1 to 2% fine disseminated and euhedral pyrite adjacent to quartz carbonate vein with hematitic stringers.
217.37	218.85	Locally weakly fuchsitic patches.
220.42	221.52	10% wispy quartz carbonate veinlets and stringers.
221.52	222.55	Locally weakly fuchsitic patches grading into intensely altered fuchsitic gabbro.
222.55	256.20	GABBRO
		Intensely altered gabbro as at 191.37 to 206.82 metres. Rare chalcopyrite.
224.14	225.22	Chlorite bearing quartz carbonate vein with hematitic alteration at margins.
225.22	226.63	Gray green to gray. Moderately bleached with rare orange quartz carbonate veins. 1% disseminated euhedral pyrite.
226.63	228.07	As above with patchy fuchsitic alteration. 1% massive chalcopyrite in chloritic stringer in quartz carbonate vein.
229.61	231.04	Multiple generation cross cutting quartz carbonate veinlets and veins. 1% and euhedral pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300310	211.31	212.83	1.52	1	F*	<.005	
FX300311	212.83	214.33	1.50	1	F*	<.005	
FX300312	214.33	215.86	1.53	1	F*	<.005	
FX300313	215.86	217.37	1.51	2	F40	<.005	
FX300314	217.37	218.85	1.48	TR	F*	<.005	
FX300315	218.85	220.42	1.57	TR	F*	<.005	
FX300316	220.42	221.52	1.10	TR	F*	<.005	
FX300317	221.52	222.55	1.03	TR	F*	<.005	
FX300318	222.55	224.14	1.59	1	F*	<.005	
FX300319	224.14	225.22	1.08	1	F*	.070	
FX300320	225.22	226.63	1.41	1	F*	.010	
FX300321	226.63	228.07	1.44	1	F*	.145	
FX300322	228.07	229.61	1.54	TR	F*	.055	
FX300323	229.61	231.04	1.43	1	F*	.005	
FX300324	231.04	232.73	1.69	2	F*	.055	
FX300325	232.73	233.45	.72	2	F*	.085	
FX300326	233.45	234.69	1.24	2	F*	.010	
FX300327	234.69	236.16	1.47	2	F*	.245	
FX300328	236.16	237.62	1.46	2	F*	.090	
FX300329	237.62	239.20	1.58	2	F*	<.005	
FX300330	239.20	240.29	1.09	2	F*	.005	

**********DESCRIPTION**********

FROM M	TO M	
231.04	233.45	Scattered bullish white quartz carbonate veins up to 20 centimetres thick with inclusions of black chlorite. 2% euhedral pyrite up to 5 millimetres. 5% pale smokey quartz carbonate veinlets.
233.45	236.16	50% quartz carbonate veins with bleached inclusions of gabbro with black chloritic rims and 2% euhedral pyrite. Locally hematitic altered gabbro inclusions. Rare tourmaline and chalcopyrite.
239.20	240.29	2% euhedral pyrite up to 5 millimetres.
240.29	241.03	50% quartz carbonate veins with chloritic stylolites and 2% euhedral pyrite. 10% sericitic altered feldspar. Locally intensely bleached gabbro. Pale buff to white with chloritic clots adjacent to boudinaged quartz carbonate vein.
241.03	242.36	Intense bleaching adjacent to quartz carbonate veinlets.
243.83	244.77	Fuchsite becoming paler in colour.
244.77	245.59	50% quartz carbonate vein with inclusions of black chlorite and trace euhedral pyrite. Patchy iron carbonate. Ground core. 16 centimetres lost core.
245.59	246.62	2% euhedral pyrite up to 1 centimetre.
248.30	249.78	Fuchsite becoming darker gray in colour.
249.78	250.71	Intense bleaching and alteration adjacent to weakly smokey quartz carbonate veinlets sub parallel to core axis, cut by chlorite bearing quartz vein with iron carbonate rims.
250.71	252.20	Patchy gray green to gray altered gabbro.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300331	240.29	241.03	.74	2	F*	.020	
FX300332	241.03	242.36	1.33	2	F*	.005	
FX300333	242.36	243.83	1.47	1	F*	.010	
FX300334	243.83	244.77	.94	1	F*	.025	
FX300335	244.77	245.59	.82	TR	F*	.005	
FX300336	245.59	246.62	1.03	2	F*	.005	
FX300337	246.62	248.30	1.68	1	F*	<.005	
FX300338	248.30	249.78	1.48	1	F*	<.005	
FX300339	249.78	250.71	.93	1	F*	.010	
FX300340	250.71	252.20	1.49	1	F*	<.005	
FX300341	252.20	253.69	1.49	1	F*	.015	
FX300342	253.69	254.98	1.29	TR	F*	.075	
FX300343	254.98	256.20	1.22	TR	F*	.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		1% disseminated pyrite.								
	252.20 253.69	Locally 10 centimetre tourmaline bearing quartz carbonate vein with fuchsitic inclusions and chloritic iron carbonate rims. Broken core. Rare massive chalcopyrite.								
	253.69 254.98	5 centimetre quartz carbonate vein with tourmaline and fuchsitic inclusions.								
	254.98 256.20	Locally rusty iron carbonate fracture with brown alteration halo.								
256.20 258.21		DIKE								
		Felsite dike. Pale gray, fine grained, massive. Silicified with 3 to 4% euhedral pyrite up to 1 millimetre, scattered cross cutting quartz carbonate stringers. Moderately iron carbonatized. Sharp contacts.	FX300344	256.20	258.21	2.01	TR	F*	.015	
258.21 270.28		GABBRO								
		Intensely altered gabbro as at 222.55 to 256.20 metres.	FX300345	258.21	259.47	1.26	TR	F*	.010	
	260.84 262.07	Locally gray, bleached patches. 2% euhedral pyrite up to 4 millimetres.	FX300346	259.47	260.84	1.37	TR	F*	.015	
			FX300347	260.84	262.07	1.23	2	F35	.220	
	262.07 263.56	25% quartz veins up to 30 centimetres thick with inclusions of white iron carbonate and black chlorite, locally cut by smokey pyritic quartz veins with 3% euhedral pyrite up to 5 millimetres. Locally pale orange bleached alteration halos adjacent to boudinaged quartz carbonate veinlets.	FX300348	262.07	263.56	1.49	3	F*	.125	
			FX300349	263.56	264.60	1.04	1	F*	.010	
			FX300350	264.60	266.09	1.49	TR	F*	.010	
			FX300351	266.09	267.61	1.52	TR	F*	.060	
			FX300352	267.61	269.16	1.55	1	F*	.015	
			FX300353	269.16	270.28	1.12	1	F*	.055	
	263.56 264.60	Tourmaline bearing quartz carbonate vein								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		50 centimetres thick with black chlorite rimmed pale buff to green inclusions of fuchsitic gabbro.								
	264.60 266.09	Locally tourmaline bearing quartz carbonate veins.								
	266.09 267.61	Locally strongly rusty fault gouge at 266.30 metres, with a bleached, rusty alteration halo. Locally tourmaline bearing quartz carbonate vein. 1% disseminated pyrite throughout.								
	267.61 270.28	Locally with rusty iron carbonate, locally vuggy fractures. Sharp lower contact with feldspar porphyry dike. Concentration of euhedral and disseminated pyrite in fuchsitic altered gabbro adjacent to dike.								
270.28	271.48	FELDSPAR PORPHYRY								
		Feldspar porphyry dike. Pale gray, very fine grained to aphanitic, siliceous matrix with 15% white feldspar megacrysts. 5 to 7% quartz carbonate veinlets and stringers. 10% pervasive euhedral pyrite up to 1 millimetre. Inclusions of fuchsite at contacts. Concentrations of pyrite in fuchsite. Locally inclusions of black chlorite adjacent to 8 centimetre quartz carbonate vein.	FX300354	270.28	271.48	1.20	10	F*	.035	
271.48	278.60	GABBRO								
		Intensely altered gabbro as at 258.21 to 270.28 metres. Quartz carbonate vein at contact with feldspar porphyry dike.	FX300355	271.48	273.71	2.23	2	F*	.220	
			FX300356	273.71	275.17	1.46	2	F*	.105	
			FX300357	275.17	276.76	1.59	2	F*	.060	

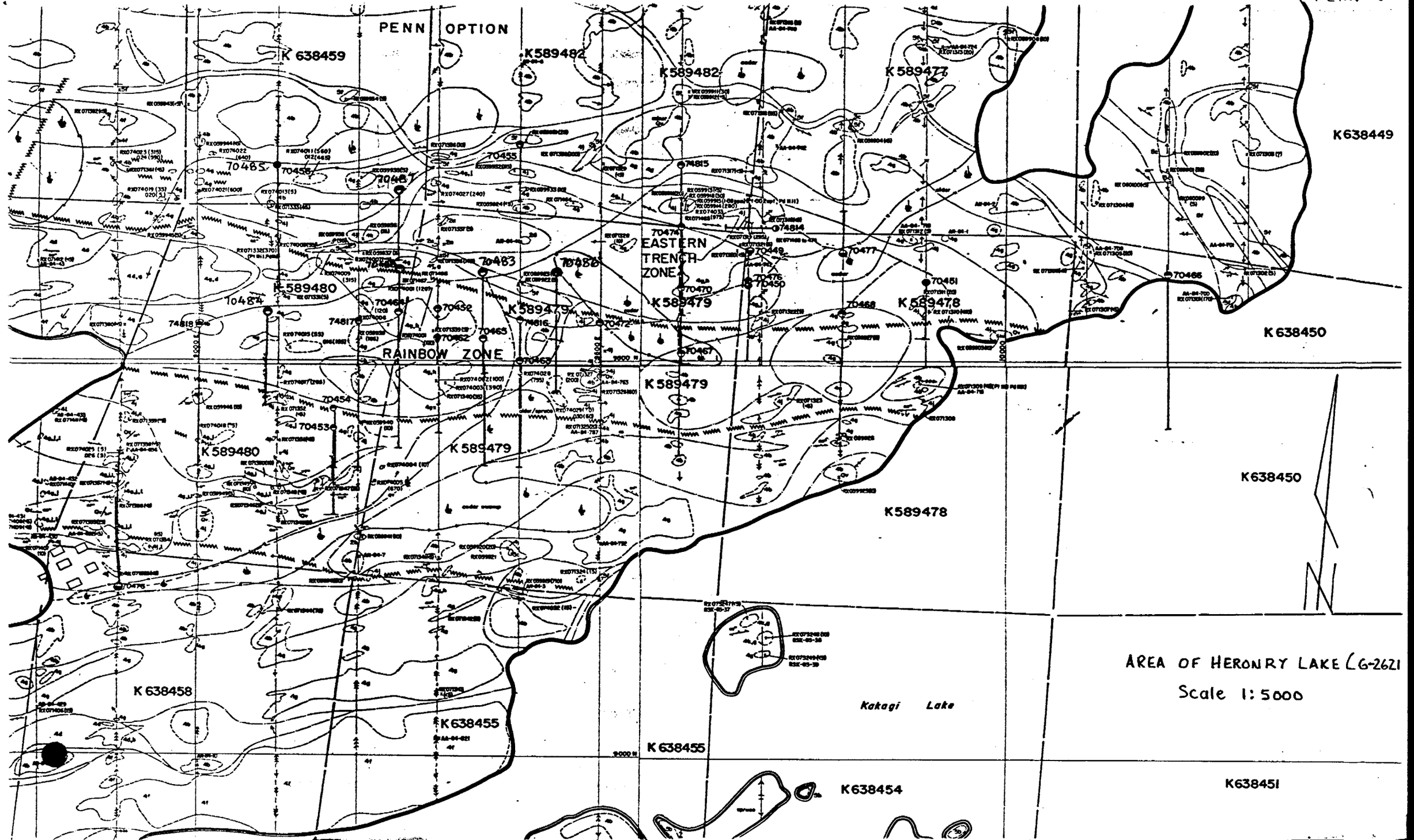
FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN X	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	271.48	273.71 Locally contorted quartz carbonate veinlets with 2% euhedral pyrite.	FX300358	276.76	277.74	.98	2	F*	.010	
	273.71	276.76 Minor feldspar porphyry dikelettes with 2% euhedral pyrite at margins.	FX300359	277.74	278.60	.86	2	F*	.015	
	276.76	277.74 Clots of euhedral pyrite in boudinaged quartz carbonate veinlets.								
	277.74	278.60 Quartz carbonate veins with chlorite stringers and iron carbonate rims. Sharp lower contact with felsite dike.								
278.60	279.48	DIKE								
		Felsite dike. Pale gray green. Fine grained, massive with 10% iron carbonate rimmed quartz veins. 3% euhedral pyrite up to 5 millimetres concentrated adjacent to veins. 2 to 3% iron carbonate. Sharp lower contact.	FX300360	278.60	279.48	.88	3	F*	.160	
279.48	285.40	FELDSPAR PORPHYRY								
		Pale gray, fine grained, siliceous matrix with 20% white feldspar megacrysts up to 5 millimetres. 2% quartz carbonate veinlets and stringers. Massive. Locally poor in megacrysts. 5 to 7% euhedral pyrite up to 1 millimetre. 1% iron carbonate. Hard.	FX300361	279.48	280.97	1.49	5	F*	.025	
			FX300362	280.97	282.45	1.48	5	F*	.040	
			FX300363	282.45	283.23	.78	5	F*	.170	
			FX300364	283.23	283.88	.65	2	F*	.415	
			FX300365	283.88	285.40	1.52	5	F*	.110	
	283.23	283.88 Poorly structured quartz vein with 5% patchy iron carbonate and black chloritic inclusions with 2% pyrite.								
285.40	290.14	GABBRO								
		Bleached gabbro. Pale gray to buff, medium grained,	FX300366	285.40	286.91	1.51	7	F*	.150	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		massive and silicified. Rough granular textured surface with remnant gabbro texture. Locally weakly fuchsitic fragments. Scattered quartz iron carbonate stringers. 5 to 7% euhedral pyrite. 5% iron carbonate crystals. Moderately hard.	FX300367	286.91	288.61	1.70	5	F*	.035	
			FX300368	288.61	290.14	1.53	5	F*	.025	
		288.61 290.14 Gradational lower contact with intensely altered gabbro.								
290.14	290.74	GABBRO								
		Intensely altered gabbro as at 222.55 to 256.20 metres. 5% euhedral pyrite up to 3 millimetre. Locally folded contorted boudinaged quartz carbonate veinlets and stringers. Weakly sericitic feldspar crystals.	FX300369	290.14	290.74	.60	2	F*	.185	
290.74	292.00	QUARTZ CARBONATE VEIN								
		Quartz carbonate vein with inclusions of bleached gabbro. Poorly structured white quartz with inclusions of pale buff to gray green gabbro with 2% euhedral pyrite. Scattered smears of visible gold up to 2 millimetres occurring in 4 places. Visible gold locally occurs interstitial with pyrite. Locally radiating needle like crystals of pyrite.	FX300370	290.74	292.00	1.26	2	F*	4.240	
292.00	295.05	GABBRO								
		Intensely altered gabbro as at 290.14 to 290.74 metres. Strongly bleached to white locally. 10% smokey quartz carbonate veins cutting carbonate veinlets. Locally up to 10% disseminated and euhedral pyrite.	FX300371	292.00	293.32	1.32	10	F*	2.820	
			FX300372	293.32	295.05	1.73	7	F*	.315	
		292.00 293.32 Locally brecciated inclusions of altered								

FROM M	TO M	**********DESCRIPTION**********
		fuchsitic gabbro in smokey quartz carbonate veins with 10% euhedral and disseminated pyrite.
293.32	295.05	Locally bleached to white with green fuchsite patches. Sharp lower contact with feldspar porphyry.
295.05	317.91	QUARTZ FELDSPAR PORPHYRY
		Pale gray to brown, very fine grained to aphanitic siliceous matrix with 25% white feldspar megacrysts and 10% quartz eyes. Locally bleached to white. Massive. Locally weakly to strongly hematitic. Scattered hematitic stringers. Up to 7% euhedral pyrite up to 1 millimetre. 5% quartz carbonate veinlets. 5% milky white quartz veins with feldspar porphyry inclusions. Very hard.
295.05	296.19	Locally bleached.
300.28	301.14	Locally hematitic.
304.19	305.68	Locally hematitic.
307.19	308.68	Locally strongly bleached with a purple brown hematitic alteration which masks the feldspar phenocrysts, leaving only the quartz eyes visible.
309.32	310.55	Quartz flooded. Highly altered quartz feldspar porphyry inclusions in white, poorly structured quartz vein.
310.55	311.47	Quartz flooded with strongly altered purple brown quartz feldspar porphyry inclusions.
313.20	314.30	Locally bleached adjacent to hematitic quartz carbonate veins.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300373	295.05	296.19	1.14	7	F*	.060	
FX300374	296.19	297.80	1.61	5	F*	.040	
FX300375	297.80	299.49	1.69	5	F*	.055	
FX300376	299.49	300.28	.79	2	F*	.080	
FX300377	300.28	301.14	.86	2	F*	.040	
FX300378	301.14	302.66	1.52	2	F*	.040	
FX300379	302.66	304.19	1.53	2	F*	.040	
FX300380	304.19	305.68	1.49	5	F*	.030	
FX300381	305.68	307.19	1.51	2	F*	.105	
FX300382	307.19	308.68	1.49	2	F*	.100	
FX300383	308.68	309.32	.64	2	F*	.025	
FX300384	309.32	310.55	1.23	2	F*	.040	
FX300385	310.55	311.47	.92	4	F*	.050	
FX300386	311.47	313.20	1.73	2	F*	.050	
FX300387	313.20	314.30	1.10	2	F*	.045	
FX300388	314.30	315.50	1.20	2	F*	.045	
FX300389	315.50	316.96	1.46	2	F*	.020	
FX300390	316.96	317.91	.95	2	F*	.030	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		316.96 317.91 Foot of hole.								


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
70455
74815
70483
70480
70474
EASTERN
TRENCH
ZONE
74814
70449
70477
70476
70450
70466
K589480
70484
70482
K589479
K589479
K589478
74818
74816
70472
70465
70462
RAINBOW ZONE
70467
70468
K638450
K638450
70454
704536
K589480
K589479
K589478
K638458
K638455
K638455
K638454
K638451
Kakagi Lake
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********IN' 'IMITED**********

FIELD EXPLOI N DIAMOND DRILL LOG

PROJECT	: PENN OPTION	LATITUDE	:N 9720.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03/28/88
PROPERTY	: CROW-PENN	DEPARTURE	:E 9250.0 M	TOWNSHIP	:	COMPLETED	: 03/30/88
BOREHOLE	: 70487-0	ELEVATION	: 1350.2 M	PROVINCE	: ONTARIO	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 355	COUNTRY	: CANADA	DRILLED BY	: D.W. COATES ENTERPRISES
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K638459	DRILL TYPE	: LONGYEAR 38
DEPTH	: 184.7 M	LOGGED BY	: S. VIDITO	GRID NAME	:	TEST METHOD	: ACID
				CORE SIZE	: BQ	ASSAYED FOR	: Au

COMMENTS : COLLAR IS 33M W AND 19M N OF POST#3.

LEFT IN HOLE:3.66 METERS OF BW CASING AND SHOE.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.57		-55.50	60.96		-54.50	121.92		-51.00	182.88		-50.00

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
										**********ANALYSES**********
.00	3.66	OVERBURDEN								
		Casing through 3.66 metres of sand and gravel overburden.	NS	.00	3.66	3.66			n/a	
3.66	30.85	LAPILLI TUFF								
		Strongly altered lapilli tuff. Contains 5 to 10%	FX271264	3.66	4.88	1.22	TR	-	.005	
		elongate dark green to medium gray green indistinct	FX271265	4.88	6.40	1.52	TR	-	.020	
		fragments of variable composition and textures up to 4	FX271266	6.40	7.92	1.52	TR	-	.080	
		centimetres long with 1 to 2% bomb sized fragments up to	FX271267	7.92	8.69	.77	TR	-	.325	
		10 millimetres wide in a fine grained, medium green to	FX271268	8.69	9.45	.76	TR	-	.140	
		green gray, moderately hard, not magnetic, moderately to	FX271269	9.45	10.21	.76	TR	-	.040	
		well foliated, locally massive, ash tuff matrix.	FX271270	10.21	10.97	.76	TR	-	<.005	
		Locally contains fine grained sections, possibly ash	FX271271	10.97	12.50	1.53	TR	-	.015	
		tuff, up to 30 centimetres wide. locally 1 to 2%	FX271272	12.50	14.02	1.52	TR	-	.035	

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FROM M	TO M	**********DESCRIPTION**********
		pervasive calcite alteration and silicification in irregular patchs. Locally moderately bleached and weakly hematitized up to 3 centimetres from quartz carbonate veins. Moderately chloritic and sericitic along fractures. contains 1 to 3% irregular, cross cutting medium gray to brown red quartz carbonate veins. Locally contains irregular medium to light green fuchsitic and chloritic streaks with black tourmaline up to 5 millimetres wide. Trace fine grained disseminated pyrite.
		6.40 7.92 Locally moderately bleached.
		7.92 8.69 Quartz carbonate vein with irregular chloritic and carbonate streaks of variable colours.
		8.69 9.45 As above with tourmaline rims.
		15.54 17.07 Locally strongly bleached.
		17.07 18.59 Vuggy quartz carbonate veins.
		18.59 20.12 Iron carbonate alteration increasing down hole with decreasing calcite alteration.
		21.64 23.16 Locally massive.
		24.69 26.21 Becoming well foliated down hole. Locally strongly bleached and sericitic.
		27.74 29.26 Foliation becoming less distinct.
		29.26 30.85 Locally strongly calcareous.
30.85	34.14	TUFF
		Possibly basalt. Dark green, fine grained, hard, weakly magnetic, massive. Moderately chloritic with 1 to 2% pervasive iron carbonate alteration. Contains 10 to 15% light gray patchs up to 1 millimetre wide. Locally contains limonite along fractures. Contains 1 to 2% cross cutting, locally vuggy, quartz calcite and iron

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271273	14.02	15.54	1.52	TR	-	<.005	
FX271274	15.54	17.07	1.53	TR	-	.020	
FX271275	17.07	18.59	1.52	TR	-	.010	
FX271276	18.59	20.12	1.53	TR	-	<.005	
FX271277	20.12	21.64	1.52	TR	F45	.005	
FX271278	21.64	23.16	1.52	TR	-	.040	
FX271279	23.16	24.69	1.53	TR	-	<.005	
FX271280	24.69	26.21	1.52	TR	F50	.040	
FX271281	26.21	27.74	1.53	TR	F50	.030	
FX271282	27.74	29.26	1.52	TR	F50	.010	
FX271283	29.26	30.85	1.59	TR	F50	.010	
FX271284	30.85	32.31	1.46	TR	-	.025	
FX271285	32.31	33.22	.91	TR	-	<.005	
FX271286	33.22	34.14	.92	TR	-	<.005	

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		carbonate veinlets up to 1 centimetre wide. Trace fine grained disseminated pyrite.								
34.14	40.84	LAPILLI TUFF								
		Strongly altered lapilli tuff. Contains 10 to 15% elongate medium green to medium gray green streaks, possibly fragments, up to 4 centimetres long in a fine grained, moderately hard, not magnetic, moderately to strongly foliated medium green to gray green matrix. Contains 1 to 2% pervasive iron carbonate alteration. Locally moderately bleached and weakly to moderately hematitized. Minor fuchsite and sericite in contorted stringers up to 2 millimetres wide and irregular patchs up to 5 millimetres diameter associated with quartz carbonate veins. Locally contains 5 to 10% irregular and cross cutting quartz iron carbonate veinlets up to 5 centimetres wide. Trace fine grained disseminated pyrite.	FX271287	34.14	35.36	1.22	TR	F45	.020	
			FX271288	35.36	36.12	.76	TR	-	.090	
			FX271289	36.12	36.88	.76	TR	F40	.010	
			FX271290	36.88	37.34	.46	TR	-	.010	
			FX271291	37.34	38.40	1.06	TR	-	.045	
			FX271292	38.40	39.93	1.53	TR	-	<.005	
			FX271293	39.93	40.84	.91	TR	-	.005	
		34.14 35.36 Becoming moderately bleached down hole.								
		35.36 36.12 Strongly altered with contorted foliation down hole.								
		37.34 38.40 Becoming less strongly altered down hole.								
		38.40 39.93 Contains 30 centimetre wide medium to dark gray inclusion, possibly intensely altered gabbro, with sub angular to sub rounded medium gray weakly hematitized patchs and medium green chloritic streaks.								
		39.93 40.84 Locally bleached along quartz carbonate veins								
40.84	43.13	GABBRO								
		Possibly altered gabbro. Medium gray green to medium	FX271294	40.84	42.18	1.34	TR	-	.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		green, medium grained, moderately hard, not magnetic, weakly to moderately foliated. Composed of 20 to 25% lenticular medium gray green carbonatized patchs up to 5 millimetres long with 10 to 15% irregular chloritic streaks up to 1 millimetre wide. Locally weakly to moderately hematitized with 1 to 2% pervasive iron carbonate alteration. Minor irregular, cross cutting quartz carbonate veins. Trace fine grained disseminated pyrite associated with quartz carbonate veins and hematite alteration.	FX271295	42.18	43.13	.95	TR	-	.125	
43.13	44.50	LAPILLI TUFF								
		Strongly altered lapilli tuff. Contains 10 to 15% elongate medium green to medium gray green streaks, possibly fragments, up to 4 centimetres long in a fine grained, moderately hard, not magnetic, moderately to strongly foliated medium green to gray green matrix. Contains 1 to 2% pervasive iron carbonate alteration. Locally moderately bleached and weakly to moderately hematitized. Minor fuchsite and sericite in contorted stringers up to 2 millimetres wide and irregular patchs up to 5 millimetres diameter associated with quartz carbonate veins. Locally contains 5 to 10% irregular and cross cutting quartz iron carbonate veinlets up to 5 centimetres wide. Trace fine grained disseminated pyrite. 43.74 44.50 Becoming less bleached down hole with more distinct foliation.	FX271296	43.13	43.74	.61	TR	-	.055	
			FX271297	43.74	44.50	.76	TR	F45	<.005	
44.50	50.60	LAPILLI TUFF								
		Halo altered lapilli tuff. Contains 5 to 10% elongate	FX271298	44.50	46.02	1.52	TR	F50	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		medium green chloritic and medium gray green carbonatized patchs, possibly fragments, up to 3 centimetres long with 10 to 15% medium gray sub rounded carbonatized spots up to 1 millimetre diameter in a medium green, fine grained, weakly magnetic, weakly foliated matrix. Contains 1 to 2% pervasive iron carbonate alteration. Moderately chloritic along fractures. Locally 5% irregular, cross cutting brown red quartz iron carbonate veinlets up to 1 centimetre wide. Locally moderately bleached up to 5 millimetres from quartz carbonate veins. Trace fine grained pyrite associated with quartz carbonate veins.	FX271299	46.02	47.55	1.53	TR	F50	<.005	
			FX271300	47.55	49.07	1.52	TR	F45	.055	
			FX271301	49.07	50.60	1.53	TR	F50	<.005	
		45.50 49.07 Contains 2 centimetre wide magnetic iron carbonate stringer at 48.62.								
		49.07 50.60 Becoming moderately bleached down hole grading to strongly altered lapilli tuff.								
50.60	62.79	LAPILLI TUFF								
		Strongly to intensely altered lapilli tuff. Contains 10 to 15% lenticular medium green to buff gray patchs up to 4 centimetres long and bands up to 4 centimetres wide, possibly indistinct fragments, in a fine grained, light green gray to buff gray, moderately soft, not magnetic, moderately to well foliated ash tuff matrix. Locally contains strongly bleached buff gray intensely altered sections up to 60 centimetres wide associated with quartz carbonate veins. Locally moderately bleached and hematitized with 1 to 2% pervasive iron carbonate alteration. Contains minor fuchsitic streaks and patchs 2 to 3 millimetres long parallel to foliation. Contains 5 to 10% sericitic spots up to 1 millimetre diameter.	FX271302	50.60	52.12	1.52	TR	F60	.030	
			FX271303	52.12	53.64	1.52	TR	F50	.035	
			FX271304	53.64	55.17	1.53	TR	F45	.255	
			FX271305	55.17	56.69	1.52	TR	F50	.035	
			FX271306	56.69	58.22	1.53	TR	-	.070	
			FX271307	58.22	59.74	1.52	TR	F55	.120	
			FX271308	59.74	61.26	1.52	TR	F55	.185	
			FX271309	61.26	62.79	1.53	TR	F55	.015	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Locally contains contorted black tourmaline rims and stringers with irregular and diffuse light gray tuffaceous whisps up to 30 centimetres from brown red quartz iron carbonate veins. Minor irregular brown yellow streaks up to 5 millimetres wide. Locally 1% irregular, cross cutting quartz iron carbonate veinlets up to 7 centimetres wide. Contains up to 1% fine grained disseminated pyrite associated with quartz carbonate veins.								
		53.64 55.17 Locally intensely altered.								
		56.69 58.22 Locally intensely altered with extensive tourmaline stringers.								
		58.22 59.74 Becoming slightly less bleached down hole.								
		61.26 62.79 Becoming less bleached and more chloritic grading down hole to altered lapilli tuff.								
62.79	66.29	LAPILLI TUFF								
		Altered lapilli tuff. Contains 5 to 10% elongate buff gray carbonatized patchs in a fine grained, medium gray green, weakly magnetic, weakly foliated matrix. Locally weakly chloritic and moderately silicified. Contains 2 to 3% irregular, cross cutting medium gray weakly faulted quartz carbonate veins up to 5 millimetres wide. Trace fine grained disseminated pyrite.	FX271310	62.79	64.31	1.52	TR	F50	<.005	
			FX271311	64.31	65.84	1.53	TR	F45	.015	
			FX271312	65.84	66.29	.45	TR	F40	<.005	
		62.79 64.31 Locally slightly faulted down hole.								
		64.31 66.29 Becoming strongly foliated at sharp lower contact.								
66.29	70.41	BASALT								
		Sub halo altered basalt. Medium green, fine grained,	FX271313	66.29	67.36	1.07	TR	-	.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		moderately hard, weakly magnetic, massive. Contains 10 to 15% sub rounded and irregular medium gray carbonatized patchs up to 1 millimetre diameter. Moderately chloritic and slickensided with minor limonite along fractures. Contains 1 to 2% irregular, cross cutting and weakly faulted medium gray quartz carbonate veins up to 1 centimetre wide. Contains 1 to 2% pervasive iron carbonate alteration. Trace fine grained disseminated pyrite.	FX271314	67.36	68.89	1.53	TR	-	<.005	
			FX271315	68.89	70.41	1.52	TR	-	.040	
70.41	72.94	BASALT								
		Halo altered basalt. Medium green, fine grained, moderately hard, weakly magnetic, massive. Contains 10 to 15% sub rounded and irregular medium gray carbonatized patchs up to 1 millimetre diameter. contains 1 to 2% pervasive iron carbonate alteration. Locally slightly bleached along quartz carbonate veins. Moderately chloritic and slickensided with minor limonite along fractures. Contains 1 to 2% irregular, cross cutting and weakly faulted brown red quartz carbonate veins up to 1 centimetre wide. Contains 1 to 2% pervasive iron carbonate alteration. Trace fine grained disseminated pyrite.	FX271316	70.41	71.93	1.52	TR	-	.035	
			FX271317	71.93	72.94	1.01	TR	-	<.005	
72.94	82.66	LAPILLI TUFF								
		Halo altered lapilli tuff. Locally strongly altered. Contains 5 to 10% elongate medium green to gray green fragments up to 4 centimetres long. Locally moderately to strongly bleached and moderately hematitized in strongly altered sections. Contains 5% irregular	FX271318	72.94	74.10	1.16	TR	F65	.020	
			FX271319	74.10	74.98	.88	TR	F45	<.005	
			FX271320	74.98	76.50	1.52	TR	-	<.005	
			FX271321	76.50	78.03	1.53	TR	-	<.005	
			FX271322	78.03	79.55	1.52	TR	-	.020	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		sericite patchs up to 1 millimetre diameter and minor brown red clots up to 5 millimetres diameter. Contains 2 to 5% irregular, cross cutting quartz iron carbonate veinlets up to 1 centimetre wide with fuzzy bleached zones up to 1 centimetre from veinlets. Contains minor fine grained disseminated pyrite associated with quartz carbonate veins.	FX271323	79.55	81.08	1.53	TR	-	.035	
			FX271324	81.08	82.30	1.22	TR	-	.010	
			FX271325	82.30	82.66	.36	TR	-	.005	
72.94	74.10	Strongly bleached and hematitized at sharp upper contact becoming less altered and more chloritic down hole.								
76.50	78.03	Strongly bleached up to 30 centimetres from 2 to 3 centimetre wide quartz carbonate vein at 77.57.								
81.08	82.30	Locally moderately bleached.								
82.30	82.66	Becoming moderately bleached grading to strongly altered lapilli tuff down hole.								
82.66	105.46	LAPILLI TUFF								
		Strongly to intensely altered lapilli tuff. Contains 10 to 15% lenticular medium green to buff gray patchs up to 4 centimetres long and bands up to 4 centimetres wide, possibly indistinct fragments, in a fine grained, light green gray to buff gray, moderately soft, not magnetic, moderately to well foliated ash tuff matrix. Locally contains strongly bleached buff gray intensely altered sections up to 60 centimetres wide associated with quartz carbonate veins. Locally moderately silicified with 1 to 2% pervasive iron carbonate alteration. Contains minor fuchsitic streaks and patchs 2 to 3 millimetres long parallel to foliation. Contains 5 to 10% sericitic spots up to 1 millimetre diameter.	FX271326	82.66	84.12	1.46	TR	F55	.015	
			FX271327	84.12	85.65	1.53	TR	-	<.005	
			FX271328	85.65	87.17	1.52	TR	-	.045	
			FX271329	87.17	88.70	1.53	TR	-	<.005	
			FX271330	88.70	90.53	1.83	TR	F50	.010	
			FX271331	90.53	91.74	1.21	TR	F30	<.005	
			FX271332	91.74	93.27	1.53	TR	F40	.050	
			FX271333	93.27	94.79	1.52	TR	F40	<.005	
			FX271334	94.79	96.32	1.53	TR	F30	.005	
			FX271335	96.32	97.84	1.52	TR	F45	.040	
			FX271336	97.84	99.36	1.52	TR	-	<.005	
			FX271337	99.36	100.89	1.53	TR	F45	<.005	
			FX271338	100.89	102.41	1.52	TR	F45	<.005	

FROM M	TO M	**********DESCRIPTION**********
		Locally contains contorted black tourmaline rims and stringers. Minor irregular brown yellow streaks up to 5 millimetres wide. Locally 1% irregular, vuggy quartz iron carbonate veinlets up to 7 centimetres wide. Contains up to 1% fine grained disseminated pyrite with siliceous pressure shadows.
	82.66	84.12 Strongly bleached up to 20 centimetres from quartz iron carbonate vein with tourmaline streaks at 89.31.
	85.65	87.17 Locally strongly bleached.
	87.17	88.70 Becoming more chloritic down hole.
	88.70	90.53 Locally moderately to strongly bleached.
	91.74	93.27 Contains numerous concordant brown red quartz carbonate veins up to 2 centimetres wide with black tourmaline, green to black chlorite, and brown yellow sericite streaks.
	94.79	96.32 Becoming moderately bleached and silicified down hole.
	96.32	97.84 Locally contains 1% disseminated pyrite with chloritic halos.
	97.84	99.36 Becoming less bleached and more chloritic down hole.
	100.89	102.41 Locally strongly bleached with vuggy quartz carbonate veins.
	102.41	103.94 As above.
	103.94	105.46 Becoming more chloritic and less altered down hole grading to halo altered lapilli tuff.
105.46	141.12	LAPILLI TUFF
		Halo altered lapilli tuff. Contains 10 to 15% elongate

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271339	102.41	103.94	1.53	TR	F40	<.005	
FX271340	103.94	105.46	1.52	TR	F50	.005	
FX271341	105.46	106.98	1.52	TR	-	<.005	

FROM M	TO M	**********DESCRIPTION**********
		and sub angular medium to light green fragments up to 4 centimetres long with minor bomb sized fragments up to 5 centimetres wide in a fine grained, medium to light green, moderately hard, not magnetic, moderately to weakly foliated matrix. Contains 1 to 2% pervasive iron carbonate alteration. Locally contains 15% sub rounded carbonatized spots up to 1 millimetre diameter becoming sericitic down hole. Locally weakly silicified and bleached. Contains 1 to 3% irregular, cross cutting, locally vuggy, buff gray quartz iron carbonate veinlets up to 1 centimetre wide. Locally moderately to strongly bleached up to 5 centimetres from quartz carbonate veins with numerous irregular tourmaline, sericitic, and chloritic streaks. Trace fine grained disseminated pyrite
108.51	110.03	Locally moderately bleached and silicified.
117.65	119.18	Locally strongly bleached and sericitic up to 6 centimetres from 5 centimetre wide quartz carbonate vein with numerous irregular tourmaline stringers at 118.72.
119.18	120.70	Moderately sericitic up to 3 centimetres from 1 to 2 centimetre wide concordant chloritic quartz carbonate veins at 198.80
122.22	123.75	Locally grading to fine grained sections, possibly ash tuff, up to 20 centimetres wide.
123.75	125.27	Locally moderately bleached.
125.27	126.80	As above.
128.32	129.84	Locally strongly sericitic along quartz carbonate veins.
131.37	132.89	Locally strongly bleached up to 1 centimetre quartz carbonate vein. Minor pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271342	106.98	108.51	1.53	TR	F30	.015	
FX271343	108.51	110.03	1.52	TR	-	.005	
FX271344	110.03	111.56	1.53	TR	F30	.010	
FX271345	111.56	113.08	1.52	TR	F40	.005	
FX271346	113.08	114.60	1.52	TR	-	<.005	
FX271347	114.60	116.13	1.53	TR	F30	<.005	
FX271348	116.13	117.65	1.52	TR	-	<.005	
FX271349	117.65	119.18	1.53	TR	F40	<.005	
FX271350	119.18	120.70	1.52	TR	F40	.005	
FX271351	120.70	122.22	1.52	TR	-	.005	
FX271352	122.22	123.75	1.53	TR	F40	.005	
FX271353	123.75	125.27	1.52	TR	F40	<.005	
FX271354	125.27	126.80	1.53	TR	F30	.010	
FX271355	126.80	128.32	1.52	TR	F40	<.005	
FX271356	128.32	129.84	1.52	TR	F40	.055	
FX271357	129.84	131.37	1.53	TR	F35	<.005	
FX271358	131.37	132.89	1.52	TR	F40	.015	
FX271359	132.89	134.42	1.53	TR	F35	.010	
FX271360	134.42	135.94	1.52	TR	F50	<.005	
FX271361	135.94	137.46	1.52	TR	-	.035	
FX271362	137.46	138.99	1.53	TR	F40	<.005	
FX271363	138.99	140.51	1.52	TR	F30	.025	
FX271364	140.51	141.12	.61	TR	F50	<.005	

FROM M	TO M	**********DESCRIPTION**********
	138.99	140.51 Locally contains minor tourmaline in quartz carbonate veins.
	140.51	141.12 Becoming slightly bleached grading to strongly altered lapilli tuff down hole.
141.12	142.71	LAPILLI TUFF Strongly to intensely altered lapilli tuff. Contains 10 to 15% lenticular medium green to buff gray patchs up to 4 centimetres long and bands up to 4 centimetres wide, possibly indistinct fragments, in a fine grained, light green gray to buff gray, moderately soft, not magnetic, moderately to well foliated ash tuff matrix. Locally contains strongly bleached buff gray intensely altered sections up to 60 centimetres wide associated with quartz carbonate veins. Locally moderately silicified with 1 to 2% pervasive iron carbonate alteration. Contains minor fuchsitic streaks and patchs 2 to 3 millimetres long parallel to foliation. Contains 5 to 10% sericitic spots up to 1 millimetre diameter. Locally contains contorted black tourmaline rims and stringers. Minor irregular brown yellow streaks up to 5 millimetres wide. Locally 1% irregular, vuggy quartz iron carbonate veinlets up to 3 centimetres wide. Trace fine grained disseminated pyrite.
142.71	144.78	FELDSPAR PORPHYRY Composed of 10 to 15% euhedral to subhedral buff white feldspar phenocrysts up to 5 millimetres long in a fine grained, brown red, hard, not magnetic, massive groundmass. Strongly silicified and moderately

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271365	141.12	142.71	1.59	TR	F35	<.005	
FX271366	142.71	143.56	.85	1	-	.170	
FX271367	143.56	144.78	1.22	1	-	.130	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		hematitized with up to 1% pervasive iron carbonate alteration. Contains minor fuchsitic patchs up to 3 millimetres diameter. Locally 1% irregular, cross cutting buff gray quartz iron carbonate veinlets up to 3 centimetres wide. Contains 1 to 2% fine grained to medium grained euhedral to subhedral pyrite associated with quartz carbonate veins.								
		142.71 143.56 Contains minor sub angular strongly altered lapilli tuff inclusions up to 30 centimetres wide at sharp upper contact.								
		143.56 144.78 Becoming moderately bleached at sharp lower contact.								
144.78	160.32	AGGLOMERATE								
		Intensely altered agglomerate. Contains a variety of colours and textures, possibly bombs with variable intensities and modes of alteration. Locally strongly bleached, weakly to moderately hematitized and moderately silicified. Contains 1 to 2% pervasive iron carbonate alteration. Locally contains 5 to 10% irregular sericitic streaks up to 3 millimetres long and chloritic patchs up to 5 millimetres long. Locally strongly bleached up to 5 millimetres from irregular, cross cutting quartz and quartz carbonate veins up to 1 centimetre wide. Locally moderately fractured with numerous irregular black chloritic streaks up to 5 millimetres wide. Trace fine grained to medium grained euhedral to subhedral pyrite concentrated in quartz carbonate veins and bleached halos.	FX271368	144.78	146.61	1.83	TR	-	.075	
			FX271369	146.61	148.13	1.52	TR	-	<.005	
			FX271370	148.13	149.66	1.53	TR	-	<.005	
			FX271371	149.66	151.18	1.52	TR	-	.005	
			FX271372	151.18	152.70	1.52	TR	-	<.005	
			FX271373	152.70	154.23	1.53	TR	F30	<.005	
			FX271374	154.23	155.75	1.52	TR	-	.005	
			FX271375	155.75	157.28	1.53	TR	-	<.005	
			FX271376	157.28	158.80	1.52	TR	-	[illegible]	
			FX271377	158.80	160.32	1.52	TR	-	[illegible]	
		144.78 146.61 Strongly bleached and moderately hematitized becoming moderately fractured								

FROM M	TO M	**********DESCRIPTION**********
		and chloritic down hole.
148.13	149.66	Less strongly hematitized with irregular blue gray patchs.
149.66	151.18	As above.
151.18	152.70	As above.
152.70	154.23	Becoming weakly bleached and moderately silicified down hole.
158.80	160.32	Less strongly altered tuffaceous section.
160.32	184.71	AGGLOMERATE
		Strongly to intensely altered agglomerate. Contains 10 to 15% indistinct medium green to buff gray patchs up to 4 centimetres long and bands up to 10 centimetres wide in a medium green gray to gray brown, fine grained, moderately soft, not magnetic, moderately foliated matrix. Contains 1 to 2% pervasive iron carbonate alteration. Locally moderately to strongly bleached and weakly to moderately hematitized. Contains 10% irregular sericitic streaks up to 1 millimetre long. Contains 1 to 2% irregular brown red to buff white quartz iron carbonate veinlets up to 3 centimetres wide. Locally contains irregular contorted chloritic and brown red streaks up to 3 millimetres wide. trace fine grained disseminated pyrite locally associated with quartz carbonate veins.
160.32	161.00	Well foliated, moderately bleached, and hematitized. Fragments very indistinct.
164.90	166.42	Bands becoming more distinct down hole.
166.42	167.94	Locally moderately bleached.
169.47	170.99	Locally intensely altered with strongly bleached sections.

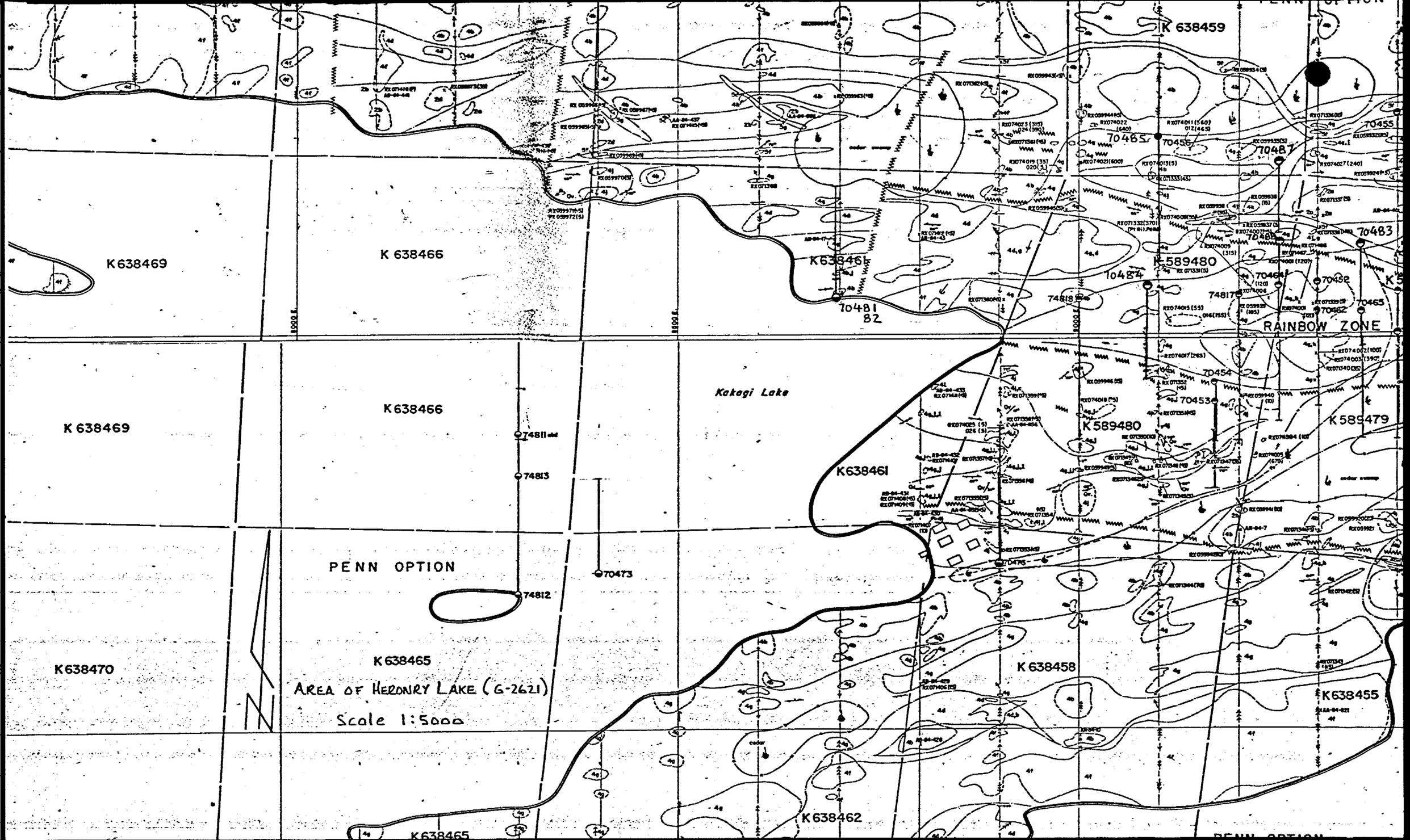
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271378	160.32	161.00	.68	TR	F40	.040	
FX271379	161.00	163.37	2.37	TR	F45	<.005	
FX271380	163.37	164.90	1.53	TR	F45	<.005	
FX271381	164.90	166.42	1.52	TR	F35	.390	
FX271382	166.42	167.94	1.52	TR	F30	.025	
FX271383	167.94	169.47	1.53	TR	F40	<.005	
FX271384	169.47	170.99	1.52	TR	F35	.020	
FX271385	170.99	172.52	1.53	TR	F30	<.005	
FX271386	172.52	174.04	1.52	TR	-	<.005	
FX271387	174.04	175.56	1.52	TR	-	<.005	
FX271388	175.56	177.09	1.53	TR	-	<.005	
FX271389	177.09	178.61	1.52	TR	F30	.025	
FX271390	178.61	180.14	1.53	TR	F30	.040	
FX271391	180.14	181.66	1.52	TR	F30	<.005	
FX271392	181.66	183.18	1.52	TR	F50	<.005	
FX271393	183.18	184.71	1.53	TR	F30	<.005	

**********DESCRIPTION**********

FROM M	TO M	
	170.99	172.52 Locally moderately bleached.
	174.04	175.56 Bands decreasing down hole. Composed of 10 to 15% elongate medium green chloritic patchs in a fine grained medium green gray matrix.
	175.56	177.09 As above. Locally banded.
	177.09	178.61 Bands becoming more distinct down hole.
	180.14	181.66 Becoming rusty with limonite stain along fractures.
	183.18	184.71 Locally strongly altered. Foot of hole at 184.71.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M


K 638459
K638469
K 638466
K638461
70485
70456
70487
70455
70486
70483
K589480
70484
74817
70462
70465
RAINBOW ZONE
70481
82
K638469
K638466
Kakagi Lake
74811
74813
K638461
K589480
K589479
70454
70453
PENN OPTION
70473
74812
K638470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638455
K638462
K638465
PENN OPTION

**********IN[illegible]LIMITED**********

FIELD EXPLOR[illegible]N DIAMOND DRILL LOG

PROJECT	: Penn Option	LATITUDE	:N 9615.0 M	NTS SHEET #	: 52f/4	STARTED	: 03/30/88
PROPERTY	: Crow-Penn	DEPARTURE	:E 9250.0 M	TOWNSHIP	:	COMPLETED	: 04/01/88
BOREHOLE	: 70488-0	ELEVATION	: 1361.5 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: D.W. Coates
DIP	: -55.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: Longyear 38
DEPTH	: 306.6 M	LOGGED BY	: M.W. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ Wireline	ASSAYED FOR	: Gold

COMMENTS : Collar is 33m W and 80m S of Post#2.

LEFT IN HOLE:3.05m of BW casing & casing shoe.

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.57		-56.50	121.92		-45.00	243.84		-37.00			
60.96		-50.00	182.88		-38.00	306.63		-34.50			

1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
										**********ANALYSES**********
.00	3.05	OVERBURDEN Soil and boulders.								
3.05	21.66	GABBRO Subhalo alteration. Dark green to green. Moderately foliated with 20% stretched white iron carbonate crystals, 30% dark green to black chlorite clots. Locally 2 to 3% altered yellow feldspars. 2 to 3% quartz carbonate veinlets and stringers concordant with foliation. Trace pyrite. Moderately soft. 3.05 3.36 Broken core, locally ground. 9.46 10.97 Foliation becoming stronger , fragments more	FX300391	3.05	3.36	.31	TR	F35	.010	
			FX300392	3.36	4.88	1.52	TR	F30	.005	
			FX300393	4.88	6.36	1.48	TR	F34	<.005	
			FX300394	6.36	7.92	1.56	TR	F44	<.005	
			FX300395	7.92	9.46	1.54	TR	F40	<.005	
			FX300396	9.46	10.97	1.51	TR	F46	.005	
			FX300397	10.97	12.43	1.46	TR	F43	<.005	
			FX300398	12.43	14.02	1.59	TR	F30	.010	

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AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********
		elongated.
	10.97	12.43 5% quartz carbonate veins.
	12.43	14.02 Pale green. Distortion of fragments.
	17.08	18.59 Weakly sericitic alteration halo with 2% pyrite adjacent to cross cutting quartz carbonate veinlets.
	18.59	20.17 Patchy unaltered fine grained gabbro.
	20.17	21.66 Grading into subhalo alteration.
14.02	21.66	GABBRO Altered gabbro. Dark green, fine grained gabbro with 15% totally boudinaged quartz veinlets cut perpendicular by calcareous stringers. Elongated pale green to buff yellow sericitic altered feldspar (8:1). Moderately iron carbonatized. Generally a smeared appearance. Moderately hard. Trace pyrite.
21.66	24.67	GABBRO Subhalo alteration in gabbro as at 3.05 to 14.02 metres. 23.16 24.67 Grades into basalt.
24.67	56.54	BASALT Weakly altered basalt (fine grained gabbro?). Dark green, fine grained, massive with 10% quartz core angle iron carbonate veinlets and stringers. Weakly calcareous. Locally moderately foliated. Trace to 1% disseminated pyrite. Locally up to 2% massive chalcopyrite. Locally feldspar stringers. Moderately soft 24.67 26.21 Moderately foliated near gradational upper

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300399	14.02	15.45	1.43	TR	F26	.010	
FX300400	15.45	17.08	1.63	TR	F33	<.005	
FX300401	17.08	18.59	1.51	1	F28	<.005	
FX300402	18.59	20.17	1.58	TR	F30	.005	
FX300403	20.17	21.66	1.49	TR	F30	<.005	
FX300404	21.66	23.16	1.50	TR	F*	<.005	
FX300405	23.16	24.67	1.51	TR	F36	<.005	
FX300406	24.67	26.21	1.54	TR	F38	<.005	
FX300407	26.21	27.73	1.52	2	F27	.010	
FX300408	27.73	29.26	1.53	2	F*	.015	
FX300409	29.26	30.78	1.52	TR	F*	.030	
FX300410	30.78	32.30	1.52	TR	F*	.005	
FX300411	32.30	33.86	1.56	TR	F*	<.005	
FX300412	33.86	35.36	1.50	TR	F*	.010	

FROM M	TO M	DESCRIPTION
		contact.
	26.21 27.73	10% blotchy calcite.
	27.73 30.78	2% disseminated and massive chalcopyrite in quartz calcite veinlets and basalt. Locally vuggy calcareous pockets.
	30.78 33.86	Locally feldspar veinlets.
	33.86 35.36	Locally vuggy calcite pods.
	35.36 42.98	Strongly calcareous.
	42.98 44.50	Locally contorted quartz iron carbonate vein with inclusions of black chlorite and green basalt.
	47.47 48.62	40% totally boudinaged weakly hematitic quartz iron carbonate veinlets concordant cross cutting 3 centimetre tourmaline bearing quartz carbonate vein with 5% euhedral pyrite in weakly altered iron carbonate halo. Well foliated.
	48.62 50.35	15% totally boudinaged quartz calcite veinlets and stringers.
56.54	65.84	GABBRO
		Subhalo alteration. Green gray, medium grained gabbro with stretched 15% iron carbonate crystals forming a moderate foliation. 10% concordant and perpendicular boudinaged quartz carbonate veinlets and stringers, locally with intense buff alteration halos and up to 3% euhedral pyrite. Moderately hard.
	56.54 57.83	Buff pyritic alteration halo adjacent to weakly hematitic quartz iron carbonate veinlets.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300413	35.36	36.85	1.49	TR	F28	.005	
FX300414	36.85	38.40	1.55	TR	F*	.010	
FX300415	38.40	39.90	1.50	TR	F*	<.005	
FX300416	39.90	41.46	1.56	TR	F*	<.005	
FX300417	41.46	42.98	1.52	TR	F*	.020	
FX300418	42.98	44.50	1.52	TR	F*	.130	
FX300419	44.50	46.00	1.50	TR	F*	.005	
FX300420	46.00	47.47	1.47	TR	F37	.030	
FX300421	47.47	48.62	1.15	3	F29	.300	
FX300422	48.62	50.35	1.73	TR	F22	.020	
FX300423	50.35	51.82	1.47	TR	F*	.010	
FX300424	51.82	53.43	1.61	TR	F*	.020	
FX300425	53.43	55.02	1.59	TR	F*	.025	
FX300426	55.02	56.54	1.52	TR	F30	.155	
FX300427	56.54	57.83	1.29	1	F*	2.520	
FX300428	57.83	59.43	1.60	TR	F25	.055	
FX300429	59.43	60.73	1.30	TR	F*	.020	
FX300430	60.73	62.29	1.56	TR	F*	.020	
FX300431	62.29	63.81	1.52	TR	F*	.025	
FX300432	63.81	65.84	2.03	TR	F*	.010	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
65.84	73.20	GABBRO								
		Halo alteration. Pale gray green, fine grained to medium grained gabbro with 10 to 15% pale orange to pink boudinaged quartz iron carbonate veinlets. Locally up to 30% iron carbonate blebs. Locally silicified. Moderately hard. Moderately foliated. Trace disseminated pyrite. 15% stretched dark green to black chlorite.	FX300433	65.84	67.35	1.51	TR	F*	.025	
			FX300434	67.35	68.88	1.53	TR	F28	.040	
			FX300035	68.88	70.39	1.51	TR	F*	<.005	
			FX300436	70.39	71.66	1.27	TR	F34	.045	
			FX300437	71.66	73.20	1.54	TR	F35	.010	
		67.35 68.88 20% pale orange to pink quartz iron carbonate veins and veinlets.								
		68.88 70.39 Locally 30% iron carbonate blebs.								
		71.66 73.20 20% totally boudinaged white quartz veinlets cut by orange iron carbonate stringers. Locally contorted white quartz carbonate veinlets with white and pale orange iron carbonate rims.								
73.20	74.71	GABBRO								
		Strongly altered gabbro. Pale gray buff to pale orange pink. Strongly bleached with faint remnant gabbro texture. Round to subrounded bleached pale gray buff gabbro fragments isolated by pale green to yellow sericitic and black chlorite veins and stringers. Strongly iron carbonatized. 1% euhedral pyrite in chloritic stringers. Silicified. Moderately hard to hard.	FX300438	73.20	73.85	.65	TR	F33	.010	
			FX300439	73.85	74.71	.86	1	F*	.045	
74.71	96.32	GABBRO								
		Halo alteration as at 65.84 to 73.20 metres. Pale gray green, fine grained to medium grained gabbro with 5 to 7% pale orange to pink quartz iron carbonate veins and	FX300440	74.71	76.11	1.40	TR	F40	.010	
			FX300441	76.11	78.75	2.64	TR	F38	<.005	
			FX300442	78.75	80.46	1.71	TR	F34	<.005	

FROM M	TO M	**********DESCRIPTION**********
		veinlets with 1 to 2% euhedral pyrite adjacent weakly altered gabbro. 15% pervasive iron carbonate. Feldspar crystals are locally altered to buff sericitic. Silicified, hard. Poorly to moderately foliated.
74.71	76.11	Buff alteration halo adjacent to boudinaged chloritic quartz carbonate vein. 5% stringers of pale orange iron carbonate concordant to foliation. Trace pyrite in vein
78.75	81.89	As at 74.71 to 76.11 metres.
83.43	84.88	20% buff altered sericitic feldspar. 1% euhedral pyrite adjacent to quartz carbonate veinlets.
84.88	86.33	7% chloritic quartz carbonate veinlets and stringers with bleached pale green to buff alteration halos with 1% euhedral pyrite.
90.92	92.17	Locally strongly bleached sericitic alteration adjacent to quartz carbonate veins
92.17	93.64	10 to 15% boudinaged quartz iron carbonate veins. 15% buff altered sericitic feldspar.
93.64	96.32	Locally strongly iron carbonate altered. Pale orange to brown with pale green sericitic. Trace to 1% euhedral pyrite.
96.32	98.88	GABBRO Strongly altered gabbro. Weakly to moderately hematitic, strongly iron carbonatized. Pale red with pale orang quartz iron carbonate veinlets and stringers. Patchy black chlorite, locally black chloritic stringers. Fine grained to medium grained. Foliated. Trace pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300443	80.46	81.89	1.43	1	F*	.010	
FX300444	81.89	83.43	1.54	TR	F*	<.005	
FX300445	83.43	84.88	1.45	1	F32	.010	
FX300446	84.88	86.33	1.45	1	F*	.245	
FX300447	86.33	87.88	1.55	TR	F*	<.005	
FX300448	87.88	89.42	1.54	TR	F*	<.005	
FX300449	89.42	90.92	1.50	TR	F*	<.005	
FX300450	90.92	92.17	1.25	TR	F*	.075	
FX300451	92.17	93.64	1.47	TR	F47	<.005	
FX300452	93.64	95.11	1.47	1	F34	.065	
FX300453	95.11	96.32	1.21	1	F46	.020	
FX300454	96.32	97.00	.68	1	F48	<.005	
FX300455	97.00	98.00	1.00	TR	F48	.005	
FX300456	98.00	98.88	.88	TR	F58	.030	

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
98.88	113.07	GABBRO								
		Halo alteration in gabbro as at 74.71 to 92.17 metres. Quartz carbonate veinlets and stringers with bleached gray alteration halos with 1 to 2% disseminated and euhedral pyrite. Poorly foliated to massive.	FX300457	98.88	99.36	.48	1	F55	.265	
			FX300458	99.36	100.84	1.48	1	F*	.170	
			FX300459	100.84	102.41	1.57	1	F*	.165	
			FX300460	102.41	103.60	1.19	2	F*	.010	
		98.88 99.36 Locally chloritic quartz carbonate veins with pyritic halos.	FX300461	103.60	104.32	.72	1	F*	.390	
			FX300462	104.32	105.93	1.61	1	F*	.195	
		103.60 104.32 10 centimetre quartz vein with vuggy cavities and gabbro inclusions.	FX300463	105.93	107.69	1.76	1	F*	<.005	
			FX300464	107.69	109.04	1.35	1	F*	.055	
		109.97 113.07 Up to 5 centimetre quartz veins with iron carbonate inclusions and bleached, buff alteration halos with 3% euhedral pyrite.	FX300465	109.04	109.97	.93	1	F*	.165	
			FX300466	109.97	111.56	1.59	2	F*	.170	
			FX300467	111.56	113.07	1.51	1	F*	.020	
113.07	122.22	GABBRO								
		Subhalo alteration as at 56.54 to 65.84 metres.	FX300468	113.07	114.60	1.53	TR	F*	<.005	
			FX300469	114.60	116.15	1.55	TR	F*	<.005	
			FX300470	116.15	117.65	1.50	TR	F25	<.005	
			FX300471	117.65	119.15	1.50	TR	F*	<.005	
			FX300472	119.15	120.70	1.55	TR	F*	<.005	
			FX300473	120.70	122.22	1.52	TR	F*	<.005	
122.22	129.13	GABBRO								
		Halo alteration in gabbro as at 65.84 to 73.20 metres. 10% pale orange quartz carbonate veinlet and stringers with bleached alteration halos.	FX300474	122.22	123.75	1.53	TR	F*	<.005	
			FX300475	123.75	125.25	1.50	TR	F*	<.005	
			FX300476	125.25	126.80	1.55	TR	F*	.005	
		128.21 129.13 Grading into moderately to strongly hematitic gabbro. 50% pale red brown hematitic stained feldspar.	FX300477	126.80	128.21	1.41	TR	F*	.010	
			FX300478	128.21	129.13	.92	TR	F*	.015	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
129.13	133.66	GABBRO								
		Hematitic altered gabbro. Pale red to red hematitized feldspar and iron carbonate with 20% dark green chlorite. Cut by white to buff quartz carbonate veinlets and stringers with chloritic alteration halos. Locally 2 to 3% euhedral pyrite up to 5 millimetres with black chloritic rims adjacent to quartz carbonate veins. Silicified, hard. Fine grained, massive.	FX300479	129.13	130.56	1.43	TR	F*	<.005	
			FX300480	130.56	132.04	1.48	1	F*	.010	
			FX300481	132.04	133.66	1.62	TR	F*	<.005	
		130.56 132.04 Pale red to locally buff.								
132.04	150.61	GABBRO								
		Halo alteration as at 122.22 to 129.13 metres. Locally hematitic quartz carbonate veinlets and stringers. 10% iron carbonate. Trace pyrite. Massive to locally weakly foliated.	FX300482	133.66	134.87	1.21	TR	F*	<.005	
			FX300483	134.87	135.87	1.00	TR	F*	<.005	
			FX300484	135.87	137.36	1.49	TR	F20	<.005	
			FX300485	137.36	138.83	1.47	TR	F*	<.005	
		135.87 137.36 Locally hematitic quartz carbonate veinlets with buff alteration halos.	FX300486	138.83	140.30	1.47	TR	F*	<.005	
			FX300487	140.30	141.89	1.59	TR	F*	.020	
		140.30 141.89 5% hematitic quartz carbonate veinlets.	FX300488	141.89	143.38	1.49	TR	F*	.020	
		143.38 145.08 5 centimetre pale orange quartz iron carbonate vein with hematitic stringers and 1% euhedral and pyrite with hematitized rims.	FX300489	143.38	145.08	1.70	1	F40	<.005	
			FX300490	145.08	146.65	1.57	TR	F*	.010	
			FX300491	146.65	147.97	1.32	TR	F*	<.005	
			FX300492	147.97	149.34	1.37	TR	F*	.010	
		149.34 150.61 Strongly bleached. Pale gray to buff feldspar altered to buff sericitic. Weakly pervasive rusty brown to yellow iron oxide stain.	FX300493	149.34	150.61	1.27	TR	F*	.010	
150.61	170.38	GABBRO								
		Strongly bleached gabbro in the rainbow zone. Pale orange to pink, locally mauve , with weak gabbro	FX300494	150.61	151.31	.70	TR	F*	<.005	
			FX300495	151.31	152.05	.74	1	F*	.050	

**********DESCRIPTION**********

FROM M	TO M	
		texture. 5% black chloritic stylolites. Discontinuous quartz carbonate veinlets with scattered brown hematitic patches. Locally smokey quartz carbonate veinlets. 1 to 2% euhedral pyrite up to 3 millimetres adjacent to quartz carbonate veinlets. Silicified, hard.
151.31	152.05	Locally with pale green sericitic stringers
152.05	153.01	Locally pale pink with pale mauve blotches with 20% buff sericitic.
153.01	154.45	Locally 10% fine grained black tourmaline. 3 centimetre quartz carbonate vein with scattered clots of tourmaline.
154.45	156.04	Locally strongly hematitic. Generally pale orange to dark red brown.
156.04	157.54	Locally strongly hematitic with 2% euhedral pyrite occurring in hematitic quartz carbonate veinlets. Scattered euhedral pyrite at margin of tourmaline bearing 2 centimetre quartz carbonate veinlet.
157.54	159.05	As at 152.05 to 153.01 metres.
159.05	164.07	10% contorted and microfaulted pale orange quartz carbonate veins in bleached pale mauve , hematitic gabbro. 15% iron carbonate crystals.
164.07	165.65	Locally 1 to 2% euhedral pyrite adjacent to quartz carbonate stringers. Vuggy quartz iron carbonate feldspar vein with chalcopyrite.
165.65	168.39	Pale pink to mauve with 20% buff sericite.
168.39	169.47	10% contorted and boudinaged pale orange to pink quartz carbonate veins with black tourmaline margins.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300496	152.05	153.01	.96	TR	F*	<.005	
FX300497	153.01	154.45	1.44	TR	F42	.030	
FX300498	154.45	156.04	1.59	1	F45	.590	
FX300499	156.04	157.54	1.50	2	F40	.830	
FX300500	157.54	159.05	1.51	TR	F40	.060	
FX300501	159.05	160.07	1.02	TR	F40	.005	
FX300502	160.07	161.57	1.50	TR	F50	<.005	
FX300503	161.57	162.58	1.01	TR	F*	<.005	
FX300504	162.58	164.07	1.49	TR	F*	.005	
FX300505	164.07	165.65	1.58	1	F35	.075	
FX300506	165.65	167.10	1.45	TR	F55	<.005	
FX300507	167.10	168.39	1.29	TR	F30	.020	
FX300508	168.39	169.47	1.08	TR	F55	<.005	
FX300509	169.47	170.38	.91	TR	F*	<.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		169.47 170.38 As at 165.65 to 168.39 metres.								
170.38	170.90	QUARTZ CARBONATE VEIN Brecciated pale orange to pink quartz carbonate vein with dark red brown soft hematitic matrix. Scattered subrounded sericitic fragments up to 7 millimetres. 5 to 7% iron carbonate. Trace euhedral pyrite in matrix.	FX300510	170.38	170.90	.52	TR	F36	<.005	
170.90	175.40	GABBRO Strongly bleached gabbro as above. 170.90 172.52 Foliated, moderately sericitic gray brown altered gabbro with 2% euhedral pyrite up to 1 millimetre. 15 to 20% stretched black chlorite clots with green rims. 172.52 175.40 Brown, silicified, altered gabbro with 15% stretched black chlorite and 10% pale green weakly fuchsitic patches. 1% euhedral pyrite up to 4 millimetres. 5% opaque quartz vein with white and pale orange iron carbonate rims.	FX300511	170.90	172.52	1.62	1	F*	.050	
			FX300512	172.52	173.97	1.45	1	F27	.025	
			FX300513	173.97	174.90	.93	2	F*	.360	
			FX300514	174.90	175.40	.50	3	F*	3.340	
175.40	177.15	QUARTZ CARBONATE VEIN White , poorly structured quartz iron carbonate vein with 30% altered inclusions of buff sericite and green fuchsite, weakly hematitic with black chloritic stylolites and margins. 3% disseminated and euhedral pyrite in inclusions. Locally brown hematitic stringers with pyrite.	FX300515	175.40	177.15	1.75	3	F*	3.110	

FROM M	TO M	**********DESCRIPTION**********
177.15	180.90	GABBRO
		Strongly altered and bleached gabbro as 170.90 to 175.40 metres.
	177.15 178.61	Intensely altered, rusty gabbro with 3% rusted pyrite cubes. Brown iron oxide stained adjacent to fracture at 7% to core axis. Crumbly and rusty. Soft.
	178.61 180.19	Pale gray to mauve , silicified with 2 to 3% disseminated and euhedral pyrite as halos adjacent to quartz carbonate veinlets with chloritic and weakly fuchsitic inclusions. 20% buff sericite.
	180.19 180.90	Brown to pale brown, moderately hematitic with 5% disseminated and euhedral pyrite.
180.90	203.66	GABBRO
		Halo alteration as at 134.87 to 150.61 metres. 10% pale orange to pink hematitic quartz carbonate veinlets and stringers. Fine grained, very weakly foliated. 10% iron carbonate. Trace pyrite. Silicified, hard. Massive. Green gray.
	182.89 184.45	Locally euhedral pyrite in pale brown iron carbonate alteration halo adjacent to quartz carbonate veinlets.
	202.27 203.66	Becoming increasingly bleached. 1% euhedral pyrite adjacent to quartz carbonate vein.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX300516	177.15	178.61	1.46	3	F*	1.970	
FX300517	178.61	180.19	1.58	2	F*	.210	
FX300518	180.19	180.90	.71	5	F24	.315	
FX300519	180.90	182.89	1.99	TR	F*	<.005	
FX300520	182.89	184.45	1.56	1	F*	.020	
FX300521	184.45	185.92	1.47	TR	F*	.015	
FX300522	185.92	187.36	1.44	TR	F*	.005	
FX300523	187.36	188.79	1.43	TR	F*	.010	
FX300524	188.79	190.23	1.44	TR	F*	<.005	
FX300525	190.23	191.71	1.48	TR	F*	<.005	
FX300526	191.71	193.32	1.61	TR	F*	<.005	
FX300527	193.32	194.83	1.51	TR	F*	.005	
FX300528	194.83	196.26	1.43	TR	F*	<.005	
FX300529	196.26	197.72	1.46	TR	F*	.015	
FX300530	197.72	199.22	1.50	TR	F*	.005	
FX300531	199.22	200.67	1.45	TR	F*	.005	
FX300532	200.67	202.27	1.60	TR	F*	.035	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX300533	202.27	203.66	1.39	1	F*	.035	
203.66	206.04	DIKE Felsite dike. Pale gray green, massive, very fine grained and silicified. 10% fine grained pervasive iron carbonate. Scattered quartz eyes. 1% disseminated pyrite as halos adjacent to quartz carbonate veinlets. Scattered euhedral pyrite. Hard.	FX300534	203.66	205.31	1.65	1	F*	.075	
			FX300535	205.31	206.04	.73	1	F*	.020	
206.04	207.54	QUARTZ CARBONATE VEIN Milky white quartz carbonate vein with inclusions of iron carbonatized gabbro, locally fuchsitic with 1 to 2% euhedral and disseminated pyrite. Inclusions occur as discontinuous stringers. Scattered euhedral pyrite in quartz veins.	FX300536	206.04	207.54	1.50	2	F*	.025	
207.54	209.66	GABBRO Halo alteration. Pale gray green, medium grained, foliated with locally brecciated to boudinaged quartz carbonate veinlets and stringers. Weakly brown hematitic staining. 2% scattered euhedral pyrite. Moderately silicified. 10% buff sericitic altered feldspar. 10% iron carbonate. 208.18 209.66 Grading into subhalo alteration.	FX300537	207.54	208.18	.64	2	F65	.705	
			FX300538	208.18	209.66	1.48	TR	F52	.015	
209.66	215.60	GABBRO Subhalo alteration in gabbro as at 56.54 to 65.84 metres. 15% wispy iron carbonate.	FX300539	209.66	211.60	1.94	TR	F*	<.005	
			FX300540	211.60	212.80	1.20	TR	F*	.005	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX300541	212.80	214.11	1.31	TR	F*	<.005	
			FX300542	214.11	215.60	1.49	TR	F*	<.005	
215.60	219.46	GABBRO Transitional gabbro to peridotite. Dark gray to black. Fine grained to medium grained, massive. 75% mafic chlorite and pyroxene. 20% feldspathic crystals. 5% iron carbonate. Locally 5% quartz carbonate veinlets and stringers. Trace disseminated pyrite.	FX300543	215.60	217.17	1.57	TR	F*	<.005	
			FX300544	217.17	218.80	1.63	TR	F*	<.005	
			FX300545	218.80	219.46	.66	TR	F*	<.005	
219.46	306.63	PERIDOTITE Transitional gabbro to peridotite as above with 5 to 7% magnetite. Moderately magnetic. 306.34 306.63 Foot of hole.	FX300546	219.46	221.88	2.42	TR	F*	<.005	
			FX300547	221.88	223.27	1.39	TR	F*	<.005	
			FX300548	223.27	224.75	1.48	TR	F*	<.005	
			FX300549	224.75	226.29	1.54	TR	F*	<.005	
			FX300550	226.29	227.72	1.43	TR	F*	<.005	
			FX300551	227.72	229.42	1.70	TR	F*	<.005	
			FX300552	229.42	230.82	1.40	TR	F*	<.005	
			FX300553	230.82	232.45	1.63	TR	F*	<.005	
			FX300554	232.45	233.92	1.47	TR	F*	<.005	
			FX300555	233.92	235.43	1.51	TR	F*	<.005	
			FX300556	235.43	236.97	1.54	TR	F*	<.005	
			FX300557	236.97	238.36	1.39	TR	F*	<.005	
			FX300558	238.36	239.82	1.46	TR	F*	<.005	
			FX300559	239.82	241.21	1.39	TR	F*	<.005	
			FX300560	241.21	242.62	1.41	TR	F*	<.005	
			FX300561	242.62	244.17	1.55	TR	F*	<.005	
			FX300562	244.17	245.67	1.50	TR	F*	<.005	
			FX300563	245.67	247.20	1.53	TR	F*	[illegible]	
			FX300564	247.20	248.72	1.52	TR	F*	[illegible]	

**********DESCRIPTION**********

FROM M | TO M

**********ANALYSES**********

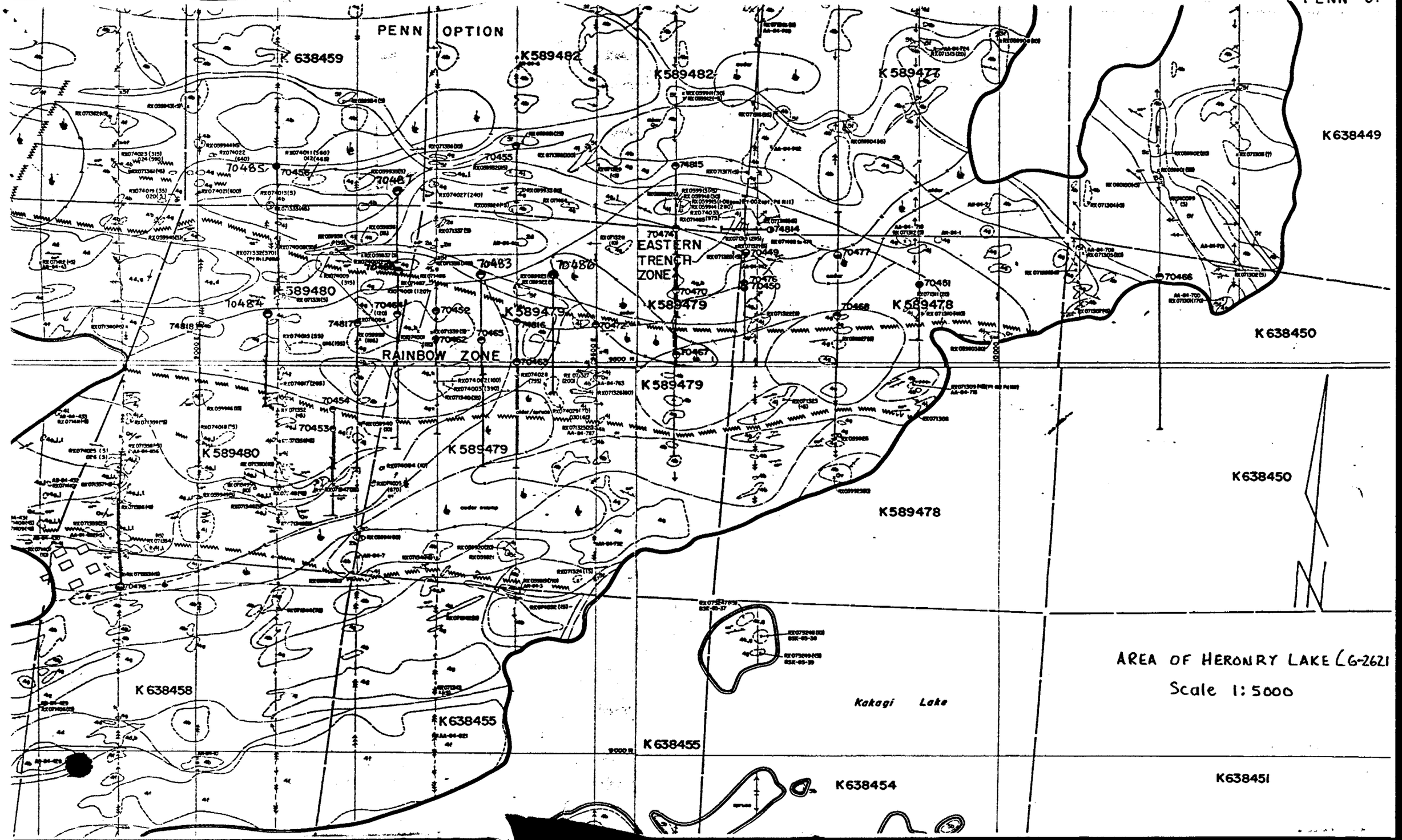
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300565	248.72	250.22	1.50	TR	F*	n/a	
FX300566	250.22	251.71	1.49	TR	F*	n/a	
FX300567	251.71	253.25	1.54	TR	F*	n/a	
FX300568	253.25	254.56	1.31	TR	F*	n/a	
FX300569	254.56	256.01	1.45	TR	F*	n/a	
FX300570	256.01	257.51	1.50	TR	F*	n/a	
FX300571	257.51	259.00	1.49	TR	F*	n/a	
FX300572	259.00	260.70	1.70	TR	F*	n/a	
FX300573	260.70	262.22	1.52	TR	F*	n/a	
FX300574	262.22	263.71	1.49	TR	F*	n/a	
FX300575	263.71	265.20	1.49	TR	F*	n/a	
FX300576	265.20	266.82	1.62	TR	F*	n/a	
FX300577	266.82	268.30	1.48	TR	F*	n/a	
FX300578	268.30	269.87	1.57	TR	F*	<.005	
FX300579	269.87	271.38	1.51	TR	F*	<.005	
FX300580	271.38	272.84	1.46	TR	F*	<.005	
FX300581	272.84	274.35	1.51	TR	F*	<.005	
FX300582	274.35	275.88	1.53	TR	F*	<.005	
FX300583	275.88	277.42	1.54	TR	F*	<.005	
FX300584	277.42	278.89	1.47	TR	F*	<.005	
FX300585	278.89	280.42	1.53	TR	F*	<.005	
FX300586	280.42	281.99	1.57	TR	F*	<.005	
FX300587	281.99	283.53	1.54	TR	F*	.010	
FX300588	283.53	285.09	1.56	TR	F*	<.005	
FX300589	285.09	286.64	1.55	TR	F*	<.005	
FX300590	286.64	288.18	1.54	TR	F*	<.005	
FX300591	288.18	289.70	1.52	TR	F*	<.005	
FX300592	289.70	291.23	1.53	TR	F*	<.005	
FX300593	291.23	292.59	1.36	TR	F*	<.005	
FX300594	292.59	294.25	1.66	TR	F*	<.005	
FX300595	294.25	295.72	1.47	TR	F*	<.005	
FX300596	295.72	297.22	1.50	TR	F*	<.005	

**********DESCRIPTION**********

FROM M	TO M

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300597	297.22	298.73	1.51	TR	F*	.005	
FX300598	298.73	300.20	1.47	TR	F*	<.005	
FX300599	300.20	301.76	1.56	TR	F*	<.005	
FX300600	301.76	303.33	1.57	TR	F*	<.005	
FX300601	303.33	304.84	1.51	TR	F*	<.005	
FX300602	304.84	306.34	1.50	TR	F*	<.005	
FX300603	306.34	306.63	.29	TR	F*	<.005	


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
70455
74815
70484
70483
70486
74814
EASTERN
TRENCH
ZONE
70449
70477
70476
70450
70451
70466
K589480
K589479
K589478
K638450
74818
74817
74816
70472
70452
70465
RAINBOW ZONE
70463
70467
70454
70453
K589480
K589479
K589479
K638450
K589478
K638458
K638455
K638455
Kakagi Lake
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9175.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-25-86
PROPERTY	: Penn Option	DEPARTURE	:E 8300.0 M	TOWNSHIP	:	COMPLETED	: 03-01-86
BOREHOLE	: 74812-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K638465	DRILL TYPE	: Boyles 37A
DEPTH	: 306.6 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 40 m west and 80 m south of post 1.

LEFT IN HOLE:

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 26 1988
RECEIVED

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
15.24	355.0	-52.00	106.68	355.0	-52.00	198.12	355.0	-50.00	289.56	355.0	-48.00
45.72	355.0	-52.00	137.16	355.0	-51.00	231.65	355.0	-49.00	306.63	355.0	-48.00
76.20	355.0	-52.00	162.64	355.0	-51.00	259.08	355.0	-49.00			

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU FPM	PPM*M
.00	15.24	OVERBURDEN 12 Metres of water followed by overburden of mud, sand and gravel..								
15.24	34.64	PERIDOTITE Fine grained to medium grained, soft, dark blackish gray. Talcose. Weakly foliated to massive. 30% altered olivine. Weak to moderate iron carbonate alteration. Minor quartz carbonate veins up to 4 millimetres thick. weakly magnetic. Minor disseminated leucoxene. 32.35 34.64 Becoming moderately foliated. Chloritic, 2%	FX141001	15.24	16.74	1.50	0	-	<.005	.000
			FX141002	16.74	18.24	1.50	0	-	<.005	.000
			FX141003	18.24	19.74	1.50	0	-	<.005	.000
			FX141004	19.74	21.24	1.50	0	-	<.005	.000
			FX141005	21.24	22.74	1.50	0	-	<.005	.000
			FX141006	22.74	24.24	1.50	0	-	<.005	.000

KENORA
MINING DIV.
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

74812-0
PAGE 1

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
		quartz carbonate veinlets.	FX141007	24.24	25.74	1.50	0	-	<.005	.000
			FX141008	25.74	27.24	1.50	0	-	<.005	.000
			FX141009	27.24	28.74	1.50	0	-	<.005	.000
			FX141010	28.74	30.24	1.50	0	-	<.005	.000
			FX141011	30.24	31.74	1.50	TR	-	<.005	.000
			FX141012	31.74	32.35	.61	0	-	<.005	.000
			FX141013	32.35	33.20	.85	0	F40	<.005	.000
			FX141014	33.20	34.64	1.44	0	-	<.005	.000
34.64	35.28	FELSITE								
		Gray, fine grained to medium grained, moderately hard. 5% leucoxene. Strongly foliated. Leucocratic. Possibly quartz flooded peridotite.	FX141015	34.64	35.28	.64	0	F30	.010	.006
35.28	38.52	PERIDOTITE								
		Weakly to strongly foliated. Fine grained to medium grained. Soft, chloritic, talcose, with several bands of fault gouge up to 3 centimetres thick. Weakly magnetic.	FX141016	35.28	36.36	1.08	0	-	.010	.017
			FX141017	36.36	37.11	.75	0	-	<.005	.017
			FX14101B	37.11	38.52	1.41	0	-	.015	.038
38.52	79.99	PERIDOTITE								
		Medium grained dark blackish gray peridotite. Weakly foliated, 20% altered olivine, soft, talcose and weakly magnetic. Weak to moderate iron carbonate alteration. 2 to 5% quartz carbonate veins up to 3 millimetres thick.	FX141019	38.52	40.08	1.56	0	F50	<.005	.038
			FX141020	40.08	41.45	1.37	0	-	<.005	.038
			FX141021	41.45	43.00	1.55	0	-	<.005	.038
			FX141022	43.00	44.50	1.50	0	-	.005	.046
		55.00 56.50 Trace pyrite.	FX141023	44.50	46.00	1.50	0	F35	.010	.061
		62.50 63.51 With 5% talc as a contorted vein 1 centimetre thick flanked by white quartz carbonate. 3% quartz carbonate veins.	FX141024	46.00	47.50	1.50	0	-	.005	.068
			FX141025	47.50	49.00	1.50	0	-	<.005	.068
			FX141026	49.00	50.50	1.50	0	-	<.005	.068
		63.51 64.00 With 1% pyrite as scattered crystals up to 3	FX141027	50.50	52.00	1.50	0	-	.060	.158

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		millimetres.	FX141028	52.00	53.50	1.50	0	-	.080	.278
	64.00 65.50	With minor contorted talc patches.	FX141029	53.50	55.00	1.50	0	-	<.005	.278
	71.50 73.00	With a 6 centimetre thick talc- quartz carbonate vein at 72.21.	FX141030	55.00	56.50	1.50	TR	-	<.005	.278
			FX141031	56.50	58.00	1.50	0	-	<.005	.278
	75.73 76.30	With 30% quartz carbonate as one contorted 1 centimetre thick vein sub parallel to core axis.	FX141032	58.00	59.50	1.50	0	-	<.005	.278
			FX141033	59.50	61.00	1.50	0	-	<.005	.278
			FX141034	61.00	62.50	1.50	0	-	<.005	.278
	76.30 77.80	Trace pyrite.	FX141035	62.50	63.51	1.01	0	-	<.005	.278
	79.30 79.99	Becoming moderately foliated.	FX141036	63.51	64.00	.49	1	-	<.005	.278
			FX141037	64.00	65.50	1.50	0	-	<.005	.278
			FX141038	65.50	67.00	1.50	0	-	<.005	.278
			FX141039	67.00	68.50	1.50	0	-	<.005	.278
			FX141040	68.50	70.00	1.50	0	-	<.005	.278
			FX141041	70.00	71.50	1.50	0	-	<.005	.278
			FX141042	71.50	73.00	1.50	0	-	<.005	.278
			FX141043	73.00	74.50	1.50	0	-	<.005	.278
			FX141044	74.50	75.73	1.23	0	-	<.005	.278
			FX141045	75.73	76.30	.57	0	-	.005	.281
			FX141046	76.30	77.80	1.50	TR	-	<.005	.281
			FX141047	77.80	79.30	1.50	0	-	<.005	.281
			FX141048	79.30	79.99	.69	0	F40	<.005	.281
79.99	81.17	PERIDOTITE								
		Chlorite talc schist. Fine grained, dark green, very soft, and talcose. Several thin fault seams. Folded. Blocky, in part fissile. Probably chilled peridotite.	FX141049	79.99	81.17	1.18	0	-	<.005	.281
81.17	91.75	PERIDOTITE								
		Medium grained to coarse grained, dark gray, soft, weakly foliated to massive. 5% quartz iron carbonate	FX141050	81.17	82.66	1.49	0	-	<.005	.281
			FX141051	82.66	84.12	1.46	0	-	<.005	.281

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		talc veins up to 1.5 centimetres thick at various angles to core axis.	FX141052	84.12	85.60	1.48	0	-	<.005	.281
			FX141053	85.60	87.17	1.57	0	-	<.005	.281
		82.66 90.02 Medium grained dark blackish gray. Soft, 15 to 20% altered olivine. Weak iron carbonate alteration. Massive. Minor quartz iron carbonate talc veins.	FX141054	87.17	88.58	1.41	0	-	<.005	.281
			FX141055	88.58	90.02	1.44	0	-	<.005	.281
			FX141056	90.02	91.35	1.33	2	-	.005	.288
			FX141057	91.35	91.75	.40	0	-	<.005	.288
		90.02 91.35 As 82.66 with 10% ribboned and weakly brecciated quartz carbonate veins. 2% disseminated pyrite crystals up to 2 millimetres.								
		91.35 91.75 As 82.66.								
91.75	95.60	PERIDOTITE								
		As to 81.17 metres but now strongly foliated. Chlorite talc schist. Fine grained dark blackish green. Very soft, strongly foliated. Greasy feel. 1% disseminated pyrite. Minor quartz carbonate veins with diffuse contacts. Patches of unfoliated and less altered peridotite.	FX141058	91.75	93.27	1.52	1	F38	.005	.295
			FX141059	93.27	94.65	1.38	1	F40	.005	.302
			FX141060	94.65	95.60	.95	1	F30	<.005	.302
95.60	118.50	PERIDOTITE								
		Medium grained, dark blackish gray. Soft, talcose, massive, weak iron carbonate alteration. Weakly magnetic. 20 to 30% white altered olivine? crystals. Trace disseminated pyrite.	FX141061	95.60	97.10	1.50	TR	-	<.005	.302
			FX141062	97.10	98.60	1.50	1	-	<.005	.302
			FX141063	98.60	100.10	1.50	TR	-	<.005	.302
			FX141074	100.10	101.60	1.50	TR	-	<.005	.302
		97.10 98.60 1% pyrite.	FX141065	101.60	103.10	1.50	TR	-	<.005	.302
		101.60 110.60 As 97.10, fine grained to medium grained , trace pyrite, minor quartz carbonate veins and patches.	FX141066	103.10	104.60	1.50	TR	-	<.005	.302
			FX141067	104.60	106.10	1.50	TR	-	<.005	.302
			FX141068	106.10	107.60	1.50	TR	-	<.005	.302
		110.60 112.10 As 101.60 with 1% disseminated pyrite as	FX141069	107.60	109.10	1.50	TR	-	<.005	.302

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		crystals up to 2 millimetres.	FX141070	109.10	110.60	1.50	0	-	<.005	.302
112.10	112.67	As 101.60 with several bands of fault gouge up to 3 centimetres thick, between 112.22 and 112.67.	FX141071	110.60	112.10	1.50	1	F80	<.005	.302
			FX141072	112.10	112.67	.57	TR	F65	.005	.305
112.67	114.00	As 95.60. Moderately foliated.	FX141073	112.67	114.00	1.33	TR	F52	<.005	.305
114.00	118.50	As 95.60. 5 to 10% quartz carbonate veins up to 2 centimetres with some associated black chlorite streaks. Massive to weakly foliated.	FX141074	114.00	115.50	1.50	TR	F80	<.005	.305
			FX141075	115.50	117.00	1.50	TR	-	<.005	.305
			FX141076	117.00	118.50	1.50	TR	-	.005	.313
118.50	126.00	PERIDOTITE								
		Transition zone from peridotite to gabbro. Becoming more gabbroic down hole.	FX141077	118.50	120.00	1.50	TR	-	<.005	.313
			FX141078	120.00	121.50	1.50	TR	-	.035	.365
124.50	126.00	As 118.50 with 2% pyrite as large crystals up to 1 centimetre in size in a 4 centimetre thick quartz carbonate vein at 124.96.	FX141079	121.50	123.00	1.50	TR	-	.025	.403
			FX141080	123.00	124.50	1.50	TR	-	.040	.463
			FX141081	124.50	126.00	1.50	2	F60	.010	.478
126.00	171.84	GABBRO								
		Medium grained, dark gray, massive to weakly foliated. 30 to 35% white to light green feldspar. 5% light gray quartz carbonate veins up to 3 centimetres thick.	FX141082	126.00	127.50	1.50	TR	-	.010	.493
			FX141083	127.50	129.00	1.50	TR	-	<.005	.493
126.00	127.50	As 118.50.	FX141084	129.00	130.50	1.50	TR	-	.020	.523
			FX141085	130.50	132.00	1.50	TR	-	.065	.620
127.50	132.00	Medium grained to coarse grained, dark gray to dark green gray. Weakly foliated to massive. 30 to 40% light green to gray feldspar. Moderately hard. Very weakly magnetic. trace to 1% disseminated pyrite. Up to 5% white quartz veins and quartz carbonate veins up to 2 centimetres	FX141086	132.00	133.50	1.50	3	-	.470	1.325
			FX141087	133.50	135.00	1.50	1	-	1.210	3.140
			FX141088	135.00	136.50	1.50	TR	-	.045	3.208
			FX141089	136.50	138.00	1.50	TR	-	.005	3.215
			FX141090	138.00	139.50	1.50	1	-	.010	3.230
			FX141091	139.50	141.00	1.50	TR	-	.015	3.253
			FX141092	141.00	142.50	1.50	TR	-	.015	3.275

FROM M	TO M	DESCRIPTION
		thick. Vein contacts weakly fuchsitic for 1 to 1.5 centimetres.
132.00	133.50	As 127.50 with 3% pyrite up to 5 millimetres in quartz carbonate veins and as disseminated in gabbro.
133.50	135.00	As 127.50 with 1% pyrite and trace chalcopyrite.
135.00	138.00	As 127.50.
138.00	139.50	As 127.50 with 1% disseminated pyrite as crystals up to 2 millimetres.
139.50	141.00	As 127.50 with 5% contorted white quartz carbonate veins, locally vuggy. trace pyrite.
141.00	142.50	As 127.50 with some brown sericite alteration of feldspars. trace to 1% disseminated pyrite.
142.50	142.92	As 127.50 with 2% disseminated pyrite.
142.92	143.95	As 127.50 with 50% white quartz carbonate as contorted and irregular veins, containing black chlorite stringers and some black tourmaline crystals. Gabbro inclusions locally have fuchsite alteration. 2% pyrite disseminated in gabbro.
143.95	145.08	Fine grained to medium grained, massive gabbro. 40% light gray feldspar. Equigranular. First 2 centimetres bleached to brown gray, balance is gray. 4% disseminated pyrite as crystals up to 2 millimetres. Hard.
145.08	145.55	Medium grained, massive gabbro with 40% feldspar. Gray, equigranular. 2%

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX141093	142.50	142.92	.42	2	-	1.440	3.880
FX141094	142.92	143.95	1.03	2	-	.065	3.947
FX141095	143.95	145.08	1.13	4	-	.410	4.410
FX141096	145.08	145.55	.47	2	-	.175	4.492
FX141097	145.55	146.96	1.41	TR	-	.015	4.514
FX141098	146.96	147.50	.54	TR	-	.015	4.522
FX141099	147.50	148.97	1.47	1	-	.110	4.683
FX141100	148.97	150.47	1.50	TR	-	.025	4.721
FX139901	150.47	152.00	1.53	1	-	.005	4.729
FX139902	152.00	153.50	1.50	1	-	.005	4.736
FX139903	153.50	155.00	1.50	TR	-	.265	5.134
FX139904	155.00	156.50	1.50	TR	-	.040	5.194
FX139905	156.50	158.00	1.50	2	-	.115	5.366
FX139906	158.00	159.50	1.50	2	-	.085	5.494
FX139907	159.50	161.00	1.50	3	-	.075	5.606
FX139908	161.00	162.50	1.50	TR	-	<.005	5.606
FX139909	162.50	164.00	1.50	TR	-	.015	5.629
FX139910	164.00	165.50	1.50	TR	-	.005	5.636
FX139911	165.50	167.00	1.50	TR	-	.020	5.666
FX139912	167.00	167.47	.47	TR	-	<.005	5.666
FX139913	167.47	168.84	1.37	TR	-	.010	5.680
FX139914	168.84	170.23	1.39	2	-	.055	5.756
FX139915	170.23	170.88	.65	TR	-	.005	5.760
FX139916	170.88	171.84	.96	TR	-	.060	5.817

**********DESCRIPTION**********

FROM M	TO M	
		disseminated pyrite. Hard. Brown sericite altered feldspar.
145.55	147.50	As above, medium grained to coarse grained, minor quartz carbonate veins. Trace to 1% pyrite.
147.50	148.97	Medium grained to coarse grained gabbro. Crystal boundaries diffuse. Mottled appearance. Massive. Gray to dark gray. Up to 5% quartz carbonate veins up to 1 centimetre thick, commonly with some fuchsite streaks. 1% fine grained disseminated pyrite.
148.97	150.47	As above with 5% quartz carbonate veins, trace pyrite. Vein contacts weakly fuchsitic.
150.47	153.50	As 147.50. 1% pyrite as crystals up to 3 millimetres.
153.50	155.00	As above with 10% weakly brecciated and contorted quartz carbonate veins. Trace pyrite.
155.00	156.50	As 147.50 with 10% white quartz carbonate veins and stringers and 3% lime green fuchsite alteration commonly along vein margins and as alteration halos up to 8 centimetres thick with fuchsite content quickly decreasing away from veins. Trace pyrite.
156.50	158.00	As above with 1 to 2% disseminated pyrite.
158.00	159.50	As 155.00. 1% fuchsite, 2% fine grained disseminated pyrite.
159.50	161.00	As 155.00. 2% fuchsite, 3% fine grained disseminated pyrite. Veins form a complex

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M

FROM M	TO M	**********DESCRIPTION**********
		stockwork.
161.00	164.00	As above, trace pyrite.
164.00	165.50	Medium grained massive gabbro. Gray, hard. 35 to 40% light gray to light brown feldspar. 5 to 10% quartz carbonate veinlet and vein stockwork. Trace disseminated pyrite.
165.50	167.47	As above with 5% light yellow leucoxene. Locally some weak hematite alteration along quartz carbonate veins. Weak iron carbonate alteration. Minor fuchsite. Trace disseminated pyrite.
167.47	168.84	As 165.50. 10 to 15% quartz and quartz carbonate stockwork. up to 4% lime green fuchsite. A limonite seam at 167.56. Trace pyrite.
168.84	170.23	Medium grained gray green gabbro. Hard, massive. Some light yellow leucoxene. 30% white to light gray quartz carbonate as a vein sub parallel to core up to 2 centimetres thick and as numerous veinlets and veins at various angles. Some fuchsite alteration. 2% fine grained disseminated pyrite.
170.23	170.88	As above with 10% quartz carbonate veins. Increase in leucoxene. Trace pyrite.
170.88	171.84	Medium grained to coarse grained, gray green, massive gabbro with 5% light yellow leucoxene. Some thin fuchsite alteration halos around several quartz carbonate veins. 2 to 3% quartz carbonate veins and veinlets. Trace pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPB	PPM*M

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
171.84	172.30	FELSITE								
		Felsite dike. Fine grained, light brown, leucocratic, hard, massive. 20% disseminated iron carbonate. 5% fine grained disseminated pyrite. Minor quartz veins.	FX139917	171.84	172.30	.46	5	-	.050	5.840
172.30	190.60	GABBRO								
		Medium grained to coarse grained massive to weakly foliated gabbro. Green gray. 5 to 8% light yellow leucoxene. 2% disseminated pyrite. minor quartz carbonate veins. Weak iron carbonate alteration. Feldspars possibly saussuritized.	FX139918	172.30	173.80	1.50	2	-	3.720	11.420
			FX139919	173.80	175.30	1.50	TR	-	<.005	11.420
			FX139920	175.30	176.80	1.50	TR	-	<.005	11.420
			FX139921	176.80	178.30	1.50	TR	-	<.005	11.420
			FX139922	178.30	179.32	1.02	TR	-	<.005	11.420
		173.80 180.10 As above with trace pyrite, 5% contorted quartz carbonate veins and trace fuchsite. Trace leucoxene.	FX139923	179.32	180.10	.78	TR	-	.005	11.424
			FX139924	180.10	181.00	.90	5	-	.025	11.447
			FX139925	181.00	182.55	1.55	3	-	.375	12.028
		180.10 181.00 As above with 5% fine grained disseminated pyrite up to 1 millimetre.	FX139926	182.55	183.50	.95	3	-	.105	12.128
			FX139927	183.50	185.00	1.50	1	-	.035	12.180
		181.00 183.50 Fine grained gray massive gabbro. Crystal boundaries are diffuse. Hard. 10% disseminated iron carbonate, minor quartz carbonate veins up to 1 centimetre. 3% fine grained disseminated pyrite.	FX139928	185.00	186.50	1.50	TR	-	<.005	12.180
			FX139929	186.50	188.00	1.50	TR	-	.015	12.203
			FX139930	189.00	189.50	1.50	TR	-	<.005	12.203
			FX139931	189.50	190.60	1.10	TR	-	.005	12.208
		183.50 185.00 Fine grained to medium grained gray massive gabbro. Hard. Minor quartz carbonate veins. 1% disseminated pyrite.								
		185.00 188.00 Medium grained gray to green gray massive gabbro. Hard, equigranular, 3% quartz carbonate veins with trace fuchsite and some hematite. Trace pyrite.								
		188.00 189.50 Fine grained to medium grained, gray								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		green, hard, massive to weakly foliated. minor quartz carbonate veinlets. Trace pyrite.								
	189.50 190.60	As above becoming finer grained. 5% quartz carbonate veins up to 1.5 centimetres.								
190.60	201.77	LAPILLI TUFF								
		Dacite lapilli tuff. Fine grained to very fine grained, very hard, gray green. Generally mottled appearance. locally sub angular dacite porphyry fragments up to 2 centimetres in size present. Trace pyrite. Some sericite. Massive to weakly foliated.	FX139932	190.60	191.73	1.13	TR	-	1.200	13.564
			FX139933	191.73	192.71	.98	1	-	.030	13.593
			FX139934	192.71	193.85	1.14	TR	-	<.005	13.593
			FX139935	193.85	194.77	.92	TR	-	.010	13.603
			FX139936	194.77	195.23	.46	0	-	<.005	13.603
			FX139937	195.23	195.68	.45	0	-	.005	13.605
			FX139938	195.68	196.52	.84	0	-	<.005	13.605
			FX139939	196.52	197.92	1.40	0	-	.010	13.619
			FX139940	197.92	199.19	1.27	0	-	<.005	13.619
			FX139941	199.19	200.62	1.43	TR	-	.210	13.919
			FX139942	200.62	201.77	1.15	0	-	<.005	13.919
	191.73 192.71	Brownish gray to light brownish green. 1% disseminated pyrite.								
	192.71 194.77	Dacite flow. Gray to green gray, very hard. very fine grained to fine grained. Up to 40% feldspar microlites. Massive to weakly foliated. Some sericite. Trace pyrite.								
	194.77 195.23	Dacite flow. Very fine grained, gray, very hard. 20 to 30% feldspar microlites. Minor quartz carbonate veinlets.								
	195.23 195.68	Dacite flow. Very fine grained, 10% microlites. Massive. 5% quartz carbonate veinlets.								
	195.68 196.52	As at 194.77.								
	196.52 197.92	Dacite lapilli tuff. 30% sub angular to rounded clasts up to 2 centimetres in size. Gray to green gray. Matrix finely spotted due to numerous feldspar microlites.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
	197.92	199.19 As at 192.71.								
	199.19	200.62 As above with trace pyrite.								
	200.62	201.77 Dacite lapilli tuff. Gray becoming light gray. Last 10 centimetres. Weakly mottled appearance. Minor quartz carbonate veins locally fuchsitic.								
201.77	212.14	GABBRO								
		Gray green to green. Medium grained. 2 to 5% leucoxene, decreasing away from contact with dacite. Moderately hard. Massive to weakly foliated. Trace pyrite. 5% contorted quartz carbonate veins and veinlets. Gash type quartz veins common.	FX139943	201.77	203.35	1.58	TR	-	<.005	13.919
			FX139944	203.35	204.85	1.50	TR	-	<.005	13.919
			FX139945	204.85	206.35	1.50	TR	-	<.005	13.919
			FX139946	206.35	207.85	1.50	TR	-	<.005	13.919
			FX139947	207.85	208.67	.82	0	-	<.005	13.919
			FX139948	208.67	210.05	1.38	0	-	<.005	13.919
			FX139949	210.05	211.30	1.25	0	-	<.005	13.919
			FX139950	211.30	212.14	.84	TR	-	.010	13.928
	207.35	207.85 Without leucoxene.								
	207.85	208.67 Medium grained, weakly foliated to massive. Gray green. 5% contorted quartz carbonate veinlets. Hard.								
	208.67	210.05 As above with 10% light brown, hematite stained quartz carbonate veins and veinlets. Some hematite streaks and patches in veins.								
	210.05	211.30 As 207.85. Fine grained to medium grained.								
	211.30	212.14 Chilled gabbro ?. Fine grained, locally medium grained. Gray green. Weakly foliated. Hard. Trace disseminated pyrite. 5% pink quartz carbonate veins up to 2 centimetres thick.								
212.14	225.11	LAPILLI TUFF								
		Dacite lapilli tuff, green gray, locally pinkish. 15%	FX139951	212.14	213.65	1.51	0	-	<.005	13.928

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		lapilli fragments up to 3 centimetres in size. Sub angular to rounded. Matrix has mottled appearance with up to 20% feldspar microlites. Minor quartz carbonate veinlets. Very hard and siliceous.	FX139952	213.65	215.16	1.51	0	-	<.005	13.928
			FX139953	215.16	216.66	1.50	1	-	.085	14.055
			FX139954	216.66	218.16	1.50	0	-	.005	14.063
			FX139955	218.16	219.56	1.40	0	-	<.005	14.063
			FX139956	219.56	221.06	1.50	0	-	<.005	14.063
			FX139957	221.06	222.56	1.50	0	-	<.005	14.063
			FX139958	222.56	224.06	1.50	0	-	<.005	14.063
			FX139959	224.06	225.11	1.05	0	-	.015	14.078
		213.65 215.16 As above. One boulder 25 centimetres long.								
		215.16 216.66 As above with light green patches and streaks. 1% fine grained disseminated pyrite.								
		216.66 218.16 Locally feldspar phyric.								
		222.56 224.06 Matrix becoming chloritic.								
		224.06 225.11 Chloritic matrix.								
225.11	225.68	LAPILLI TUFF								
		Altered. Bleached highly silicified and carbonatized adjacent to several thin quartz veins. fine grained, light brown gray to green gray. First 25 centimetres is bleached and altered with 2% fine grained disseminated pyrite. Contacts are sharp at 20 degrees to core axis.	FX139960	225.11	225.68	.57	2	-	.100	14.135
225.68	228.43	ASH TUFF								
		Fine grained, green, massive, equigranular. Probably intermediate ash tuff. 5% quartz carbonate and minor hematite as veinlets and veins.	FX139961	225.68	227.12	1.44	0	-	.020	14.164
			FX139962	227.12	228.43	1.31	0	-	.010	14.177
228.43	230.62	ASH TUFF								
		Fine grained, hard, siliceous, gray green. Trace disseminated pyrite.	FX139963	228.43	229.64	1.21	TR	-	.040	14.226
			FX139964	229.64	230.62	.98	4	C26	.125	14.348
		229.64 230.62 In part altered with several light brown bleached pyritic bands up to 10								

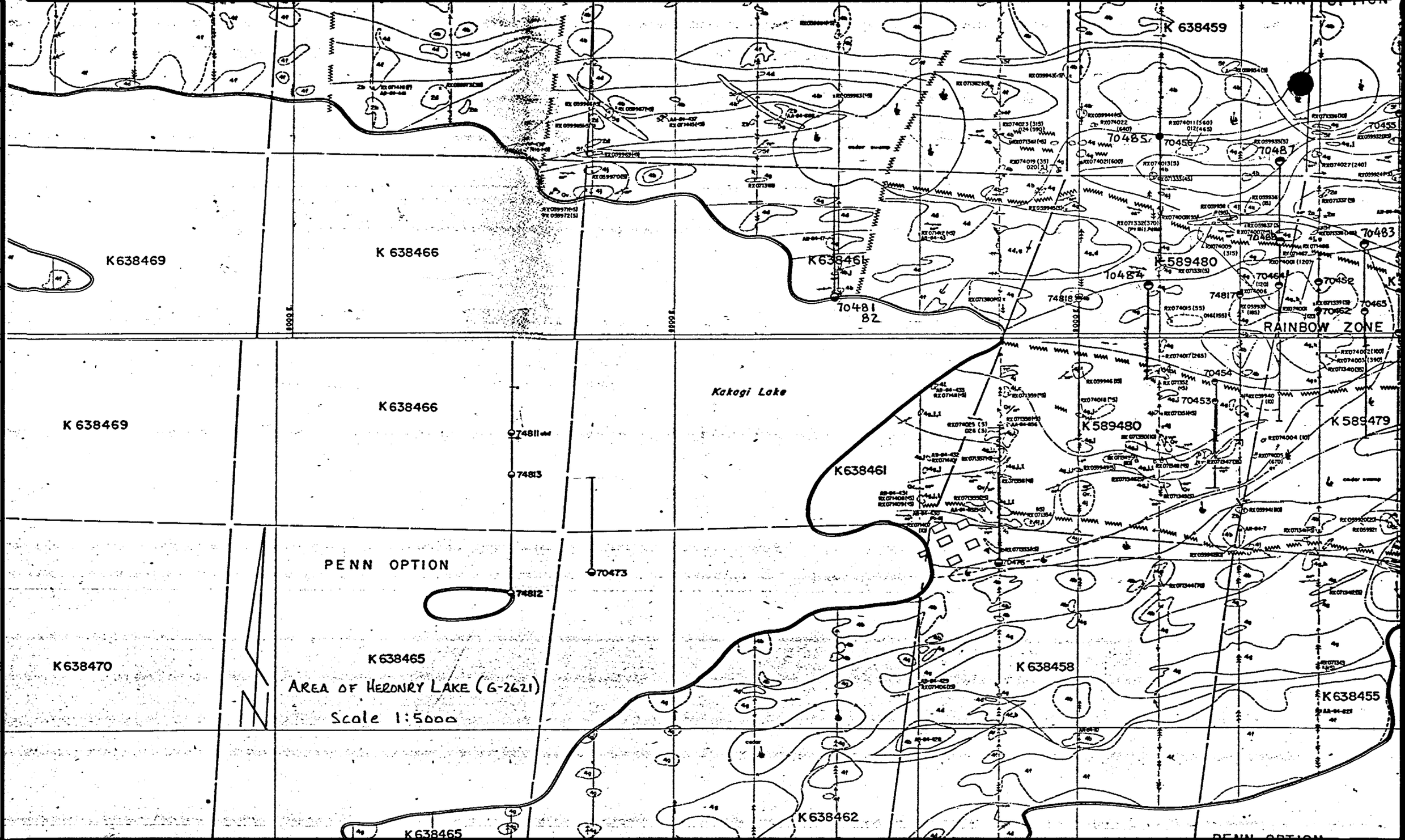
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		centimetres thick with diffuse contacts. 4% disseminated pyrite concentrated primarily in areas of alteration but scattered throughout. Weakly foliated to massive.								
230.62	280.50	LAPILLI TUFF								
		Dacite lapilli tuff. Gray to gray green. Several mafic porphyritic dacite flow cobbles. 2% disseminated pyrite as crystals up to 2 millimetres.	FX139965	230.62	231.12	.50	2	-	.020	14.358
			FX139966	231.12	233.60	2.48	0	-	.010	14.383
			FX139967	233.60	235.10	1.50	0	-	.010	14.398
231.12	233.60	More intermediate lapilli tuff. 5% dacite fragments set in chloritic fine grained matrix. Hard, massive to weakly foliated.	FX139968	235.10	236.60	1.50	0	-	<.005	14.398
			FX139969	236.60	238.10	1.50	0	-	<.005	14.398
			FX139970	238.10	239.60	1.50	0	-	<.005	14.398
233.60	254.60	Dacite lapilli tuff. Similar to above but more siliceous. 20 to 30% rounded dacite fragments which frequently blend in with the matrix and are hard to spot though some are pinkish and stand out. Fragments are polymictic but mainly dacitic in composition. Green gray, hard, minor quartz carbonate veinlets.	FX139971	239.60	241.10	1.50	0	-	<.005	14.398
			FX139972	241.10	242.60	1.50	0	-	.035	14.450
			FX139973	242.60	244.10	1.50	0	-	<.005	14.450
			FX139974	244.10	245.60	1.50	0	-	<.005	14.450
			FX139975	245.60	247.10	1.50	0	-	<.005	14.450
			FX139976	247.10	248.60	1.50	0	-	.005	14.458
			FX139977	248.60	250.10	1.50	0	-	<.005	14.458
			FX139978	250.10	251.60	1.50	0	-	.005	14.465
254.60	258.30	As above becoming grayer.	FX139979	251.60	253.10	1.50	0	-	<.005	14.465
258.30	260.19	As at 233.60.	FX139980	253.10	254.60	1.50	0	-	<.005	14.465
260.19	261.42	Dacite. Very fine grained, light gray green to gray. 5% quartz carbonate veins. Weakly foliated.	FX139981	254.60	256.10	1.50	0	-	<.005	14.465
			FX139982	256.10	257.15	1.05	0	-	<.005	14.465
			FX139983	257.15	258.30	1.15	0	F42	<.005	14.465
261.42	263.22	Dacite flow. Very fine grained, hard, massive, siliceous. Dark gray to gray. Some feldspar microlites.	FX139984	258.30	259.72	1.42	0	F35	<.005	14.465
			FX139985	259.72	260.19	.47	0	-	<.005	14.465
			FX139986	260.19	261.42	1.23	0	-	.095	14.582
263.22	263.90	Dacite lapilli tuff. Gray green to green. Hard. 20% lapilli fragments up to 4	FX139987	261.42	262.44	1.02	0	-	<.005	14.582
			FX139988	262.44	263.22	.78	0	-	.025	14.602

FROM M	TO M	**********DESCRIPTION**********
		millimetres. Weakly foliated to massive.
263.90	264.93	Dacite flow with flowtop breccia first 36 centimetres. Breccia has 15% light gray quartz carbonate. Massive, pale green gray. Lower contact sharp.
264.93	269.45	Dacite lapilli tuff. Fine grained, gray to gray green. Some epidote alteration. Weakly magnetic from 1 to 2% disseminated magnetite. 10 to 25% dacitic fragments commonly with mafic phenocrysts. Sub angular to rounded.
269.45	270.95	As above with decreasing epidote alteration
270.95	276.15	As at 233.60. Locally weakly magnetic.
276.15	278.24	Dacite lapilli tuff. Pale gray green to green. Moderately to strongly foliated. Minor quartz carbonate veins. Becoming chloritic.
278.24	279.00	Dacite lapilli tuff. Green to gray green. Moderately to strongly foliated. Folded. Chloritic. 5% contorted quartz carbonate veins.
279.00	280.50	As 277.15. Chloritic. Some lapilli fragments present though somewhat stretched.
280.50	282.00	LAPILLI TUFF Chlorite sericite schist. Strongly foliated. Pale green to light gray green. Probably originally dacite lapilli tuff. Some quartz carbonate veins up to 1 centimetre thick.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX139989	263.22	263.90	.68	0	-	.025	14.619
FX139990	263.90	264.93	1.03	0	-	<.005	14.619
FX139991	264.93	266.45	1.52	0	C35	<.005	14.619
FX139992	266.45	267.95	1.50	0	-	.010	14.634
FX139993	267.95	269.45	1.50	0	-	<.005	14.634
FX139994	269.45	270.95	1.50	0	-	<.005	14.634
FX139995	270.95	272.45	1.50	0	-	<.005	14.634
FX139996	272.45	273.95	1.50	0	-	.015	14.656
FX139997	273.95	275.45	1.50	0	-	.010	14.671
FX139998	275.45	276.15	.70	0	-	.020	14.685
FX139999	276.15	277.15	1.00	0	-	<.005	14.685
FX140000	277.15	278.24	1.09	0	F30	<.005	14.685
FX163715	278.24	279.00	.76	0	-	<.010	14.685
FX163716	279.00	280.50	1.50	0	F33	.010	14.700
FX163717	280.50	282.00	1.50	0	F30	<.010	14.700

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
282.00	287.22	LAPILLI TUFF								
		Dacite lapilli tuff as at 233.60.	FX163718	282.00	283.50	1.50	0	-	<.010	14.700
		286.03 286.66 With 10% white contorted quartz veins up to 8 centimetres thick.	FX163719	283.50	285.00	1.50	0	-	<.010	14.700
			FX163720	285.00	286.03	1.03	0	-	<.010	14.700
		286.66 287.22 As at 277.15. 5% contorted quartz carbonate veins up to 1 centimetre thick.	FX163721	286.03	286.66	.63	0	-	<.010	14.700
			FX163722	286.66	287.22	.56	0	F23	<.010	14.700
287.22	291.13	LAPILLI TUFF								
		Chlorite sericite schist. Fine grained, strongly foliated, gray green colour. Streaky appearence. Sheared lapilli tuff. 5% quartz carbonate veins, in part contorted.	FX163723	287.22	288.34	1.12	0	F23	<.010	14.700
			FX163724	288.34	289.09	.75	0	F16	<.010	14.700
			FX163725	289.09	290.59	1.50	0	F07	<.010	14.700
			FX163726	290.59	291.13	.54	0	F34	<.010	14.700
		288.34 289.09 Minor white quartz veins.								
		289.09 291.13 Folded in part, with foliation sub parallel to core axis. 10 to 15% light gray quartz carbonate as patches, bands and streaks. Trace leucoxene. Moderately hard.								
291.13	300.36	LAPILLI TUFF								
		Dacite lapilli tuff. Fine grained, gray green, hard, weakly to moderately foliated. 5 to 15% lapilli fragments up to 5 centimetre in size, commonly with mafic phenocrysts. Minor quartz carbonate veinlets.	FX163727	291.13	292.63	1.50	0	-	<.010	14.700
			FX163728	292.63	294.13	1.50	0	-	<.010	14.700
			FX163729	294.13	295.63	1.50	0	F37	<.010	14.700
			FX163730	295.63	297.13	1.50	0	-	<.010	14.700
		297.13 298.63 Gray green to pale green.	FX163731	297.13	298.63	1.50	0	F47	<.010	14.700
		298.63 300.36 Pale gray green. Moderately foliated. 20% lapilli and bomb fragments up to 5 centimetres in size. Sub rounded to rounded. Commonly have mafic phenocrysts.	FX163732	298.63	299.41	.78	0	F30	<.010	14.700
			FX163733	299.41	300.36	.95	0	-	<.010	14.700

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		Fragments becoming stretched.								
300.36	302.20	LAPILLI TUFF								
		Chlorite sericite schist. Fine grained, strongly foliated, pale gray green to green. Streaky appearance. Some stretched out chlorite clots minor quartz carbonate veins.	FX163734	300.36	301.14	.78	0	F37	<.010	14.700
			FX163735	301.14	302.20	1.06	0	F30	<.010	14.700
		301.14 302.20 With sericite and chlorite streaks. 15% quartz and iron carbonate as patches, bands and contorted veins which are pinkish in colour. 2% dark brown hematite as patches within quartz carbonate veins.								
302.20	303.47	ASH TUFF								
		Intermediate tuff. Fine grained, green gray, weakly to moderately foliated. Moderately hard.	FX163736	302.20	303.47	1.27	0	-	<.010	14.700
303.47	306.63	LAPILLI TUFF								
		Altered. Strongly hematitized sericitized and foliated lapilli tuff. 1 to 2 centimetre red brown hematite veins. sericite schist. Light gray with scattered chlorite clots. 2% vuggy quartz carbonate veins with 1% associated dark brown hematite patches.	FX163737	303.47	304.30	.83	0	F40	<.010	14.700
			FX163738	304.30	305.47	1.17	0	F36	<.010	14.700
			FX163739	305.47	306.63	1.16	0	F30	<.010	14.700
		305.47 306.63 With 5% hematite as staining on fractures, as patches in quartz carbonate veins and as streaks scattered throughout. Foot of hole.								


K638469
K 638466
K638461
K 638459
K 589480
RAINBOW ZONE
K638469
K 638466
Kakagi Lake
K638461
K 589480
K 589479
74811
74813
74812
70473
PENN OPTION
K638470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638455
K638462
K638465
PENN OPTION

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT	: CROW	LATITUDE	:N 9325.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-03-86
PROPERTY	: Penn Option	DEPARTURE	:E 8300.0 M	TOWNSHIP	:	COMPLETED	: 03-09-86
BOREHOLE	: 74813-0	ELEVATION	: 1337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 355.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -50.0	GRID BEARING	:	CLAIM #	: K638466	DRILL TYPE	: Boyles 37A
DEPTH	: 305.7 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : 50 m west and 50 m north of post #2. Casing pulled.

LEFT IN HOLE:

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 26 1988
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********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
30.80	355.0	-47.00	93.30	355.0	-43.00	182.90	355.0	-48.00	274.30	355.0	-47.00
61.00	355.0	-46.00	123.70	355.0	-46.00	213.40	355.0	-47.00	305.70	355.0	-48.00
76.20	355.0	-45.00	154.20	355.0	-47.00	243.80	355.0	-48.00			

**********DESCRIPTION**********

FROM M	TO M	
.00	74.41	OVERBURDEN Casing through 33.5 metres of water followed by overburden consisting of mud and sand with some boulders near the bottom.
74.41	147.35	PERIDOTITE Fine grained to medium grained, bluish black, soft and talcose. Some light green talc veins up to 3 millimetres thick. Massive, magnetic with 10% leucoxene and saussuritized feldspars. Trace disseminated pyrite and rare chalcopyrite.

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX163740	74.41	75.86	1.45	TR	-	<.010	.000
FX163741	75.86	77.36	1.50	TR	-	<.010	.000
FX163742	77.36	78.42	1.06	TR	-	<.010	.000
FX163743	78.42	79.92	1.50	TR	-	<.010	.000
FX163744	79.92	81.20	1.28	TR	53	<.010	.000

KENORA
MINING DIV.
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JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

FROM M	TO M	**********DESCRIPTION**********
	78.42	79.92 With 5% talc veins up to 1 centimetre thick.
	79.92	80.22 Foliated with 60% irregular talc veins.
	81.20	82.70 With 5% talc veins and veinlets.
	87.20	90.20 With rare quartz carbonate veins and patches. Trace hematite.
	91.70	102.20 Fine grained to medium grained, bluish black, massive, magnetic, talcose peridotite. Soft, with 5 to 15% iron carbonate grains up to 3 millimetres in size , gray to light brown in colour. Trace disseminated pyrite. Rare talc veinlets.
	102.20	103.70 As above with 5% quartz carbonate veining.
	111.00	117.00 Strongly saussuritized feldspars.
	117.00	121.50 As at 91.70. Strongly saussuritized feldspars.
	121.50	124.50 As above with 5% quartz carbonate bands and veins.
	124.50	126.00 As above but weakly foliated.
	126.00	130.50 As at 91.70 with 15 to 30% disseminated iron carbonate grains up to 3 millimetres in size. Weakly foliated, trace pyrite.
	130.50	132.00 As above with 5% quartz carbonate veins and quartz carbonate talc veins.
	132.00	138.00 As at 91.70, weakly foliated.
	138.00	141.00 As above, weakly to moderately foliated. Several narrow fault gouge seams. Several quartz carbonate veins up to 5 millimetres thick with some associated light green talc. Trace pyrite.
	141.00	145.50 Fine grained to medium grained, soft, talcose peridotite. Weakly to moderately

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX163745	81.20	82.70	1.50	TR	-	<.010	.000
FX163746	82.70	84.20	1.50	TR	-	.010	.015
FX163747	84.20	85.70	1.50	TR	-	<.010	.015
FX163748	85.70	87.20	1.50	TR	-	<.010	.015
FX163749	87.20	88.70	1.50	TR	-	<.010	.015
FX163750	88.70	90.20	1.50	TR	-	<.010	.015
FX163751	90.20	91.70	1.50	TR	-	<.010	.015
FX163752	91.70	93.20	1.50	TR	-	<.010	.015
FX163753	93.20	94.70	1.50	TR	-	<.010	.015
FX163754	94.70	96.20	1.50	TR	-	<.010	.015
FX163755	96.20	97.70	1.50	TR	-	.005	.023
FX163756	97.70	99.20	1.50	TR	-	<.010	.023
FX163757	99.20	100.70	1.50	TR	-	<.010	.023
FX163758	100.70	102.20	1.50	TR	-	<.010	.023
FX163759	102.20	103.70	1.50	TR	-	<.010	.023
FX163760	103.70	105.00	1.30	TR	-	<.010	.023
FX163761	105.00	106.50	1.50	TR	-	<.010	.023
FX163762	106.50	108.00	1.50	TR	-	<.010	.023
FX163763	108.00	109.50	1.50	TR	-	<.010	.023
FX163764	109.50	111.00	1.50	TR	-	<.010	.023
FX163765	111.00	112.50	1.50	TR	-	<.010	.023
FX163766	112.50	114.00	1.50	TR	-	<.010	.023
FX163767	114.00	115.50	1.50	TR	-	<.010	.023
FX163768	115.50	117.00	1.50	TR	-	<.010	.023
FX163769	117.00	118.50	1.50	TR	-	<.010	.023
FX163770	118.50	120.00	1.50	TR	-	<.010	.023
FX163771	120.00	121.50	1.50	TR	-	<.010	.023
FX163772	121.50	123.00	1.50	TR	-	<.010	.023
FX163773	123.00	124.50	1.50	TR	-	<.010	.023
FX163774	124.50	126.00	1.50	TR	50	<.010	.023
FX163775	126.00	127.50	1.50	TR	40	<.010	.023
FX163776	127.50	129.00	1.50	TR	45	<.010	.023

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		foliated with several scattered thin fault seams up to 1 centimetre thick.	FX163777	129.00	130.50	1.50	TR	-	<.010	.023
			FX163778	130.50	132.00	1.50	TR	-	.010	.038
145.50	147.35	Fine grained to medium grained, soft, talcose, magnetic, dark bluish gray to black peridotite. 10 to 20% fine grained to medium grained disseminated iron carbonate. Massive to weakly foliated.	FX163779	132.00	133.50	1.50	TR	-	<.010	.038
			FX163780	133.50	135.00	1.50	TR	45	<.010	.038
			FX163781	135.00	136.50	1.50	TR	-	<.010	.038
			FX163782	136.50	138.00	1.50	TR	43	<.010	.038
			FX163783	138.00	139.50	1.50	TR	45	.005	.045
			FX163784	139.50	141.00	1.50	TR	-	<.010	.045
			FX163785	141.00	142.50	1.50	0	42	<.010	.045
			FX163786	142.50	144.00	1.50	0	-	<.010	.045
			FX163787	144.00	145.50	1.50	0	30	<.010	.045
			FX163788	145.50	146.47	.97	0	-	<.010	.045
			FX163789	146.47	147.35	.88	0	-	<.010	.045
147.35	147.90	LAMPROPHYRE								
		Mafic dike. Fine grained, massive, soft, biotitic, black, equigranular. Not magnetic.	FX163790	147.35	147.90	.55	0	-	<.010	.045
147.90	215.50	PERIDOTITE								
		Fine grained to medium grained, soft, talcose, magnetic dark bluish gray to black with 10 to 20% fine grained to medium grained disseminated iron carbonate. Massive.	FX163791	147.90	149.00	1.10	0	-	<.010	.045
			FX163792	149.00	150.50	1.50	0	-	<.010	.045
			FX163793	150.50	152.00	1.50	0	-	<.010	.045
159.50	161.00	With 15 to 30% disseminated iron carbonate.	FX163794	152.00	153.50	1.50	0	-	.010	.060
161.00	162.50	As above, with 5% disseminated limonite spots 1 to 2 millimetres in size.	FX163795	153.50	155.00	1.50	0	-	<.010	.060
			FX163796	155.00	156.50	1.50	0	-	<.010	.060
162.50	168.50	Becoming harder.	FX163797	156.50	158.00	1.50	0	-	<.010	.060
168.50	171.60	Soft to moderately hard, with rare quartz carbonate veins, several black chlorite talc seams up to 4 millimetres thick and fault fractures at various angles to core	FX163798	158.00	159.50	1.50	0	-	<.010	.060
			FX163799	159.50	161.00	1.50	0	-	<.010	.060
			FX163800	161.00	162.50	1.50	0	-	<.010	.060
			FX163801	162.50	164.00	1.50	0	-	<.010	.060

FROM M	TO M	**********DESCRIPTION**********
		axis which are commonly iron stained and some times have minor fault gouge.
171.60	172.88	Fractured with several gouge filled fault fractures up to 1 centimetre thick and 5% chlorite talc quartz carbonate veining with the chlorite talc being present as very soft green to black streaks and patches. Trace pyrite. Moderately hard to soft.
172.88	174.38	Moderately hard to soft, locally fractured and filled with fault gouge up to 1 centimetre thick. Rare serpentine veins.
175.75	177.25	As at 172.88.
180.22	181.82	Strongly fractured and brecciated with numerous fault gouge seams at various angles to core axis. 5% fine grained chlorite, 10% light green talc and 5% quartz carbonate as streaks and veins within the fractured and brecciated zones.
181.82	183.28	Moderately fractured with some thin fault gouge, chlorite and talc.
183.28	184.54	As at 180.22.
187.00	190.00	With 2 to 3% serpentine and chlorite talc veins up to 1 centimetre thick and with minor quartz carbonate veining.
190.00	191.50	With 5% dark green chlorite veins and streaks, 2% contorted quartz carbonate veins.
194.50	196.00	With minor serpentine veining up to 5 millimetre thick, 5% white quartz carbonate veins up to 2 centimetres thick.
199.00	200.50	As at 194.50.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX163802	164.00	165.50	1.50	0	-	<.010	.060
FX163803	165.50	167.00	1.50	0	-	<.010	.060
FX163804	167.00	168.50	1.50	0	-	<.010	.060
FX163805	168.50	170.00	1.50	0	-	<.010	.060
FX163806	170.00	171.60	1.60	0	-	<.010	.060
FX163807	171.60	172.88	1.28	TR	-	<.010	.060
FX163808	172.88	174.38	1.50	0	-	<.010	.060
FX163809	174.38	175.75	1.37	0	-	<.010	.060
FX163810	175.75	177.25	1.50	0	-	<.010	.060
FX163811	177.25	178.75	1.50	0	-	<.010	.060
FX163812	178.75	180.22	1.47	0	-	<.010	.060
FX163813	180.22	181.25	1.03	0	-	<.010	.060
FX163814	181.25	181.82	.57	0	-	.125	.131
FX163815	181.82	182.62	.80	0	-	<.010	.131
FX163816	182.62	183.28	.66	0	-	<.010	.131
FX163817	183.28	184.54	1.26	0	-	<.010	.131
FX163818	184.54	185.50	.96	0	-	.030	.160
FX163819	185.50	187.00	1.50	0	-	<.010	.160
FX163820	187.00	188.50	1.50	0	-	<.010	.160
FX163821	188.50	190.00	1.50	0	-	<.010	.160
FX163822	190.00	191.50	1.50	0	-	<.010	.160
FX163823	191.50	193.00	1.50	0	-	<.010	.160
FX163824	193.00	194.50	1.50	0	-	<.010	.160
FX163825	194.50	196.00	1.50	0	-	<.010	.160
FX163826	196.00	197.50	1.50	0	-	<.010	.160
FX163827	197.50	199.00	1.50	0	-	.015	.183
FX163828	199.00	200.50	1.50	0	-	<.010	.183
FX163829	200.50	202.00	1.50	0	-	<.010	.183
FX163830	202.00	203.50	1.50	0	-	<.010	.183
FX163831	203.50	205.00	1.50	TR	-	<.010	.183
FX163832	205.00	206.50	1.50	0	-	<.010	.183
FX163833	206.50	208.00	1.50	0	-	<.010	.183

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
	200.50	202.00 Minor quartz carbonate talc veining.	FX163834	208.00	209.50	1.50	0	-	.010	.198
	203.50	205.00 2 to 3% quartz carbonate chlorite veining. Minor fracturing. trace pyrite.	FX163835	209.50	211.00	1.50	0	-	.010	.213
	205.00	206.50 Fracturing at low angle to core axis. In part very chloritic. 20 to 40% iron carbonate.	FX163836	211.00	212.50	1.50	0	-	.010	.228
	206.50	208.00 With 5% quartz carbonate as a banded vein 8 centimetres thick.	FX163837	212.50	214.00	1.50	0	-	<.010	.228
	208.00	212.50 Fine grained to medium grained, dark bluish gray to black, weakly magnetic to magnetic. moderately hard, massive, generally mottled appearence. 15 to 25% disseminated fine grained to medium grained iron carbonate. minor black chlorite as seams up to 3 millimetres thick	FX163838	214.00	215.50	1.50	0	-	<.010	.228
	212.50	214.00 As above with a chlorite serpentine iron carbonate vein sub parallel to core axis 1 centimetre thick.								
	214.00	215.50 As at 209.50.								
215.50	217.18	PYROXENITE								
		Medium grained to coarse grained, dark greenish gray, massive, moderately hard. Weakly magnetic to non magnetic	FX163839	215.50	216.31	.81	0	-	<.010	.228
			FX163840	216.31	217.18	.87	0	F15	<.010	.228
217.18	218.40	PERIDOTITE								
		As at 208.00, becoming pyroxenitic.	FX163841	217.18	218.40	1.22	0	-	<.010	.228
218.40	222.42	PYROXENITE								
		Fine grained to coarse grained, chloritic, dark gray	FX163842	218.40	219.90	1.50	0	-	<.010	.228

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		green. Fractured sub parallel to core axis. 5% white quartz carbonate as patches. Contact with peridotite is gradational.	FX163843	219.90	221.44	1.54	0	-	<.010	.228
			FX163844	221.44	222.42	.98	0	-	<.010	.228
		221.44 222.42 Medium grained to coarse grained, dark gray green, massive, moderately hard to soft , and with minor quartz carbonate. Weakly to non magnetic.								
222.42	224.03	PERIDOTITE								
		As at 208.00.	FX163845	222.42	224.03	1.61	0	-	<.010	.228
224.03	226.13	PYROXENITE								
		Medium grained to coarse grained, dark gray green, massive, moderately hard to soft. Minor quartz carbonate. Weakly to non magnetic. Rare iron carbonate.	FX163846	224.03	225.43	1.40	0	-	<.010	.228
			FX163847	225.43	226.13	.70	0	-	<.010	.228
		225.43 226.13 Becoming peridotite. Fine grained to coarse grained, dark green to bluish black. Minor iron carbonate. Weakly magnetic to magnetic. Minor talc quartz carbonate veinlets.								
226.13	255.32	PERIDOTITE								
		Fine grained to medium grained, bluish black, massive, mottled appearence. Moderately hard. magnetic. Minor iron carbonate. Minor quartz carbonate veins. Trace pyrite.	FX163848	226.13	227.50	1.37	TR	-	<.010	.228
			FX163849	227.50	228.27	.77	TR	-	<.010	.228
			FX163850	228.27	229.21	.94	0	-	<.010	.228
			FX163851	229.21	230.50	1.29	0	-	<.010	.228
		228.27 229.21 Strongly deformed and contorted with 15 to 20% talc and fibrous serpentine, 5% iron carbonate. Moderately hard to very soft.	FX163852	230.50	232.00	1.50	TR	-	<.010	.228
			FX163853	232.00	233.48	1.48	TR	-	<.010	.228
			FX163854	233.48	234.78	1.30	TR	-	<.010	.228

FROM M	TO M	**********DESCRIPTION**********
		Weakly magnetic. 10% white quartz carbonate veins up to 4 centimetres thick.
229.21	230.50	With minor talc and quartz carbonate patches.
233.48	234.78	With several quartz carbonate talc bands up to 10 centimetres thick.
235.96	236.52	Moderately to strongly contorted with 5 to 10% fibrous serpentine and talc. 10% quartz carbonate as bands, veins and streaks.
236.52	238.02	2% green fibrous serpentine veins up to 1 centimetre thick with minor white quartz carbonate and trace limonite at various angles to core axis.
238.02	239.52	Pyroxenitic in part. 10 centimetre wide ribboned quartz carbonate vein at 238.60.
239.52	241.02	With 12 centimetre thick quartz carbonate talc vein that has diffuse contacts, at 239.88. Minor fibrous serpentine. Olivine crystals have slight brownish tint.
241.02	249.49	Olivine crystals have brownish tint. Minor quartz carbonate veining.
249.49	249.84	Strongly altered and contorted with green chlorite and talc. 20% white quartz carbonate as veins and streaks. Blocky.
249.84	250.06	Pyroxenitic. Medium grained to coarse grained, dark green to bluish black.
250.06	251.56	As at 241.02.
251.56	253.06	As above with 2% quartz carbonate talc veining.
253.06	254.51	As at 241.02 with 10% fibrous serpentine and talc as veins up to 1 centimetre

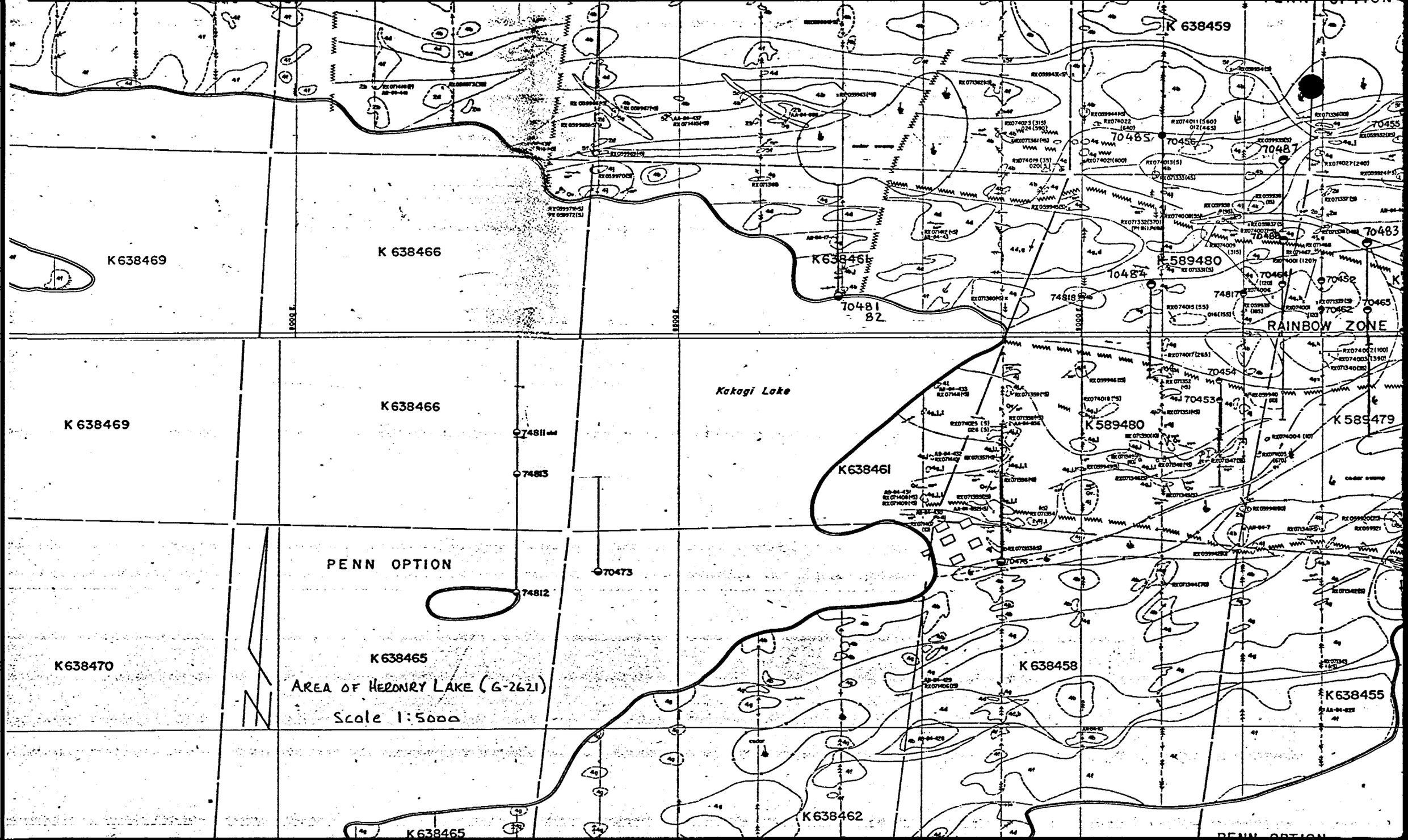
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX163855	234.78	235.96	1.18	TR	-	<.010	.228
FX163856	235.96	236.52	.56	TR	-	<.010	.228
FX163857	236.52	238.02	1.50	TR	-	<.010	.228
FX163858	238.02	239.52	1.50	TR	-	.445	.895
FX163859	239.52	241.02	1.50	TR	-	<.010	.895
FX163860	241.02	242.52	1.50	TR	-	<.010	.895
FX163861	242.52	244.02	1.50	TR	-	<.010	.895
FX163862	244.02	245.52	1.50	TR	-	<.010	.895
FX163863	245.52	247.02	1.50	TR	-	<.010	.895
FX163864	247.02	248.52	1.50	TR	-	<.010	.895
FX163865	248.52	249.49	.97	TR	-	<.010	.895
FX163866	249.49	250.06	.57	0	-	<.010	.895
FX163867	250.06	251.56	1.50	0	-	<.010	.895
FX163868	251.56	253.06	1.50	0	-	<.010	.895
FX163869	253.06	254.51	1.45	0	-	<.010	.895
FX163870	254.51	255.32	.81	0	-	<.010	.895

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		thick. Fractured with miror fault gouge, blocky. 36% ground core.								
	254.51 255.32	As at 241.02, blocky. 2% quartz carbonate veins up to 3 millimetres thick.								
255.32 257.05		FAULT								
		Fault breccia with 20 to 30% fault gouge. Fragments are of peridotite. Very blocky. Oxidized.	FX163871	255.32	256.16	.84	0	-	.035	.924
	256.16 257.05	10% fault gouge, 5% fibrous serpentine.	FX163872	256.16	257.05	.89	0	-	<.010	.924
257.05 258.58		PERIDOTITE								
		Fine grained to medium grained, massive, with 40% pinkish olivine crystals. Bluish black, mottled appearence, soft to moderately hard. Magnetic. Minor serpentine veinlets.	FX163873	257.05	257.88	.83	0	-	<.010	.924
			FX163874	257.88	258.58	.70	0	-	<.010	.924
258.58 259.34		FAULT								
		Fractured and brecciated peridotite with 40% fault gouge.	FX163875	258.58	259.34	.76	0	-	<.010	.924
259.34 282.50		PERIDOTITE								
		As at 257.05.	FX163875	259.34	259.78	.44	0	-	<.010	.924
	259.78 260.74	Very blocky, highly fractured. Talcose, in part chloritic. minor hematite staining.	FX163876	259.78	261.52	1.74	TR	-	<.010	.924
			FX163877	261.52	263.09	1.57	TR	-	<.010	.924
	261.52 263.09	Deformed and contorted. 15% fibrous serpentine, 5% talc as contorted patches and veins. In part fractured and blocky with some hematite staining. Some fractures slickensided.	FX163878	263.09	264.50	1.41	TR	-	<.010	.924
			FX163879	264.50	266.00	1.50	TR	-	<.010	.924
			FX163880	266.00	267.50	1.50	TR	-	<.010	.924
			FX163881	267.50	269.00	1.50	TR	-	<.010	.924
			FX163882	269.00	270.50	1.50	TR	-	<.010	.924

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									ANALYSES	
266.00	272.00	Fine grained to medium grained, massive, bluish black, mottled appearence , weakly magnetic, moderately hard. Minor iron carbonate. Trace pyrite.	FX163883	270.50	272.00	1.50	TR	-	<.010	.924
			FX163884	272.00	273.50	1.50	TR	-	<.010	.924
			FX163885	273.50	275.00	1.50	TR	-	<.010	.924
			FX163886	275.00	276.50	1.50	TR	-	<.010	.924
272.00	273.50	As above with some talc chlorite veinlets and 2% quartz carbonate veins up to 5 millimetres thick.	FX163887	276.50	278.00	1.50	TR	-	<.010	.924
			FX163888	278.00	279.50	1.50	TR	-	<.010	.924
			FX163889	279.50	281.00	1.50	TR	-	<.010	.924
273.50	279.50	As at 266.00. Very weakly magnetic to not magnetic.	FX163890	281.00	282.50	1.50	0	-	<.010	.924
279.50	281.00	As above with minor quartz carbonate talc veining.								
281.00	282.50	As at 266.00, becoming pyroxintic. Blocky, fractured with some hematite staining on fractures. 5% ribboned white quartz carbonate veins up to 3 centimetres thick at various angles to core axis.								
282.50	291.25	PYROXENITE								
		Medium grained to coarse grained, dark black gray, massive, not magnetic, minor iron carbonate and moderately hard. In part fractured and blocky with minor fault gouge on some fractures. 3% quartz carbonate veins with minor light green talc.	FX163891	282.50	283.71	1.21	0	-	<.010	.924
			FX163892	283.71	284.54	.83	0	-	<.010	.924
			FX163893	284.54	285.81	1.27	0	-	<.010	.924
			FX163894	285.81	287.16	1.35	0	-	<.010	.924
			FX163895	287.16	287.98	.82	0	C25	<.010	.924
283.71	284.54	Not fractured.	FX163896	287.98	289.20	1.22	TR	-	<.010	.924
284.54	285.81	As above with 60% white calcareous quartz veins up to 40 centimetres thick with minor light green talc streaks and with irregular contacts at various angles to core axis.	FX163897	289.20	290.45	1.25	TR	-	<.010	.924
			FX163898	290.45	291.25	.80	TR	-	<.010	.924
285.81	287.16	1% quartz carbonate veins.								
287.16	287.98	Medium grained to coarse grained, massive,								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		in part brecciated. 20% white calcareous quartz as veins and veinlets, at 25 degrees to core axis, sub parallel to core and cementing brecciated areas.								
	287.98 289.20	Medium grained to coarse grained, massive, moderately hard to soft, mottled. not magnetic. Consists primarily of pyroxene crystals. Dark gray black. Minor iron carbonate. trace pyrite.								
	289.20 290.45	As above with minor quartz veins up to 3 millimetres thick.								
	290.45 291.25	As at 287.98.								
291.25 292.35		FAULT								
		Strongly fractured and brecciated with fragments cemented by fault gouge. Contacts sharp. Fragments consist of peridotite and pyroxenite.	FX163899	291.25	292.35	1.10	0	C15	.010	.935
292.35 300.12		PYROXENITE								
		Medium grained to coarse grained, massive, moderately hard to soft, mottled, not magnetic. Consists of mainly pyroxene crystals. Dark gray black. Trace pyrite.	FX163900	292.35	292.95	.60	0	-	<.010	.935
			FX163901	292.95	293.95	1.00	0	F25	<.010	.935
			FX163902	293.95	295.38	1.43	0	-	<.010	.935
	292.95 293.95	Fractured with minor fault gouge. In part blocky. Altered with streaks and patches of light green to white calcite. Moderately to strongly foliated.	FX163903	295.38	296.88	1.50	0	-	<.010	.935
			FX163904	296.88	297.18	.30	0	-	<.010	.935
			FX163905	297.18	298.08	.90	0	-	<.010	.935
			FX163906	298.08	298.88	.80	0	-	<.010	.935
	297.18 298.08	With two white calcareous quartz veins 4 centimetres thick.	FX163907	298.88	300.12	1.24	0	-	<.010	.935
	298.08 300.12	With several calcite talc veins and fault gouge filled fractures at various angles								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		to core axis.								
300.12	301.23	FAULT								
		Strongly fractured and brecciated with 60% fault gouge. Weakly to moderately calcareous.	FX16390B	300.12	301.23	1.11	0	F10	<.010	.935
301.23	303.75	PYROXENITE								
		Medium grained to coarse grained, dark gray, massive, soft to moderately hard. 5% calcite as veins and veinlets up to 3 millimetres thick. Weakly fractured. Foliated sub parallel to core axis.	FX163909	301.23	302.32	1.09	0	-	<.010	.935
			FX163910	302.32	303.43	1.11	0	F10	<.010	.935
			FX163911	303.43	303.75	.32	0	-	<.010	.935
		302.32 303.43 Fractured with several fault gouge fillrd seams. Contorted. moderately to strongly foliated. 15% white calcareous quartz veins and stringers.								
		303.43 303.75 As above but less deformed. 30% white calcareous quartz carbonate veins and patches.								
303.75	305.71	FAULT								
		Strongly fractured and brecciated with 30 to 60% fault gouge. Calcareous. 5% white quartz carbonate veins, veinlets and streaks.	FX163912	303.75	305.00	1.25	0	-	<.010	.935
			FX163913	305.00	305.71	.71	0	-	<.010	.935
		305.00 305.71 As above. Ultramafic rock fragments strongly foliated. Foot of hole.								


K638459
K638469
K638466
K638461
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70484
70483
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74818
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70465
70462
RAINBOW ZONE
Kakagi Lake
70454
70453
74811
74813
74812
70473
PENN OPTION
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

74816-0
PAGE 1

PROJECT	: CROW	LATITUDE	:N 9550.0 M	NTS SHEET #	: 52-F-4	STARTED	: 03-16-86
PROPERTY	: Penn Option	DEPARTURE	:E 9400.0 M	TOWNSHIP	:	COMPLETED	: 03-19-86
BOREHOLE	: 74816-0	ELEVATION	: 1356.6 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: OBS	COUNTRY	: Canada	DRILLED BY	: Bradley Bros.
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Boyles 37A
DEPTH	: 260.3 M	LOGGED BY	: A.Aubut	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 120m east and 150m south of post #4. 3.66m casing left in hole.

LEFT IN HOLE:

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
SEP 26 1988
RECEIVED

********DEVIATION RECORDS********

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.70	175.0	-48.00	91.40	175.0	-46.00	182.90	175.0	-40.00	260.30	175.0	-36.00
30.50	175.0	-49.00	121.90	175.0	-43.00	213.40	175.0	-38.00			
61.00	175.0	-45.00	152.40	175.0	-43.00	243.80	175.0	-37.00			

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	AU PPM	PPM*M
									**********ANALYSES**********	
.00	3.66	OVERBURDEN								
3.66	5.12	GABBRO								
		Fine grained, green, moderately hard. 10% disseminated iron carbonate. Chloritic. 10% light yellow stretched clots of sericitized feldspar producing a spotted appearance. Strongly foliated. 2 to 3% quartz carbonate veins.	FX188040	3.66	4.38	.72	-	F47	<.010	.000
			FX188041	4.38	5.12	.74	-	F43	<.010	.000
		4.38 5.12 Darker green. With 15 to 25% gray to white quartz carbonate streaks, lenses and patches. More calcareous. Weakly magnetic.								

KENORA
MINING DIV.
RECEIVED
JUN 6 - 1988
AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

74816-0
PAGE 1

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
5.12	28.20	GABBRO								
		Fine grained, dark green, soft to moderately hard. Very chloritic, moderately to strongly foliated. Weakly magnetic. 1 to 4% fine grained disseminated magnetite. Trace pyrite. 10 to 15% iron carbonate as streaks and disseminated rhombic crystals. Weakly mottled. 2% quartz carbonate veins.	FX188042	5.12	6.62	1.50	TR	F40	<.010	.000
			FX188043	6.62	8.12	1.50	TR	F42	<.010	.000
			FX188044	8.12	9.62	1.50	TR	-	<.010	.000
			FX188045	9.62	11.12	1.50	TR	F45	<.010	.000
			FX188046	11.12	12.62	1.50	TR	-	<.010	.000
			FX188047	12.62	13.79	1.17	TR	F44	<.010	.000
		8.12 9.62 In part weakly calcareous.	FX188048	13.79	14.04	.25	TR	-	<.010	.000
		9.62 13.79 Trace to 1% fine grained light yellow leucoxene, weakly to moderately foliated.	FX188049	14.04	16.50	2.46	TR	F53	<.010	.000
			FX188050	16.50	18.00	1.50	TR	F55	<.010	.000
		13.79 20.77 Weakly to moderately foliated, 1 to 2% light yellow leucoxene. Finely spotted appearance. 15% disseminated fine grained iron carbonate. 3 to 4% quartz carbonate veins, usually contorted. Chloritic.	FX188051	18.00	19.50	1.50	TR	-	<.010	.000
			FX188052	19.50	20.77	1.27	TR	-	<.010	.000
			FX188053	20.77	21.12	.35	TR	-	<.010	.000
			FX188054	21.12	22.56	1.44	TR	F48	<.010	.000
			FX188055	22.56	23.36	.80	TR	-	<.010	.000
		20.77 21.12 20% pinkish gray quartz carbonate as contorted patches.	FX188056	23.36	24.12	.76	TR	F45	<.010	.000
			FX188057	24.12	24.87	.75	TR	-	<.010	.000
		21.12 23.36 As at 13.79 becoming strongly foliated and more chloritic.	FX188058	24.87	26.10	1.23	TR	F55	<.010	.000
			FX188059	26.10	26.66	.56	TR	-	<.010	.000
		24.12 26.10 As at 21.12 with 5% quartz carbonate veins and veinlets.	FX188060	26.66	28.20	1.54	TR	F48	.005	.008
		26.10 26.66 Moderately foliated, green gray, weakly chloritic, 15 to 20% iron carbonate streaks. Soft.								
28.20	31.70	GABBRO								
		Fine grained, dark green, chloritic to very chloritic. Strongly foliated. 10 to 15% strongly contorted quartz carbonate wisps, patches, streaks and veins. 1% light	FX188061	28.20	29.70	1.50	TR	-	<.010	.008
			FX188062	29.70	31.20	1.50	TR	F45	<.010	.008
			FX188063	31.20	31.70	.50	TR	-	<.010	.008

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		yellow leucoxene, trace pyrite, 5 to 10% disseminated iron carbonate and as streaks.								
		31.20 31.70 10% quartz carbonate patches, streaks and veins.								
31.70	40.91	GABBRO								
		Fine grained, green to gray green. Weakly to moderately foliated, moderately hard, 25 to 30% disseminated iron carbonate. 10% disseminated granules of ilmenite?, black, metallic, weakly to non magnetic, reddish brown streak. 3 to 5% quartz carbonate veins up to 1 centimetre thick. Trace pyrite, chalcopyrite.	FX1BB064	31.70	33.14	1.44	TR	F52	<.010	.008
			FX1BB065	33.14	34.60	1.46	TR	-	<.010	.008
			FX1BB066	34.60	36.20	1.60	TR	-	<.010	.008
			FX1BB067	36.20	37.60	1.40	TR	F40	<.010	.008
			FX1BB068	37.60	38.88	1.28	TR	-	<.010	.008
			FX1BB069	38.88	39.76	.88	TR	F43	<.010	.008
			FX1BB070	39.76	40.91	1.15	1	-	<.010	.008
		31.70 33.14 Dark green, chloritic, 10% gray quartz carbonate masses , veins, and patches.								
		37.60 38.88 With 5% quartz carbonate veins up to 5 millimetres thick, in part contorted.								
		38.88 39.76 Moderately to strongly foliated, chloritic. Ilmenite is totally altered to light gray leucoxene. 10% gray to white quartz carbonate as contorted patches , streaks and discontinuous veins up to 4 millimetres thick.								
		39.76 40.91 As above with leucoxene content decreasing in last 30 centimetres. 1% pyrite as streaks and disseminated crystals.								
40.91	43.76	GABBRO								
		Strongly deformed and contorted. Gray green, fine grained, hard. 40% light gray quartz carbonate as wisps, patches and streaks with almost a brecciated	FX1BB071	40.91	42.41	1.50	1	-	<.010	.008
			FX1BB072	42.41	43.76	1.35	1	-	<.010	.009

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********	ANALYSES **********
		appearance with fragments being stretched in various directions. Chloritic, lineated, strongly foliated but with foliation also deformed. Locally remnant gray green leucoxene present. 1% pyrite as scattered fine grained to medium grained crystals.								
43.76	63.26	GABBRO								
		Medium grained, gray, strongly foliated, moderately hard, 1 to 8% crushed ilmenite grains. minor quartz carbonate veinlets. 30 to 35% iron carbonate, moderately chloritic. Locally altered adjacent to quartz carbonate veins.	FX188073	43.76	44.10	.34	8	C30	2.465	.846
			FX188074	44.10	44.50	.40	1	F40	.030	.858
			FX188075	44.50	44.94	.44	5	-	.875	1.243
			FX188076	44.94	46.50	1.56	0	F33	<.010	1.243
			FX188077	46.50	48.00	1.50	0	-	<.010	1.243
			FX188078	48.00	49.50	1.50	0	F30	<.010	1.243
			FX188079	49.50	51.00	1.50	0	F40	<.010	1.243
			FX188080	51.00	52.50	1.50	0	-	<.010	1.243
			FX188081	52.50	54.00	1.50	0	-	<.010	1.243
			FX188082	54.00	55.16	1.16	0	F43	.030	1.278
			FX188083	55.16	55.90	.74	0	-	.020	1.292
			FX188084	55.90	56.72	.82	TR	F25	<.010	1.292
			FX188085	56.72	57.24	.52	0	-	<.010	1.292
			FX188086	57.24	58.60	1.36	0	F35	<.010	1.292
			FX188087	58.60	59.20	.60	0	-	<.010	1.292
			FX188088	59.20	60.08	.88	0	-	<.010	1.292
			FX188089	60.08	60.76	.68	TR	-	<.010	1.292
			FX188090	60.76	61.64	.88	1	F38	<.010	1.292
			FX188091	61.64	62.18	.54	TR	F40	.040	1.314
			FX188092	62.18	63.26	1.08	TR	-	.300	1.638
		43.76 44.10 With 1.5 centimetre thick quartz vein surrounded by a bleached, silicified, carbonatized, pyritic alteration envelope. 8% fine grained to medium grained pyrite as crystals up to 2 millimetres. light gray, hard with 30% iron carbonate as streaks, discontinuous veins and disseminated.								
		44.10 44.50 Fine grained to medium grained, green gray to light gray, moderately to strongly foliated, chloritic. 8% ilmenite partially altered to leucoxene. Moderately hard , carbonatized. 15% quartz iron carbonate streaks. Becoming bleached. 1% pyrite.								
		44.50 44.94 Bleached, silicified, carbonatized and pyritic. Light gray to gray. 4 centimetre thick quartz vein in centre. 5% fine grained to medium grained disseminated pyrite.								
		46.50 48.00 Upper 35 centimetres has 3 diffuse quartz carbonate zones and 3% scattered black								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		tourmaline. Rest of section has 1% tourmaline								
48.00	49.50	1 to 2% scattered medium grained tourmaline grains.								
49.50	51.00	5 to 8% quartz carbonate veins up to 12 centimetres thick with some displacement and contorting of veins. Lineation rakes 35 degrees on the foliation plane. Trace to 1% tourmaline.								
51.00	52.50	Weakly to moderately foliated. 5% quartz carbonate veins up to 8 centimetres thick, locally contorted.								
52.50	54.00	Fine grained to medium grained, weakly to moderately foliated.								
54.00	55.16	5% quartz carbonate veins up to 1 centimetre thick. Weakly folded and contorted.								
55.16	55.90	15% quartz carbonate veins up to 1 centimetre thick and strongly crenulated with minor black tourmaline. Generally sub parallel to core axis with strongly folded knots, and is locally vuggy.								
55.90	56.72	Strongly foliated and lineated. Sericitic, chloritic. 5% quartz carbonate veins up to 1.5 centimetres thick. Trace pyrite.								
56.72	57.24	60% strongly folded and contorted quartz carbonate with 40% sericitic, chloritic, strongly deformed gabbro. 1 to 2% black tourmaline as crenulated veinlets.								
57.24	59.20	Trace to 1% ilmenite, 3% quartz carbonate veins up to 2 centimetres thick at various angles to core.								
59.20	60.08	Folded and crenulated with 20% quartz carbonate veins up to 1 centimetre thick,								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
		in part sub parallel to core. 2% chlorite veinlets. Ilmenite is mostly altered to leucoxene.								
	60.08	60.76 Becoming bleached. Strongly carbonatized. Gray to light gray, moderately to weakly foliated, moderately hard. Leucoxene becoming rarer, probably due to replacement. Trace to 1% fine grained disseminated pyrite.								
	60.76	61.64 Altered and bleached. Very strongly carbonatized with 60% iron carbonate. Light gray, moderately hard, weakly foliated, 5% chlorite streaks, 1% pyrite. Now quartz sericite iron carbonate rock. Last 15 centimetres has 15% black tourmaline veinlets and streaks.								
	61.64	62.18 10% light green leucoxene. Magnetic. Weakly to moderately foliated. Dark green, with trace very fine grained pyrite and chalcopyrite. 15% white quartz carbonate veins up to 1 centimetre thick and are in part folded and contorted.								
	62.18	63.26 Dark gray, fine grained to medium grained, magnetic, trace chalcopyrite and pyrite. Weakly foliated. 3% quartz carbonate veins up to 3 millimetres thick.								
63.26	82.60	GABBRO								
		Fine grained, dark green, massive, chloritic, moderately hard, magnetic. 8 to 12% ilmeno magnetite as disseminated grains. Trace to 1% very fine grained	FX18B093	63.26	64.76	1.50	TR	F30	.010	1.653
			FX18B094	64.76	65.81	1.05	TR	-	<.010	1.653
			FX18B095	65.81	66.57	.76	1	-	.030	1.676

FROM M	TO M	**********DESCRIPTION**********
		chalcopyrite and pyrite.
63.26	64.67	Contact with gabbro gradational. Very strongly carbonatized with 30 to 35% iron carbonate. 3 to 5% quartz carbonate veins up to 1 centimetre thick. Weakly foliated.
64.67	65.81	25 to 30% iron carbonate.
65.81	66.57	10 to 25% iron carbonate. Minor quartz carbonate veinlets, 1% pyrite, trace chalcopyrite.
66.57	67.13	With 18 centimetre thick white quartz carbonate vein. Basalt has 15% iron carbonate, 5% disseminated pyrite crystals up to 2 millimetres. Vein contacts sharp.
67.13	69.69	5% iron carbonate, weakly calcareous, 5% quartz carbonate veins up to 1 centimetre thick.
69.69	70.43	Weakly to moderately calcareous.
70.43	70.70	Strongly calcareous, 5% disseminated pyrite, weakly foliated.
70.70	70.92	Bull quartz vein.
70.92	71.32	Strongly to moderately calcareous, 3% pyrite crystals up to 2 millimetres. Pitted surface-possibly amygdaloidal.
71.32	72.82	Weakly calcareous, 3 to 5% quartz carbonate veins up to 5 millimetres at various angles to core.
72.82	74.32	Locally pitted due to water soluable mineral. Minor quartz carbonate veins up to 2 millimetres thick.
74.32	76.40	2 to 3% quartz carbonate veins up to 4 millimetres thick. Moderately calcareous.
76.40	79.11	Weakly to moderately foliated. Ilmenite

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188096	66.57	67.13	.56	5	C50	<.010	1.676
FX188097	67.13	68.50	1.37	TR	-	.020	1.703
FX188098	68.50	69.69	1.19	TR	-	.030	1.739
FX188099	69.69	70.43	.74	TR	-	.100	1.813
FX188100	70.43	71.32	.89	3	-	.040	1.848
FX188101	71.32	72.82	1.50	TR	-	.020	1.878
FX188102	72.82	74.32	1.50	TR	-	.295	2.321
FX188103	74.32	75.40	1.08	TR	-	<.005	2.321
FX188104	75.40	76.40	1.00	TR	-	<.005	2.321
FX188105	76.40	77.94	1.54	TR	F37	.010	2.336
FX188106	77.94	79.11	1.17	TR	-	<.005	2.336
FX188107	79.11	80.47	1.36	0	-	<.005	2.336
FX188108	80.47	81.47	1.00	0	F32	.370	2.706
FX188109	81.47	82.60	1.13	0	-	.005	2.712

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		lamelli altered to light gray leucoxene. Stretched medium grained magnetite - leucoxene grains produce a spotted appearence. 3 to 5% quartz carbonate veins up to 1 centimetre thick. Locally pitted due to water soluable mineral. Weakly to moderately calcareous.								
	79.11 80.47	Leucoxene alteration of ilmenite lamelli greatly decreased. Ilmeno magnetite grains up to 3 millimetre. Massive to weakly foliated.								
	80.47 81.47	Fine grained with medium grained patches. Weakly foliated with 3 to 5% leucoxene altered ilmeno magnetite grains. 5% disseminated iron carbonate. 5% quartz carbonate veins up to 6 millimetres thick.								
	81.47 82.60	3 to 5% leucoxene altered ilmeno magnetite. Weakly foliated. 5% disseminated fine grained iron carbonate. 5% quartz carbonate veins up to 4 millimetres thick. Very weakly to non magnetic.								
82.60	84.64	GABBRO								
		Medium grained to fine grained, gray to dark gray, moderately hard, mottled, weakly to moderately foliated. 5 to 10% fine grained disseminated iron carbonate. 10% light green gray skeletal leucoxene.	FX1BB110	82.60	83.30	.70	2	F40	.605	3.136
			FX1BB111	83.30	84.64	1.34	TR	-	.005	3.142
	82.60 83.30	2% fine grained disseminated pyrite, 5% quartz carbonate veins up to 5 millimetres thick. Contact with basalt is gradational.								
	83.30 84.64	Dark gray, fine grained to medium grained,								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
		trace pyrite.								
84.64	89.48	GABBRO								
		Halo alteration. Weakly carbonatized and silicified gabbro with 10 to 15% gash type quartz carbonate veins.	FX188112	84.64	86.20	1.56	TR	F43	.015	3.166
		87.70 88.60 Weakly foliated to massive, pale gray, 15% disseminated fine grained iron carbonate.	FX188113	86.20	87.70	1.50	TR	-	.005	3.173
			FX188114	87.70	88.60	.90	TR	-	<.005	3.173
			FX188115	88.60	89.48	.88	2	-	.010	3.182
		88.60 89.48 As above with 2% pyrite as crystals up to 2 millimetres. 5 centimetre thick quartz carbonate vein at 89.21.								
89.48	101.80	GABBRO								
		Altered gabbro. Very pale green gray, leucocratic, bleached, silicified, 20 to 35% fine grained disseminated iron carbonate. Almost completely devoid of mafics. Medium grained to coarse grained, hard to very hard , moderately foliated, mottled. 5% light gray skeletal leucoxene, sometimes partially replaced by pyrite. 2% disseminated fine grained to medium grained pyrite as crystals up to 2 millimetres.	FX188116	89.48	90.82	1.34	2	F45	.010	3.195
			FX188117	90.82	91.56	.74	3	-	.085	3.258
			FX188118	91.56	92.20	.64	5	-	1.500	4.218
			FX188119	92.20	93.25	1.05	4	F45	.010	4.229
			FX188120	93.25	93.87	.62	3	-	.075	4.275
			FX188121	93.87	95.00	1.13	3	F45	.130	4.422
			FX188122	95.00	95.95	.95	6	-	2.190	6.503
			FX188123	95.95	96.71	.76	2	-	1.340	7.521
			FX188124	96.71	97.67	.96	3	F48	1.910	9.355
			FX188125	97.67	98.19	.52	4	-	.780	9.760
			FX188126	98.19	98.72	.53	6	-	1.540	10.576
			FX188127	98.72	100.24	1.52	2	-	.025	10.614
			FX188128	100.24	101.00	.76	2	-	.050	10.652
			FX188129	101.00	101.80	.80	1	-	.030	10.676
		90.82 91.56 3% pyrite crystals up to 4 millimetres.								
		91.56 92.20 With 20% white quartz carbonate veins up to 12 centimetre thick. 5% medium grained to coarse grained pyrite as crystals up to 6 millimetres disseminated in the gabbro. 1% chalcopyrite and minor black tourmaline streaks in the largest quartz carbonate vein								
		92.20 93.25 4% pyrite.								
		93.25 93.87 With 10% with quartz carbonate veins up to 4 centimetres thick. 3% black tourmaline as								

FROM M	TO M	**********DESCRIPTION**********
		disseminated crystals and bands within the gabbro. 30 to 40% iron carbonate. 3% pyrite as crystals up to 3 millimetres.
93.87	95.00	Weakly fractured, blocky. 10% white quartz carbonate veins up to 10 centimetres thick at high angles to the core. 3% pyrite as crystals up to 4 millimetres but mainly 1 to 2 millimetres. Rare tourmaline.
95.00	95.95	Very pale green gray to light pinkish gray. 10% quartz carbonate veins up to 2.5 centimetres thick. 6% medium grained to coarse grained pyrite up to 3 millimetres.
95.95	96.71	White quartz carbonate vein with 1% chalcopyrite as scattered patches and 1% pyrite as disseminated crystals. 5% black tourmaline as mats of acicular crystals and as veinlets. 20% altered gabbro inclusions.
96.71	97.67	As at 95.00 with 5% white quartz carbonate veins up to 4 centimetres thick. 3% coarse grained to medium grained pyrite as crystals up to 4 millimetres. Trace chalcopyrite, minor tourmaline.
97.67	98.19	4% pyrite as crystals up to 4 millimetres.
98.19	98.72	Not mottled. Light green gray to light pinkish gray. With 10% quartz carbonate veins up to 3 centimetres thick. 6% coarse grained pyrite crystals, 2 to 4 millimetres on average and up to 1 centimetre. 1% tourmaline veinlets in quartz carbonate veins
98.72	100.24	Light pinkish gray to light green gray. 2% fine grained disseminated pyrite.
100.24	101.00	8 to 10% gray skeletal leucoxene with

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M

FROM M	TO M	DESCRIPTION
		diffuse borders up to 2 millimetres in size giving rock spotted appearence, light green gray. One 4 centimetre thick quartz carbonate vein. 2% medium grained disseminated pyrite.
	101.00 101.80	As above, light gray green. Leucoxene decreasing down hole. Pressure shadows around pyrite crystals. 1% pyrite.
101.80 107.24		GABBRO
		Altered. As above except now hematitized as well.
	101.80 102.80	Light pinkish gray. Leucoxene very fuzzy. 2% pyrite. minor quartz carbonate veins up to 1 centimetre thick with some chalcopyrite and tourmaline. Hematitized fracture at bottom..
	102.80 103.64	Very pale pink. 1% medium grained pyrite.
	103.64 104.21	As above with 3 centimetre thick quartz carbonate vein at top with 10% tourmaline streaks and crystals. Upper contact of quartz carbonate vein is hematitized. 2% medium grained pyrite.
	104.21 104.41	Quartz carbonate vein with 5% streaks and thin veinlets of black tourmaline. 2% chalcopyrite as patches.
	104.41 104.92	Very pale pink. Moderately to strongly foliated. 3% pyrite as crystals up to 3 millimetres.
	104.92 107.24	Very pale pink to light pink. 3% disseminated pyrite as crystals up to 4 millimetres. One 3 centimetre thick quartz

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188130	101.80	102.80	1.00	2	-	.335	11.011
FX188131	102.80	103.64	.84	1	F42	.040	11.045
FX188132	103.64	104.21	.57	2	-	2.950	12.727
FX188133	104.21	104.41	.20	2	-	.095	12.746
FX188134	104.41	104.92	.51	3	-	.155	12.825
FX188135	104.92	106.32	1.40	3	F43	.160	13.049
FX188136	106.32	107.24	.92	3	-	.055	13.099

FROM M	TO M	**********DESCRIPTION**********
		vein with 1% chalcopyrite.
107.24	118.40	GABBRO
		Altered. As to 101.80 metres.
		107.24 108.00 Light gray, massive to weakly foliated, 2% disseminated pyrite as crystals up to 2 millimetres.
		108.00 109.08 Medium grained, light gray to pale gray with up to 10% chlorite spots. 1% fine grained pyrite. Pyrite content decreases with increasing chlorite content. Massive to weakly foliated.
		109.08 109.98 Medium grained, pale gray, 10% chlorite, weakly foliated, trace pyrite, weak iron carbonate.
		109.98 112.45 Light gray, 25 to 30% fine grained disseminated iron carbonate. 3 to 5% gray leucoxene with diffuse borders , and up to 2 millimetres in size. Trace pyrite. Minor quartz carbonate veins up to 1 centimetre.
		112.45 113.20 As above with 1% pyrite.
		113.20 114.10 As at 109.98 with 3% medium grained pyrite as crystals up to 3 millimetres. 10% white quartz carbonate tourmaline veining up to 3 centimetres thick.
		114.10 115.60 As at 109.98.
		115.60 115.96 As above with 15% quartz carbonate tourmaline veining and 4% fine grained to medium grained disseminated pyrite.
		115.96 116.41 As at 109.98 with 1% disseminated pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
FX188137	107.24	108.00	.76	2	-	.275	13.308
FX188138	108.00	109.08	1.08	1	-	.070	13.384
FX188139	109.08	109.98	.90	TR	-	.010	13.393
FX188140	109.98	110.95	.97	TR	-	.005	13.398
FX188141	110.95	112.45	1.50	TR	-	.005	13.405
FX188142	112.45	113.20	.75	1	F42	<.005	13.405
FX188143	113.20	114.10	.90	3	-	1.240	14.521
FX188144	114.10	115.60	1.50	TR	F50	.005	14.529
FX188145	115.60	115.96	.36	4	-	3.060	15.630
FX188146	115.96	116.41	.45	1	-	.090	15.671
FX188147	116.41	116.64	.23	1	-	<.005	15.671
FX188148	116.64	117.64	1.00	2	F47	.055	15.726
FX188149	117.64	118.40	.76	2	-	.015	15.737

FROM M	TO M	**********DESCRIPTION**********
	116.41	116.64 Quartz carbonate vein with 1% chalcopyrite, 2% black tourmaline.
	116.64	117.64 Light gray, 25% iron carbonate, 5% very diffuse leucoxene, 2% fine grained disseminated pyrite.
	117.64	118.40 Slightly greenish light gray. Minor chlorite seams. 2 to 3% diffuse leucoxene. 1 to 2% pyrite. 25% white quartz carbonate veins up to 7 centimetres thick with scattered patches chalcopyrite, 1% tourmaline veinlets.
118.40	128.32	GABBRO
		Altered. Hematitized and silicified as to 107.24 metres.
		118.40 119.50 Light gray to light pink, mottled, 3 to 5% diffuse gray leucoxene and trace pyrite.
		119.50 121.00 Light pink, minor quartz carbonate veins and veinlets with associated pyritic envelopes. 1% pyrite.
		121.00 122.04 Light pink to pink, minor quartz carbonate veins up to 1 centimetre thick. 2% fine grained pyrite as pyritic envelopes enclosing quartz carbonate veins and along light gray streaks.
		122.04 123.20 Pink, 1 to 3% leucoxene, trace pyrite.
		123.20 124.45 Pink to light pink. 5 to 10% leucoxene. Granitic appearance. Trace pyrite.
		124.45 125.49 As above with a 5 centimetre thick quartz carbonate vein containing trace tourmaline, 2% pyrite. 1% overall fine grained to medium grained disseminated

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	**********ANALYSES********** AU PPM	PPM*M
FX188150	118.40	119.50	1.10	TR	-	.030	15.770
FX188151	119.50	121.00	1.50	1	F40	.070	15.875
FX188152	121.00	122.04	1.04	2	-	.160	16.042
FX188153	122.04	123.20	1.16	TR	F47	.025	16.071
FX188154	123.20	124.45	1.25	TR	F51	<.005	16.071
FX188155	124.45	125.49	1.04	1	F46	.075	16.149
FX188156	125.49	126.07	.58	1	-	.445	16.407
FX188157	126.07	127.30	1.23	TR	-	<.005	16.407
FX188158	127.30	128.32	1.02	TR	-	.015	16.422

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		pyrite mainly in the area of the quartz carbonate vein. decreasing amount of leucoxene.								
	125.49	126.07 Light pinkish gray. 8% quartz carbonate as a knot with some tourmaline streaks. In part very strongly silicified with associated 1% very fine grained pyrite.								
	126.07	127.30 Light gray, minor leucoxene, trace pyrite.								
	127.30	128.10 Light gray, 3 to 5% medium grained leucoxene, trace to 1% pyrite.								
	128.10	128.32 White quartz carbonate vein with 3% chlorite streaks, trace pyrite.								
128.32	130.68	GABBRO								
		Altered. As to 101.80 metres.	FX188159	128.32	129.84	1.52	TR	F54	<.005	16.422
	128.32	129.84 Light gray, moderately to strongly foliated, 3% leucoxene, trace pyrite, minor quartz carbonate veins.	FX188160	129.84	130.68	.84	TR	F45	<.005	16.422
	129.84	130.68 Strongly foliated, light gray to light pinkish gray. 5% quartz carbonate veins up to 1 centimetre thick. Trace to 1% pyrite.								
130.68	136.70	GABBRO								
		Halo alteration. Strongly foliated, fine grained, green gray to pale gray, sericitic, chloritic, 10 to 15% disseminated iron carbonate. Trace to 1% disseminated fine grained black tourmaline crystals. 3 to 5% light green streaked out leucoxene. 10% white to light pinkish brown quartz carbonate veins up to 1.5	FX188161	130.68	131.20	.52	0	F45	<.005	16.422
			FX188162	131.20	131.96	.76	0	F45	<.005	16.422
			FX188163	131.96	132.86	.90	0	F40	.010	16.431
			FX188164	132.86	133.76	.90	0	-	.020	16.449
			FX188165	133.76	134.42	.66	0	F43	.005	16.452
			FX188166	134.42	135.27	.85	0	F35	<.005	16.452

**********DESCRIPTION**********

FROM M	TO M	
		centimetres thick concordant to foliation.
	136.70	131.20 Pale gray to gray. 2% tourmaline.
	133.76	134.42 Slightly reddish tint. Strongly hematitized along fractures.
	134.42	135.27 Reddish due to 2 to 3% disseminated hematite. 5% light yellow quartz carbonate veins in part strongly hematitized.
	135.27	135.76 Medium grained, sheared gabbro. Hematitized. 20% light yellow altered, crushed and stretched feldspar giving a streaky appearence. Strongly foliated.
	135.76	136.70 Becoming bleached. Green gray to very pale gray with slight reddish tint. Very strongly foliated. Mafics rapidly dissappearing in first 20 centimetres. Very sericitic. Leucocratic.
136.70	144.54	GABBRO
		Altered gabbro. Medium grained to fine grained, light pinkish gray to light gray, bleached, silicified, carbonatized, and hematitized hard to very hard, leucocratic. Trace light green chlorite. 25 to 30% disseminated iron carbonate. Weakly to moderately foliated. 3 to 5% gray leucoxene as diffuse and broken clots.
	136.70	138.10 Moderately foliated, trace pyrite, minor quartz carbonate veins up to 1.5 centimetres.
	138.10	139.52 Locally strongly silicified and pyritic. 1% pyrite.
	139.52	141.02 With 5% brownish quartz carbonate veins up

**********ANALYSES**********

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188167	135.27	135.76	.49	0	F37	.035	16.469
FX188168	135.76	136.70	.94	0	F35	<.005	16.469
FX188169	136.70	138.10	1.40	TR	F38	<.005	16.469
FX188170	138.10	139.52	1.42	1	-	.035	16.519
FX188171	139.52	141.02	1.50	TR	-	.010	16.534
FX188172	141.02	142.34	1.32	TR	F44	.010	16.547
FX188173	142.34	143.49	1.15	1	F42	.020	16.570
FX188174	143.49	144.54	1.05	1	-	.050	16.623

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		to 8 centimetres thick with strongly hematitized and fractured contacts. Trace pyrite.								
	141.02	142.34 Trace to 1% pyrite.								
	142.34	143.49 1% pyrite. 8 centimetre wide mylonite zone.								
	143.49	144.54 With four fractures that have strongly hematitized oxidization rinds 1 to 3 centimetres thick. 1% pyrite.								
144.54	155.31	GABBRO								
		Altered. Bleached highly silicified gabbro as to 101.80 metres.	FX188175	144.54	145.22	.68	TR	-	<.005	16.623
	144.54	145.22 Light greenish gray. Trace pyrite.	FX188176	145.22	146.34	1.12	1	-	.010	16.634
	145.22	148.22 As above with 1% fine grained disseminated pyrite.	FX188177	146.34	147.15	.81	1	-	.295	16.873
	148.22	149.62 Light greenish gray, weakly foliated to massive with 2% disseminated pyrite, 2% black fine grained to medium grained tourmaline as disseminated crystals and streaks. 15% white quartz carbonate veins up to 16 centimetres thick.	FX188178	147.15	148.22	1.07	1	-	.010	16.884
			FX188179	148.22	149.62	1.40	2	-	.135	17.073
			FX188180	149.62	150.94	1.32	1	-	.095	17.198
			FX188181	150.94	151.42	.48	2	-	.185	17.287
			FX188182	151.42	153.62	2.20	1	-	.035	17.364
			FX188183	153.62	154.16	.54	2	-	.470	17.618
			FX188184	154.16	155.31	1.15	1	-	.075	17.704
	149.62	150.94 Light greenish gray, massive. 3% quartz carbonate veins up to 1.5 centimetres thick. 1% fine grained pyrite, trace disseminated tourmaline.								
	150.94	151.42 As above with 6% quartz carbonate veins up to 2 centimetres thick. 2% fine grained disseminated pyrite.								
	151.42	153.62 As at 149.62.								
	153.62	154.16 Light greenish gray, massive. 6% quartz tourmaline veins up to 1 centimetre								

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		thick. 2% fine grained disseminated pyrite.								
154.14	155.31	Light greenish gray to pale green, massive. 5 to 15% pale green chlorite that increases down hole. 1% fine grained pyrite.								
155.31	161.12	GABBRO								
		Halo alteration. Numerous gash type quartz carbonate veins. Medium grained to fine grained dark gray, weakly to moderately mottled, hard, weakly foliated to massive. 20 to 30% fine grained disseminated iron carbonate.	FX188185	155.31	156.78	1.47	1	-	.055	17.785
			FX188186	156.78	158.28	1.50	1	-	.010	17.800
			FX188187	158.28	159.68	1.40	TR	-	<.005	17.800
			FX188188	159.68	161.12	1.44	TR	-	<.005	17.800
155.31	156.78	With 4% quartz carbonate veins up to 2 centimetres thick and as small veinlets. the thicker quartz carbonate veins have bleached pyritic envelopes. The veinlets have bleached alteration envelopes with minor pyrite. 1% pyrite overall.								
156.78	158.28	5% bleached light gray alteration veins up to 1 centimetre thick, some with thin quartz carbonate veinlets at variable angles to core. Trace to 1% pyrite.								
158.28	161.12	As above. Alteration veins are light brown due to limonite staining.								
161.12	186.10	GABBRO								
		Fine grained to medium grained gray green massive to weakly foliated gabbro.	FX188189	161.12	162.29	1.17	TR	-	<.010	17.800
			FX188190	162.29	163.20	.91	TR	-	<.010	17.800
161.12	162.29	With 5% white quartz carbonate veins up to 4 millimetres thick. No alteration envelopes. Trace pyrite. Becoming lighter	FX188191	163.20	164.42	1.22	0	-	<.010	17.800
			FX188192	164.42	165.32	.90	0	-	<.010	17.800
			FX188193	165.32	166.66	1.34	0	-	<.010	17.800

**********DESCRIPTION**********

FROM M	TO M	
		in colour.
162.29	163.20	Bleached, light pinkish gray, 15% pale green chlorite. 2% quartz carbonate veins up to 1 centimetre , trace pyrite.
163.20	164.42	Pinkish gray to green gray. 1 to 2% quartz carbonate veins up to 3 millimetres thick.
164.42	165.32	Medium grained, gray green, very mottled because of patches of light gray, relatively unaltered feldspar and patches of green altered feldspar. All feldspars carbonatized. 3% quartz carbonate veins up to 5 millimetres thick. Weakly foliated. Hard , weakly fractured with hematite and limonite on fractures.
165.32	170.82	As above with only minor quartz carbonate veins.
170.82	172.27	Fine grained to medium grained, dark gray green, massive to weakly foliated. With narrow quartz carbonate veins. 1% light yellow fine grained leucoxene.
172.27	173.39	As above with 3% limonitic quartz carbonate veins up to 2 millimetres thick.
173.39	174.82	As above with 5% light brown quartz carbonate veins up to 1 centimetre thick.
174.82	180.94	As at 170.82.
180.94	181.31	As above with 40% light brown to mottled gray quartz carbonate veins with disseminated specularite.
181.31	182.81	Medium grained, gray green, locally slightly brownish. 40% altered light green feldspar. Massive to weakly foliated, moderately hard. 30% fine

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188194	166.66	168.16	1.50	0	-	<.010	17.800
FX188195	168.16	169.66	1.50	0	-	<.010	17.800
FX188196	169.66	170.82	1.16	0	-	<.010	17.800
FX188197	170.82	172.27	1.45	0	-	<.010	17.800
FX188198	172.27	173.39	1.12	0	-	<.010	17.800
FX188199	173.39	174.82	1.43	0	-	<.010	17.800
FX188200	174.82	175.83	1.01	0	F48	<.010	17.800
FX188201	175.83	177.33	1.50	0	-	<.010	17.800
FX188202	177.33	178.83	1.50	0	-	<.010	17.800
FX188203	178.83	180.33	1.50	0	-	<.010	17.800
FX188204	180.33	180.94	.61	0	-	<.010	17.800
FX188205	180.94	181.31	.37	0	-	.005	17.802
FX188206	181.31	182.81	1.50	0	-	.010	17.817
FX188207	182.81	184.26	1.45	0	-	<.010	17.817
FX188208	184.26	185.28	1.02	0	-	<.010	17.817
FX188209	185.28	186.10	.82	0	-	<.010	17.817

**********ANALYSES**********

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		grained disseminated iron carbonate. 1 to 2% fine grained light yellow leucoxene. Some limonite staining along fractures. 2 to 3% light brown quartz carbonate veins up to 3 millimetres thick.								
182.81	185.28	As above, medium grained to fine grained.								
185.28	186.10	Medium grained, 20% iron carbonate, moderately hard, massive, mottled. 60% light gray altered feldspar. Green gray.								
186.10	191.80	GABBRO								
		Fine grained, dark gray, massive. 15 to 20% disseminated iron carbonate. 3% light brownish gray quartz carbonate veins and veinlets up to 3 millimetres thick. Hard.	FX188210	186.10	187.60	1.50	0	-	<.010	17.817
			FX188211	187.60	189.10	1.50	0	-	<.010	17.817
			FX188212	189.10	190.60	1.50	0	-	<.010	17.817
			FX188213	190.60	191.80	1.20	0	-	<.010	17.817
191.80	195.46	GABBRO								
		Fine grained to medium grained, dark gray. Similar to 186.10 but slightly coarser. 3 to 5% light gray quartz carbonate veins and veinlets up to 1 centimetre thick. Trace fuchsite locally present adjacent to quartz carbonate veins.	FX188214	191.80	193.28	1.48	0	-	.010	17.831
			FX188215	193.28	194.78	1.50	0	-	<.010	17.831
			FX188216	194.78	195.46	.68	0	-	<.010	17.831
195.46	206.24	GABBRO								
		Fine grained, dark green to gray green, strongly foliated, chloritic. 5 to 15% fine grained disseminated iron carbonate, 1 to 2% fine grained light yellow leucoxene. Hard. With 5 to 8% light brown quartz carbonate veins and veinlets.	FX188217	195.46	196.36	.90	0	F55	.010	17.840
			FX188218	196.36	197.29	.93	0	F54	<.010	17.840
			FX188219	197.29	198.27	.98	0	F55	<.010	17.840
			FX188220	198.27	199.64	1.37	0	F57	<.010	17.840
			FX188221	199.64	201.04	1.40	0	F50	<.010	17.840

FROM M	TO M	DESCRIPTION
195.75	196.36	Deformed and contorted. Quartz carbonate veins are boudinaged and fragmental.
196.36	197.29	Some quartz carbonate veins sub parallel to core but are deformed due to movement along foliation planes.
197.29	198.27	Moderately to strongly foliated, in part contorted. Quartz carbonate veins are white to light gray.
198.27	199.64	1 to 2% gray to white quartz carbonate veins up to 1 centimetre thick, usually contorted. 2 to 3% hematitized spots.
199.64	201.04	Fine grained to medium grained. 10 to 15% brownish altered feldspar crystals up to 2 millimetres scattered throughout. 2 to 3% quartz carbonate veinlets.
201.04	202.13	As above with 5% quartz carbonate veins and veinlets, weakly to strongly contorted.
202.13	202.90	As at 198.27.
202.90	203.74	Gray, fine grained, siliceous, very hard, strongly foliated with 10 to 15% chlorite streaks. 15 to 20% contorted fragmental quartz carbonate. Trace pyrite.
203.74	204.64	40% contorted and irregular white quartz carbonate veins with numerous inclusions and streaks of chlorite and sericite. Trace pyrite.
204.64	206.24	As at 199.64. 5% quartz carbonate veins up to 1 centimetre thick, in part contorted. Up to 5% light greenish yellow leucoxene schlerin. Trace pyrite.

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	ANALYSES AU PPM	ANALYSES PPM*M
FX188222	201.04	202.13	1.09	0	-	<.010	17.840
FX188223	202.13	202.90	.77	0	F50	<.010	17.840
FX188224	202.90	203.74	.84	TR	F55	<.010	17.840
FX188225	203.74	204.64	.90	TR	-	<.010	17.840
FX188226	204.64	205.14	.50	TR	F45	<.010	17.840
FX188227	205.14	206.24	1.10	0	F54	<.010	17.840

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU FPM	FPM*M
									**********ANALYSES**********	
206.24	211.76	FELDSPAR PORPHYRY								
		Feldspar porphyry dike. 15 to 20% white anhedral to subhedral feldspar phenocrysts up to 3 millimetres set in leucocratic , very siliceous, aphanitic matrix for the most part void of mafics and with 10% disseminated iron carbonate. Very hard, massive. 2% fine grained disseminated pyrite crystals. Identical to dike in borehole 70463-0.	FX188228	206.24	207.79	1.55	2	-	.010	17.856
			FX188229	207.79	208.48	.69	2	-	.010	17.863
			FX188230	208.48	209.28	.80	2	-	.010	17.871
			FX188231	209.28	209.70	.42	1	-	<.010	17.871
			FX188232	209.70	211.20	1.50	1	-	.010	17.886
			FX188233	211.20	211.76	.56	1	-	.010	17.891
		206.24 207.79 Light buff. First 20 centimetres has 10% chlorite closest to the contact but quickly dissappearing , away from the contact. contact zone is light brown gray.								
		207.79 208.48 Light buff to slightly greenish. One 2 centimetre quartz vein.								
		208.48 209.28 Light pale green to brownish.								
		209.28 209.70 Light buff to greenish. 1% pyrite.								
		209.70 211.20 Pale brown. 1% very fine grained to fine grained pyrite.								
		211.20 211.76 Light pale green. Last 20 centimetres with up to 15% fine grained chlorite. 1% pyrite. Contact is diffuse.								
211.76	223.57	GABBRO								
		Fine grained, dark green gray, strongly foliated with 2 to 5% streaked out light yellow leucoxene. Hard . 10 to 15% fine grained iron carbonate. 2 to 3% contorted and discontinuous quartz carbonate veins up to 1 centimetre thick and quartz carbonate patches. Trace pyrite.	FX188234	211.76	212.86	1.10	TR	F56	.010	17.902
			FX188235	212.86	213.86	1.00	TR	F50	.010	17.912
			FX188236	213.86	214.58	.72	TR	F55	.010	17.920
			FX188237	214.58	216.08	1.50	TR	F54	.010	17.935
			FX188238	216.08	217.58	1.50	TR	F55	<.010	17.935
		211.76 212.86 5% quartz carbonate veins up to 4 centimetres thick. Trace leucoxene.	FX188239	217.58	218.86	1.28	TR	F52	<.010	17.935
			FX188240	218.86	219.63	.77	0	F53	<.010	17.935
		212.86 213.86 1 to 2% quartz carbonate veins and patches.	FX188241	219.63	220.04	.41	0	-	.020	17.943

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
218.86	219.63	10% quartz carbonate veins up to 3 centimetres thick parallel to foliation.	FX188242	220.04	220.90	.86	0	F48	<.010	17.943
			FX188243	220.90	221.25	.35	0	F50	<.010	17.943
219.63	220.04	50% quartz carbonate veins up to 2 centimetres thick, weakly contorted but generally parallel to foliation.	FX188244	221.25	222.75	1.50	TR	F47	<.010	17.943
			FX188245	222.75	223.57	.82	TR	F45	<.010	17.943
220.04	220.90	5% quartz carbonate veins and patches.								
220.90	221.25	Minor quartz carbonate veinlets. Medium grained.								
221.25	222.75	3 to 4% quartz carbonate patches and veins.								
222.75	223.57	Medium grained, green gray, becoming very weakly fuchsitic.								
223.57	225.10	GABBRO								
		Altered. Weakly to moderately fuchsitic gabbro with numerous gash type, cross cutting , and patchy quartz carbonate veins. Few hematitized dolomite veins.	FX188246	223.57	224.74	1.17	0	F30	<.010	17.943
			FX188247	224.74	225.10	.36	TR	-	.030	17.954
223.57	224.74	Medium grained, green gray to pale green gray. No leucoxene. In part bleached and silicified. 10% white quartz carbonate veins, weakly contorted and at various angles to core. 1% black tourmaline streaks in the veins. Weak fuchsite alteration close to some vein contacts.								
224.74	225.10	Medium grained, green, 1% leucoxene, 15% quartz carbonate as streaks, veinlets and veins up to 3 centimetres thick. Weakly fuchsitic.								
225.10	225.48	FELDSPAR PORPHYRY								
		Fine grained, light gray, weakly foliated, leucocratic,	FX188248	225.10	225.48	.38	2	-	1.490	18.520

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
		with 10% fine grained disseminated iron carbonate. 30% irregular buff to white quartz carbonate veins with chlorite streaks and some fuchsite. 2% fine grained disseminated pyrite. Possibly highly silicified gabbro.								
225.48	230.32	GABBRO								
		Altered. As to 225.10 metres.	FX188249	225.48	226.91	1.43	0	F43	.020	18.548
		225.48 226.91 Dark emerald green. Fuchsitic. 30% quartz carbonate veins, up to 10 centimetres thick, and as streaks and patches , all generally parallel to foliation. 5% quartz veins up to 3 centimetres thick.	FX188250	226.91	227.73	.82	0	F40	<.010	18.548
			FX188251	227.73	228.63	.90	0	F40	.060	18.602
			FX188252	228.63	229.36	.73	0	-	.010	18.610
			FX188253	229.36	230.32	.96	0	-	.020	18.629
		226.91 228.63 Gray to green gray, weakly fuchsitic, 10 to 15% quartz carbonate veins up to 2 centimetres thick. Minor quartz veins.								
		228.63 229.36 Green, weakly fuchsitic with 70%, in part strongly hematitized, iron carbonate quartz tourmaline as chaotic masses and veins. 5% black tourmaline as patches , streaks and veinlets. Hematitized parts are red brown in colour. Iron carbonate is generally light buff. Strongly deformed and contorted.								
		229.36 230.32 As above but not as strongly hematitized. 3% black tourmaline.								
230.32	246.94	GABBRO								
		Strongly foliated gabbro. Medium grained, hard, 10 to 15% iron carbonate, chloritic, weakly sericitic. Cut by numerous quartz carbonate veins and some quartz veins.	FX188254	230.32	231.38	1.06	0	F45	.010	18.639
			FX188255	231.38	232.84	1.46	0	F47	<.010	18.639
			FX188256	232.84	234.24	1.40	0	F52	<.010	18.639

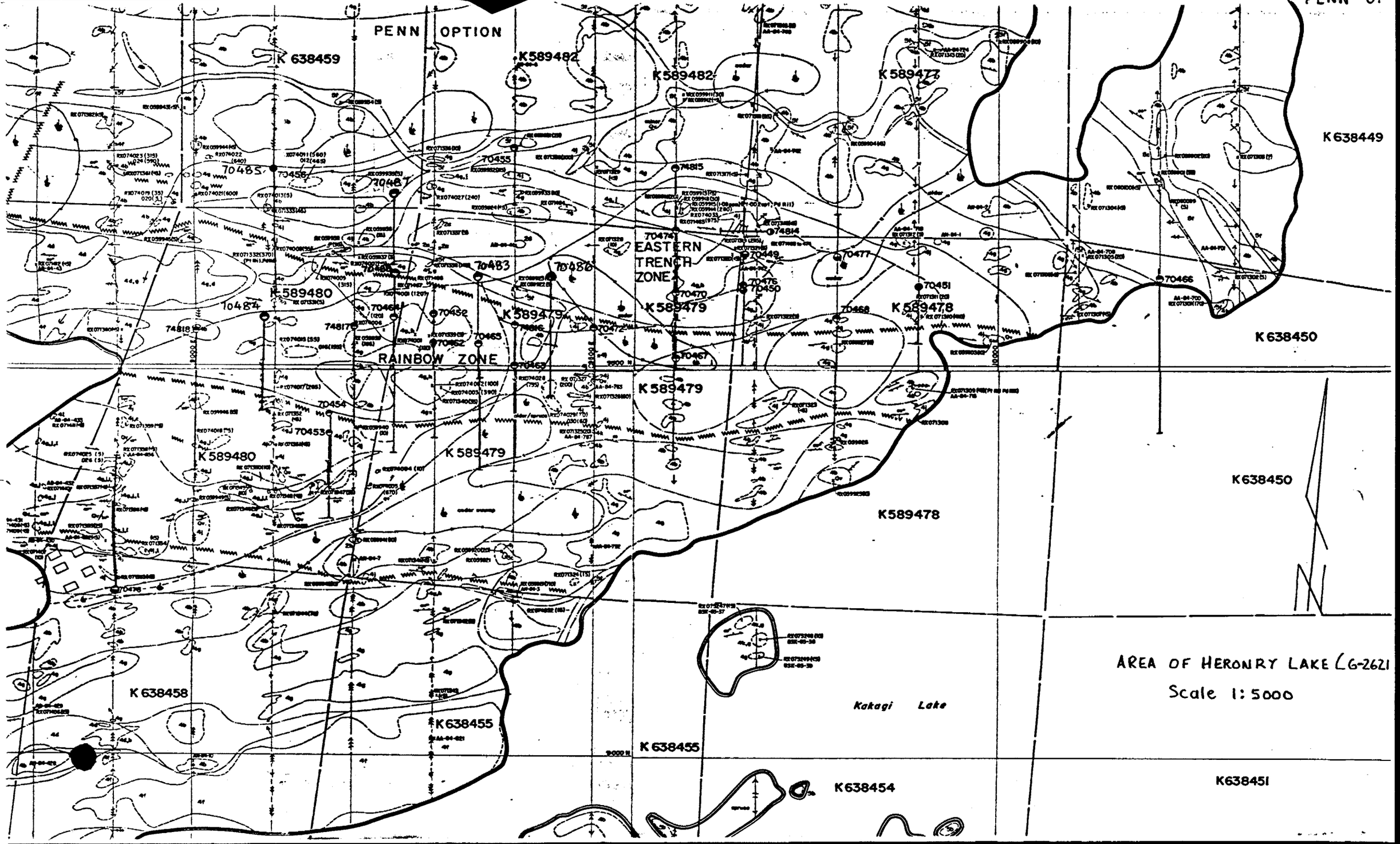
FROM M	TO M	**********DESCRIPTION**********
		At least two ages of veining. Oldest set are ankerite quartz veins, white to light buff in colour. Youngest, and usually normal to the other veins are white quartz veins sometimes with acicular crystals of green tourmaline.
230.32	231.38	Dark green gray, 10% quartz carbonate veins and contorted masses. veins up to 3 centimetre thick. All are light buff in colour. Generally parallel to foliation.
231.38	232.84	Dark green gray, 5 to 8% quartz carbonate veins up to 4 centimetres thick and locally contorted. Generally parallel to foliation.
232.84	234.24	Light gray to light greenish gray in colour
234.24	235.74	As above with 10% quartz carbonate veins.
235.74	236.22	As at 231.38 with 40% quartz carbonate veins up to 1 centimetre thick producing a bedded appearence.
236.22	240.05	As at 231.38.
240.05	241.19	As above with 5% quartz carbonate veins.
241.19	241.84	Dark green gray. Minor quartz carbonate veinlets.
241.84	243.24	As above with 3% quartz carbonate veins.
243.24	243.94	As at 231.38 with 20% weakly to moderately contorted quartz carbonate veins up to 3 centimetres thick. Locally silicified.
243.94	244.94	Dark green gray. First 35 centimetres strongly silicified. With 5% quartz carbonate veins up to 2 centimetres thick. Trace to 1% disseminated pyrite. Strongly to moderately foliated.
246.14	246.94	Feldspars becoming saussuritized. Becoming

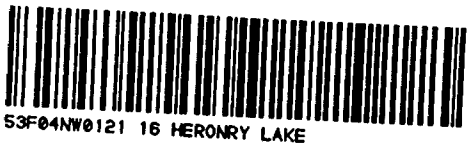
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188257	234.24	235.74	1.50	0	F55	<.010	18.639
FX188258	235.74	236.22	.48	0	F54	<.010	18.639
FX188259	236.22	237.70	1.48	0	F55	<.010	18.639
FX188260	237.70	238.84	1.14	0	F54	<.010	18.639
FX188261	238.84	240.05	1.21	0	F47	<.010	18.639
FX188262	240.05	241.19	1.14	0	F47	.010	18.651
FX188263	241.19	241.84	.65	0	F45	.010	18.657
FX188264	241.84	243.24	1.40	0	-	<.010	18.657
FX188265	243.24	243.94	.70	0	F47	<.010	18.657
FX188266	243.94	244.94	1.00	TR	F47	.030	18.687
FX188267	244.94	246.14	1.20	TR	F50	.010	18.699
FX188268	246.14	246.54	.40	TR	-	<.010	18.699
FX188269	246.54	246.94	.40	TR	-	<.010	18.699

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		coarser grained down hole.								
246.94	256.25	GABBRO								
		Fuchsitic. Weakly to strongly fuchsitic gabbro with 10 to 15% quartz carbonate dolomite veins.	FX188270	246.94	247.80	.86	TR	F45	.055	18.747
		Medium grained, weakly to moderately foliated, mottled,	FX188271	247.80	248.94	1.14	TR	-	<.010	18.747
		gray green, hard. 3 to 8% fine grained disseminated iron	FX188272	248.94	249.58	.64	1	-	<.010	18.747
		carbonate. chloritic, sericitic , trace pyrite.	FX188273	249.58	249.78	.20	0	-	.020	18.751
		244.94 246.14 Minor quartz carbonate veins up to 1.5	FX188274	249.78	250.52	.74	TR	F52	.010	18.758
		centimetres thick.	FX188275	250.52	251.32	.80	TR	-	.070	18.814
		246.14 246.54 20% quartz carbonate veins up to 2	FX188276	251.32	252.74	1.42	TR	F45	.010	18.828
		centimetres thick.	FX188277	252.74	253.04	.30	TR	-	<.010	18.828
		246.94 247.80 Weakly to moderately fuchsitic. Gray green	FX188278	253.04	254.12	1.08	0	F58	1.668	20.629
		to dull emerald green. 15% quartz carbonate veins up	FX188279	254.12	255.14	1.02	TR	-	.010	20.639
		to 10 centimetres thick, light buff to light brown in	FX188280	255.14	255.58	.44	0	F60	.180	20.719
		colour.	FX188281	255.58	256.25	.67	0	-	<.010	20.719
		247.80 248.94 Gray green. 5% quartz carbonate veins up								
		to 1.5 centimetres thick and generally parallel to								
		the foliation. Trace to 1% pyrite.								
		248.94 249.58 Dull to bright emerald green. Moderately								
		to strongly fuchsitic . 1% disseminated pyrite as								
		crystals up to 1 millimetre.								
		249.58 249.78 Quartz vein with 10% light buff iron								
		carbonate, 2% green tourmaline as acicular crystals								
		and 10% strongly fuchsitic gabbro inclusions.								
		249.78 250.52 As at 248.94 with only 2% quartz carbonate								
		veins up to 1.5 centimetres thick. Trace pyrite.								
		250.52 251.32 Green to dull emerald green. Moderately								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		fuchsitic. 2% quartz veins up to 2 centimetres thick. Hematitized along fractures. Trace pyrite.								
	251.32	252.74 Gray green, weakly to moderately fuchsitic, trace pyrite.								
	252.74	253.04 As at 250.52.								
	253.04	254.12 Emerald green. Strongly fuchsitic, moderately foliated. 15% of rock is criscrossed network of quartz carbonate veins parallel to foliation and normal to foliation and up to 2 centimetres thick. Some veins have hematitized patches. Veins consist mostly of iron carbonate though there are some white quartz veins with trace black tourmaline are also present. Minor black chlorite seams in gabbro.								
	254.12	255.14 As above with 10% quartz carbonate veins and quartz veins. Trace pyrite.								
	255.14	255.58 As at 250.52 , weakly to moderately fuchsitic. 10% light buff quartz carbonate veins up to 2 centimetres thick.								
	255.58	256.25 Green gray with 5% diffuse quartz carbonate veins and patches up to 5 millimetres thick.								
256.25	260.30	GABBRO								
		Halo alteration grading to gabbro down hole. Very weakly altered with 10 to 15% quartz carbonate veins.	FX188282	256.25	257.13	.88	1	-	<.010	20.719
			FX188283	257.13	258.54	1.41	TR	F60	.010	20.733
	256.25	257.13 Dark green gray, weakly foliated, with 5% contorted quartz carbonate veins and patches with diffuse contacts. 1%	FX188284	258.54	259.64	1.10	TR	-	<.010	20.733
			FX188285	259.64	260.30	.66	TR	F57	<.010	20.733

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
		disseminated pyrite.								
257.13	259.64	As above with 5% slightly yellow quartz carbonate veins generally parallel to foliation and up to 3 centimetres thick and locally hematitized. Trace pyrite.								
259.64	260.30	As above with minor quartz carbonate veins to 5 millimetres thick. Trace pyrite. Foot of hole.								


PENN OPTION
K 638459
K589482
K589482
K589477
K638449
70485
70456
70455
74815
70487
74814
70474
EASTERN
TRENCH
ZONE
70449
70477
70483
70486
70476
70450
70466
K589480
70484
70470
K589479
70468
K589478
70451
74818
70462
70465
K638450
RAINBOW ZONE
70469
70467
K589479
70454
70453
K589480
K589479
K589478
K638450
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621
Scale 1:5000



900

Ministry of Northern Development and Mines

Ontario

Report of Work

DOCUMENT No. W8801.166

Mining Act

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)".

Name and Postal Address of Recorded Holder

Canadian Nickel company Limited

Prospector's Licence No.

A-17527

Copper Cliff, Ontario POM 1NO

Summary of Work Performance and Distribution of Credits

Total Work Days Cr. claimed [redacted]

for Performance of the following work. (Check one only)

- ☐ Manual Work
- ☐ Shaft Sinking Drifting or other Lateral Work.
- ☐ Compressed Air, other Power driven or mechanical equip.
- ☐ Power Stripping
- ☒ Diamond or other Core drilling
- ☐ Land Survey

Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.	Mining Claim Prefix	Mining Claim Number	Work Days Cr.
See Schedule I								
[redacted]	10,113 DAYS		[redacted]			[redacted]		

All the work was performed on Mining Claim(s): K589477-80 incl.; ~~K589482~~; K638458-59; K638461-62; ~~K638466~~; K777750-51

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

See separate list (Schedule II)

PHILLIPS TWP M-2102
HERONRY LAKE G.2621
DOG PAW LAKE G.2613

KENORA MINING DIV. RECEIVED JUN 6 - 1988 AM 7 8 9 10 11 12 1 2 3 4 5 6 PM

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE SEP 26 1988 RECEIVED

Date of Report: May 31, 1988

Recorded Holder or Agent (Signature): I.D. McCaskill

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

I.D. McCaskill c/o Canadian Nickel Company Limited

Copper Cliff, Ontario POM 1NO

Date Certified: May 31, 1988

Certified by (Signature): I.D. McCaskill

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. 727477	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		
Power Stripping	Type of equipment and amount expended. Note: Proof of actual cost must be submitted within 30 days of recording.	Names and addresses of owner or operator together with dates when drilling/stripping done.	
Diamond or other core drilling	Signed core log showing: footage, diameter of core, number and angles of holes.		Work Sketch (as above) in duplicate
Land Survey	Name and address of Ontario land surveyor.	Nil	Nil

7C-8 (85/12)

DOCUMENT No.
W8801· 166

SCHEDULE II

Excess Credits Remaining on Drill Holes Previously Filed

B.H. 70451 - 39.8 days #15-87
70455 - 109.9 days #15-87
70467 - 62 days #26/88
74816 - 66.13 days #75 TOTAL 277.83 days

BQ drill hole 70456; Angle -45°N
121.9 metres (399.8 ft) drilled on K 638459 = 399.8 days

BQ drill hole 70468; Angle -45°S
220.7 metres (723.9 ft) drilled on K 589478 = 723.9 days

BQ drill hole 70470; Angle -45°S
155.8 metres (511 ft) drilled on K 589479 = 511 days

BQ drill hole 70471; Angle -55°N
138.7 metres (454.9 ft) drilled on K 777750 = 454.9 days

BQ drill hole 70472; Angle -45°S
255.7 metres (838.7 ft) drilled on K 589479 = 838.7 days

BQ drill hole 70473; Angle -50°N
84 metres (276.83 ft) drilled on K 638461
100 metres (328 ft) drilled on K 638462 = 604.8 days

BQ drill hole 70474; Angle -45°S
157 metres (514.9 ft) drilled on K 589479 = 514.9 days

BQ drill hole 70475; Angle -45°N
178 metres (583.8 ft) drilled on K 589480
70.1 metres (229.9 ft) drilled on K 638458 = 813.7 days

BQ drill hole 70476; Angle -45°S
146.3 metres (479.9 ft) drilled on K 589478 = 479.9 days

BQ drill hole 70477; Angle -45°S
40 metres (131.2 ft) drilled on K 589478
28.3 metres(92.8 ft) drilled on K 589477 = 224 days

* ~~BQ drill hole 74811; Angle -45°W~~
~~79.9 metres (262 ft) drilled on K 638466~~ NO BEDROCK = ~~262 days~~

BQ drill hole 74814; Angle -45°W
65 metres (213.2 ft) drilled on K 589477
18.5 metres (60.7 ft) drilled on K 589482 = 273.9 days

BQ drill hole 74815; Angle -45°S
153.6 metres (503.8 ft) drilled on K 589482 = 503.8 days

BQ drill hole 74817; Angle -45°S
251.2 metres (823.9 ft) drilled on K 589480 = 823.9 days

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DOCUMENT No.
W8801 166

BQ drill hole 74818; Angle -45°S
248.1 metres (813.8 ft) drilled on K 589480 = 813.8 days

BQ drill hole 74819; Angle -45°N
76.2 metres (249.9 ft) drilled on K 777750 = 249.9 days

BQ drill hole 70478; Angle -55°N
249.0 metres (816.7 ft) drilled on K 777750 = 816.7 days

BQ drill hole 70479; Angle -55°N
194.5 metres (637.9 ft) drilled on K 777750 = 637.9 days

BQ drill hole 70480; Angle -55°N
170.1 metres (557.9 ft) drilled on K 777750 = 557.9 days

BQ drill hole 70481; Angle -45°N
306 metres (1003.7 ft) drilled on K 638461 = 1003.7 days

BQ drill hole 70482; Angle -60°N
62.2 metres (204 ft) drilled on K 638461 = 204 days

BQ drill hole 70483; Angle -55°S
307.2 metres (946.2 ft) drilled on K 589479 = 946.2 days

BQ drill hole 70484; Angle -55°S
251.8 metres (825.9 ft) drilled on K 589480 = 825.9 days

BQ drill hole 70485; Angle -55°S
89.7 metres (294.2 ft) drilled on K 638459 = 294.2 days
220 metres (721.6 ft) drilled on K 589480 = 721.6 days

BQ drill hole 70486; Angle -55°S
317.9 metres (1042.7 ft) drilled on K 589479 = 1042.7 days

BQ drill hole 70487; Angle -55°S
45 metres (147.6 ft) drilled on K 638459 = 147.6 days
139.7 metres (458.2 ft) drilled on K 589480 = 458.2 days

BQ drill hole 70488; Angle -55°S
306.6 metres (1003.7 ft) drilled on K 589480 = 1003.7 days

Total days 17,169 ~~17,491~~

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SCHEDULE I Revised

Claim No.	Work Days Credit	Claim No.	Work Days Credit	Claim No.	Work Days Credit
K 727477	24.5	K 758834	60	K 777730	100
K 727478	60	K 758835	60	K 777731	140
K 727479	60	K 758836	60	K 777732	80
K 727480	60	K 758837	60	K 777733	120
K 727481	60	K 758838	60	K 777734	100
K 729246	60	K 777508	80	K 777735	100
K 729247	60	K 777608	80	K 777736	100
K 732244	60	K 777609	80	K 777737	140
K 732245	60	K 777610	80	K 777738	120
K 732246	60	K 777623	80	K 777739	120
K 732247	60	K 777624	80	K 777740	100
K 732248	60	K 777625	80	K 777741	100
K 732249	60	K 777626	80	K 777742	100
K 732250	60	K 777627	80	K 777743	140
K 732251	60	K 777640	80	K 777744	120
K 732252	60	K 777641	80	K 777745	120
K 732253	60	K 777642	80	K 777746	100
K 732254	60	K 777643	80	K 777747	100
K 732255	60	K 777644	80	K 777748	120
K 732256	60	K 777660	80	K 777749	120
K 732257	60	K 777661	80	K 777750	120
K 732258	60	K 777662	80	K 777751	120
K 732259	60	K 777663	80	K 777752	120
K 732260	60	K 777664	80	K 777753	120
K 732261	60	K 777681	80	K 777754	120
K 732262	60	K 777682	80	K 777755	120
K 732263	60	K 777683	80	K 777763	120
K 758822	60	K 777690	80	K 777764	120
K 758823	60	K 777704	80	K 777765	120
K 758824	60	K 777705	48	K 777766	120
K 758825	60	K 777706	48	K 777776	120
K 758826	60	K 777707	48	K 777786	120
K 758827	60	K 777708	48	K 777787	120
K 758828	60	K 777722	100	K 777788	120
K 758829	60	K 777723	108	K 777789	152.5
K 758830	60	K 777724	108	K 777790	80
K 758831	60	K 777725	108	K 777800	80
K 758832	60	K 777728	100	K 898861	180
K 758833	60	K 777729	100	K 898862	180
				K 898863	180

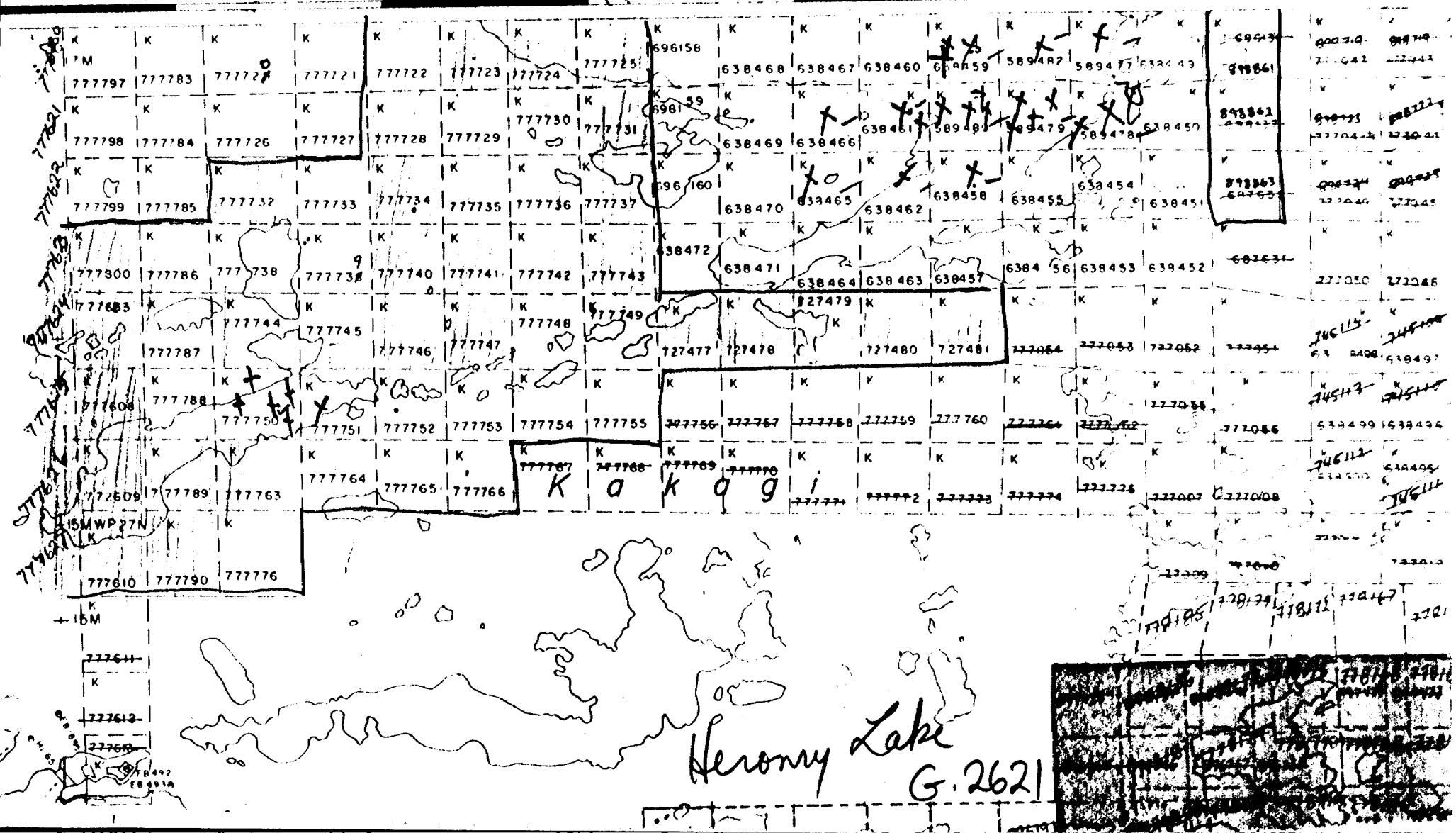
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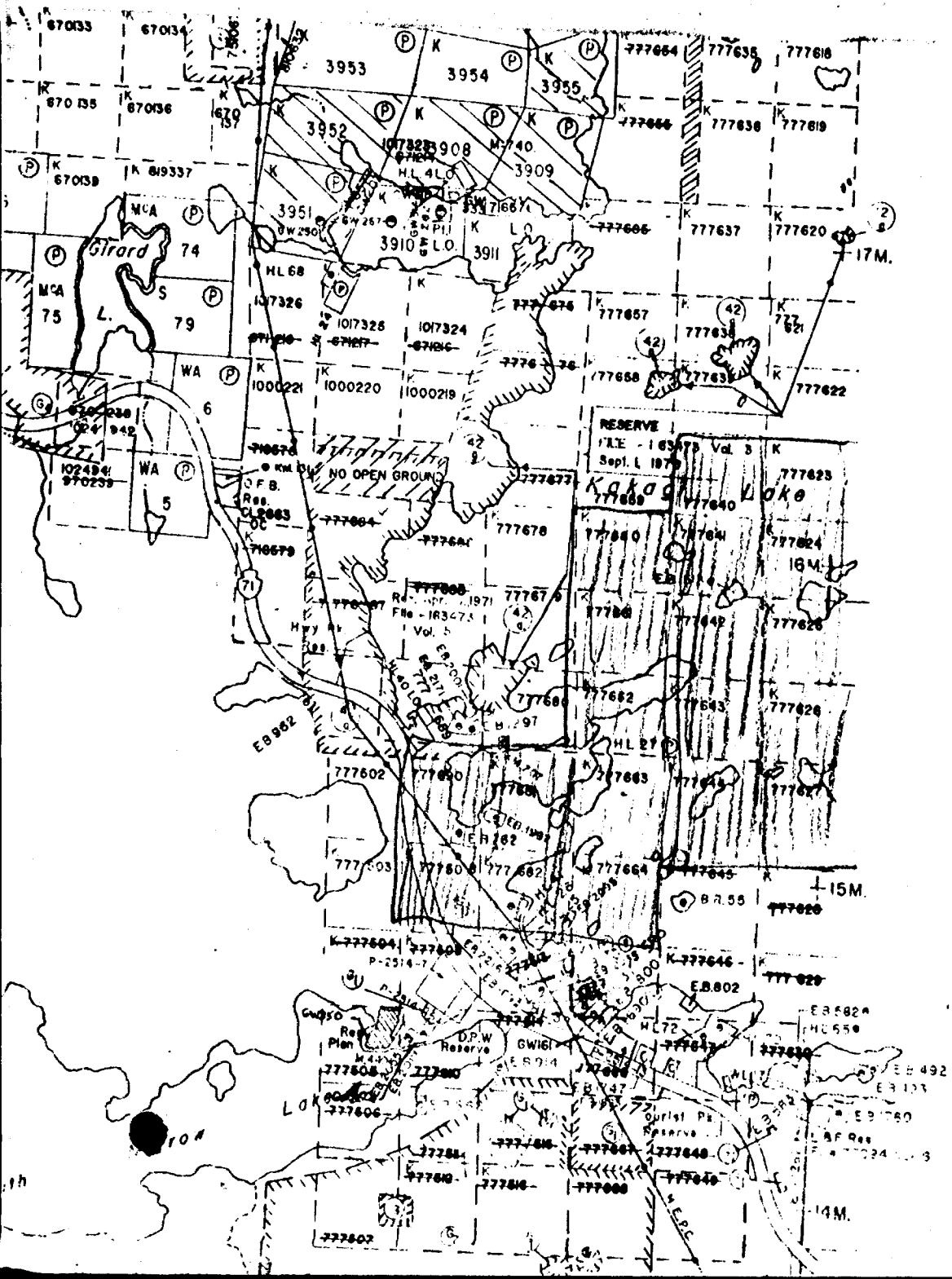
Total Claims 118

Total Credits 10,113

IDM/cbB
Aug. 29/88

DOGPAW LAKE G-2613





PATENTED LAND (P)
CROWN LAND SALE C.S.
LEASES (L)
LOCATED LAND Loc.
LICENSE OF OCCUPATION L.O.
MINING RIGHTS ONLY M.R.O.
SURFACE RIGHTS ONLY S.R.O.
ROADS
IMPROVED ROADS
KING'S HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES
CANCELLED C.
PATENTED LAND S.R.O.

NOTES

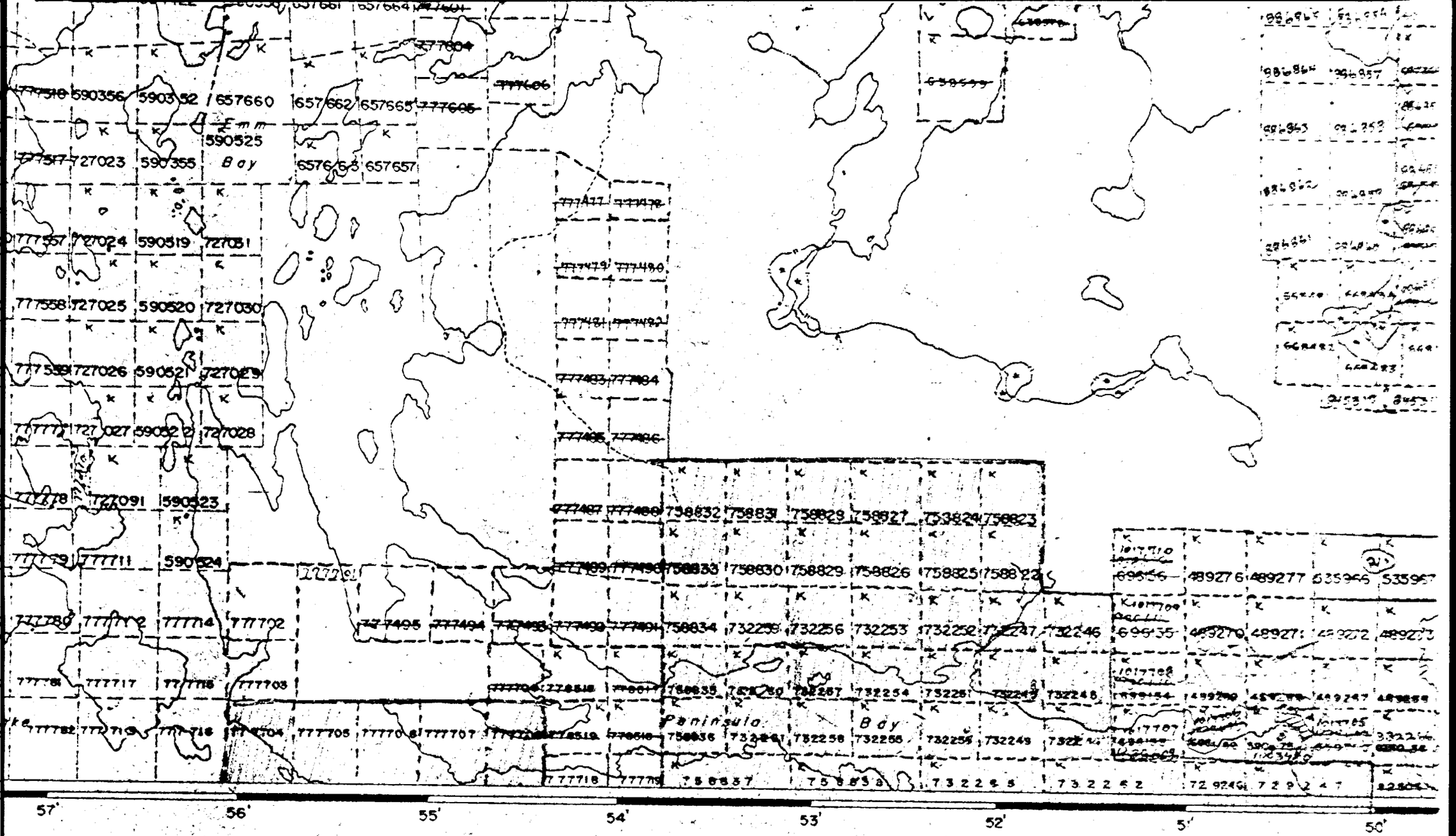
400' surface rights reservation along the shores of all lakes and rivers.

(42) S.R.O. withdrawn from staking under Sec. 42 of Mining Act. Aug. 18, [illegible] File- 163474, [illegible]

SAND & GRAVEL

(C) QUARRY PERMIT
(G) GRAVEL PIT [illegible]
(G) GRAVEL PIT [illegible]
(G) MTC PIT [illegible]
(G) GRAVEL PIT
(G) MTC PIT NO. 1503
(G) MTC PIT NO. 1504

Phillips
CR-2102



HERONRY LAKE G-2621

Dogpaw Lake

G.2613