52F04NW8132 2.11451 HERONRY LAKE

010

**********IP LIMITED**********
FIELD EXPLO N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9645.0 metric	NTS SHEET #	: 52-F-5	STARTED	: 02 25 85
PROPERTY	: PENN OPTION	DEPARTURE	: 9685.0 metric	TOWNSHIP	:	COMPLETED	: 02 26 85
BOREHOLE	: 70449-0	ELEVATION	: 1352.0 metric	PROVINCE	: Ontario	MEASUREMENTS	: metric
AZIMUTH	: 355.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589478	DRILL TYPE	: J.K.Smit 300
DEPTH	: 50.1 metric	LOGGED BY	: W.O.Manson	GRID NAME	:	TEST METHOD	: acid
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 4m east and 20m south of post 4.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.60	355.0	-45.00	50.10	355.0	-42.00						

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

FROM metric	TO metric	
.00	1.04	OVERBURDEN Frost heaved and broken bedrock. BW casing to 1.52m. Start of core.
1.04	13.73	GABBRO Metagabbro, dark gray green. Mottled. Fine grained. Strongly sheared and schistose. Rock is now chlorite schist with clots of sericite elongate along foliation and disseminated grain of iron carbonate. The chlorite is after mafic minerals such as pyroxene, the sericite is after feldspar. The iron carbonate may be replacement of feldspar. Locally minor veinlets and patches of quartz carbonate. Iron carbonate 30%. 15 to

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

SAMPLE#	FROM metric	TO metric	LENGTH metric	MIN %	CR ANG	AU PPM	PPM*M
FX118342	1.04	1.70	.66	TR	F45	<.005	
FX118343	1.70	2.00	.30	TR	F50	<.005	
FX118344	2.00	2.50	.50	TR	-	<.005	
FX118345	2.50	2.76	.26	TR	-	<.005	
FX118346	2.76	3.35	.59	1	F45	.010	
FX118347	3.35	4.88	1.53	TR	F45	.010	
FX118348	4.88	5.40	.52	TR	F30	<.005	
FX118349	5.40	7.92	2.52	TR	F45	<.005	

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

FROM metric	TO metric	
		20% sericite. Increased iron carbonate gives decreased sericite. Very rare speck pyrite. Good foliation at 45 to 50 degree core axis.
1.70	2.00	Fractured with surface material mixed with gabbro blocks.
2.50	2.76	Quartz carbonate vein. Some iron carbonate. White, coarse grained, massive. Contacts sharp.
2.76	3.35	1% pyrite as cubes with up to 5% pyrite 3.00 to 3.10.
12.65	13.13	Quartz carbonate veining.
13.73	15.49	SCHIST
		Chlorite schist with quartz carbonate vein sub parallel to core axis. 1 to 2% disseminated pyrite. 5 to 8% disseminated grains of brown to red brown mineral which may be hematite stained iron carbonate.
14.20	14.81	Minor quartz, rare pyrite, contorted foliation.
14.81	15.49	1% pyrite, contorted foliation 10 to 50 degree to core axis.
15.49	18.36	GABBRO
		Chlorite sericite iron carbonate metababbro. Iron carbonate is dominant over sericite. Minor quartz carbonate veinlets, 1 to 3% pyrite.
16.00	16.89	Very minor sericite. 25% quartz carbonate veinlets and masses. 1 to 3% pyrite.
17.40	18.36	Rare sericite. Quartz iron carbonate parallel to core axis. Other veinlets parallel to foliation which is locally

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

SAMPLE#	FROM metric	TO metric	LENGTH metric	MIN %	CR ANG	AU PPM	PPM*M
FX118350	7.92	9.44	1.52	TR	-	<.005	
FX118351	9.44	10.97	1.53	TR	-	<.005	
FX118352	10.97	12.65	1.68	TR	F55	<.005	
FX118353	12.65	13.13	.48	TR	-	<.005	
FX118354	13.13	13.73	.60	TR	F50	.940	
FX118355	13.73	14.20	.47	2	F10	.015	
FX118356	14.20	14.81	.61	TR	F10	<.005	
FX118357	14.81	15.49	.68	TR	-	<.005	
FX118358	15.49	16.00	.51	2	-	<.005	
FX118359	16.00	16.89	.89	3	F50	.015	
FX118360	16.89	17.40	.51	TR	-	<.005	
FX118361	17.40	18.36	.96	2	F45	.030	

FROM metric	TO metric	DESCRIPTION	SAMPLE#	FROM metric	TO metric	LENGTH metric	MIN %	CR ANG	AU PPM	PPM*M
		contorted but commonly 45 degree to core axis.								
18.36	19.05	GABBRO								
		Metagabbro altered to chlorite iron carbonate schist with 15% quartz carbonate veining, 1 to 2% pyrite.	FX118362	18.36	19.05	.69	2	F40	.010	
19.05	28.56	GABBRO								
		Metagabbro altered to chlorite iron carbonate schist.	FX118363	19.05	20.12	1.07	TR	F45	.020	
		Rare speck pyrite. Well foliated.	FX118364	20.12	21.21	1.09	2	-	.085	
		Rare quartz carbonate veinlets.	FX118365	21.21	22.20	.99	TR	-	.005	
		20.12 21.21 Local pyritic band to 3 to 4 centimetres.	FX118366	22.20	23.16	.96	TR	-	.015	
		24.03 24.70 15% quartz carbonate flooding, 3 to 5%	FX118367	23.16	24.03	.87	2	-	.035	
		euhedral pyrite.	FX118368	24.03	24.70	.67	5	F40	.010	
		27.20 28.56 Minor quartz carbonate veinlets with pyritic	FX118369	24.70	26.21	1.51	TR	-	.065	
		margins. Abundant red brown iron carbonate	FX118370	26.21	27.20	.99	TR	-	<.005	
		WHERE pyritic. The red brown carbonate in	FX118371	27.20	28.31	1.11	TR	-	.015	
		some places resembles sphalerite. 2% pyrite	FX118372	28.31	28.56	.25	2	F55	.025	
		from 28.31 to 28.56.								
28.56	28.94	QUARTZ CARBONATE VEIN								
		Quartz carbonate vein. White, massive, at 20 degree to core axis. Vein is 20 centimetres along core and has a mineralized wall rock envelope of about 7 to 8 centimetres thickness on both sides. The envelope includes euhedral pyrite and arsenopyrite. The vein includes disseminated grains of pyrite, arsenopyrite, chalcopyrite and about 12 specks visible gold.	FX118373	28.56	28.94	.38	15	-	96.560	

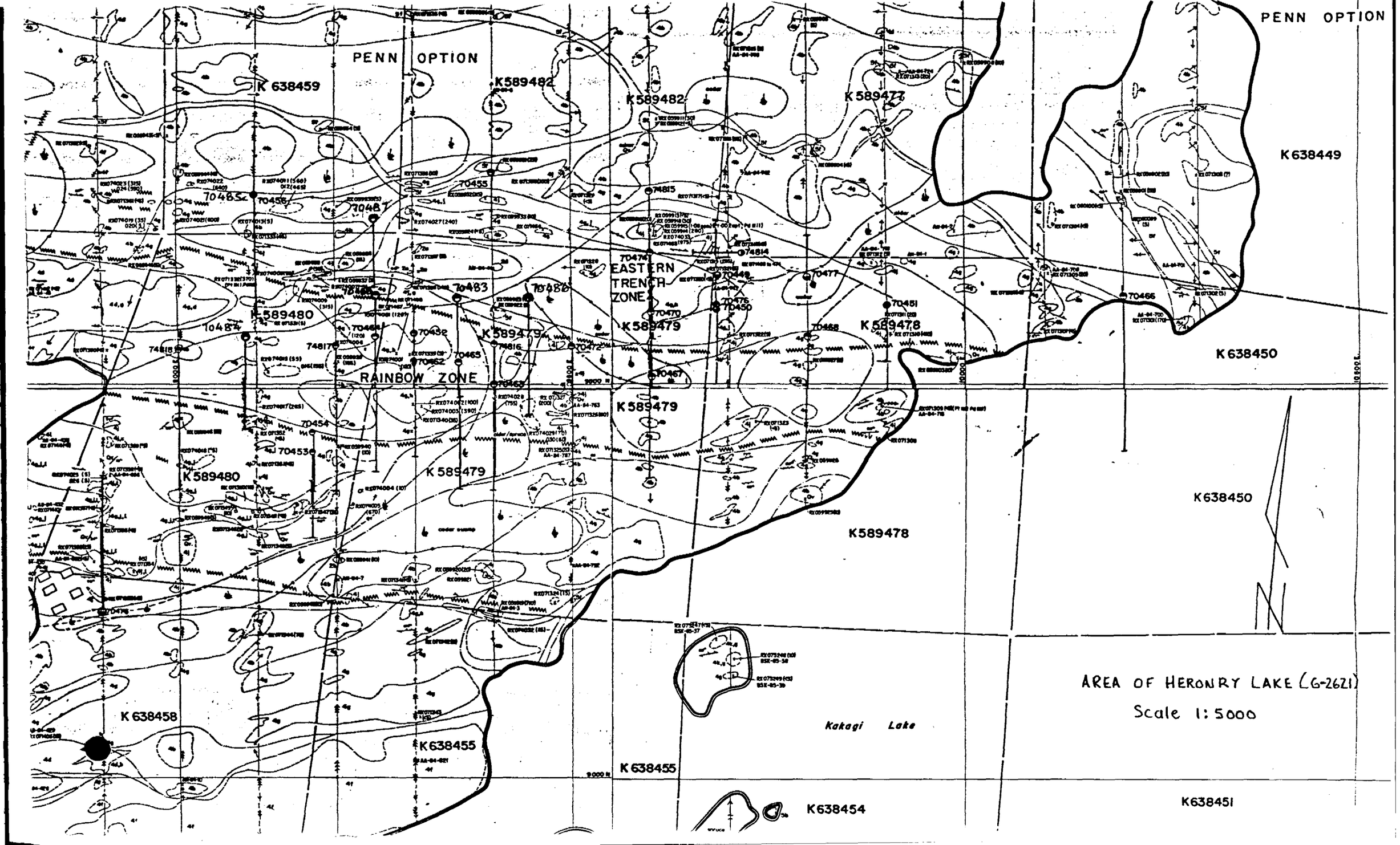
**********DESCRIPTION**********

FROM metric	TO metric	
28.94	34.88	GABBRO
		Metagabbro. Fine grained chlorite iron carbonate schist. Minor quartz carbonate veinlets with pyritic margins.
	28.94 29.53	1 to 2% pyrite.
	29.53 29.88	Strongly silicified and iron carbonatized. Rare speck pyrite.
	29.88 33.44	Good foliation at 45 degree to core axis.
	33.44 33.99	Bleached and silicified with quartz iron carbonate veining.
34.88	36.22	SCHIST
		Chlorite sericite iron carbonate schist. Disseminated grain euhedral 1 to 2% pyrite.
	35.50 35.80	Quartz iron carbonate vein with 1.5 centimetre silicified and pyritic envelope vein is white pink, massive with rare specks pyrite and 3 specks visible gold.
	35.80 36.22	Sericite iron carbonate schist with grains and streaks chlorite. Quartz carbonate veining scattered euhedral pyrite grains to 5 millimetres.
36.22	47.91	SCHIST
		Chlorite sericite iron carbonate schist with 40% veins and/or bands sheared quartz carbonate and silicified schist. Occasional scattered grain very fine grained pyrite up to 1% with 2 to 4% from 37.07 to 37.60.
	37.60 37.95	Quartz iron carbonate vein. Sheared sericitized chloritic inclusions. Local

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

SAMPLE#	FROM metric	TO metric	LENGTH metric	MIN %	CR ANG	AU PPM	PPM*M
FX118374	28.94	29.53	.59	2	F45	.285	
FX118375	29.53	29.88	.35	1	-	.100	
FX118376	29.88	30.75	.87	TR	-	.010	
FX118377	30.75	32.31	1.56	TR	-	.005	
FX118378	32.31	33.44	1.13	TR	-	.005	
FX118379	33.44	33.99	.55	TR	-	.070	
FX118380	33.99	34.88	.89	TR	F50	.055	
FX118381	34.88	35.50	.62	2	F50	.540	
FX118382	35.50	35.80	.30	15	-	23.600	
FX118383	35.80	36.22	.42	1	F55	.265	
FX118384	36.22	37.07	.85	TR	F50	.050	
FX118385	37.07	37.60	.53	4	-	.350	
FX118386	37.60	37.95	.35	1	F55	.275	
FX118387	37.95	38.96	1.01	TR	-	.010	
FX118388	38.96	39.92	.96	TR	F55	.010	
FX118389	39.92	41.34	1.42	TR	-	<.005	

FROM metric	TO metric	DESCRIPTION	SAMPLE#	FROM metric	TO metric	LENGTH metric	MIN %	CR ANG	AU PPM	PPM*M
		patches chrome mica. 1% very fine grained disseminated pyrite in inclusions and chloritic bands.	FX118390	41.34	43.00	1.66	TR	-	<.005	
			FX118391	43.00	43.81	.81	TR	-	.010	
			FX118392	43.81	44.31	.50	5	F45	.890	
43.81	44.31	Quartz carbonate vein to 1 centimetre at 44.0, 10 degree to core axis. 3 to 5% disseminated pyrite.	FX118393	44.31	46.02	1.71	TR	-	.030	
			FX118394	46.02	46.94	.92	TR	-	.010	
			FX118395	46.94	47.65	.71	2	-	.010	
46.94	47.65	Rare 2 centimetre band with pyrite. 1 to 2% pyrite.	FX118396	47.65	47.91	.26	1	F50	.035	
47.65	47.91	With bands quartz carbonate to 2 centimetres. Quartz bands include 5 millimetre bands dark gray black acicular masses of tourmaline. 1% pyrite.								
47.91	49.25	SCHIST								
		Chlorite sericite iron carbonate schist. Rare specks pyrite.	FX118397	47.91	48.60	.69	TR	-	.010	
			FX118398	48.60	49.25	.65	TR	-	<.005	
48.00	60.00	49.25 Local patches have light gray colour due to some quartz flooding.								
49.25	49.68	FELSITE								
		Felsite, fine grained, light gray green. Sheared and sericitized. Appears to be a sill . Both contacts are sharp at 35 degree to core axis.	FX118399	49.25	49.68	.43	TR	F35	.020	
49.68	50.14	SCHIST								
		Chlorite sericite iron carbonate schist with rare pyrite specks. Foot of hole.	FX118400	49.68	50.14	.46	TR	F50	.005	


PENN OPTION
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K 638459
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EASTERN TRENCH ZONE
RAINBOW ZONE
Kakagi Lake
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

FIELD EXPLO[illegible]N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9595.0 METRIC	NTS SHEET #	: 52-F-4	STARTED	: 02 27 85
PROPERTY	: PENN OPTION	DEPARTURE	: 9685.0 METRIC	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70450-0	ELEVATION	: 1355.0 METRIC	PROVINCE	: ONTARIO	MEASUREMENTS	: METRIC
AZIMUTH	: 355.0	BL AZIMUTH	:	COUNTRY	: CANADA	DRILLED BY	: ULTRAMOBILE
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589478	DRILL TYPE	: JKS300
DEPTH	: 152.7 METRIC	LOGGED BY	: D.CAR	GRID NAME	: PENN	TEST METHOD	: ACID
				CORE SIZE	: THINWALL BQ	ASSAYED FOR	: GOLD

COMMENTS : COLLAR IS 4M EAST AND 70 M SOUTH OF POST 4

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
4.90	355.0	-47.00	45.70	355.0	-44.50	91.40	355.0	-41.00	152.70	355.0	-37.00

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

FROM METRIC	TO METRIC	
.00	4.87	OVERBURDEN Collar. Overburden consisting of sand, gravel and boulders.
4.87	10.41	SCHIST Chlorite schist. Very soft but competant. Was most likely a former gabbro. Lacks an intense foliation. Weakly to moderately foliated. Sections have an overall coarse grained texture but what appears to be feldspar crystals is actually clots of iron carbonate up to 4 millimetres diameter. The clots often coalesce and appear to have undergone some shearing. Rock is weakly magnetic. 1 to 2% sericite as stretched wisps to 5

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139001	4.87	6.37	1.50	TR	F50	.005	
FX139002	6.37	7.87	1.50	TR	-	.000	
FX139003	7.87	9.37	1.50	TR	-	.000	
FX139004	9.37	10.61	1.24	TR	-	.000	

FROM METRIC	TO METRIC	DESCRIPTION	SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
		millimetres by 3 2 millimetres.								
		10 to 15% iron carbonate overall, mainly as discrete masses to several millimetres diameter. 5% iron carbonate, quartz, calcite veins to 1 centimetre wide, generally wispy and contorted and principally parallel to foliation. Trace pyrite, some of which is limonitized.								
		7.87 9.37 Quartz carbonate veins are extremely wispy and contorted, with most at various angles to foliation. 3 to 5% sericite as wisps and clots.								
		9.37 10.41 Not magnetic. 1 to 2% sericite.								
10.41	10.76	GABBRO								
		Fine grained, massive, very chloritic unfoliated equivalent of above. Saturated with 10 to 12% quartz as discrete grains to 2 millimetres diameter, trace leucoxene.	FX139005	10.61	10.76	.15	TR	-	.000	
		10.61 10.76 Quartz iron carbonate vein sub parallel to core axis and forming 60% of sample. Host is fine grained gabbro. No sulfide.								
10.76	26.85	SCHIST								
		As 4.87 but not magnetic and with up to 10% sericitic wisps and clots to 8 millimetres long and 2 millimetres wide. 4% quartz carbonate veins to 1.5 millimetres wide and sub parallel to foliation. Trace leucoxene. Trace pyrite. 10 to 15% fine grained disseminated iron carbonate.	FX139006	10.76	12.26	1.50	TR	F47	.000	
			FX139007	12.26	13.72	1.46	TR	-	.000	
			FX139008	13.72	15.22	1.50	TR	-	.000	
			FX139009	15.22	16.72	1.50	TR	F50	.000	
			FX139010	16.72	18.55	1.83	TR	-	.000	
			FX139011	18.55	20.05	1.50	TR	-	.000	
		12.26 16.72 10% quartz carbonate veins to 2 centimetres wide. Most veins contorted, weakly broken	FX139012	20.05	21.55	1.50	TR	-	.000	
			FX139013	21.55	23.05	1.50	TR	-	.000	

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

FROM METRIC	TO METRIC	
		up and contain chlorite inclusions. Most sub parallel to foliation.
16.72	21.55	5% quartz carbonate veins to 1.5 centimetres wide and generally parallel to foliation.
21.55	24.55	Light greenish- yellow sericite is absent. Clots of iron carbonate and light gray sericite are dominant throughout most of the sample, giving it a medium grained to coarse grained gabbroic appearence. These clots are very soft, are moderately stretched and commonly coalesce. Size ranges from a few millimetres to 1 centimetre long and up to 5 millimetres wide. Iron carbonate forms at least 10% as disseminated grains to 3 millimetres in diameter, generally within the above clots. The last 1.5 mediums has 3% wispy quartz carbonate veins and 2% sericite.
24.55	25.05	Chlorite schist with some clotty zones as above.
25.05	26.85	Has clotty appearence and contains 4 to 5% yellow green masses to 4 millimetres long which may be highly altered feldspar crystals. Trace leucoxene. Trace pyrite. 13% quartz carbonate veins decreasing to 2 to 3% in last 0.8 medium. Veins have sharp to diffuse contacts and are generally wispy in nature. A few veins to 10 centimetres wide are a mixture of quartz, carbonate and chloritic inclusions.

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139014	23.05	24.55	1.50	TR	-	.000	
FX139015	24.55	26.05	1.50	TR	-	.000	
FX139016	26.05	26.85	.80	TR	-	.000	

FROM METRIC	TO METRIC	DESCRIPTION	SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
26.85	27.66	DIKE Dioritic massive dike with fine grained chilled margins about 7 centimetres thick that are chloritic. Very weakly foliated. Central core is medium grained. Trace pyrite. Minor quartz carbonate veins at edges of dike.	FX139017	26.85	27.66	.81	TR	-	.000	
27.66	30.68	SCHIST Similar to that at 21.55 but finer grained texture overall. 10% Wispy quartz carbonate veins at various angles to core. One 10 centimetre vein with diffuse contacts and containing numerous inclusions of host rock with diffuse contacts. Trace leucoxene. Trace pyrite. 29.18 30.68 5% quartz carbonate veins.	FX139018	27.66	29.18	1.52	TR	-	.000	
			FX139019	29.18	30.68	1.50	TR	F55	.000	
30.68	32.03	DIKE Similar to dike at 26.85 but possibly more granodioritic. fine grained chilled margins and medium grained interior. Cut by 2% quartz veins to 2 millimetres wide which have pyritic alteration envelopes extending several millimetres out from from edges of vein. These veins are parallel to very weak foliation. A few late-stage quartz veins to 3 millimetres wide cross cut foliation and have no alteration envelopes. Very weakly magnetic in places.	FX139020	30.68	32.03	1.35	1	-	.050	
32.03	46.87	SCHIST As 21.55. Up to 2% quartz carbonate veins to 3 millimetres wide. Weakly magnetic in places. Moderately foliated. Leucocratic stretched clots to 7	FX139021	32.03	33.53	1.50	TR	-	.005	
			FX139022	33.53	35.03	1.50	TR	-	.000	
			FX139023	35.03	36.53	1.50	TR	-	.000	

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

FROM METRIC	TO METRIC	
		millimetres by 3 millimetres. Sometimes coalesce and form about 50% of rock. Fine grained chloritic matrix forms remainder. trace yellow leucoxene. Trace pyrite.
37.48	37.76	Quartz iron carbonate vein. Coarse grained iron carbonate forms 15%. Lower 10 cm is pegmatitic in appearence.
42.90	43.20	50% quartz carbonate veins. Highly contorted and intermixed with highly foliated chlorite schist.
45.52	45.80	50% quartz vein sub parallel to core axis. Some coarse grained iron carbonate.
46.87	47.69	DIKE
		Coarse grained to very coarse grained. Massive. Grano to quartz diorite dike with a slightly pegmatitic texture.
47.69	56.61	SCHIST
		As 32.03. 1 to 2% quartz carbonate veins to 4 millimetres wide and sub parallel to foliation.
49.29	50.29	One 8 millimetre wide quartz carbonate vein runs 50 centimetres down 50.29 50.52 quartz vein with minor fine grained disseminated iron carbonate. Margins include some schist as inclusions. Vein is sub parallel to foliation. Up to 1% stubby black tourmaline.
51.10	51.15	5 centimetre wide zone contains 3% pyrite and chalcopyrite as masses to 8 millimetres by 3 millimetres. Trace leucoxene.
52.02	53.50	Slightly coarse grained in sections, but medium grained overall. 10% quartz carbonate

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139024	36.53	37.48	.95	TR	-	.010	
FX139025	37.48	37.76	.28	TR	F53	.000	
FX139026	37.76	39.26	1.50	TR	-	.000	
FX139027	39.26	40.76	1.50	TR	-	.010	
FX139028	40.76	42.20	1.44	TR	F53	.000	
FX139029	42.20	42.90	.70	TR	-	.015	
FX139030	42.90	43.20	.30	TR	-	.000	
FX139031	43.20	44.70	1.50	TR	-	.020	
FX139032	44.70	45.52	.82	TR	-	.015	
FX139033	45.52	45.80	.28	TR	-	.055	
FX139034	45.80	46.87	1.07	TR	-	.020	
FX139035	46.87	47.69	.82	TR	-	.000	
FX139036	47.69	49.26	1.57	TR	-	.005	
FX139037	49.26	50.29	1.03	TR	-	.015	
FX139038	50.29	50.52	.23	TR	-	.000	
FX139039	50.52	52.02	1.50	TR	-	.010	
FX139040	52.02	53.50	1.48	TR	F48	.000	
FX139041	53.50	55.00	1.50	TR	-	.000	
FX139042	55.00	56.61	1.61	TR	-	.035	

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

FROM METRIC	TO METRIC	
		veins to 4 centimetres wide, generally sub parallel to foliation and with sharp to diffuse contacts. to 20% disseminated medium grained iron carbonate crystals or grains.
	53.50 55.00	2 to 3% quartz carbonate veins.
	55.00 56.61	Very weakly foliated to near massive.
56.61	57.71	DIKE
		Coarse grained to very coarse grained massive, quartz dioritic in composition. Upper contact gradational with schist, but lower contact sharp. To 1% pyrite as grains to 7 millimetres diameter. Most pyrite occurs within a 15 centimetre wide zone near lower contact. 2% quartz carbonate veins to 3 millimetres wide. 5 to 10% fine grained disseminated iron carbonate.
57.71	68.36	SCHIST
		As 32.03.
		As 55.00. The very weakly foliated schist has the appearence of gabbro, but mineralogy totally altered to the point that rock is quite soft.
	58.76 59.24	Injected by 50 to 60% quartz and quartz carbonate veins that are highly contorted and broken up in sections. 1% pyrite as occasional crystals to 7 millimetres diameter. Trace very yellow brown leucoxene to 2 millimetres long.
	60.74 62.24	4% quartz carbonate veins to 5 centimetres wide and with sharp contacts.

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139043	56.61	57.71	1.10	1	-	.020	
FX139044	57.71	58.76	1.05	TR	-	.000	
FX139045	58.76	59.24	.48	1	-	.005	
FX139046	59.24	60.74	1.50	TR	-	.000	
FX139047	60.74	62.24	1.50	0	-	.015	
FX139048	62.24	63.74	1.50	0	-	.000	
FX139049	63.74	65.24	1.50	0	F45	.000	
FX139050	65.24	66.25	1.01	0	-	.000	
FX139051	66.25	66.98	.73	TR	-	.000	
FX139052	66.98	68.36	1.38	TR	-	.000	

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

FROM METRIC	TO METRIC	
62.24	63.74	Some coarse grained well foliated phases.
63.74	65.24	Coarse grained and well to moderately well foliated. 1 to 2% quartz carbonate veins.
65.24	66.25	5% quartz carbonate veins, mainly as one 3 centimetre wide vein sub parallel to core axis.
66.25	66.98	About 70% quartz carbonate veins as several veins sub parallel to core axis. 30% of sample is host schist. Iron carbonate as coarse grained stringers and fine grained disseminated crystals in veins. 2 to 3% pink feldspar as stringers with in veins. Trace fine grained crystals of magnetite in veins trace pink disseminated fine grained hematite after magnetite. Host chlorite schist has trace pyrite as fine grained crystals.
68.36	68.85	PEGMATITE Quartz rich pegmatite with numerous inclusions of chlorite rich material (schist?). Nearly 1% combined pyrite and chalcopyrite as grains to 4 millimetres diameter. Trace very fine grained disseminated magnetite crystals. Some rosettes of feldspar to quartz to 3 centimetres diameter and with radiating growth patterns. 3 to 4% iron carbonate as fine grained disseminated and as occasional veins to 2 millimetres wide.
68.85	81.79	SCHIST

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139053	68.36	68.85	.49	1	-	.005	

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

FROM METRIC	TO METRIC	
		As 32.03 but more chloritic.
69.87	70.28	Quartz vein with sharp to diffuse contacts. Within 10 centimetres of each contact, 2 to 3% pyrite up to 5 millimetres diameter occurs within host schist. Total pyrite in sample is 1%. Trace leucoxene in vein.
70.28	71.16	Contains 2 to 3% yellow green stretched masses of sericite to 5 by 2 millimetres.
71.16	71.38	70% quartz - feldspar veins to 5 centimetres wide. The remainder consists of sericitic, chloritic silicified schist. Portions of sample are of brecciated vein material. Trace pyrite occurs along margins of main zone of veining.
71.38	73.08	Fine grained to medium grained chlorite schist similar to all previous schist. Slightly up to 1% combined pyrite and chalcopyrite as fine grained disseminated and as nearly massive aggregates to 1 centimetre by 3 to 4 millimetres. Most sulfides occur within a 10 centimetre zone at 72.3. 2 to 3% quartz carbonate veins.
73.08	74.58	Fine grained to medium grained very chloritic schist. Some sections to 20 centimetres wide may be zones of possible mylonitization, but not really obvious. Rock is still competant. 2 to 3% quartz carbonate veins. Disseminated iron carbonate.
74.58	76.08	Similar to above but lacks intence shearing of the fine grained phases.
76.08	77.58	Fine grained to medium grained. Very chloritic. 5% quartz carbonate veins to 3

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139054	68.85	69.87	1.02	TR	-	.000	
FX139055	69.87	70.28	.41	1	-	.030	
FX139056	70.28	71.16	.88	TR	-	.000	
FX139057	71.16	71.38	.22	TR	-	.030	
FX139058	71.38	73.08	1.70	1	-	.020	
FX139059	73.08	74.58	1.50	TR	-	.000	
FX139060	74.58	76.08	1.50	TR	F58	.010	
FX139061	76.08	77.58	1.50	TR	-	.015	
FX139062	77.58	79.08	1.50	TR	-	.000	
FX139063	79.08	80.58	1.50	TR	-	.005	
FX139064	80.58	81.22	.64	TR	-	.010	
FX139065	81.22	81.79	.57	1	-	.005	

FROM METRIC	TO METRIC	DESCRIPTION	SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
		centimetres wide sub parallel to foliation. Trace pyrite and chalcopyrite, mainly as one semi- massive lens 2 centimetres by 8 millimetres. Trace leucoxene.								
77.58	79.08	As above. Very minor pyrite and chalcopyrite.								
79.08	81.22	Medium grained, weakly foliated schist with high % of iron carbonate and sericite masses after feldspar. 10% quartz carbonate veins, highly contorted and up to 4 centimetres wide.								
81.22	81.79	60% quartz carbonate veins to 3 centimetre wide. Some veins brecciated and highly contorted. And 1% disseminated pyrite within host schist.								
81.79	82.66	PEGMATITE Dark gray silica rich pegmatitic phase with lower 20 centimetres comprised of white quartz and dark to light pink feldspar. Major portion appears to contain highly silicified schist as intimate inclusions. Some pure white quartz veins to 2 centimetres wide. Trace pyrite. Trace tourmaline along margin of one quartz vein. Some weakly developed spheroidal banding within host leucocratic phase of pegmatite.	FX139066	81.79	82.66	.87	TR	-	.005	
82.66	83.77	SCHIST Medium grained, weakly foliated schist with high % of iron carbonate and sericite masses after feldspar. 10% quartz carbonate veins, highly contorted and up to 4 centimetres wide.	FX139067	82.66	83.77	1.11	TR	-	.005	

FROM METRIC	TO METRIC	DESCRIPTION	SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
83.77	84.55	DIKE Fine grained to medium grained light gray massive felsite dike. Appears to be quartz diorite to diorite in composition. Trace pyrite crystals to 2 millimetres diameter. 2% quartz veins to 8 millimetres wide.	FX139068	83.77	84.55	.78	TR	-	.015	
84.55	90.87	SCHIST As 82.66.	FX139069	84.55	85.60	1.05	TR	-	.020	
		85.60 86.32 Highly foliated and injected by 30% quartz carbonate feldspar veins to 10 centimetres wide. Some veins appear weakly brecciated. Trace tourmaline in veins. Trace green fuchsite in most veins.	FX139070	85.60	86.32	.72	TR	-	.020	
			FX139071	86.32	87.24	.92	TR	-	.130	
			FX139072	87.24	89.12	1.88	1	-	.075	
			FX139073	89.12	89.37	.25	TR	-	.115	
			FX139074	89.37	90.87	1.50	TR	-	.000	
		86.32 87.24 90% weakly brecciated quartz carbonate feldspar veins with 10% schist inclusions trace fuchsite. To 1% disseminated pyrite. Veins have a very fine grained pegmatitic texture. 3% tourmaline as massive 1 to 5 millimetre stringers.								
		87.24 89.12 Medium grained schist with 15% pegmatitic veins to 1 centimetre wide at various angles to foliation. To 1% pyrite as crystals to 3 millimetres diameter.								
		89.12 89.37 15 centimetre white quartz vein and 12 centimetre coarse grained pink pegmatite in contact with vein. trace pyrite. Trace molybdenite.								
		89.37 90.87 As 87.24. Trace pyrite.								

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

FROM METRIC	TO METRIC	
90.87	103.29	GABBRO
		Medium grained, fairly massive equivalent of above schist. Both are essentually same original rock, but gabbro is less sheared and altered. Gabbro is harder than schist. Rock is medium gray in colour and tends toward dioritic gabbro. 10 % white to pink quartz iron carbonate veins at various angles to foliation. Feldspar is altered to sericite. 19 to 15% fine grained disseminated iron carbonate. Trace disseminated pyrite up to 2 millimetres. Trace leucoxene.
92.26	93.67	Several % very fine grained hematite disseminated within former feldspar, now altered to sericite and quartz + iron carbonate.
93.67	93.79	60% white quartz vein with 40% host gabbro which contains 2 % disseminated pyrite to 2 millimetres. 1% tourmaline or rutile? needles to 1.5 centimetres long.
94.30	94.60	Quartz vein with occasional chloritic inclusions.
96.10	100.99	7% highly contorted quartz carbonate veins up to 6 centimetres wide. Some have a pegmatitic texture. Trace leucoxene. Weakly magnetic in places. 15% contorted pinkish quartz carbonate veins to 6 centimetres wide with sharp to diffuse contacts between 99.10 and 100.60.
100.99	101.31	White quartz vein sub parallel to core axis forms 60%. 1 to 2% fuchsite within host gabbro near vein contacts. Minor hematite.

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139075	90.87	92.26	1.39	TR	-	.020	
FX139076	92.26	93.67	1.41	TR	F62	.000	
FX139077	93.67	93.79	.12	TR	-	.015	
FX139078	93.79	94.30	.51	TR	-	.015	
FX139079	94.30	94.60	.30	TR	-	.000	
FX139080	94.60	96.10	1.50	TR	-	.010	
FX139081	96.10	97.60	1.50	TR	-	.015	
FX139082	97.60	99.10	1.50	TR	-	.015	
FX139083	99.10	100.60	1.50	TR	-	.025	
FX139084	100.60	100.90	.30	TR	-	.030	
FX139085	100.90	101.31	.41	TR	-	.070	
FX139086	101.31	102.81	1.50	TR	-	.025	
FX139087	102.81	103.29	.48	TR	-	.015	

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

FROM METRIC	TO METRIC	
	101.31	103.29 Variably sheared medium grained gabbro. Trace hematite. Trace fuchsite in some quartz carbonate veins. 5% quartz carbonate veins up to 2 centimetres wide and with sharp to diffuse contacts. trace pyrite.
103.29	110.34	SCHIST

Variably foliated fine grained to medium grained gabbro with anorthosite overall schistose texture. Moderate hard and competent. Pervasive quartz carbonate veins form 20 % and range from 1 millimetre to 4 centimetres wide and are primarily sub parallel to foliation and some are highly brecciated and injected by later stage veins. 1% fine grained disseminated pyrite throughout. Trace leucoxene. Fine grained disseminated iron carbonate is pervasive.

103.29 103.77 20 centimetre wide quartz vein with highly chloritic marginal schist injected by 40% irregular quartz veins. Trace fuchsite as diffuse clots up to several millimetres diameter. Up to 1% fine grained disseminated pyrite, mainly with in host chlorite schist. Some veins within marginal schist are beige to light pink and rich in fine grained iron carbonate.

105.27 106.53 Lower 25 centimetres consists of highly siliceous light gray material that may just be diffuse silica within schist.

108.88 109.51 50% quartz carbonate veins with sharp contacts. Appears to be several periods

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139088	103.29	103.77	.48	TR	-	.050	
FX139089	103.77	105.27	1.50	1	F66	.020	
FX139090	105.27	106.53	1.26	1	-	.010	
FX139091	106.53	108.10	1.57	1	-	.035	
FX139092	108.10	108.88	.78	TR	-	.000	
FX139093	108.88	109.51	.63	TR	-	.015	
FX139094	109.51	110.34	.83	TR	-	.035	

FROM METRIC	TO METRIC	DESCRIPTION	SAMPLE#	FROM METRIC	TO METRIC	LENGTH	MIN %	CR ANG	AU PPM	PPM*M
		of veining, with bull quartz veins sub parallel to core axis having come last. Trace fuchsite.								
110.34	113.17	GABBRO								
		Fine grained to medium grained massive gabbro. Dark gray and quite hard. Very magnetic. 5% quartz carbonate veins at all angles to foliation and with sharp to diffuse contacts. Up to 1% disseminated pyrite associated with margins of some veins.	FX139095	110.34	111.60	1.26	TR	-	.070	
			FX139096	111.60	112.63	1.03	TR	-	.010	
			FX139097	112.63	112.92	.29	8	-	.555	
			FX139098	112.92	113.17	.25	8	-	.870	
		112.63 112.92 Light gray weakly brecciated quartz carbonate vein injected by late stage quartz veins. 25% iron carbonate. 8% disseminated pyrite crystals up to 3 millimetres. White bull quartz comprises about 20% of the vein system.								
		112.92 113.17 As above with some black streaks and masses that may be tourmaline form 2 to 3%								
113.17	115.17	DIKE								
		Massive light gray quartz feldspar porphyry with very fine grained siliceous matrix. Contains occasional dioritic phases. Some very feldspathic vein like bands. Trace pyrite.	FX139099	113.17	114.17	1.00	TR	-	.010	
			FX139100	114.17	115.17	1.00	TR	-	.020	
		114.17 115.17 1 to 2% coarse grained leucoxene.								
115.17	131.83	GABBRO								
		Massive to weakly foliated very hard dioritic medium grained gabbro. Medium gray in colour. 7% quartz veins	FX139101	115.17	116.67	1.50	TR	F55	.150	
			FX139102	116.67	118.17	1.50	TR	-	.095	

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

FROM METRIC	TO METRIC	
		up to 1.5 centimetres wide at various angles to foliation. 10% quartz grains. up to 1% disseminated pyrite crystals associated mainly with quartz veins. Some feldspathic alteration envelopes around some quartz veins. Pervasive fine grained disseminated iron carbonate.
116.67	118.17	Feldspar crystals weakly stretched but still relatively fresh. 1 to 2% coarse grained leucoxene.
118.17	119.21	1% disseminated pyrite up to 3 millimetres.
119.21	119.66	Quartz vein. Moderate stretched and brecciated with inclusion of chloritic host gabbro. vein is 30 % iron carbonate. 1 to 2% black stringers tourmaline. Up to 1% disseminated pyrite crystals to 2 millimetres diameter.
119.66	120.16	2 to 3% disseminated pyrite crystals.
120.16	120.46	50% quartz as 2 to 3 veins sub parallel to core axis. Veins have sharp to diffuse contacts with host gabbro. 4 to 5% pyrite crystals up to 8 millimetres.
120.78	121.51	Bull quartz vein with 5% disseminated iron carbonate and trace pyrite.
121.51	129.11	Dark gray medium grained massive gabbro similar to previous gabbro with 2 to 3% leucoxene, up to 1 to 2% disseminated pyrite crystals up to 2 millimetres and 2 to 3% quartz veins up to 2 centimetres wide at various angles. Becoming fine grained overall in last 1.5 mediums with occasional pyrite crystals up to 3 millimetres , 1 to 2% fine grained

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139103	118.17	119.21	1.04	1	-	.080	
FX139104	119.21	119.66	.45	TR	-	1.285	
FX139105	119.66	120.16	.50	3	-	.055	
FX139106	120.16	120.46	.30	5	-	1.045	
FX139107	120.46	120.78	.32	3	-	.275	
FX139108	120.78	121.51	.73	TR	-	.215	
FX139109	121.51	123.01	1.50	TR	-	.135	
FX139110	123.01	124.61	1.60	TR	-	.055	
FX139111	124.61	126.11	1.50	TR	-	.000	
FX139112	126.11	127.61	1.50	TR	-	.000	
FX139113	127.61	129.11	1.50	TR	-	.010	
FX139114	129.11	130.61	1.50	TR	-	.015	
FX139115	130.61	131.83	1.22	TR	-	.005	

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

FROM METRIC	TO METRIC	
		leucoxene associated with several % disseminated magnetite and being very magnetic.
129.11	130.61	Fine grained equivalent of above with occasional medium grained phases. up to 1% pyrite concentrated into a few narrow zones as disseminated crystals up to 2 millimetres diameter.
130.61	131.83	As above but not magnetic. Trace leucoxene and pyrite.
131.83	139.20	DIORITE
		Coarse grained massive medium gray diorite to gabbro - diorite. Up to 1% fine grained disseminated pyrite, 2 to 3% quartz veins at various angles to core. Trace fuchsite as fine grained disseminations associated with some quartz veins. At least 5% pervasively disseminated iron carbonate.
133.33	138.10	As above. Possibly more of a gabbro. No fuchsite.
138.10	138.33	Bull quartz vein.
138.33	139.20	As 133.33.
139.20	145.05	DIKE
		Fine grained massive dark gray intermediate dike with trace pyrite. Very hard and fresh. Sharp contact with diorite - gabbro.
140.70	142.20	3% quartz carbonate veins up to 1.5 centimetres wide. 10 centimetre wide slightly pyritic alteration zones

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139116	131.83	133.33	1.50	TR	-	.140	
FX139117	133.33	134.83	1.50	TR	-	.035	
FX139118	134.83	136.33	1.50	TR	-	.010	
FX139119	136.33	138.10	1.77	TR	-	.020	
FX139120	138.10	138.33	.23	TR	-	.000	
FX139121	138.33	139.20	.87	TR	-	.000	
FX139122	139.20	140.70	1.50	TR	-	.055	
FX139123	140.70	142.20	1.50	TR	-	.490	
FX139124	142.20	143.70	1.50	TR	-	.010	
FX139125	143.70	145.05	1.35	TR	-	.030	

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

FROM METRIC	TO METRIC	
		associated with 3 of the main veins.
145.05	152.72	SCHIST
		Well foliated medium grained altered and soft gabbro. Has a talcose feel similar to schist at top of hole. Trace pyrite, 2 to 3% quartz carbonate veins up to 4 millimetres wide at various angles to core. Some limonite after pyrite. Mafics altered to chlorite feldspar altered to quartz, carbonate and sericite.
149.55	152.72	Varies from fine grained to coarse grained. 15 centimetre mafic dike at 149.9. 1% quartz carbonate veins. Core baddly broken up in last 50 centimetres. Foot of hole.

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

SAMPLE#	FROM METRIC	TO METRIC	LENGTH METRIC	MIN %	CR ANG	AU PPM	PPM*M
FX139126	145.05	146.55	1.50	TR	-	.000	
FX139127	146.55	148.05	1.50	TR	F60	.000	
FX139128	148.05	149.55	1.50	TR	-	.000	
FX139129	149.55	151.65	2.10	TR	-	.000	
FX139130	151.65	152.72	1.07	TR	-	.000	

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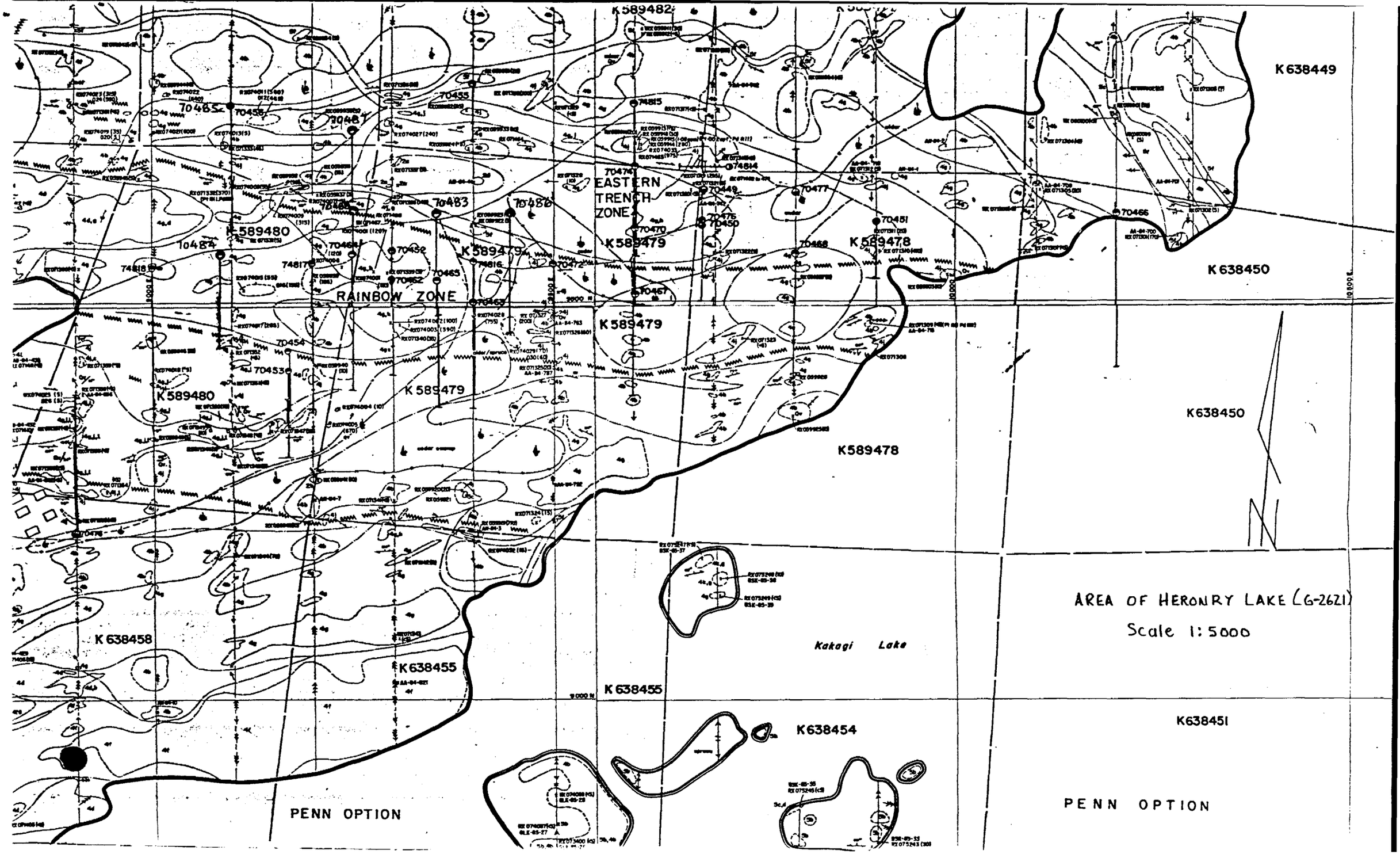
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RAINBOW ZONE
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K638455
Kakagi Lake
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638454
K638451
PENN OPTION
PENN OPTION

**********INC' 'IMITED**********

FIELD EXPLO N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9568.0 Metric	NTS SHEET #	: 52-F-4	STARTED	: 03-02-85
PROPERTY	: Penn Option	DEPARTURE	: 9300.0 Metric	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70451-0	ELEVATION	: 1341.0 Metric	PROVINCE	: Ontario	MEASUREMENTS	: Metric
AZIMUTH	: 175.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589478	DRILL TYPE	: J.K.Smit 300
DEPTH	: 99.4 Metric	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 60 m south and 220 m east of post 4.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
6.10	175.0	-45.00	51.80	175.0	-44.00	99.40	175.0	-42.00			

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

FROM Metric	TO Metric	DESCRIPTION
.00	6.24	OVERBURDEN Collar. Overburden.
6.24	51.10	SCHIST Highly altered and moderate well foliated. Dark gray to nearly black. Formerly a gabbro or pyroxenitic gabbro, possibly talcose. 60 to 70% fine grained chlorite and 30 to 40% stretched leucocratic masses averaging 3 to 4 millimetres by 1 to 2 millimetres which consist of iron carbonate and minor white sericite and or very fine grained quartz. The leucocratic material probably represents former feldspar crystals. Iron carbonate forms 15 to 20%. Up to 1% fine grained disseminated

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139131	6.24	7.74	1.50	1	F45	.050	
FX139132	7.74	9.24	1.50	TR	-	.010	
FX139133	9.24	10.74	1.50	TR	-	.000	
FX139134	10.74	12.24	1.50	TR	-	.000	
FX139135	12.24	13.74	1.50	TR	F35	.005	
FX139136	13.74	15.24	1.50	TR	-	.000	
FX139137	15.24	16.74	1.50	TR	-	.000	
FX139138	16.74	18.24	1.50	TR	-	.000	
FX139139	18.24	19.74	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		pyrite.
7.74	9.24	2 to 3% quartz iron carbonate veins up to 1 centimetre wide sub parallel to foliation, weakly boudinaged and with sharp contacts.
9.24	10.74	Veins to 2 centimetres wide.
10.74	12.24	3 to 4% contorted and brecciated quartz carbonate veins to 3 centimetres wide at various angles to core.
12.24	12.32	Weakly to moderate magnetic.
12.32	12.37	Fault. Sharply defined muddy fault gouge.
16.39	16.58	Fault. Zone of badly broken core and muddy fault gouge. Minor calcite veining.
21.24	22.74	One 10 centimetre quartz calcite vein sub parallel to foliation.
22.74	23.81	12% quartz carbonate veins to 10 centimetres wide and parallel to foliation. veins are moderately brecciated and contain minor inclusions of sheared schist. Some ladder type veining with rungs of quartz and remainder of iron carbonate.
26.81	28.33	4% quartz carbonate veins to 3 centimetres wide, some of which are ladder type as at 22.74.
29.83	31.33	Trace brown mineral, possibly leucoxene.
32.83	35.50	As at 26.81, but about 6% veins.
35.50	36.10	One or two main quartz and iron carbonate veins to 4 centimetres wide running sub parallel to core axis. Associated with iron carbonate rich rims and occasional iron carbonate veins to 1 centimetre wide. 50% of sample consists of vein material. trace fine grained disseminated pyrite. Host is

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139140	19.74	21.24	1.50	TR	-	.000	
FX139141	21.24	22.74	1.50	TR	F48	.000	
FX139142	22.74	23.81	1.07	TR	-	.000	
FX139143	23.81	25.31	1.50	TR	-	.000	
FX139144	25.31	26.81	1.50	TR	-	.000	
FX139145	26.81	28.33	1.52	TR	-	.005	
FX139146	28.33	29.83	1.50	TR	-	.000	
FX139147	29.83	31.33	1.50	TR	-	.000	
FX139148	31.33	32.83	1.50	TR	-	.000	
FX139149	32.83	34.33	1.50	TR	-	.020	
FX139150	34.33	35.50	1.17	TR	-	.010	
FX139151	35.50	36.10	.60	TR	-	.005	
FX139152	36.10	37.60	1.50	TR	F48	.000	
FX139153	37.60	39.10	1.50	TR	-	.000	
FX139154	39.10	40.60	1.50	TR	-	.000	
FX139155	40.60	42.10	1.50	TR	-	.000	
FX139156	42.10	43.60	1.50	TR	-	.020	
FX139157	43.60	45.10	1.50	TR	-	.215	
FX139158	45.10	46.60	1.50	TR	-	.405	
FX139159	46.60	48.10	1.50	TR	-	.305	
FX139160	48.10	49.60	1.50	TR	-	.000	
FX139161	49.60	51.10	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		chlorite schist.
	36.10 42.10	Leucocratic clots form to 60 to 70%. Has appearence of coarse grained gabbro. Weakly to moderate magnetic. 1 to 2% quartz carbonate veins to 1 centimetre wide sub parallel to foliation.
	42.10 49.60	As above with slight variations in size and concentration of leucocratic clots. May reflect former cumulate textures. 2 to 3% quartz carbonate veins to 2 centimetres wide
	49.60 51.10	As above becoming less of a schist and more of a primary dioritic gabbro.
51.10 52.20	GABBRO	
		Medium grained to coarse grained slightly foliated meta gabbro.
	51.76 52.20	With 30% quartz carbonate veins as two 8 centimetre wide veins with diffuse contacts. Up to 1% disseminated pyrite as crystals to 2 millimetres diameter. 10 to 15% disseminated iron carbonate.
52.20 68.85	DIORITE	
		Coarse grained dioritic equivalent of gabbro at 51.10. Very weakly foliated. 1% quartz carbonate veins to 5 millimetres wide. 10% fine grained disseminated iron carbonate, trace pyrite. Rock is still not a fresh diorite or gabbro.
	55.20 56.01	Trace fuchsite, 5% quartz carbonate veins to 2 centimetres wide primarily sub parallel

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139162	51.10	51.76	.66	TR	-	.005	
FX139163	51.76	52.20	.44	TR	-	.030	
FX139164	52.20	53.70	1.50	TR	-	.010	
FX139165	53.70	55.20	1.50	TR	-	.010	
FX139166	55.20	56.01	.81	TR	-	.070	
FX139167	56.01	56.81	.80	TR	-	.070	
FX139168	56.81	58.31	1.50	TR	-	.020	
FX139169	58.31	59.90	1.59	TR	-	.000	
FX139170	59.90	60.50	.60	2	-	.160	

FROM Metric	TO Metric	DESCRIPTION
		to core axis.
56.01	56.81	Sheared diorite with 50% contorted quartz carbonate veins to 2 centimetres wide running sub parallel to core axis and with sharp to diffuse contacts. Trace pyrite.
56.81	58.31	More sheared fine grained to medium grained equivalent of previous diorite. 10% quartz carbonate veins to 10 centimetres wide.
58.31	59.90	Coarse grained, weakly foliated. 3 to 4% quartz carbonate veins. Trace leucoxene.
59.90	60.50	As above with 40% quartz carbonate veins to 13 centimetres wide and with sharp contacts. Iron carbonate is dominant component of veins. Up to 2% disseminated pyrite to 2 millimetres diameter occuring within host diorite to veins.
60.50	60.96	As 58.31, fine grained to coarse grained.
60.96	61.60	Quartz iron carbonate veins form 70% as two veins to 28 centimetres wide with sharp to diffuse contacts. Iron carbonate is dominant in veins. up to 1% disseminated pyrite crystals to 4 millimetres in diameter.
61.60	68.85	Coarse grained, weakly to moderate foliated diorite. 10% diffuse to sharp quartz carbonate veins to 4 millimetres wide at various angles to foliation. Quite schistose in places.
68.85	70.35	GABBRO
		More mafic equivalent of above. Weakly foliated but very hard overall. Several % dark olive green mineral, but

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139171	60.50	60.96	.46	TR	-	.015	
FX139172	60.96	61.60	.64	TR	-	.050	
FX139173	61.60	63.10	1.50	TR	-	.000	
FX139174	63.10	64.60	1.50	TR	F60	.025	
FX139175	64.60	66.10	1.50	TR	-	.010	
FX139176	66.10	67.60	1.50	TR	-	.020	
FX139177	67.60	68.85	1.25	TR	-	.015	
FX139178	68.85	70.35	1.50	TR	-	.010	

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

FROM Metric	TO Metric	
		not identified. 2 to 3% quartz carbonate veins to 1.5 centimetres wide at various angles to core. Much of the feldspar appears relatively unaltered. Mafics are chloritic. Trace pyrite. Several % fine grained disseminated iron carbonate.
70.35	79.05	DIORITE
		Dioritic equivalent of above. Slightly more foliated overall. 4% quartz veins to 2 centimetres wide parallel to foliation.
		73.30 74.55 Highly foliated equivalent of above. Almost a schist but still quite hard. 10 % diffuse to sharply defined quartz carbonate veins boudinaged and at various angles to core, up to 2 centimetres wide. 2 to 3% fine grained disseminated pyrite to 2 millimetres diameter throughout the sample, primarily within diorite.
		74.55 76.05 As above but up to 1% disseminated pyrite.
		76.05 77.55 Gabbroic, weakly foliated coarse grained diorite. Trace pyrite. 5% diffuse to sharply defined quartz carbonate veins to 1 centimetre wide.
		77.55 79.05 As above, possibly more of a gabbro.
79.05	88.05	GABBRO
		More mafic equivalent of above.
		80.55 82.05 Moderate foliated.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139179	70.35	71.85	1.50	TR	F45	.010	
FX139180	71.85	73.30	1.45	TR	-	.000	
FX139181	73.30	74.55	1.25	3	-	.030	
FX139182	74.55	76.05	1.50	TR	-	.030	
FX139183	76.05	77.55	1.50	TR	-	.005	
FX139184	77.55	79.05	1.50	TR	-	.010	
FX139185	79.05	80.55	1.50	TR	-	.040	
FX139186	80.55	82.05	1.50	TR	-	.010	
FX139187	82.05	83.55	1.50	TR	-	.000	
FX139188	83.55	85.05	1.50	TR	-	.010	

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

FROM Metric	TO Metric	
88.05	99.36	SCHIST Softer altered equivalent of above. Only real difference is that this schist is easily scratched and talcose. Trace pyrite. 10% disseminated fine grained iron carbonate. Most mafic minerals altered to chlorite, feldspar altered to clots of iron carbonate, white sericite and fine grained quartz. 5% quartz carbonate veins with generally diffuse contacts to 1 centimetre wide primarily sub parallel to foliation. 95.55 99.36 10% irregular and diffuse veins, most of which are highly brecciated. Foot of hole.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139189	85.05	86.55	1.50	TR	-	.000	
FX139190	86.55	88.05	1.50	TR	F57	.000	
FX139191	88.05	89.55	1.50	TR	-	.010	
FX139192	89.55	91.05	1.50	TR	-	.005	
FX139193	91.05	92.55	1.50	TR	-	.000	
FX139194	92.55	94.05	1.50	TR	-	.000	
FX139195	94.05	95.55	1.50	TR	-	.000	
FX139196	95.55	97.05	1.50	TR	-	.005	
FX139197	97.05	98.55	1.50	TR	-	.005	
FX139198	98.55	99.36	.81	TR	F62	.010	

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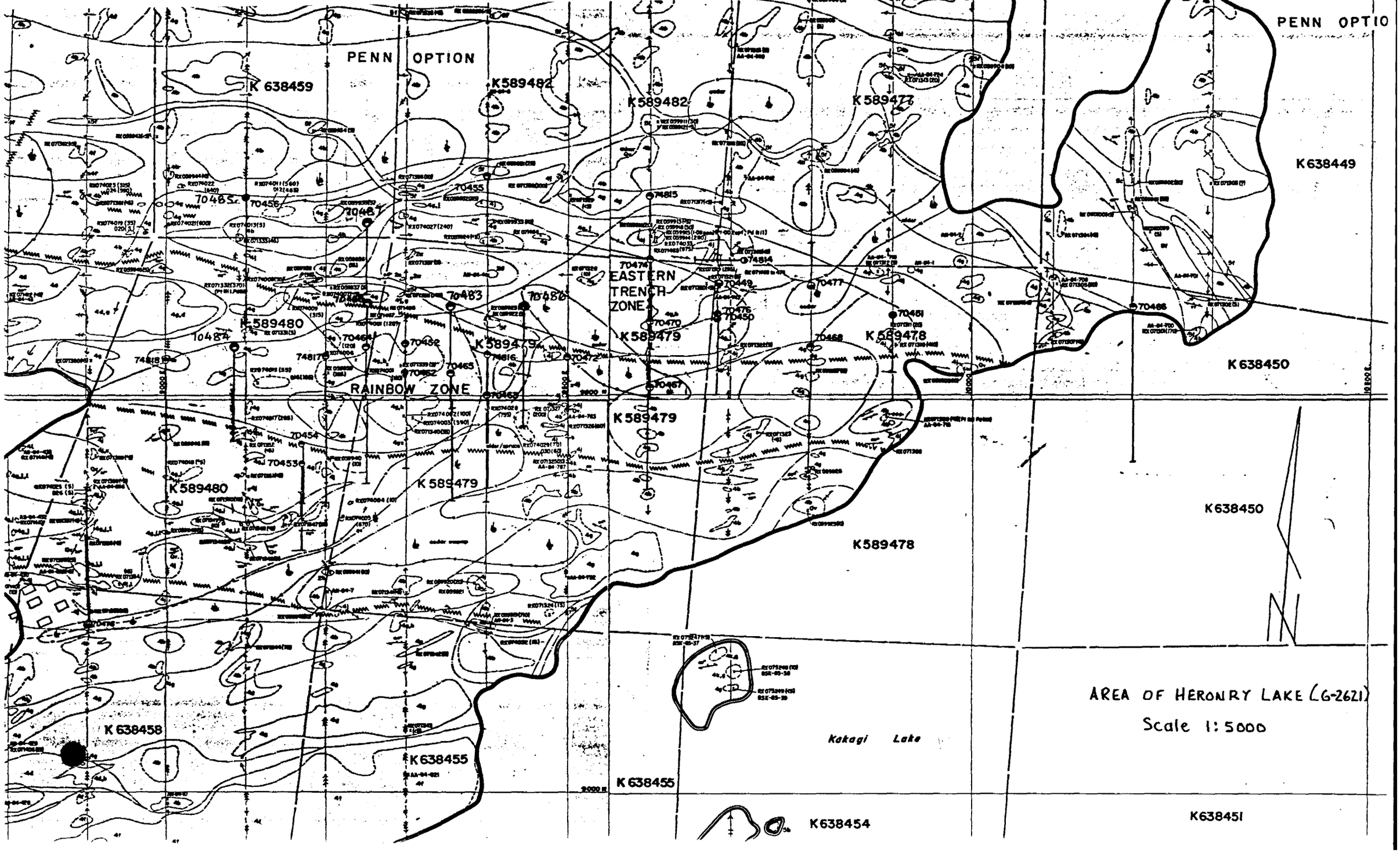
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Kakagi Lake
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K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

PROJECT	:	LATITUDE	: 9568.0 Metric	NTS SHEET #	: 52-F-4	STARTED	: 03-06-85
PROPERTY	: Penn Option	DEPARTURE	: 9300.0 Metric	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70452-0	ELEVATION	: 1368.0 Metric	PROVINCE	: Ontario	MEASUREMENTS	: Metric
AZIMUTH	: 175.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: J.K.Smit 300
DEPTH	: 161.8 Metric	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid'
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 140 m south and 15 m east of post 1.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
1.80	175.0	-44.00	93.20	175.0	-38.00	161.80	175.0	-36.00			
47.50	175.0	-41.00	129.80	175.0	-38.00						

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

FROM Metric	TO Metric	DESCRIPTION
.00	.78	OVERBURDEN
.78	6.78	GABBRO Fine grained to medium grained dense and massive. Very dark gray green gabbro -almost basaltic in places. Most crystal boundaries poorly defined and feldspar difficult to detect in much of rock. High % of chlorite. up to 1% disseminated leucoxene. The rock may be more highly sheared than it appears to be. Trace pyrite. Up to 10 to 15% disseminated iron carbonate. 2% diffuse quartz carbonate veins that are commonly very irregular in shape in places, feldspathic material appears to

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139201	.78	2.28	1.50	TR	-	.010	
FX139202	2.28	3.78	1.50	TR	-	.000	
FX139203	3.78	5.28	1.50	TR	F42	.000	
FX139204	5.28	6.78	1.50	TR	-	.000	

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
		consist more of glomeroporphyritic clots to 8 millimetres in diameter, rather than specific crystals and forms up to 15% of rock.								
6.78	8.28	SCHIST								
		As gabbro above but highly foliated. Up to 4% coarse grained skeletal leucoxene. up to 30% feldspathic porphyroblasts in fine grained chloritic matrix. Well sheared in places. Most feldspathic clots or blasts consist mainly of iron carbonate and up to 3 millimetres diameter.	FX139205	6.78	8.28	1.50	TR	-	.010	
		6.78 9.78 Moderately well foliated in places.								
8.28	9.78	GABBRO								
		As 0.78.	FX139206	8.28	9.78	1.50	TR	-	.020	
9.78	14.10	SCHIST								
		Highly sheared equivalent of above gabbro. 7% quartz	FX139207	9.78	11.10	1.32	TR	-	.050	
		carbonate veins to 5 centimetres wide sub parallel to	FX139208	11.10	12.60	1.50	TR	-	.005	
		foliation. Rock is quite hard overall.	FX139209	12.60	14.10	1.50	TR	-	.010	
14.10	58.83	GABBRO								
		Variably foliated fine grained to medium grained as at	FX139210	14.10	15.60	1.50	TR	-	.010	
		0.78.	FX139211	15.60	17.10	1.50	TR	-	.015	
		15.60 17.10 3 to 4% quartz carbonate veins with sharp to	FX139212	17.10	18.60	1.50	TR	-	.010	
		diffuse contacts and at various angles to	FX139213	18.60	19.50	.90	TR	-	.070	
		foliation. Veins to 2 centimetres wide.	FX139214	19.50	19.83	.33	8	-	.970	
		17.10 18.60 Trace leucoxene and pyrite. 1% narrow quartz	FX139215	19.83	21.33	1.50	TR	-	.050	

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

FROM Metric	TO Metric	
		carbonate veins.
18.60	19.50	Rather coarse grained and more dioritic in appearence.
19.50	19.83	Poorly defined quartz carbonate vein material with 40% chloritic gabbro. May be an internal pegmatitic phase of gabbro. At least 10% fine grained disseminated iron carbonate. 8% fine grained disseminated pyrite crystals up to 2 millimetres diameter.
19.83	21.33	Fine grained to coarse grained weakly to moderately foliated. 2 to 3% quartz carbonate veins. 5% quartz grains.
21.33	24.33	Medium grained to coarse grained with good gabbroic texture. Massive, not foliated dioritic gabbro. Several % fine grained disseminated iron carbonate. Trace pyrite. 2% irregular quartz carbonate veins up to 1 centimetre wide sub parallel to core axis and with relatively sharp contacts. To 1% coarse grained leucoxene. up to 1% pyrite as clots to 6 millimetres diameter. Several % quartz grains.
24.33	25.83	As at 19.83.
25.83	27.33	Fine grained to medium grained dark green massive to highly foliated gabbro. Some fine grained very chlorite rich bands. 1% leucoxene. Trace pyrite. 2 to 3% quartz carbonate veins at various angles to core and commonly highly contorted with diffuse contacts. Although highly foliated in places, rock is quite competant.
27.33	28.83	Similar to above but generally quite massive.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139216	21.33	22.83	1.50	TR	-	.020	
FX139217	22.83	24.33	1.50	TR	-	.080	
FX139218	24.33	25.83	1.50	TR	-	.085	
FX139219	25.83	27.33	1.50	TR	F45	.055	
FX139220	27.33	28.83	1.50	TR	-	.020	
FX139221	28.83	30.33	1.50	TR	-	.020	
FX139222	30.33	31.83	1.50	TR	-	.020	
FX139223	31.83	33.33	1.50	TR	-	.000	
FX139224	33.33	34.83	1.50	TR	-	.015	
FX139225	34.83	36.33	1.50	TR	-	.010	
FX139226	36.33	37.83	1.50	TR	-	.040	
FX139227	37.83	39.33	1.50	TR	-	.030	
FX139228	39.33	40.83	1.50	TR	F48	.010	
FX139229	40.83	42.33	1.50	TR	-	.010	
FX139230	42.33	43.83	1.50	TR	-	.010	
FX139231	43.83	45.33	1.50	TR	-	.005	
FX139232	45.33	46.83	1.50	TR	-	.000	
FX139233	46.83	48.33	1.50	TR	-	.000	
FX139234	48.33	49.83	1.50	TR	-	.000	
FX139235	49.83	51.33	1.50	TR	-	.000	
FX139236	51.33	52.83	1.50	TR	-	.045	
FX139237	52.83	54.33	1.50	TR	F51	.000	
FX139238	54.33	55.83	1.50	TR	-	.030	
FX139239	55.83	57.33	1.50	TR	-	.010	
FX139240	57.33	58.83	1.50	TR	-	.030	

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

FROM Metric	TO Metric	
28.83	31.83	Medium grained to coarse grained massive and as at 25.83 but without chlorite rich shears. There appears to be a cyclicity to the variations in grain size, indicating possible multiple internal invection and subsequent crystal settling within most of the previous sample intervals.
31.83	33.33	As 28.83 with 10% veins to 7 centimetres wide
33.33	39.33	As 28.83 with 2 to 3% quartz carbonate veins.
39.33	40.83	Predominantly very fine grained chlorite rich equivalent of gabbro as above. It is quite probable that much of the fine grained material here and elsewhere is fine grained cataclastite. The texture is really quite odd. 1 to 2% coarse grained leucoxene. Several % quartz grains predominantly in fine grained chloritic material. 4% quartz carbonate veins up to 3 centimetres wide and parallel to foliation. Trace pyrite. One 3 centimetre wide band of black pseudo-tachylite?.
40.83	42.33	Fine grained to medium grained, massive, dark green. Slightly soft. Up to 1% leucoxene. chloritic. Trace pyrite. Several % disseminated quartz grains. 8% quartz carbonate veins up to 9 centimetres wide with sharp to diffuse contacts and at various angles to core.
42.33	45.33	As 40.83 with 3 to 4% veins up to 1 centimetre wide.
45.33	49.83	As above. Slightly fresher and harder.
49.83	51.33	Medium grained to coarse

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

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

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

FROM Metric	TO Metric	
		grained, massive, chloritic gabbro. 1% quartz carbonate veins to 3 millimetres wide up to 1% leucoxene. Trace pyrite.
51.33	52.83	As above but ranges from fine grained to coarse grained slightly dioritic phase toward bottom of sample. One 1.5 centimetre wide quartz vein with slightly pyritic leucocratic alteration envelope 2 centimetres wide on one side of vein.
52.83	54.33	As above but with 15 centimetre wide chlorite rich shear containing 10% iron carbonate as crystals up to 2 millimetres diameter. Shear is competant. Grain size is extremely variable. 8% quartz carbonate veins mainly as one 7 centimetre wide vein in contact with shear zone. Note: samples 231 to 240 come from a box that was dropped.
54.33	57.33	Medium grained to coarse grained dioritic massive gabbro with 1 to 2% quartz carbonate veins, trace pyrite. Pervasive fine grained disseminated iron carbonate.
57.33	58.83	Fine grained to medium grained massive dioritic gabbro with 5% diffuse leucocratic alteration zones to 3 centimetres wide with minor disseminated pyrite.
58.83	65.32	DIORITE Similar to above gabbro but medium grained and essentially dioritic. 3 to 4% disseminated quartz to 3 millimetres diameter. 3% leucocratic alteration zones to 2 centimetres wide.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139241	58.83	60.24	1.41	TR	-	.020	
FX139242	60.24	61.08	.84	3	-	.250	
FX139243	61.08	62.60	1.52	TR	-	.010	
FX139244	62.60	64.10	1.50	TR	-	.000	

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
	60.24	61.08 As above but 30% leucocratic alteration zones to 4 centimetres wide trending at various angles to core. 2 to 3% fine grained disseminated pyrite occuring mainly in the leucocratic alteration zones.	FX139245	64.10	65.32	1.22	TR	-	.040	
	61.08	64.10 Becoming fine grained.								
	64.10	65.32 Fine grained massive diorite similar to above. 2% quartz grains to 3 millimetre diameter. Up to 1% disseminated pyrite.								
65.32	67.70	SCHIST								
		Highly altered, Sheared and brecciated competant equivalent of diorite. Pinkish brown, weak to moderate pervasive hematitization. 3 to 4% quartz carbonate veins to 1 centimetre wide. Appears to be pervasive quartz flooding. Rock is only weakly foliated. 3 to 4% fine grained disseminated pyrite as crystals to 3 millimetres diameter.	FX139246	65.32	66.57	1.25	4	-	.300	
			FX139247	66.57	67.70	1.13	TR	-	.155	
	66.57	67.70 Up to 3 % quartz as irregular masses to 1 centimetre in diameter. Trace possible massive tourmaline in quartz vein.								
67.70	68.67	DIKE								
		Dark gray massive probable dike. 20% disseminated iron carbonate crystals to 2 millimetres diameter. Up to 1% fine grained pyrite.	FX139248	67.70	68.67	.97	TR	-	.035	
68.67	71.70	SCHIST								
		Gray green sericite schist.	FX139249	68.67	69.50	.83	TR	-	.140	

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

FROM Metric	TO Metric	
68.67	69.50	Highly brecciated. Flooded with quartz and iron carbonate. Injected with 20 % irregular quartz iron carbonate veins. 5% black streaks of tourmaline. Up to 1% fine grained disseminated pyrite. trace chalcopyrite. 15 to 20% iron carbonate.
69.50	69.68	Massive bull quartz. 10% iron carbonate as discrete masses to 5 millimetres wide.
69.68	70.65	As 68.67 but has an overall pink tint. 1% massive tourmaline streaks.
70.65	71.70	Weakly foliated slightly altered fine grained to medium grained rock. Trace pyrite.
71.70	77.22	DIKE
		Fine grained massive light gray possible dike with 7% gray submetallic grains to 2 millimetres diameter which scratch a brown colour.
71.90	72.37	With chlorite rich zones. 15% quartz as veins to 3 centimetres wide. 8% variably disseminated pyrite as crystals to 2 millimetres.
72.37	73.50	Slight pinkish tint.
73.50	75.10	Fine grained medium gray dike material interlayered with dike material as above. Weakly foliated in places.
75.10	76.10	Fine grained light green massive dike with 3 to 4% violet brown phenocrysts to 3 millimetres diameter. 10% white quartz veins at various angles and up to 2 centimetres wide. Trace tourmaline. 5 to 6% disseminated pyrite to 2 millimetres diameter. At least

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139250	69.50	69.68	.18	TR	-	.050	
FX139251	69.68	70.65	.97	TR	-	.130	
FX139252	70.65	71.90	1.25	TR	-	.035	
FX139253	71.90	72.37	.47	8	-	.590	
FX139254	72.37	73.50	1.13	TR	-	.025	
FX139255	73.50	75.10	1.60	TR	-	.005	
FX139256	75.10	76.10	1.00	6	-	1.070	
FX139257	76.10	77.22	1.12	12	-	1.285	

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
		20% fine grained disseminated iron carbonate								
	76.10 77.22	Similar to above. Highly flooded with quartz and iron carbonate. 10 to 12% disseminated pyrite to 2 millimetres diameter.								
77.22	78.93	GABBRO								
		Fine grained to medium grained massive to very weakly foliated chloritic gabbro to dioritic gabbro. Trace pyrite, chalcopyrite. 3% quartz carbonate veins to 2 centimetres wide with diffuse contacts.	FX139258	77.22	78.17	.95	TR	-	.010	
			FX139259	78.17	78.93	.76	TR	-	.015	
	78.17 78.93	Similar to above. 12% diffuse quartz carbonate veins, highly contorted weakly brecciated. 2% submetallic dark gray mineral that has a brown streak. Up to 1% disseminated pyrite.								
78.93	79.39	DIKE								
		As at 76.10. Since contact with gabbro is diffuse, it is likely that much of the rock termed dike between 71.9 and here is simply a highly altered gabbro or diorite. Most veins run sub parallel to core axis. 10 to 12% disseminated pyrite as crystals to 4 millimetres diameter.	FX139260	78.93	79.39	.46	12	-	1.010	
79.39	80.12	GABBRO								
		As 77.22.	FX139261	79.39	79.69	.30	TR	-	.050	
	79.39 79.69	Bull quartz vein running sub parallel to core axis.	FX139262	79.69	80.12	.43	7	F40	.455	
	79.69 80.12	Flooded with quartz and iron carbonate.								

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
		Weakly foliated in places. 5 to 7% disseminated pyrite.								
80.12	82.03	DIKE								
		As at 78.93. No tourmaline. 7 to 8% disseminated pyrite.	FX139263	80.12	80.82	.70	8	-	1.535	
		80.82 81.07 Quartz carbonate vein with inclusions of above rock. 2 to 3% fine grained disseminated pyrite.	FX139264	80.82	81.07	.25	3	-	.280	
			FX139265	81.07	82.03	.96	5	-	.900	
		81.07 82.03 Some unaltered sections of gabbro included within sample. 5% fine grained disseminated pyrite occurring primarily within the leucocratic altered material.								
82.03	82.34	GABBRO								
		Medium grained weakly foliated dioritic gabbro. 1 to 2% gray brown leucoxene.	FX139266	82.03	82.80	.77	4	-	.595	
82.34	82.80	DIKE								
		As at 80.12. 7% disseminated pyrite crystals to 3 to 4 millimetres diameter.								
82.80	86.86	SCHIST								
		Moderately foliated gabbro to dioritic gabbro flooded with high % quartz and fine grained disseminated iron carbonate. Appears to contain some sericite. Ranges in colour from medium gray to beige. Trace pyrite.	FX139267	82.80	84.09	1.29	TR	-	.015	
			FX139268	84.09	85.31	1.22	TR	-	.010	
			FX139269	85.31	86.86	1.55	TR	-	.010	

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

FROM Metric	TO Metric	
86.86	91.25	GABBRO Fine grained to medium grained weakly foliated gabbro. Fairly chloritic with a few chlorite rich shears to 2 centimetres wide. 15% quartz carbonate veins to 7 centimetres wide at various angles to core. trace pyrite. Pervasive fine grained disseminated iron carbonate. 88.36 89.86 2 to 3% quartz veins to 1.5 centimetres wide. Some diffuse leucocratic alteration zones. 89.86 91.25 Becomes dioritic and well foliated in lower half of sample. One 10 centimetre wide bull quartz vein at 90.1 with 15% iron carbonate. The well foliated dioritic section is weakly hematitized and contains 1 to 2% submetallic mineral that has brown streak.
91.25	92.75	DIORITE Moderately to well foliated diorite similar to lower section of above. 1% quartz carbonate veins to 8 millimetres wide with sharp contacts and parallel to foliation.
92.75	126.19	SCHIST Highly altered well foliated grunge. Moderately flooded with quartz. Slightly chloritic to moderately chloritic. Ranges from pinkish gray to light pinkish beige and is fairly hard. 10% boudinaged to weakly brecciated pink quartz carbonate veins to 8 millimetres wide.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139270	86.86	88.36	1.50	TR	-	.110	
FX139271	88.36	89.86	1.50	TR	-	.095	
FX139272	89.86	91.25	1.39	TR	-	.035	
FX139273	91.25	92.75	1.50	TR	F50	.000	
FX139274	92.75	94.25	1.50	TR	-	.030	
FX139275	94.25	95.17	.92	TR	-	.035	
FX139276	95.17	95.37	.20	2	-	2.615	
FX139277	95.37	96.45	1.08	TR	-	.320	
FX139278	96.45	96.85	.40	5	-	.595	
FX139279	96.85	98.35	1.50	TR	-	.035	

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

FROM Metric	TO Metric	
94.25	95.17	Fairly sericitic and hematitic. Trace pyrite. 15% quartz grains to 3 to 4 millimetres diameter.
95.17	95.37	11 centimetre wide quartz vein with 3 to 4 centimetres wide pyritic sericite schist margins. 1 to 2% pyrite mainly with in margins.
95.37	96.45	Saturated with fine grained iron carbonate. Pink and white quartz carbonate veins highly boudinaged. Trace pyrite. Upper 20 cm' is porous and quite hematitic.
96.45	96.85	Hematitic quartz sericite schist with much carbonate. Up to 5% fine grained disseminated pyrite.
96.85	97.55	Intensely quartz saturated boudinaged and brecciated pink grunge containing 30% black chlorite with in contorted and brecciated bands to several centimetres wide.
97.55	97.73	Very limonitic porous schist. Trace pyrite.
97.73	98.35	As 96.85.
98.35	100.26	Sericitic, chloritic, intensely foliated competant schist. slightly hematitic in places. 25% boudinaged pinkish quartz iron carbonate veins to 3 centimetres wide with generally sharp contacts and sub parallel to foliation. The colour ranges from pinkish brown to light green. Pervasive fine grained disseminated iron carbonate. Trace pyrite.
100.26	101.76	Porous limonitic schist. Limonite is very pervasive and has masked most former mineralogy. Schist is moderately fissile.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139280	98.35	100.26	1.91	TR	F57	.030	
FX139281	100.26	101.76	1.50	TR	-	.020	
FX139282	101.76	103.30	1.54	TR	-	.265	
FX139283	103.30	104.70	1.40	TR	-	1.100	
FX139284	104.70	105.02	.32	1	-	1.790	
FX139285	105.02	105.92	.90	3	-	.150	
FX139286	105.92	106.50	.58	2	-	2.045	
FX139287	106.50	107.70	1.20	TR	-	.000	
FX139288	107.70	108.90	1.20	TR	-	.000	
FX139289	108.90	110.40	1.50	TR	-	.140	
FX139290	110.40	111.90	1.50	TR	-	.000	
FX139291	111.90	113.40	1.50	TR	F50	.030	
FX139292	113.40	114.41	1.01	TR	-	.030	
FX139293	114.41	115.33	.92	2	-	.420	
FX139294	115.33	115.97	.64	TR	-	.410	
FX139295	115.97	116.32	.35	TR	-	1.380	
FX139296	116.32	117.46	1.14	TR	-	.950	
FX139297	117.46	118.51	1.05	TR	-	.035	
FX139298	118.51	119.57	1.06	TR	-	.380	
FX139299	119.57	120.32	.75	TR	-	.905	
FX139300	120.32	121.32	1.00	1	-	.208	
FX139301	121.32	122.75	1.43	TR	-	.130	
FX139302	122.75	123.91	1.16	3	-	4.334	
FX139303	123.91	124.21	.30	1	-	2.230	
FX139304	124.21	124.93	.72	2	-	2.955	
FX139305	124.93	126.19	1.26	TR	F50	.070	

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

FROM Metric	TO Metric	
		Occasional hematite stringers to a few millimetres wide. Up to 1% pyrite as oxidized crystals to 4 millimetres diameter. 2 to 3% quartz carbonate veins. Some disseminated iron carbonate.
101.76	103.30	As above with 12% quartz carbonate veins to 5 centimetres wide at various angles to core. Occasional oxidized pyrite crystals to 8 millimetres diameter. Trace possible tourmaline as thin stringers in some quartz veins.
103.30	104.70	Very badly broken, soft, porous and occasionally vuggy, intensely hematitized schist. Some core badly ground up. 2 to 3% irregular quartz carbonate veins to 4 centimetres wide. Occasional oxidized pyrite crystals to 8 millimetres diameter. Minor disseminated iron carbonate. 10% chlorite overall.
104.70	105.02	Similar to above but not badly broken. 40% quartz iron carbonate as one 12 centimetre wide vein. To 1% pyrite as oxidized crystals to 4 millimetres diameter in schist.
105.02	105.92	Quartz iron carbonate vein with a brecciated appearence. 5 to 10% black irregular stringer like very fine grained material variably distributed. Up to 1% very fine grained needles of tourmaline to several millimetre long. The vein has a pegmatitic appearence due to presence of irregular masses and stringers of iron

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

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

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

FROM Metric	TO Metric	
		carbonate. 1 to 3% pyrite as cubic to slightly octahedral crystals to 5 millimetres diameter which are variably distributed.
105.92	106.50	As at 104.70. 50% quartz carbonate veins mainly as one 25 centimetre wide vein. 2% pyrite as octahedral crystals to 7 millimetres diameter within schist. Pyrite is not oxidized.
106.50	107.70	Rather fissile soft and porous limonitic schist with irregular stringers of hematite sub parallel to parallel with foliation. Very fine grained iron carbonate is pervasive. Appears to have much sericite. Trace pyrite.
107.70	108.15	As at 98.35. Up to 60% boudinaged and brecciated pinkish veins. To 1% folded bands of massive black tourmaline. Trace pyrite.
108.15	108.90	Pink competant quartz sericite schist which is quite hard. Up to 1% quartz carbonate veins. Pervasive iron carbonate. Trace leucoxene.
108.90	110.40	As above with 10% boudinaged to brecciated pinkish quartz carbonate veins to 10 centimetres wide. Trace black stringers of tourmaline in one vein. Up to 1% pyrite as occasional crystals to 8 millimetres diameter.
110.40	111.90	As above but not as highly foliated. 5% boudinaged quartz carbonate veins.
111.90	113.40	As above. Well folisted. 2 to 3% quartz

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

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

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

FROM Metric	TO Metric	
		carbonate veins at various angles to core and to 1.5 centimetres wide.
113.40	114.41	As above. Up to 1% fine grained disseminated pyrite. Slightly more bleached than above.
114.41	115.33	Similar to above. 15% white quartz carbonate veins to 9 centimetres wide at various angles to foliation. Trace possible graphite as a few blebs to 3 millimetres diameter along one vein margin. Trace hard bluish black mineral as irregular blebs to 5 millimetres diameter. 1 to 2% pyrite as crystals to 3 millimetres diameter.
115.33	115.97	White quartz vein with minor disseminated iron carbonate and 30% inclusions limonitic and hematitic schist. Trace tourmaline as very fine grained needles. Up to 1% pyrite as crystals to 3 millimetres diameter within schist inclusions.
115.97	116.32	Hematitic schist with 8 centimetre wide quartz carbonate vein. Up to 1% pyrite as crystals to 3 millimetres diameter. Schist is highly contorted and injected by smaller contorted veins.
116.32	117.46	White quartz vein with 20% irregular and contorted inclusions of schist and chlorite stringers. Inclusions of schist to 10 centimetres diameter and chlorite stringers generally a few millimetres wide. Minor iron carbonate occurring

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

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

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

FROM Metric	TO Metric	
		mainly within schist inclusions. trace very fine tourmaline. Up to 1% pyrite as crystals to 3 millimetres diameter within schist inclusions.
117.46	118.51	Bull quartz vein with minor chlorite or schist inclusions.
118.51	119.57	As 116.32.
119.57	120.32	As above but few schist inclusions. 20% black diffuse to sharp chloritic stringers to 1 centimetres wide. Stringers highly contorted and commonly rather short
120.32	121.32	Contorted brecciated schist with 45% quartz veins to 20 centimetres wide. Up to 1% pyrite as crystals to 5 millimetres diameter.
121.32	122.75	Pink quartz sericite schist. Weakly to moderately foliated. Competant. 7% white quartz carbonate veins to 8 centimetres wide and at various angles to foliation. Up to 1% disseminated pyrite to 3 millimetres diameter.
122.75	123.91	Light green to pink highly foliated quartz sericite schist. 25% highly boudinaged pink and white quartz carbonate veins. Entire section highly contorted. 2 to 3% disseminated pyrite as crystals to 4 millimetres diameter.
123.91	124.21	White quartz carbonate vein with 15% black chloritic stringers running at various angles. Minor hematite as diffuse stringers to a few millimetres wide. About 1% pyrite as crystals to 3

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

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

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
		millimetres associated with chloritic stringers.								
	124.21	124.93 Highly foliated quartz sericite schist ranging from orange brown to pink. 15% quartz carbonate veins to 6 centimetres wide. 2% black chloritic contorted stringers to 1 centimetre wide. 1 to 2% pyrite as crystals to 4 millimetres diameter.								
	124.93	126.19 As at 121.32.								
126.19	127.60	DIORITE								
		Very weakly foliated equivalent of above schist. Is massive and medium grained and highly bleached moderately hematitized. Overall pink to light green colour essentually the same as schist. Pervasive iron carbonate. 1 to 2% quartz carbonate veins to 1 centimetre wide. 1 to 2% black mineral disseminated and to 1 millimetre diameter. Trace pyrite.	FX139306	126.19	127.60	1.41	TR	-	.010	
127.60	130.57	SCHIST								
		Highly foliated equivalent of above and identical to that at 124.93. Pervasive iron carbonate. Up to 2% veins. No black mineral as above.	FX139307	127.60	129.07	1.47	TR	-	.010	
			FX139308	129.07	130.57	1.50	TR	-	.040	
130.57	133.54	DIORITE								
		As at 126.19. No black mineral. 3% quartz carbonate vein as one vein 3 centimetres wide trending sub parallel to core axis.	FX139309	130.57	132.04	1.47	TR	-	.075	
			FX139310	132.04	133.54	1.50	TR	-	.070	

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

FROM Metric	TO Metric	
	132.04	133.54 More foliated.
133.54	155.78	SCHIST
		As at 127.60.
	135.76	137.26 Intensely foliated porous limonitic and hematitic schist. Rather fissile and moderately broken up. Occasional thin muddy seams.
	137.26	138.76 As above with 10% quartz carbonate veins at various angles.
	138.76	140.26 As at 126.19 with trace fuchsite or light green chlorite. Trace pyrite.
	140.26	141.76 As above. Pink to light green in colour. Up to 1% fine grained blue black mineral occurring in two 20 centimetre wide zones. 4 to 5% boudinaged quartz carbonate veins to 2 centimetres wide and parallel to foliation.
	141.76	143.26 As above. To 1% fine grained dark blue black mineral distributed within several zones.
	143.26	144.76 As above. No blue black mineral. 2 to 3% quartz carbonate veins.
	144.76	146.26 As above. 25% boudinaged pink quartz carbonate veins with contacts that are frequently difficult to diffine. Trace possible tourmaline stringers to 1 millimetre wide sub parallel to core axis. Up to 1% transluscent soft olive green mineral filling voids to 4 millimetres by 1.5 centimetres. Pervasive

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139311	133.54	135.04	1.50	TR	F40	.000	
FX139312	135.04	135.76	.72	TR	-	.020	
FX139313	135.76	137.26	1.50	TR	F35	.085	
FX139314	137.26	138.76	1.50	TR	-	.000	
FX139315	138.76	140.26	1.50	TR	-	.000	
FX139316	140.26	141.76	1.50	TR	F22	.000	
FX139317	141.76	143.26	1.50	TR	-	.000	
FX139318	143.26	144.76	1.50	TR	-	.000	
FX139319	144.76	146.26	1.50	TR	-	.000	
FX139320	146.26	147.76	1.50	TR	F30	.000	
FX139321	147.76	149.26	1.50	TR	-	.000	
FX139322	149.26	150.76	1.50	TR	-	.000	
FX139323	150.76	151.83	1.07	TR	-	.010	
FX139324	151.83	152.73	.90	TR	-	.000	
FX139325	152.73	154.23	1.50	TR	F42	.000	
FX139326	154.23	155.78	1.55	TR	-	.000	

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

FROM Metric	TO Metric	
		fine grained iron carbonate. Trace pyrite and light green chlorite.
146.26	147.76	As above. Trace fine grained blue black mineral disseminated within one 20 centimetre wide zone.
147.76	149.26	Similar to above but only 2% well defined quartz carbonate veins to 1 centimetre wide and sub parallel to foliation. 1 to 2% fine grained blue black mineral disseminated throughout. Has an overall violet hue.
149.26	150.76	Similar to above. 25% brecciated pink quartz carbonate veins to 1.5 centimetres wide. 3 to 4% light green chlorite or very fine grained diffuse fuchsite within one 30 centimetre wide zone.
150.76	151.83	Violet pink schist with 5% boudinaged brecciated pink quartz carbonate veins. Minor light green chlorite.
151.83	152.73	Brecciated pink quartz carbonate vein. Minor chlorite stringers. Trace pyrite. Trace black stringers of tourmaline to 2 millimetres wide and trending sub parallel to core axis.
152.73	154.23	As 149.26.
154.23	155.78	As above. Up to 1% contorted black stringers of tourmaline or silicified chlorite or possible fine grained disseminated fuchsite.

155.78 161.84 DIORITE

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

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

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

FROM Metric	TO Metric	
		Massive medium grained very slightly foliated diorite. Has a very slight pink tint due to minor disseminated hematite. 2 to 3% diffuse to sharply defined pink leucocratic alteration veins to 1.5 centimetres wide at various angles to core. Trace pyrite. Pervasive disseminated iron carbonate.
157.28	158.78	Massive.
160.28	161.84	Slightly foliated in places. 2 to 3% pink quartz carbonate veins sub parallel to core axis. Trace stringers of massive tourmaline to 2 millimetres wide. Foot of hole.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139327	155.78	157.28	1.50	TR	-	.000	
FX139328	157.28	158.78	1.50	TR	-	.000	
FX139329	158.78	160.28	1.50	TR	F46	.000	
FX139330	160.28	161.84	1.56	TR	-	.000	

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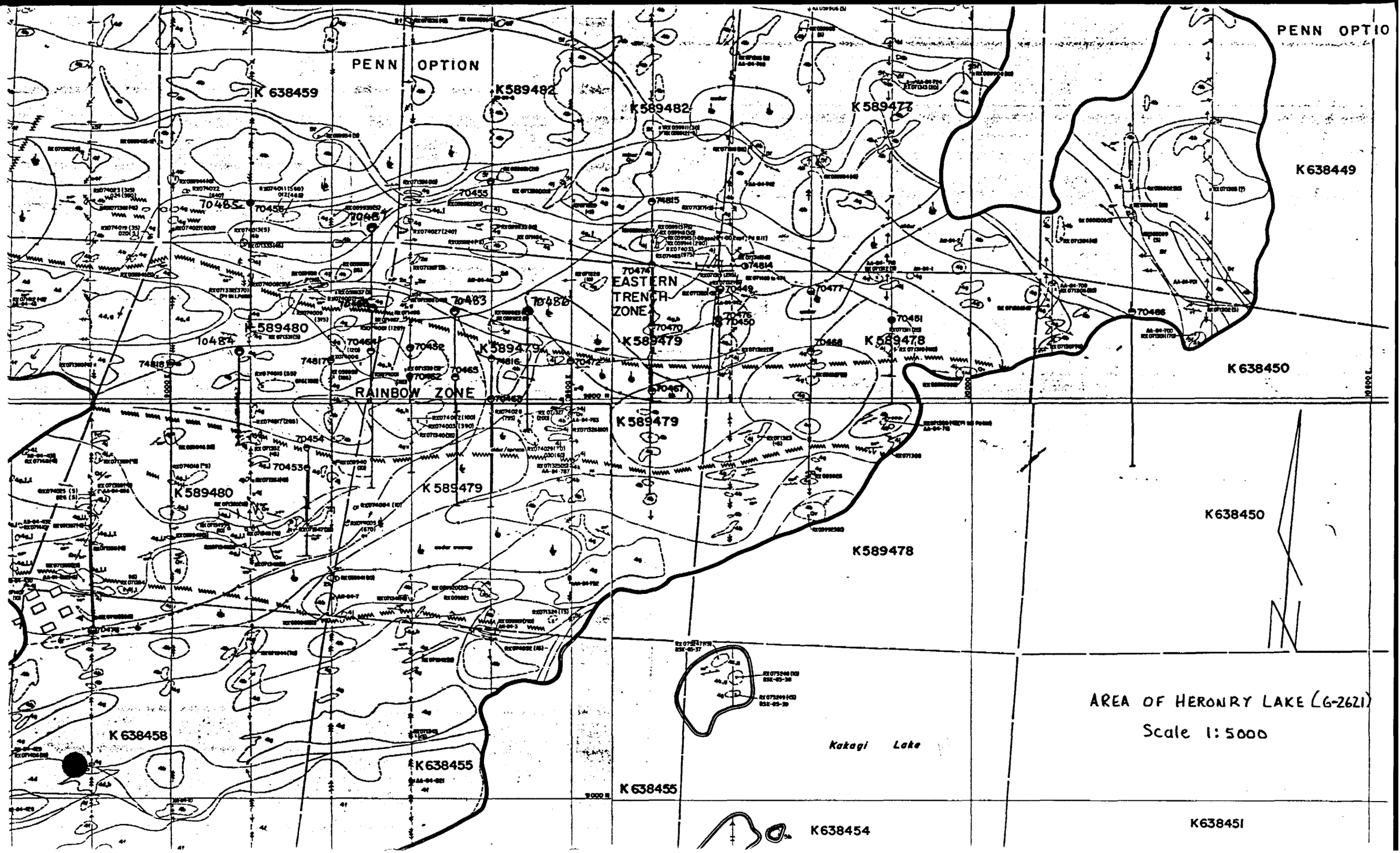
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AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

FIELD EXPLOR .N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9415.0 Metric	NTS SHEET #	: 52-F-4	STARTED	: 03-10-85
PROPERTY	: Penn Option	DEPARTURE	: 9170.0 Metric	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70453-0	ELEVATION	: 1368.0 Metric	PROVINCE	: Ontario	MEASUREMENTS	: Metric
AZIMUTH	: 175.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: J.K.Smit 300
DEPTH	: 149.4 Metric	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 20 m west and 185 m north of post 2.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
3.00	175.0	-45.00	51.80	175.0	-44.00	100.60	175.0	-44.00	143.20	175.0	-43.00

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

FROM Metric	TO Metric	
.00	1.00	OVERBURDEN
1.00	4.37	DIORITE Massive medium grained diorite to gabbroic diorite. Not foliated to any degree. 2% quartz veins to 1 centimetre wide at various angles to core with sharp contacts. Feldspar has a light green tint. Trace pyrite. Pervasive iron carbonate to 10%. 2.74 4.37 Fine grained massive diorite or possible a dike. Medium gray in colour. Becomes medium grained massive diorite within lower 15 centimetres. 4% quartz veins to 5 centimetres wide. Trace pyrite.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139331	1.00	2.74	1.74	TR	-	.010	
FX139332	2.74	4.37	1.63	TR	-	.000	

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

FROM Metric	TO Metric	
4.37	4.71	SCHIST Highly sheared limonitic schist that is badly broken up. 10% quartz veins parallel to foliation.
4.71	23.09	DIORITE Medium grained massive diorite. Texture is slightly clotty with clots of aggregated feldspar crystals and clots of chloritic mafic minerals, all up to 8 millimetres diameter. 2% hematitic alteration veinlets to 2 centimetres wide and with diffuse contacts. 5.97 11.97 Medium grained to coarse grained massive diorite. Feldspars are felted. 1% quartz carbonate veins to 4 millimetres wide. 11.97 13.47 As above with some fine grained phases. 2 to 3% diffuse leucocratic alteration zones that are irregular and to 2 centimetres wide. 13.47 14.97 As 5.97. 14.97 17.97 As 11.97. 17.97 19.47 Fine grained gray diorite. Massive to weakly foliated. 10% pink to gray quartz carbonate veins. White veins to 6 centimetres wide with sharp contacts and at various angles to core. Trace fine grained long needles of tourmaline in some veins. One 3 centimetre wide black slightly porphyritic dike. Minor limonite in a sheared narrow section on both sides of a white quartz vein. Trace pyrite. 19.47 20.27 Fine grained, well foliated diorite with 40% quartz carbonate veins to 17 centimetre wide

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139333	4.37	5.97	1.60	TR	F38	.000	
FX139334	5.97	7.47	1.50	TR	-	.000	
FX139335	7.47	8.97	1.50	TR	-	.000	
FX139336	8.97	10.47	1.50	TR	-	.000	
FX139337	10.47	11.97	1.50	TR	-	.000	
FX139338	11.97	13.47	1.50	TR	-	.020	
FX139339	13.47	14.97	1.50	TR	-	.000	
FX139340	14.97	16.47	1.50	TR	-	.000	
FX139341	16.47	17.97	1.50	TR	-	.000	
FX139342	17.97	19.47	1.50	TR	-	.010	
FX139343	19.47	20.27	.80	TR	F45	.040	
FX139344	20.27	21.59	1.32	TR	-	.000	
FX139345	21.59	23.09	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		with sharp to diffuse contacts and generally sub parallel to foliation. Trace pyrite as grains to 4 millimetres diameter mainly at one side of major vein and within slightly hematitic schist.
20.27	21.59	Fine grained, massive to weakly foliated diorite. 1 to 2% narrow pink quartz carbonate veins. Trace pyrite. Pervasive very fine grained iron carbonate.
21.59	23.09	As above. Slightly hematitic.
23.09	26.00	SCHIST
		Highly foliated to slightly foliated fine grained diorite with disseminated hematite giving it a pink tint. up to 1% disseminated pyrite as crystals to 3 millimetres.
23.09	23.72	White to light pink quartz carbonate veins interbedded with 20% highly foliated hematitic schist with 1 to 2% pyrite as crystals to 3 millimetres diameter within schist. Iron carbonate occurs as 5% inclusions within quartz veins. Minor limonitic inclusions of schist.
23.72	24.71	Brecciated and boudinaged quartz carbonate veins of overall pink colour. 2 to 3% chloritic stringers. 1 to 2% schist inclusions. Trace pyrite.
24.71	25.10	40% boudinaged quartz carbonate veins interbedded with 60% chloritic black altered diorite. trace pyrite.
25.10	26.00	One quartz vein with iron carbonate margins

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139346	23.09	23.72	.63	2	-	.705	
FX139347	23.72	24.71	.99	TR	-	.235	
FX139348	24.71	25.10	.39	TR	-	.060	

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

FROM Metric	TO Metric	
		and 2% tourmaline. Vein is 5 centimetres wide and perpendicular to foliation.
26.00	78.08	DIORITE
		Fine grained to medium grained massive to very weakly foliated. Slight pink tint due to hematite. trace pyrite. Pervasive very fine grained iron carbonate. Up to 1% pink quartz carbonate veins to 8 millimetres wide.
27.43	28.93	As above but no hematite. Colour is gray green. 1 to 2% quartz carbonate veins at various angles to core.
28.93	30.43	Medium grained to fine grained felted massive diorite with an overall yellow green colour. Up to 1% pyrite as crystals to 3 millimetre diameter. 1% quartz carbonate veins to 7 millimetres wide at various angles to core. Between 29.13 and 29.33 rock is very porous and limonitic, reflecting a minor fault zone.
30.43	31.93	As above but feldspar lacks a yellow tint. Becoming fine grained toward the bottom.
31.93	36.43	Fine grained to medium grained massive gray green diorite. 3% pink alteration veinlets to 2 centimetres wide with rather diffuse contacts and at various angles to core. Up to 1% quartz carbonate veins to 5 millimetres wide and with sharp contacts. Trace pyrite.
36.43	39.43	Similar to above but more medium grained and slightly foliated in places. 10% combined pinkish leucocratic alteration veinlets and

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139349	26.00	27.43	1.43	TR	-	.010	
FX139350	27.43	28.93	1.50	TR	-	.030	
FX139351	28.93	30.43	1.50	TR	-	.085	
FX139352	30.43	31.93	1.50	TR	-	.000	
FX139353	31.93	33.43	1.50	TR	-	.025	
FX139354	33.43	34.93	1.50	TR	-	.000	
FX139355	34.93	36.43	1.50	TR	-	.000	
FX139356	36.43	37.93	1.50	TR	-	.000	
FX139357	37.93	39.43	1.50	TR	-	.000	
FX139358	39.43	40.93	1.50	TR	-	.000	
FX139359	40.93	42.08	1.15	TR	-	.040	
FX139360	42.08	42.95	.87	TR	-	.000	
FX139361	42.95	43.83	.88	TR	-	.005	
FX139362	43.83	44.43	.60	2	-	.030	
FX139363	44.43	45.26	.83	TR	-	.010	
FX139364	45.26	45.48	.22	1	-	2.468	
FX139365	45.48	46.32	.84	TR	F55	.015	
FX139366	46.32	47.82	1.50	TR	-	.000	
FX139367	47.82	49.32	1.50	TR	-	.020	
FX139368	49.32	50.82	1.50	TR	-	.325	
FX139369	50.82	52.32	1.50	TR	-	.000	
FX139370	52.32	53.82	1.50	TR	-	.000	
FX139371	53.82	55.32	1.50	TR	-	.000	
FX139372	55.32	56.82	1.50	TR	-	.000	
FX139373	56.82	58.17	1.35	2	-	.010	
FX139374	58.17	59.16	.99	TR	-	.095	
FX139375	59.16	60.66	1.50	TR	-	.005	

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

FROM Metric	TO Metric	
		quartz carbonate veins generally to 1 centimetre wide and at various angles to core
39.43	40.93	Similar to above but has a bleached appearence over a 30 centimetre section.
40.93	42.08	Medium grained massive gray green to pink brown massive diorite. 6% irregular quartz carbonate veins to 5 millimetres wide. Most veins dislocated. Trace tourmaline trace pyrite as crystals to 2 millimetres diameter.
42.08	43.83	Very weakly foliated medium grained light gray green diorite. 4% quartz carbonate veins. trace pyrite as crystals to 2 millimetres diameter.
43.83	44.43	Massive medium grained light gray emerald green diorite. Emerald green colour possible due to very fine grained disseminated fuchsite. 30% white quartz feldspar veins to 6 centimetres wide and with diffuse contacts. Veins at various angles to core. 1 to 2% disseminated pyrite crystals to 3 millimetres within diorite.
44.43	45.26	Similar to above but only 10% quartz carbonate veins and trace pyrite. trace black chlorite as stringers in one 8 centimetre wide quartz carbonate vein.
45.26	45.48	Quartz carbonate vein, sub parallel to weak foliation in diorite. Vein contains 10% black stringers of soft chlorite and hard silicified chlorite or massive tourmaline. About 1% pyrite grains to 3 millimetres diameter.
45.48	46.32	As at 44.43. Trace tourmaline in two 3

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139376	60.66	62.16	1.50	TR	-	.010	
FX139377	62.16	63.25	1.09	TR	-	.040	
FX139378	63.25	63.80	.55	TR	-	.005	
FX139379	63.80	64.68	.88	TR	-	.000	
FX139380	64.68	65.18	.50	TR	F35	.000	
FX139381	65.18	66.68	1.50	TR	-	.000	
FX139382	66.68	68.18	1.50	TR	-	.000	
FX139383	68.18	69.68	1.50	TR	-	.000	
FX139384	69.68	71.18	1.50	TR	-	.000	
FX139385	71.18	72.68	1.50	TR	-	.005	
FX139386	72.68	74.18	1.50	TR	-	.000	
FX139387	74.18	75.68	1.50	TR	-	.000	
FX139388	75.68	77.50	1.82	TR	-	.010	
FX139389	77.50	78.08	.58	TR	-	.000	

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

FROM Metric	TO Metric	
		centimetre wide quartz carbonate veins. Weakly to moderately sheared in places. Up to 1% fine grained disseminated pyrite.
46.32	47.82	Medium grained massive gray green diorite. 2% pink leucocratic alteration veinlets with diffuse contacts. 2% quartz carbonate veins to 2 centimetres wide. Trace pyrite. 8% cross cutting white alteration veinlets following possible unt pattern.
47.82	49.32	Bleached pinkish equivalent of above. May be finer grained.
49.32	50.82	Fine grained to medium grained medium gray to pinkish gray massive to very weakly foliated, slightly altered altered and slightly soft diorite. One 2 centimetre white quartz vein. 2% pink leucocratic alteration veinlets.
50.82	52.32	Similar to above. 1% quartz vein. 2% pink to white alteration veinlets. Trace pyrite as crystals to 3 millimetres diameter.
52.32	53.82	Medium grained medium gray massive slightly soft diorite. 1 to 2% pink alteration veinlets at various angles to core. Trace pyrite.
53.82	55.32	As above but minimal leucocratic alteration veins.
55.32	56.82	As above. Has a slightly more pistachio green tint.
56.82	58.17	As above. Has a strong pistachio green colour. Up to 1% pyrite to 2 millimetres diameter.
58.17	59.16	Lime green, fine grained to medium grained

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

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

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

FROM Metric	TO Metric	
		diorite. Some fuchsite present. 1 to 2% disseminated pyrite. 10% quartz as bull quartz veins to 6 centimetres wide with sharp to diffuse contacts.
59.16	60.66	As above but trace pyrite. 10% bull quartz veins to 5 centimetres wide trending sub parallel to core axis.
60.66	62.16	Fine grained to medium grained massive to weakly foliated light green to brownish gray diorite. Trace fuchsite. 5 centimetre quartz carbonate vein containing pyrite grains to 5 millimetres diameter. Trace pyrite.
62.16	63.25	Gray to medium gray green fine grained to medium grained massive to weakly foliated diorite. 3% leucocratic alteration veinlets to 1 centimetre wide with diffuse contacts and at various angles to core. Minor hematite along a few fractures. 2% bull quartz.
63.25	63.80	As above but with 60% white to pink quartz carbonate veins to 12 centimetres wide. trace acicular tourmaline. Up to 1% black chlorite stringers to 8 millimetres wide. Trace pyrite.
63.80	64.68	Moderate foliated medium grained pink green diorite. 1 to 2% quartz carbonate veins with sharp to diffuse contacts to 1 centimetre wide. Trace pyrite.
64.68	65.18	Pink gray foliated medium grained diorite. Up to 1% pyrite as crystals to 4 millimetres diameter. Moderately chloritic.

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

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

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

FROM Metric	TO Metric	
65.18	66.68	Massive to foliated medium grained gray to pinkish- gray diorite. 1% quartz carbonate veins. Trace pyrite.
66.68	68.18	Medium grained slightly foliated pistachio green diorite. Trace fuchsite. trace pyrite. Up to 2% quartz carbonate veinlets at various angles.
68.18	69.68	As above but more foliated and no fuchsite.
69.68	71.18	As above but essentially massive. Trace fuchsite.
71.18	72.68	Gray medium gray medium grained massive diorite. 5% irregular leucocratic alteration veinlets that are white to light green with diffuse contacts and to 1 centimetre wide. trace pyrite.
72.68	74.18	Fine grained to medium grained massive light gray to light gray green diorite. Trace fuchsite. 3% quartz carbonate veins to 2 centimetres wide and 2% leucocratic alteration veinlets. Trace pyrite.
74.18	75.68	Medium grained to coarse grained massive greenish gray. 1 to 2% quartz veins and alteration veinlets. Trace pyrite.
75.68	77.50	Similar to above but finer grained and slightly foliated. Trace leucoxene.
77.50	78.08	60% white quartz iron carbonate veins to 15 centimetres wide mixed with 40% fuchsitic diorite that ranges from weakly to highly foliated. Trace black needles of rutile? (hexagonal x- sections). Trace pyrite.

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

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

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
78.08	79.04	SCHIST								
		Highly foliated gray chloritic fine grained to medium grained diorite to gabbroic diorite. 25% wispy white leucocratic alteration veinlets to 6 millimetres wide and generally parallel to foliation. rock is slightly soft. Trace pyrite.	FX139390	78.08	79.04	.96	TR	F40	.000	
79.04	80.41	DIKE								
		Fine grained massive dark gray dike with diffuse contacts with enclosing schist. Trace quartz veins pyrite.	FX139391	79.04	80.41	1.37	TR	-	.000	
80.41	122.98	SCHIST								
		As at 78.08. One 3 centimetres quartz carbonate vein with trace fuchsite.	FX139392	80.41	80.96	.55	TR	-	.005	
			FX139393	80.96	82.12	1.16	TR	-	.500	
		80.96 82.15 Mixture of quartz carbonate veins and 30%	FX139394	82.12	83.65	1.53	TR	-	.010	
		variably foliated slightly fuchsitic	FX139395	83.65	85.15	1.50	TR	-	.000	
		chloritic diorite. 3% irregular stringers	FX139396	85.15	85.83	.68	TR	-	.005	
		and masses of hard black silicified	FX139397	85.83	86.11	.28	TR	-	.000	
		chlorite or massive tourmaline -rutile?.	FX139398	86.11	87.61	1.50	TR	-	.000	
		Trace acicular crystals of rutile? up to 1%	FX139399	87.61	88.82	1.21	TR	-	.000	
		pyrite mainly along the irregular vein	FX139400	88.82	88.99	.17	TR	-	.000	
		contacts.	FX139401	88.99	90.54	1.55	TR	-	.025	
		82.15 85.83 As 78.08 but up to 2% leucocratic alteration	FX139402	90.54	91.34	.80	TR	-	.000	
		veinlets. 2 to 3% quartz carbonate veins to	FX139403	91.34	92.70	1.36	TR	-	.000	
		1.5 centimetres wide and trending at various	FX139404	92.70	94.20	1.50	TR	-	.000	
		angles. Trace rutile or tourmaline	FX139405	94.20	95.70	1.50	TR	-	.000	
		crystals. Trace pyrite.	FX139406	95.70	97.20	1.50	TR	F32	.000	
		85.83 86.11 As at 80.96 but 50% schist in sample. trace	FX139407	97.20	98.47	1.27	TR	-	.000	
		pyrite. Up to 1% black irregular stringers.	FX139408	98.47	99.08	.61	TR	-	.000	

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

FROM Metric	TO Metric	
86.11	87.61	As at 82.15. 10% quartz carbonate veins to 6 centimetres wide.
87.61	88.82	As at 82.15.
88.82	88.99	Bull quartz vein.
88.99	90.54	Quite chloritic fine grained to medium grained highly to moderately foliated gabbro. 2 to 3% fine grained disseminated iron carbonate. 2% quartz carbonate veins to 1.5 centimetres wide with sharp to diffuse contacts parallel to foliation. Trace pyrite as crystals to 5 millimetres diameter.
90.54	91.34	As above. 5% veins. Trace fuchsite.
91.34	92.70	As above. 30% quartz carbonate veins with generally irregular sharp to diffuse contacts. Veins are to 10 centimetres wide. Trace fuchsite in some veins. Trace fine grained pyrite. trace chalcopyrite.
92.70	94.20	As at 90.54. No fuchsite.
94.20	95.70	As above. Up to 1% pyrite as grains to 5 millimetres diameter.
95.70	98.47	As above. 2 to 3% quartz carbonate veins.
98.47	99.08	70% white quartz carbonate veins to 15 centimetres wide with sharp to diffuse contacts and trending sub parallel to core axis. 30% of sample consists of schist as above. Up to 1% pyrite as crystals to 3 millimetres diameter.
99.08	100.62	Dark gray fine grained to medium grained highly foliated very chloritic sheared gabbro. Rock is easily scratched. 4% quartz carbonate veins to 5 centimetres wide. Trace pyrite to 3 millimetres diameter.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139409	99.08	100.62	1.54	TR	F25	.000	
FX139410	100.62	101.40	.78	TR	-	.000	
FX139411	101.40	101.98	.58	2	-	.000	
FX139412	101.98	103.48	1.50	TR	-	.000	
FX139413	103.48	104.98	1.50	TR	-	.170	
FX139414	104.98	106.48	1.50	TR	-	.000	
FX139415	106.48	107.98	1.50	TR	-	.000	
FX139416	107.98	109.48	1.50	TR	-	.000	
FX139417	109.48	110.98	1.50	TR	F40	.000	
FX139418	110.98	112.48	1.50	TR	-	.020	
FX139419	112.48	113.98	1.50	TR	-	.000	
FX139420	113.98	115.48	1.50	TR	-	.000	
FX139421	115.48	116.98	1.50	TR	-	.000	
FX139422	116.98	118.48	1.50	TR	F54	.005	
FX139423	118.48	119.98	1.50	TR	-	.000	
FX139424	119.98	121.48	1.50	TR	-	.000	
FX139425	121.48	122.98	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		Some fine grained disseminated iron carbonate.
100.62	101.40	As above. No quartz veins.
101.40	101.98	About 40% highly boudinaged white quartz carbonate veins to 3 centimetres wide and with sharp to diffuse contacts. Veins sub parallel to foliation which is sub parallel to core axis. 60% of sample is highly chloritic black highly foliated gabbro. 1 to 2% disseminated pyrite to 4 millimetres diameter within schist.
101.98	103.48	As at 99.08. Trace pyrite to 4 millimetres diameter.
103.48	109.48	As at 101.98. Trace pyrite to 4 millimetres diameter. Has a slightly talcose feel.
109.48	110.98	As above. Trace fine grained disseminated pyrite. Becoming more basic in composition. Possibly pyroxenite.
110.98	112.48	As above. 5 to 6% quartz iron carbonate veins to 3 centimetres wide at various angles to core and with sharp to diffuse contacts. Compositionally a pyroxenite to very mafic gabbro. Trace pyrite as crystals to 3 millimetres diameter. Has talcose feel and is quite easy to scratch. Quite competant. Weakly magnetic.
112.48	113.98	As above. 25% iron carbonate clots to 3 millimetres. 2 to 3% veins.
113.98	115.48	As above. Core slightly ground in places, with possibly 20 centimetres of lost core.
115.48	116.98	As at 112.48 but only 1% veins.

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

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

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

FROM Metric	TO Metric	
116.98	118.48	As above. One speck of chalcopyrite.
118.48	121.48	As at 112.48 becoming peridotitic.
121.48	122.98	Essentially a peridotite. 3% contorted quartz carbonate veins with sharp to diffuse contacts to 2 centimetres wide. Trace talc in the veins. 5 to 10% iron carbonate clots to 3 millimetres diameter.
122.98	149.35	PERIDOTITE
122.98	124.48	As above, slightly foliated. 10 to 15% iron carbonate grains.
124.48	125.98	As above. 1% quartz carbonate veins.
125.98	127.48	As above. 3 to 4% quartz carbonate veins. No obvious talc.
127.48	128.98	As above. Trace talc within carbonate veins
128.98	130.48	As above. To 1% light green talc in veins to 1 centimetre wide. highly foliated in places. 1 centimetre fault gouge at 130.01.
130.48	131.98	As at 124.48.
131.98	133.48	Highly foliated peridotite with 1 to 2% quartz carbonate veins to 1 centimetre wide parallel to foliation. Trace talc.
133.48	137.98	As above. 5 to 6% quartz carbonate veins that are highly contorted. To 1% light green talc in the carbonate veins. Trace pyrite as crystals to 4 millimetres diameter. up to 10% fine grained disseminated iron carbonate.
137.98	145.48	As above. 3 to 4% quartz carbonate veinlets, highly broken up and boudinaged. Trace talc. Trace fine grained

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139426	122.98	124.48	1.50	TR	-	.010	
FX139427	124.48	125.98	1.50	TR	-	.000	
FX139428	125.98	127.48	1.50	TR	-	.010	
FX139429	127.48	128.98	1.50	TR	-	.000	
FX139430	128.98	130.48	1.50	TR	-	.000	
FX139431	130.48	131.98	1.50	TR	-	.000	
FX139432	131.98	133.48	1.50	TR	F60	.005	
FX139433	133.48	134.98	1.50	TR	-	.000	
FX139434	134.98	136.48	1.50	TR	F42	.000	
FX139435	136.48	137.98	1.50	TR	-	.000	
FX139436	137.98	139.48	1.50	TR	-	.000	
FX139437	139.48	140.98	1.50	TR	-	.000	
FX139438	140.98	142.48	1.50	TR	-	.000	
FX139439	142.48	143.98	1.50	TR	-	.000	
FX139440	143.98	145.48	1.50	TR	-	.000	
FX139441	145.48	146.98	1.50	TR	F55	.000	
FX139442	146.98	149.35	2.37	TR	-	.000	

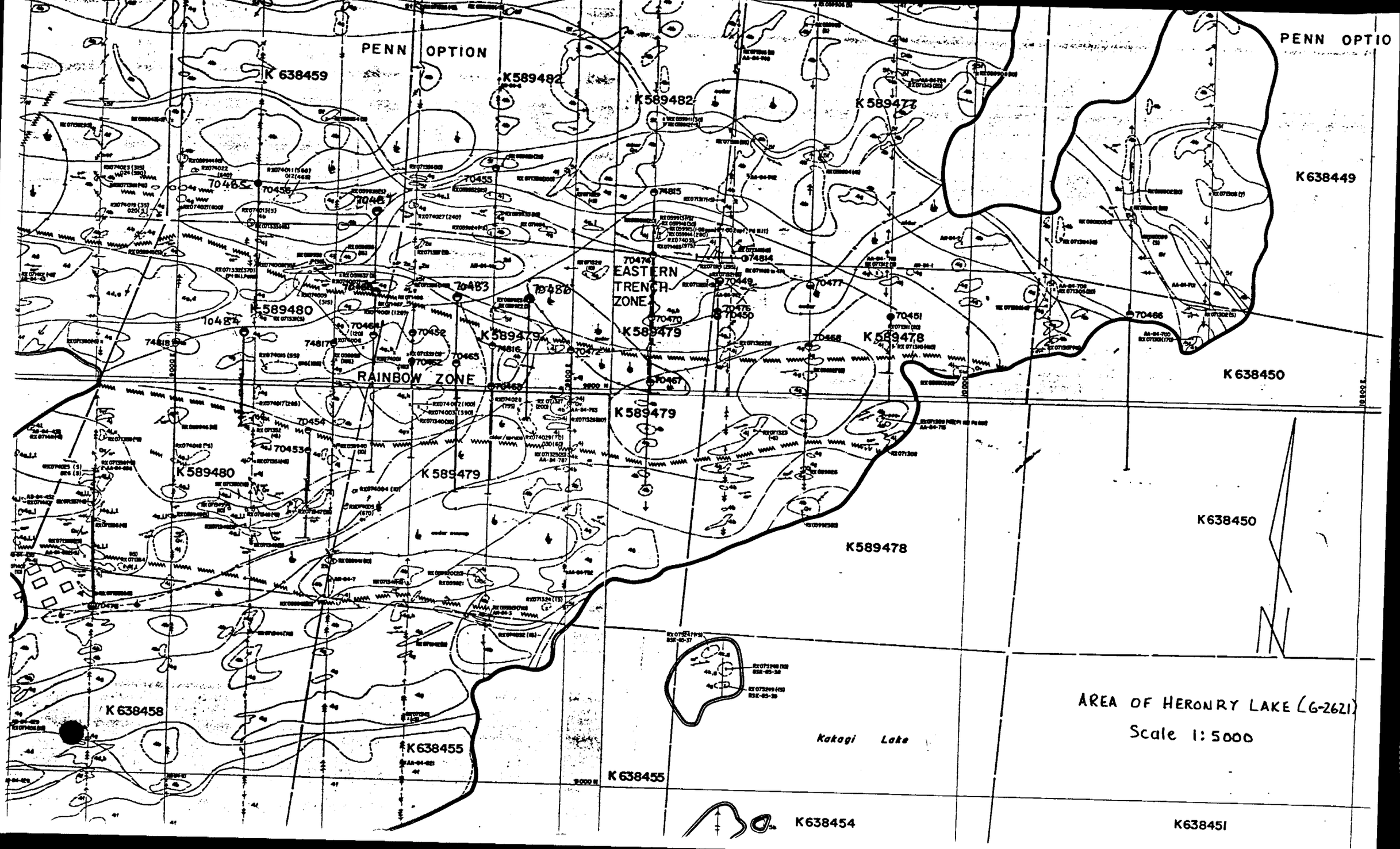
**********DESCRIPTION**********

FROM Metric	TO Metric	
		pyrite.
145.48	146.98	As above. 10% carbonate veins.
146.98	149.35	As at 137.98. Foot of hole.

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

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

Invalid Type#1 at line 8
Invalid Type#1 at line 14


PENN OPTION
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RAINBOW ZONE
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K638450
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Kakagi Lake
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K638454
K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

FIELD EXPLO N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9440.0 Metric	NTS SHEET #	: 52-F-4	STARTED	: 03-13-85
PROPERTY	: Penn Option	DEPARTURE	: 9165.0 Metric	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70454-0	ELEVATION	: 1365.0 Metric	PROVINCE	: Ontario	MEASUREMENTS	: Metric
AZIMUTH	: 175.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: J.K.Smit 300
DEPTH	: 106.7 Metric	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: Thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 25 m west and 210 m north of post 2.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
2.40	175.0	-45.00	54.90	175.0	-43.00	106.70	175.0	-43.00			

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

FROM Metric	TO Metric	
.00	1.77	OVERBURDEN
1.77	14.19	SCHIST Well foliated fine grained gabbro that might be considered basaltic to andesitic in appearence. Competent and slightly soft. Colour is dark gray. 1 to 2% orange white quartz carbonate veins to 6 millimetres wide that trend at various angles. Trace fine grained pyrite. Pervasive iron carbonate. Some limonitic fracture surfaces that are irregular and at various orientations. 3.27 4.77 Very similar to above but more medium grained and less foliated overall. 2 to 3% highly

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139443	1.77	3.27	1.50	TR	F34	.000	
FX139444	3.27	4.77	1.50	TR	-	.005	
FX139445	4.77	6.32	1.55	TR	F48	.020	
FX139446	6.32	6.73	.41	2	-	.195	
FX139447	6.73	7.54	.81	TR	-	.040	
FX139448	7.54	8.84	1.30	TR	-	.160	
FX139449	8.84	9.26	.42	TR	-	.040	
FX139450	9.26	9.74	.48	TR	-	.480	
FX139451	9.74	10.90	1.16	TR	F35	.035	
FX139452	10.90	11.63	.73	3	-	2.825	

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

FROM Metric	TO Metric	
		contorted orange white quartz carbonate veins. Up to 1% fine grained pyrite, occurring primarily within hematitic silicified alteration zone 5 centimetres wide.
4.77	6.32	Similar to above. Trace pyrite. Trace crenulated black chlorite veins to 1 millimetre wide trending sub parallel to core axis.
6.32	6.73	50% white quartz carbonate veins to 10 centimetres wide hosted by soft hematitic chloritic schist. Schist contains 1 to 2% pyrite as grains to 2 millimetres diameter. veins contain trace needles of black stringers of tourmaline. Some brecciation of narrower pinkish veins.
6.73	7.54	Variably foliated dark gray to green fine grained to medium grained gabbro. Injected by 40% boudinaged and highly brecciated orange brown to white quartz carbonate veins with sharp to diffuse contacts. Orange tint is probably caused by very fine grained disseminated hematite. Up to 1% disseminated pyrite to 2 millimetres diameter.
7.54	8.84	Similar to above but veining and hematitization are more pervasive, with only about 40% of sample as recognizable schist. At least two periods of veining, with white quartz carbonate veins being last set and trending perpendicular to core axis. Rock is really quite juiced-up.
8.84	9.74	Very similar to above but up to 10% schist. Up to 1% tourmaline or rutile needles in last

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139453	11.63	12.17	.54	3	-	3.945	
FX139454	12.17	13.77	1.60	TR	-	.010	
FX139455	13.77	14.19	.42	TR	-	.035	

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

FROM Metric	TO Metric	
		set of white quartz veins. 2 to 3% hard black irregular stringers of ? to 1 centimetre wide and highly contorted.
9.74	10.90	As at 6.73. Quite hematitic. Trace pyrite occurring mainly in one 2 centimetre wide zone within a brecciated orange brown vein.
10.90	12.17	Highly crenulated and boudinaged and broken up white quartz carbonate veins with sharp contacts. Veins trend sub parallel to core axis. 15% black very fine grained hard material as stringers to 5 millimetres wide. 5 to 10% highly foliated schist. 2 to 3% pyrite as crystals to 2 to 3 millimetres diameter and as irregular masses to 4 millimetres by 1 centimetre, all within schist or black stringer material.
12.17	13.77	Weakly to intensely hematitized fine grained to medium grained gabbroic schist. colour ranges from diffuse bands of medium green to purple brown to dark gray. 2 to 3% beige to pinkish beige quartz carbonate veins contorted and boudinaged and generally up to 1 centimetre thick. Trace very fine grained pyrite.
13.77	14.19	Two white quartz carbonate veins to 22 centimetres wide separated by a 10 centimetre band of schist. Trace black green long needles of hexagonally terminated rutile? up to 1% pyrite as grains to 4 millimetres diameter within schist.

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

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

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

FROM Metric	TO Metric	
14.19	33.01	GABBRO
		Fine grained to medium grained massive to slightly foliated, very competent and hard, medium green to gray rock. 2 to 3% pink to white quartz carbonate veins to 1.5 centimetres wide. Most veins have narrow leucocratic alteration halos around them. Trace pyrite.
16.21	16.51	Pinkish altered silicified slightly hematitized massive medium grained gabbro. Alteration possibly related to a 2 centimetres wide tourmaline rich quartz vein in middle of sample. 2 to 3% disseminated pyrite to 3 millimetres diameter in gabbro.
16.51	18.01	Massive medium grained medium green gabbro. 5 to 7% pinkish brown alteration envelopes associated with quartz iron carbonate veins. Veins and leucocratic alteration envelopes trend at all angles and most have diffuse contacts. Most veins -envelopes up to 1 centimetre wide. Trace pyrite. Pervasive very fine grained iron carbonate in gabbro.
18.01	19.51	As above but essentially fine grained.
19.51	21.01	As above but varies from fine grained to medium grained.
21.01	22.51	As above. Feldspar tends to be slightly clotty as diffuse masses up to 3 to 4 millimetres diameter.
22.51	24.01	As above. Slightly foliated. 5 to 6% quartz carbonate veins with associated pink alteration halos. One vein 4 centimetres wide and trending sub parallel to foliation.
24.01	25.51	As at 19.51.
25.51	27.01	Fine grained to medium grained massive

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139456	14.19	15.79	1.60	TR	-	.000	
FX139457	15.79	16.21	.42	TR	-	.010	
FX139458	16.21	16.51	.30	3	-	1.095	
FX139459	16.51	18.01	1.50	TR	-	.010	
FX139460	18.01	19.51	1.50	TR	-	.005	
FX139461	19.51	21.01	1.50	TR	-	.005	
FX139462	21.01	22.51	1.50	TR	-	.000	
FX139463	22.51	24.01	1.50	TR	F15	.010	
FX139464	24.01	25.51	1.50	TR	-	.010	
FX139465	25.51	27.01	1.50	TR	-	.000	
FX139466	27.01	28.51	1.50	TR	F32	.130	
FX139467	28.51	30.01	1.50	TR	-	.005	
FX139468	30.01	31.51	1.50	TR	-	.010	
FX139469	31.51	33.01	1.50	TR	-	.080	

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

FROM Metric	TO Metric	
		gabbro. 20% pink alteration splotches ranging from a few millimetres to 3 centimetres in diameter and with diffuse irregular margins. 1 to 2% true quartz carbonate veins. Trace pyrite.
27.01	28.51	As above. Slightly foliated. One 3 centimetre wide pinkish brown quartz carbonate vein with minor pyrite crystals to 3 millimetres diameter.
28.51	30.01	As at 25.51 but splotches are minimal. Most alteration as pink veinlets with diffuse margins. 5 centimetre wide limonitic alteration zone associated with minor quartz vein at 28.75. Narrow band (1 cm) of intense hematitization at 29.80.
30.01	33.01	Fine grained to medium grained massive dark gray gabbro. 10% pink alteration veinlets at all angles cross cutting each other. Veinlets are to 6 millimetres wide and generally have diffuse margins.
33.01	35.14	SCHIST
		Highly foliated fine grained to medium grained gabbro. Disseminated hematite forms 2 to 3%. 20 centimetre band of alteration and quartz carbonate veining at 33.90. Quartz carbonate vein with sharp contacts form 20%.
34.51	35.02	Highly foliated fine grained to medium grained gabbro. 7% pink white quartz carbonate veins to 4 millimetres wide cross cutting foliation. Trace pyrite.
35.02	35.14	Intensely hematitized schist mixed with 50%

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139470	33.01	34.51	1.50	TR	-	.000	
FX139471	34.51	35.02	.51	TR	F47	.000	
FX139472	35.02	35.14	.12	TR	-	.015	

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

FROM Metric	TO Metric	
		quartz carbonate veins to 7 millimetres wide. Trace pyrite.
35.14	52.20	GABBRO
		Massive to weakly foliated fine grained to medium grained gabbro. 3 to 4% pink alteration veinlets. Trace pyrite.
	36.70 38.20	As above but massive. Trace pyrite as crystals to 1.5 millimetres diameter.
	38.20 39.70	Massive medium grained gabbro with 10 to 15% diffuse pink alteration veinlets and splotches all having irregular orientation.
	39.70 41.20	Massive medium grained medium gray green gabbro with 2 to 3% pink alteration veinlets and 1 to 2% pink splotches to 4 millimetres diameter, all with diffuse margins. 1% true quartz carbonate veins to 8 millimetres wide.
	41.20 44.20	Massive medium grained gabbro. 3% irregular pink alteration splotches to 3 to 4 centimetres diameter. Up to 1% quartz carbonate veins. Trace pyrite.
	44.20 45.70	As above with 1% quartz carbonate veins and alteration veinlets.
	45.70 47.20	As above with 2 to 3% quartz carbonate veins and alteration veinlets.
	47.20 49.47	As at 44.20.
	49.47 49.88	Altered hematitized medium grained gabbro or diorite. Up to 1% disseminated pyrite. 2% white quartz carbonate veins to 9 centimetres wide.
	49.88 50.54	As at 38.20. Up to 1% fine grained

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139473	35.14	36.70	1.56	TR	-	.025	
FX139474	36.70	38.20	1.50	TR	-	.000	
FX139475	38.20	39.70	1.50	TR	-	.010	
FX139476	39.70	41.20	1.50	TR	-	.000	
FX139477	41.20	42.70	1.50	TR	-	.000	
FX139478	42.70	44.20	1.50	TR	-	.000	
FX139479	44.20	45.70	1.50	TR	-	.000	
FX139480	45.70	47.20	1.50	TR	-	.010	
FX139481	47.20	48.70	1.50	TR	-	.790	
FX139482	48.70	49.47	.77	TR	-	.000	
FX139483	49.47	49.88	.41	TR	-	3.140	
FX139484	49.88	50.54	.66	TR	-	.030	
FX139485	50.54	52.20	1.66	TR	-	.020	

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

FROM Metric	TO Metric	
		disseminated pyrite associated with alteration veinlets.
	50.54 52.20	As at 45.70. Becoming dioritic.
52.20	64.75	DIORITE
		Medium grained massive light green diorite. Up to 1% quartz carbonate veins, trace pyrite.
	53.70 54.45	3% bull quartz iron carbonate veins to 2 centimetres wide.
	54.45 54.65	Up to 2% quartz carbonate veins, up to 1% fine grained disseminated pyrite, trace chalcopyrite.
	56.15 57.65	Lower 40 centimetres slightly hematitized. Trace pyrite.
	57.65 59.15	Medium grained massive gray diorite becoming gray light green towards bottom. 1 to 2% quartz carbonate veins. No pink alteration veinlets. Trace pyrite.
	59.15 62.15	Medium grained massive lime green diorite. 1 to 2% white quartz carbonate veins to 1 centimetre wide. Pervasive very fine grained iron carbonate. Up to 1% white diffuse leucocratic alteration veinlets. Trace pyrite. Possible very fine grained fuchsite.
	62.15 64.75	As above with 1 to 2% fine grained disseminated pyrite.
64.75	65.27	SCHIST
		Highly foliated fine grained fuchsitic diorite. 5 to 7%

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139486	52.20	53.70	1.50	TR	-	.010	
FX139487	53.70	54.45	.75	TR	-	.010	
FX139488	54.45	54.65	.20	TR	-	.110	
FX139489	54.65	56.15	1.50	TR	-	.015	
FX139490	56.15	57.65	1.50	TR	-	.000	
FX139491	57.65	59.15	1.50	TR	-	.010	
FX139492	59.15	60.65	1.50	TR	-	.020	
FX139493	60.65	62.15	1.50	TR	-	.015	
FX139494	62.15	63.65	1.50	2	-	.100	
FX139495	63.65	64.75	1.10	TR	-	.000	
FX139496	64.75	65.27	.52	TR	F45	.025	

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

FROM Metric	TO Metric	
		diffuse white quartz carbonate veins parallel to foliation. Up to 1% black very fine grained massive stringers parallel to foliation. Trace pyrite.
65.27	78.60	DIORITE
		Fine grained foliated lime green diorite with 1 to 2% white quartz carbonate veins and trace pyrite.
	66.22 74.08	Medium grained massive diorite with lime to emerald green tint. pervasive fine grained iron carbonate possible to 3% fine grained fuchsite. 1% white quartz carbonate veins.
	74.08 75.07	As above with up to 1% fine grained pyrite to 1.5 millimetres diameter as diffuse white quartz carbonate veins.
	75.07 77.77	Medium gray massive medium grained to fine grained gabbroic diorite. 5 to 7% gray to white quartz carbonate veins and alteration veinlets at all angles, highly contorted with diffuse to sharp margins and up to 1.5 centimetres wide. Trace fine grained pyrite. trace fine grained leucoxene.
	77.77 78.60	Light emerald green moderately foliated fine grained to medium grained diorite ? with 10% white quartz veins and alteration veinlets to 2 centimetres wide with sharp to diffuse margins. All are highly contorted and trend at all angles. Fine grained disseminated fuchsite gives the rock its colour. Up to 1% fine grained disseminated pyrite. Trace leucoxene.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139497	65.27	66.77	1.50	TR	-	.000	
FX139498	66.77	68.27	1.50	TR	-	.010	
FX139499	68.27	69.77	1.50	TR	-	.000	
FX139500	69.77	71.27	1.50	TR	-	.000	
FX139501	71.27	72.77	1.50	TR	-	.000	
FX139502	72.77	74.08	1.31	TR	-	.030	
FX139503	74.08	75.07	.99	TR	-	.045	
FX139504	75.07	76.57	1.50	TR	-	.000	
FX139505	76.57	77.77	1.20	TR	-	.000	
FX139506	77.77	78.60	.83	TR	-	.010	

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

FROM Metric	TO Metric	
78.60	79.74	BRECCIA Fine grained lightly brecciated siliceous emerald green diorite ?. Rock is so highly altered that original texture is destroyed. 5 to 7% obvious white quartz carbonate veins to 1.5 centimetres wide with sharp margins and trending at various angles. trace tourmaline or rutile in one vein. 1 to 2% fine grained disseminated pyrite to 2 millimetres diameter. trace leucoxene. 79.20 79.74 As above but more highly brecciated and lightly sheared. 1 to 2% chloritic stringers to 1 millimetre wide. 1 to 2% pyrite as crystals to 3 millimetres diameter.
79.74	84.91	SCHIST Gray moderate brecciated schist injected by 35% white to light gray green wispy contorted brecciated veinlets of quartz carbonate to 1 centimetre wide and several centimetres long. trace pyrite. Quartz as one 1 centimetre wide vein sub parallel to core axis. 80.74 81.40 Intensely limonitic schist. Limonite obscures nearly all textures. Some hematite. Contact with above schist is very sharp. Schist is competant and relatively porous. Fairly chloritic. 81.40 82.10 Highly limonitic equivalent of schist at 79.74. Contact with underlying schist is sharp. 82.10 83.22 As at 79.74.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139507	78.60	79.20	.60	2	-	.540	
FX139508	79.20	79.74	.54	2	-	.090	
FX139509	79.74	80.74	1.00	TR	F30	.005	
FX139510	80.74	81.40	.66	TR	-	.025	
FX139511	81.40	82.10	.70	TR	-	.000	
FX139512	82.10	83.22	1.12	TR	-	.000	
FX139513	83.22	83.68	.46	TR	-	.005	
FX139514	83.68	84.91	1.23	TR	-	.000	

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
	83.22 83.68	Emerald green equivalent of above. 3 bull.								
	83.68 84.91	As at 79.74. 2% yellow clots of sericite to 3 millimetres diameter. Slightly fuchsitic.								
84.91 86.92		DIKE								
		Light gray, fine grained, massive intermediate dike. Sharp upper contact and diffuse lower contact. 3% bull quartz veins to 3 centimetres wide perpendicular to core axis. Trace rutile needles in veins. Trace pyrite as occasional crystals to 2 millimetres diameter.	FX139515	84.91	86.74	1.83	TR	-	.010	
			FX139516	86.74	86.92	.18	TR	-	.020	
	86.74 86.92	6 centimetre bull quartz vein and remainder is silicified very fine grained massive beige dike. Up to 1% disseminated pyrite in dike.								
86.92 106.68		DIORITE								
		As at 77.77. 2 to 3% yellow brown sericite as irregular clots to 3 millimetres diameter and with diffuse margins	FX139517	86.92	88.42	1.50	TR	-	.030	
			FX139518	88.42	89.92	1.50	TR	-	.010	
	88.42 89.92	As above but finer grained and weakly brecciated. 6% bull quartz iron carbonate veins. Trace rutile. Trace pyrite as crystals to 3 millimetres diameter.	FX139519	89.92	91.42	1.50	TR	-	.010	
			FX139520	91.42	91.94	.52	TR	-	.005	
			FX139521	91.94	92.39	.45	TR	-	.000	
			FX139522	92.39	93.86	1.47	TR	-	.010	
	91.94 92.39	60% bull quartz as veins to 3 centimetres wide and trending at various angles. Most is emerald green highly altered diorite. Trace pyrite.	FX139523	93.86	94.60	.74	TR	-	.025	
			FX139524	94.60	95.60	1.00	TR	-	.000	
			FX139525	95.60	96.32	.72	TR	-	.000	
			FX139526	96.32	97.00	.68	TR	-	.005	
	92.39 93.86	As at 77.77. Trace pyrite as crystals to 5 millimetres diameter.	FX139527	97.00	98.53	1.53	TR	-	.020	
			FX139528	98.53	99.77	1.24	TR	F40	.010	
	93.86 94.60	As above with trace pyrite and 10 to 15% quartz carbonate veins with diffuse to sharp	FX139529	99.77	101.06	1.29	TR	-	.000	
			FX139530	101.06	102.56	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		margins.
94.60	95.60	As at 91.94. Veins to 5 centimetres wide. Trace rutile as long needles in some veins.
95.60	96.32	As at 93.86.
96.32	97.00	As at 91.94. Some veins contain fragments of fuchsitic schist and iron carbonate rich material in a brecciated texture.
97.00	98.53	As at 94.60 with 7 to 8% quartz carbonate veins.
98.53	101.06	As above. Weakly foliated, trace pyrite as crystals to 3 millimetres diameter.
101.06	106.00	Medium gray weakly foliated fine grained to medium grained diorite. Slightly chloritic. 1 to 2% contorted quartz carbonate veins. Trace pyrite as crystals to 3 millimetres diameter. Very fine grained disseminated iron carbonate.
106.00	106.68	Emerald green medium grained weakly foliated diorite with 5% white quartz carbonate veins to 2 centimetres wide. Trace pyrite. Foot of hole.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139531	102.56	104.06	1.50	TR	-	.000	
FX139532	104.06	105.15	1.09	TR	-	.000	
FX139533	105.15	106.00	.85	TR	-	.000	
FX139534	106.00	106.68	.68	TR	-	.010	

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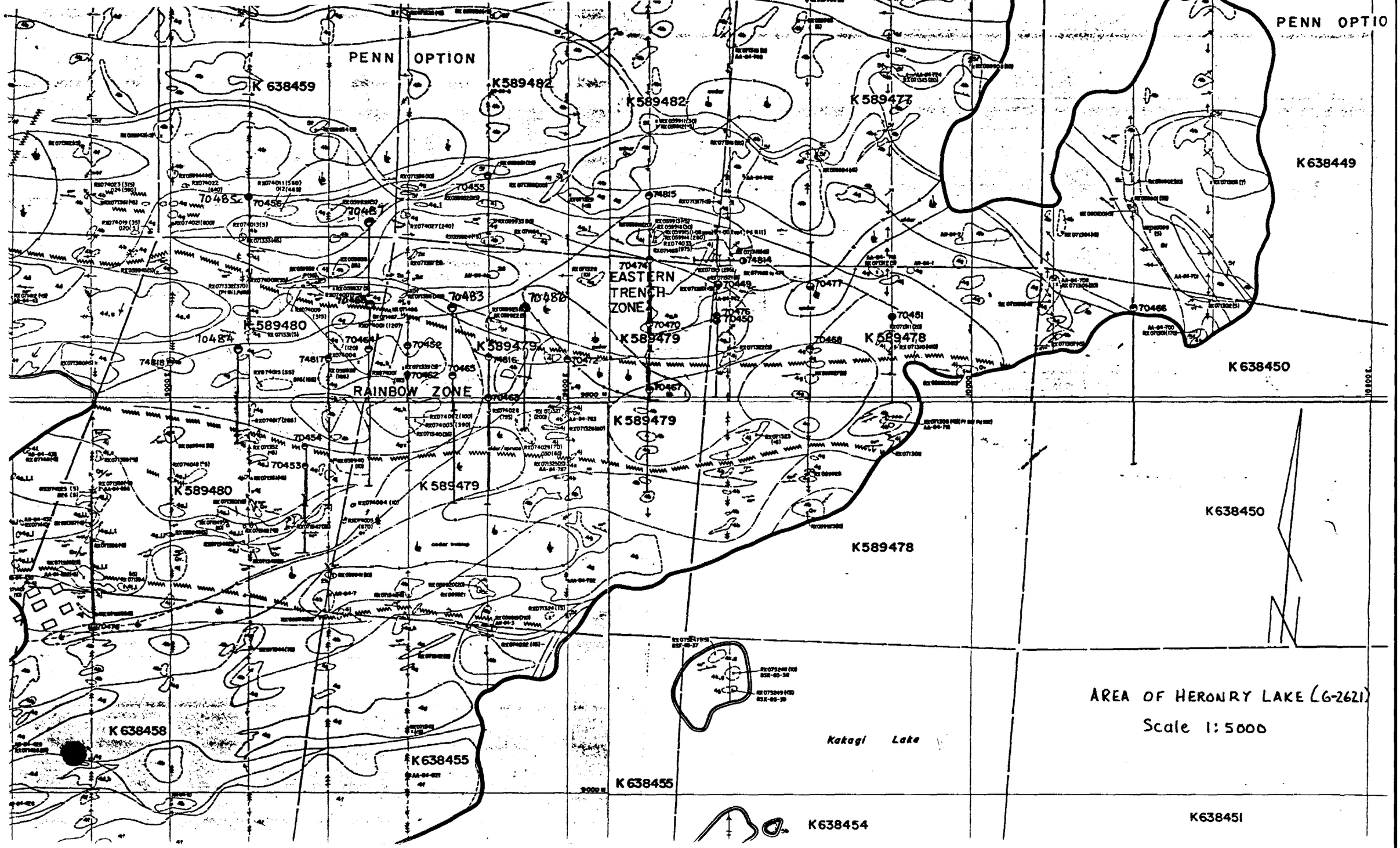
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Kakagi Lake
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AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********IN[illegible] LIMITED**********
FIELD EXPLOR[illegible]N DIAMOND DRILL LOG

PROJECT	:	LATITUDE	: 9771.0 Metric	NTS SHEET #	: 52-F-4	STARTED	: 03-17-85
PROPERTY	: Penn Option	DEPARTURE	: 9400.0 Metric	TOWNSHIP	:	COMPLETED	:
BOREHOLE	: 70455-0	ELEVATION	: 1358.0 Metric	PROVINCE	: Ontario	MEASUREMENTS	: Metric
AZIMUTH	: 175.0	BL AZIMUTH	:	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589482	DRILL TYPE	: J.K.Smit 300
DEPTH	: 100.9 Metric	LOGGED BY	: D.Car	GRID NAME	: Penn	TEST METHOD	: Acid
				CORE SIZE	: thinwall BQ	ASSAYED FOR	: Gold

COMMENTS : Collar is 120 m east and 75 m north of post 3.

LEFT IN HOLE:

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
12.80	175.0	-45.00	46.00	175.0	-44.00	100.90	175.0	-42.00			

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

FROM Metric	TO Metric	
.00	12.62	OVERBURDEN
12.62	36.43	SCHIST Moderately to highly foliated fine grained to medium grained gabbro. 5 to 7% chlorite. In moderately foliated sections hematitic leucocratic clots to 5 millimetres diameter form 70 to 80%. Strongly hematitized overall. Brown colour. Rock is relatively hard and competant. trace pyrite. 14.12 15.12 As above with 10% chlorite. 15.12 17.07 Very badly ground core, at least 60% lost core. rock is similar to above schist. 17.07 19.26 Highly broken up chlorite schist. Minimal

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139535	12.62	14.12	1.50	TR	F52	.000	
FX139536	14.12	15.12	1.00	TR	-	.010	
FX139537	15.12	17.07	1.95	TR	-	.015	
FX139538	17.07	19.26	2.19	TR	-	.000	
FX139539	19.26	19.90	.64	TR	-	.005	
FX139540	19.90	21.46	1.56	TR	-	.010	
FX139541	21.46	22.96	1.50	TR	-	.000	
FX139542	22.96	24.46	1.50	TR	F42	.000	
FX139543	24.46	25.53	1.07	TR	-	.000	
FX139544	25.53	27.14	1.61	TR	-	.000	

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

FROM Metric	TO Metric	
		hematite. rock is relatively soft. 30% lost core. Trace pyrite. 1 to 2% pink quartz carbonate veins at various angles.
19.26	19.90	As above. 10% lost core, highly hematitized.
19.90	21.46	Moderately to highly foliated dark green chloritic gabbro. Chlorite forms at least 15%. 10 to 15% highly contorted orange brown quartz carbonate veins with sharp margins. Many of the veins are highly brecciated. 2 to 3% white bull quartz veins. All veins are at various angles to foliation. 2 to 3% disseminated limonite, trace pyrite.
21.46	22.96	As above. To 25% contorted veins to 2 centimetres wide.
22.96	25.53	Highly foliated medium grained chloritic gabbro. 15% orange brown quartz carbonate veins to 8 millimetre wide and parallel to foliation. Trace pyrite. Rock is easily scratched. Pervasive very fine grained disseminated iron carbonate.
25.53	27.14	As above but only 1% quartz carbonate veins.
27.14	28.64	As above but becoming coarse grained. Gray quartzo- feldspathic clots to 3 to 4 millimetres by 1 centimetre form 70 to 80%. Rock has an overall medium gray colour. Could be considered anorthosite altered gabbro rather than a true schist. Much of the quartzo- feldspathic material is at least 20% iron carbonate.
28.64	31.64	As above but much of the rock is massive. Up to 1% quartz carbonate veins.
31.64	34.64	As above, medium grained.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139545	27.14	28.64	1.50	TR	-	.005	
FX139546	28.64	30.14	1.50	TR	-	.005	
FX139547	30.14	31.64	1.50	TR	-	.005	
FX139548	31.64	33.14	1.50	TR	-	.000	
FX139549	33.14	34.64	1.50	TR	-	.010	
FX139550	34.64	36.43	1.79	TR	-	.005	

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
	34.64	36.43 As above with 5% yellow beige quartz carbonate veins to 8 millimetres wide trending sub parallel to foliation.								
36.43	36.76	DIKE Pinkish gray fine grained weakly foliated slightly chloritic dacitic dike with sharp contacts. 1 to 2% fine grained disseminated pyrite. One 2 centimetre bull quartz vein.	FX139551	36.43	36.76	.33	2	-	.010	
36.76	53.04	SCHIST As at 34.64. 2% disseminated limonite or goethite?.	FX139552	36.76	38.26	1.50	TR	-	.010	
	39.76	41.26 As at 34.64 but most veins are bull quartz to 2 centimetres wide and contorted.	FX139553	38.26	39.76	1.50	TR	-	.000	
			FX139554	39.76	41.26	1.50	TR	F55	.020	
	41.26	44.26 As at 28.64.	FX139555	41.26	42.76	1.50	TR	-	.000	
	44.26	45.76 As above. Fine grained to medium grained, highly chloritic, 3 to 4% yellow beige and bull quartz veins at various angles.	FX139556	42.76	44.26	1.50	TR	-	.000	
			FX139557	44.26	45.76	1.50	TR	-	.000	
			FX139558	45.76	47.26	1.50	TR	-	.005	
	45.76	48.93 As above, fine grained to medium grained.	FX139559	47.26	48.93	1.67	TR	-	.005	
	48.93	50.43 As above, 2% quartz carbonate veins. Quite chloritic, trace fine grained pyrite.	FX139560	48.93	50.43	1.50	TR	-	.005	
			FX139561	50.43	51.93	1.50	TR	-	.000	
	50.43	53.04 As above, fine grained to medium grained.	FX139562	51.93	53.04	1.11	TR	-	.005	
53.04	57.16	VOLCANIC Gray green fine grained andesite - basalt containing some units of above schist with diffuse margins. Upper contact is diffuse. Sample possibly represents volcanic inclusion. 5% white to pink quartz carbonate veins and alteration veinlets to 2 centimetres wide with sharp to	FX139563	53.04	54.54	1.50	TR	-	.000	
			FX139564	54.54	56.04	1.50	TR	-	.010	
			FX139565	56.04	56.68	.64	TR	-	.000	
			FX139566	56.68	57.16	.48	2	-	.125	

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

FROM Metric	TO Metric	
		diffuse margins. Trace fine grained disseminated pyrite.
54.54	56.04	As above. Rock has a thickly banded appearence with multicentimetre wide gray to dark gray green bands.
56.04	56.68	As above with some light green and beige alteration bands to 2 centimetres wide.
56.68	57.16	Fine grained dark gray basaltic unit with 10 to 15% white vuggy quartz carbonate veins to 8 centimetres wide. Light gray alteration halos associated with the veins. 1 to 2% very fine grained disseminated pyrite occurring in the gray alteration halos.
57.16	90.25	GABBRO
		Fine grained to medium grained massive to weakly foliated hard dark gray gabbro or possible medium grained basalt - andesite. trace pyrite. 3% wispy white alteration veinlets and quartz carbonate veins to 8 millimetres wide at various angles.
58.42	59.07	Medium grained massive hard black gabbro with 25% pinkish gray alteration envelopes associated with 3 to 4% bull quartz veins. Alteration halos have diffuse margins and are up to 5 centimetres out from each side of quartz vein. Much fine grained iron carbonate. 2 to 3% fine grained disseminated pyrite mainly within alteration halos.
60.32	60.78	25 centimetre wide quartz iron carbonate vein with 3 to 6 centimetres wide gray alteration halos within host gabbro. 2 to 3% very fine grained disseminated pyrite. Minor

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139567	57.16	58.42	1.26	TR	-	.095	
FX139568	58.42	59.07	.65	3	-	1.220	
FX139569	59.07	60.32	1.25	TR	-	.035	
FX139570	60.32	60.78	.46	3	-	.590	
FX139571	60.78	61.19	.41	TR	-	.085	
FX139572	61.19	61.71	.52	3	-	.505	
FX139573	61.71	62.48	.77	TR	-	.035	
FX139574	62.48	63.41	.93	2	F55	.110	
FX139575	63.41	63.78	.37	3	-	.300	
FX139576	63.78	64.90	1.12	TR	-	.000	
FX139577	64.90	66.15	1.25	TR	-	.000	
FX139578	66.15	66.95	.80	4	-	.600	
FX139579	66.95	67.79	.84	8	-	.410	
FX139580	67.79	68.51	.72	3	-	.170	
FX139581	68.51	68.81	.30	8	-	1.340	
FX139582	68.81	69.35	.54	2	-	.170	
FX139583	69.35	69.88	.53	2	-	.340	

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

FROM Metric	TO Metric	
		pyrite to 5 millimetres diameter in vein.
60.78	61.19	Massive medium grained to coarse grained black gabbro, weakly foliated in places. trace pyrite.
61.19	61.71	Fine grained to medium grained massive black gabbro with 15% splotchy to stringer like alteration generally associated with a few 1 centimetre wide bull quartz iron carbonate veins. 2 to 3% disseminated pyrite.
61.71	62.48	5 to 7% wispy to splotchy gray white alteration veinlets and spots to 5 millimetres wide.
62.48	63.41	Well foliated fine grained to medium grained chloritic black gabbro or basalt ? 15% gray quartz iron carbonate veins or alteration veinlets to 2 centimetre wide sub parallel to foliation. 1 to 2% fine grained disseminated pyrite associated mainly with zones of alteration.
63.41	63.78	Weakly foliated gabbro with 70% quartz carbonate and gray alteration veins and splotches. 2 to 3% disseminated pyrite to 2 millimetres diameter.
63.78	66.15	As at 61.71. 10 to 15% gray white alteration veinlets and splotches to 2 centimetres long by 5 millimetres with veinlets to 7 millimetres wide and trend sub parallel to core axis.
66.15	66.95	Light gray massive gabbro or diorite. Fine grained to medium grained. 5 to 7% bull quartz to 3 centimetres wide at various angles to core. Diffuse light gray

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139584	69.88	70.38	.50	TR	-	.110	
FX139585	70.38	71.88	1.50	TR	-	.040	
FX139586	71.88	73.38	1.50	TR	-	.020	
FX139587	73.38	74.88	1.50	TR	-	.030	
FX139588	74.88	76.38	1.50	TR	-	.005	
FX139589	76.38	77.88	1.50	TR	-	.000	
FX139590	77.88	79.58	1.70	TR	-	.005	
FX139591	79.58	79.95	.37	TR	-	.205	
FX139592	79.95	81.45	1.50	TR	-	.020	
FX139593	81.45	82.95	1.50	TR	-	.000	
FX139594	82.95	84.45	1.50	TR	-	.010	
FX139595	84.45	85.95	1.50	TR	-	.000	
FX139596	85.95	87.75	1.80	TR	-	.005	
FX139597	87.75	88.75	1.00	TR	-	.020	
FX139598	88.75	90.25	1.50	TR	-	.005	

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

FROM Metric	TO Metric	
		alteration is pervasive throughout. 3 to 4% disseminated pyrite to 3 millimetres diameter
66.95	67.79	Similar to above but ranges from black massive gabbro to light gray altered gabbro. 3 to 4% quartz carbonate veins contorted and to 2 centimetres wide. 7 to 8% disseminated pyrite to 3 millimetres diameter. Much of the alteration is blotchy and diffuse.
67.79	68.51	Black fine grained to medium grained massive gabbro with 15% combined quartz veins and gray alteration envelopes. 2 to 3% fine grained disseminated pyrite.
68.51	68.81	12 centimetre wide quartz vein sub parallel to core axis with a gray alteration envelope. 7 to 8% fine grained disseminated pyrite occurring within alteration envelope and in vein.
68.81	69.35	Massive fine grained to medium grained black gabbro with 7% diffuse gray alteration zones. 1 to 2% fine grained disseminated pyrite.
69.35	69.88	Quartz carbonate vein sub parallel to core axis forms 60%. 40% formed of gabbro and alteration zone. 1 to 2% disseminated pyrite.
69.88	70.38	As at 63.78. Up to 20% veins and gray alteration bands.
70.38	71.88	As at 63.78.
71.88	74.88	Massive to foliated fine grained to medium grained gabbro with a medium greenish gray colour. 15% quartz carbonate and white to light gray alteration veins and bands at all

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

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

FROM Metric	TO Metric	DESCRIPTION	SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
		angles. Trace pyrite.								
	74.88 76.38	As above with 5% quartz carbonate veinlets.								
	76.38 79.58	As above but massive.								
	79.58 79.95	As at 71.88. Up to 1% pyrite.								
	79.95 81.45	As at 76.38. Some slightly dioritic phases.								
	81.45 85.95	As at 76.38.								
	85.95 87.75	As above. Weakly foliated towards bottom.								
	87.75 88.75	Foliated fine grained to medium grained gabbro with 40% boudinaged and contorted quartz veins to 6 centimetres and light greenish gray alteration veins to 15 centimetres wide. Trace rutile or tourmaline in one vein. Trace contorted black hard veinlets to 1 millimetre wide in veins. Up to 1% disseminated pyrite. Gabbro is quite chloritic.								
	88.75 90.25	Fine grained to medium grained massive to weakly foliated gabbro with 5% quartz and leucocratic alteration veinlets. Trace pyrite.								
90.25	96.25	SCHIST								
		Well foliated medium grained gabbro with 30% stretched chlorite and 60% stretched quartzo feldspathic clots to 2 millimetres by 8 millimetres. 7 to 8% contorted quartz carbonate veins to 1.2 centimetres wide. Trace pyrite.	FX139599	90.25	91.75	1.50	TR	-	.135	
			FX139600	91.75	93.25	1.50	TR	-	.000	
			FX139601	93.25	94.75	1.50	TR	F67	.005	
			FX139602	94.75	96.25	1.50	TR	-	.020	
	94.75 96.25	Relatively massive in places.								
96.25	100.89	GABBRO								
		As at 88.75.	FX139603	96.25	97.75	1.50	TR	-	.020	

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

FROM Metric	TO Metric	
99.25	100.89	Quite massive. 2% quartz carbonate veinlets at various angles. Foot of hole.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139604	97.75	99.25	1.50	TR	-	.165	
FX139605	99.25	100.89	1.64	TR	-	.000	

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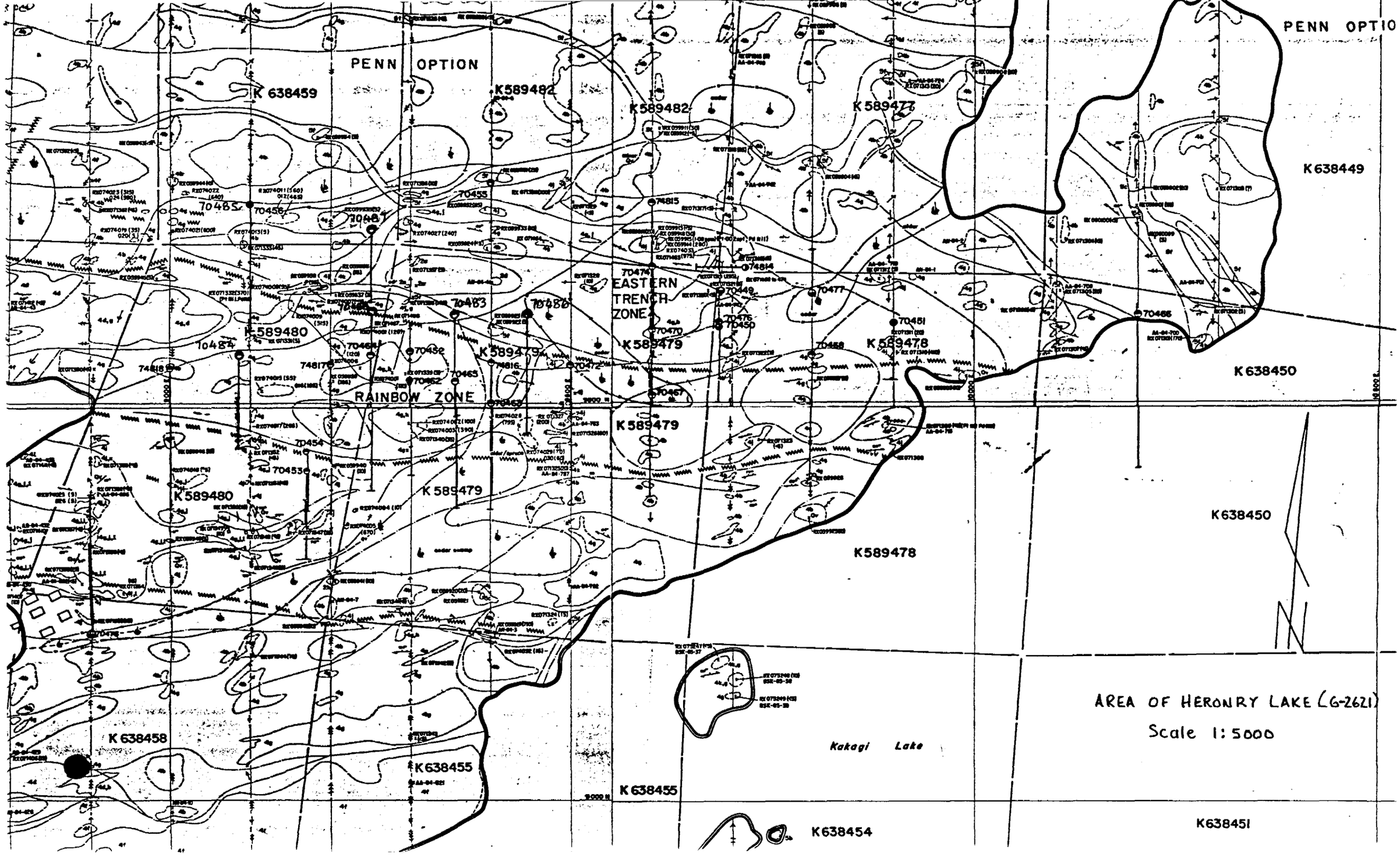
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Kakagi Lake
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K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

FIELD EXPLO[illegible] N DIAMOND DRILL LOG

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

COMMENTS : Collar is 50 m north and 115 m west 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 Metric	TO Metric	
.00	12.18	OVERBURDEN
12.18	49.06	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. 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.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139606	12.18	13.68	1.50	TR	-	.000	
FX139607	13.68	15.18	1.50	TR	-	.000	
FX139608	15.18	16.68	1.50	TR	-	.000	
FX139609	16.68	18.18	1.50	TR	-	.005	
FX139610	18.18	19.68	1.50	TR	-	.000	
FX139611	19.68	21.18	1.50	TR	-	.000	
FX139612	21.18	22.68	1.50	TR	-	.000	
FX139613	22.68	24.18	1.50	TR	-	.000	
FX139614	24.18	25.68	1.50	TR	-	.000	
FX139615	25.68	27.18	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		Some foliation.
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.
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.
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	45.18	Similar to above but rock is considerably harder. This may be due to a more pervasive silicification.
45.18	46.68	Fairly massive fine grained peridotite grading to a medium grained massive rock 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 which has a gabbroic texture. 2 to 3% highly brecciated quartz carbonate veins within distinct gray matrix. Crystals average 2 to 3 millimetres diameter and form 50%.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139616	27.18	28.68	1.50	TR	-	.000	
FX139617	28.68	30.18	1.50	TR	-	.000	
FX139618	30.18	31.68	1.50	TR	-	.000	
FX139619	31.68	33.18	1.50	TR	-	.000	
FX139620	33.18	34.68	1.50	TR	F62	.000	
FX139621	34.68	36.18	1.50	TR	-	.000	
FX139622	36.18	37.68	1.50	TR	-	.010	
FX139623	37.68	39.18	1.50	TR	-	.000	
FX139624	39.18	40.68	1.50	TR	-	.005	
FX139625	40.68	42.18	1.50	TR	-	.020	
FX139626	42.18	43.68	1.50	TR	-	.035	
FX139627	43.68	45.18	1.50	TR	-	.040	
FX139628	45.18	46.68	1.50	TR	-	.000	
FX139629	46.68	48.18	1.50	TR	-	.025	
FX139630	48.18	49.06	.88	TR	-	.025	

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

FROM TO
Metric Metric

Margins in most cases. Much of the vein material consists of fragments floating in fine grained peridotite or gabbro. Trace pyrite.

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.

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 dike. Up to 1% quartz carbonate veins.

60.64 118.45 DIORITE

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

SAMPLE#	FROM	TO	LENGTH	MIN %	CR ANG	AU PPM	PPM*M
	Metric	Metric	Metric				
FX139631	49.06	50.56	1.50	TR	-	.020	
FX139632	50.56	52.06	1.50	TR	-	.000	
FX139633	52.06	53.56	1.50	TR	-	.000	
FX139634	53.56	55.06	1.50	TR	-	.000	
FX139635	55.06	56.56	1.50	TR	-	.000	
FX139636	56.56	58.06	1.50	TR	-	.000	
FX139637	58.06	59.56	1.50	TR	-	.000	
FX139638	59.56	60.64	1.08	TR	-	.000	

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

FROM Metric	TO Metric	
		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.
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 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

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139639	60.64	62.14	1.50	TR	-	.000	
FX139640	62.14	63.64	1.50	TR	-	.000	
FX139641	63.64	65.14	1.50	TR	-	.000	
FX139642	65.14	66.64	1.50	TR	-	.000	
FX139643	66.64	68.14	1.50	TR	-	.000	
FX139644	68.14	69.64	1.50	TR	-	.000	
FX139645	69.64	71.14	1.50	TR	-	.000	
FX139646	71.14	72.64	1.50	TR	-	.000	
FX139647	72.64	74.14	1.50	TR	-	.000	
FX139648	74.14	75.64	1.50	TR	-	.000	
FX139649	75.64	77.14	1.50	TR	-	.000	
FX139650	77.14	78.64	1.50	TR	-	.000	
FX139651	78.64	79.97	1.33	TR	-	.000	
FX139652	79.97	81.47	1.50	TR	-	.000	
FX139653	81.47	82.97	1.50	TR	-	.000	
FX139654	82.97	84.47	1.50	TR	-	.000	
FX139655	84.47	85.97	1.50	TR	-	.000	
FX139656	85.97	87.47	1.50	TR	-	.000	
FX139657	87.47	88.97	1.50	TR	-	.000	
FX139658	88.87	90.47	1.60	TR	-	.000	
FX139659	90.47	91.97	1.50	TR	-	.000	
FX139660	91.97	93.47	1.50	TR	-	.000	
FX139661	93.47	94.97	1.50	TR	-	.000	
FX139662	94.97	96.47	1.50	TR	F45	.000	
FX139663	96.47	97.97	1.50	TR	-	.000	
FX139664	97.97	99.47	1.50	TR	-	.000	
FX139665	99.47	100.97	1.50	TR	-	.000	
FX139666	100.97	102.47	1.50	TR	-	.000	
FX139667	102.47	103.97	1.50	TR	-	.000	
FX139668	103.97	105.47	1.50	TR	-	.000	
FX139669	105.47	106.97	1.50	TR	-	.000	
FX139670	106.97	108.47	1.50	TR	-	.000	

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

FROM Metric	TO Metric	
		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.
118.45	121.92	GABBRO
		Similar to above but more mafic and only about 8%

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

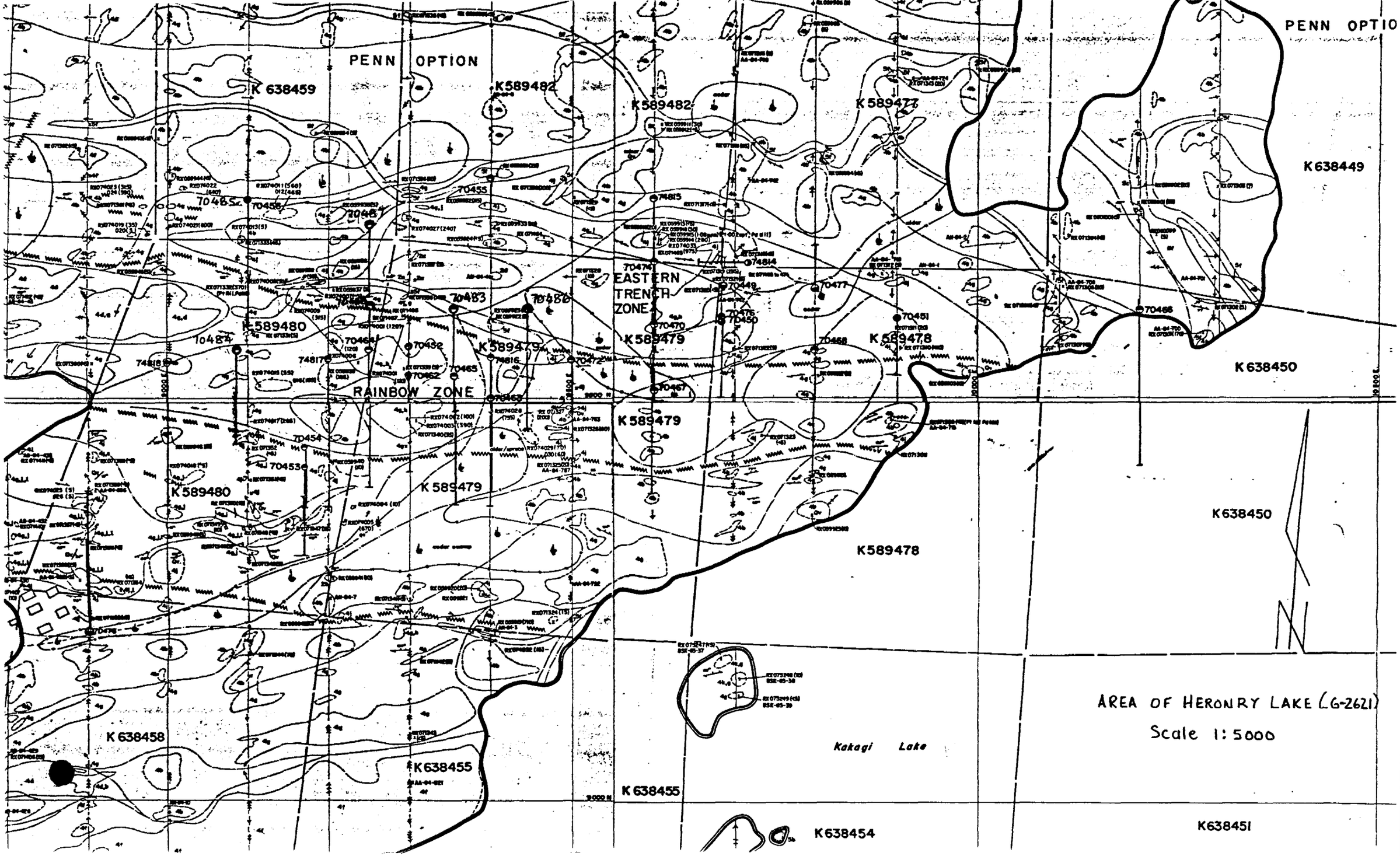
SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139671	108.47	109.97	1.50	TR	-	.005	
FX139672	109.97	111.47	1.50	TR	-	.000	
FX139673	111.47	112.97	1.50	TR	-	.000	
FX139674	112.97	114.47	1.50	TR	F54	.000	
FX139675	114.47	115.97	1.50	TR	-	.000	
FX139676	115.97	117.26	1.29	TR	-	.010	
FX139677	117.26	118.45	1.19	TR	-	.030	
FX139678	118.45	119.53	1.08	TR	-	.000	

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

FROM Metric	TO Metric	
		alteration veinlets. trace pyrite.
119.53	121.04	Similar to above but about 15% alteration veins to 4 centimetres wide. Texture is medium grained, trace pyrite.
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.

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

SAMPLE#	FROM Metric	TO Metric	LENGTH Metric	MIN %	CR ANG	AU PPM	PPM*M
FX139679	119.53	121.04	1.51	TR	-	.000	
FX139680	121.04	121.92	.88	TR	-	.000	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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	: Fort Knox JV	LATITUDE	:N 9530.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-06-87
PROPERTY	: Penn	DEPARTURE	:E 9300.0 M	TOWNSHIP	:	COMPLETED	: 02-10-87
BOREHOLE	: 70462-0	ELEVATION	: 1371.2 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	PL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Hydra-Core 28
DEPTH	: 164.9 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BOWL	ASSAYED FOR	: Au

COMMENTS : Collar is 50 m E and 170 m S of number 4 post.
Hole stopped because drill at depth capacity.
LEFT IN HOLE:3.05 m BW casing

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
7.62		-44.50	60.96		-42.50	123.75		-40.50	155.10		-39.00

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

FROM M	TO M	DESCRIPTION
.00	2.75	GABBRO B casing in gb bedrock. Core not saved from surface to 2.75.
2.75	13.36	GABBRO Fine grained to medium grained dark green weakly foliated moderately to strongly magnetic gabbro. 1 to 3 % magnetite crystals locally rimmed by pyrite. 2.75 3.05 B core. 4.76 5.08 Several milky white quartz veins with minor carbonate patches to 1 centimetre wide. Veins at various core angles. Contacts silicified and bleached to light gray for 1 to 3

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224101	2.75	3.05	.30	3	F42	.050	.015
FX224102	3.05	4.76	1.71	TR	F40	.040	.083
FX224103	4.76	5.08	.32	3	-	.350	.195
FX224104	5.08	6.40	1.32	TR	-	.115	.347
FX224105	6.40	7.90	1.50	TR	-	<.005	.347
FX224106	7.90	9.45	1.55	TR	-	<.005	.347
FX224107	9.45	10.86	1.41	TR	F32	.010	.361
FX224108	10.86	12.34	1.48	TR	-	<.005	.361

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		centimetres and contain 10% pyrite.	FX224109	12.34	13.36	1.02	TR	C45	.030	.392
		5.08 6.40 Becoming less magnetic to non-magnetic down hole. Oxidized pyritic fracture at 6.00.								
		10.86 12.34 Contorted 15 millimetre carbonate quartz vein at 11.67.								
		12.34 13.36 10% medium grained leucoxene.								
13.36	14.54	GABBRO								
		Altered. Fine grained light green to gray bleached gabbro. foliation becoming stronger. Weakly to moderately carbonatized. Sharp lower contact.	FX224110	13.36	14.54	1.18	TR	F35	.010	.404
14.54	15.04	VEIN								
		Predominantly contorted carbonate quartz veining with carbonatized or chloritic gabbro inclusions. Thin black veinlets chlorite or tourmaline.	FX224111	14.54	15.04	.50	3	-	1.900	1.354
15.04	16.76	GABBRO								
		Altered. Weakly to moderately carbonatized gray fine grained to medium grained gabbro cut by several quartz veinlets rimmed by carbonate.	FX224112	15.04	15.81	.77	TR	-	.240	1.539
			FX224113	15.81	16.76	.95	TR	F40	.005	1.543
16.76	17.11	VEIN								
		Predominantly carbonate quartz veining with diffuse bleached silicified carbonatized contacts.	FX224114	16.76	17.11	.35	TR	C50	.275	1.640
17.11	21.00	GABBRO								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Altered. Light gray bleached silicified carbonatized gabbro. 20 to 25% carbonate. Cut by irregular quartz carbonate veins with minor tourmaline.	FX224115	17.11	17.50	.39	7	F38	.445	1.813
		17.11 17.50 5 to 8% pyrite as fine grained to medium grained cubes.	FX224116	17.50	18.59	1.09	TR	F38	.130	1.955
		17.50 18.59 Quartz carbonate vein from 17.79 to 17.92.	FX224117	18.59	19.36	.77	TR	-	.245	2.143
		Few irregular thin quartz carbonate veins with fine tourmaline crystals typically at quartz carbonate contacts.	FX224118	19.36	21.00	1.64	TR	-	.110	2.324
21.00	21.57	VEIN								
		Predominantly brecciated carbonate quartz veining with few chlorite tourmaline pyrite veinlets. At 21.20 a 10 centimetre inclusion of carbonatized weakly fuchsitic gabbro.	FX224119	21.00	21.57	.57	TR	-	.105	2.384
21.57	22.36	GABBRO								
		Altered. Most altered section seen in hole to date. Moderately foliated (sheared)? carbonatized silicified sericitized gabbro. Pale gray to pale lime green cut by irregular quartz carbonate veins, with minor tourmaline. Rusty oxidized fracture at 21.80.	FX224120	21.57	22.36	.79	3	F40	.980	3.158
22.36	25.35	VEIN								
		Brecciated quartz-carbonate veining. Angular carbonate fragments from mm size to 5 cm. Numerous thin chlorite and locally tourmaline veinlets..	FX224121	22.36	23.60	1.24	TR	-	.060	3.232
		23.60 24.22 As above. Veins obviously folded. Inclusions of highly altered gabbro with 5-10% pyrite.	FX224122	23.60	24.22	.62	5	F45	1.650	4.255
			FX224123	24.22	25.35	1.13	3	F45	1.190	5.600

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Apparent axes of folds parallel to foliation of gabbro at 45. Minor stylolites..								
	24.22 25.35	Approximately 50:50 vein and highly altered pale gray gabbro. Strongly foliated. Carbonate-quartz-pyrite-sericite vein with minor tourmaline at 45 degrees to core axis..								
25.35	29.16	GABBRO								
		Halo alteration. Light green to dark gray medium grained weakly to moderately carbonatized and silicified. Alteration decreasing down hole. Numerous carbonate quartz veinlets to 1.5 centimetre at various core angles	FX224124	25.35	27.14	1.79	2	F45	.285	6.110
			FX224125	27.14	28.10	.96	TR	F40	.015	6.125
			FX224126	28.10	29.16	1.06	TR	-	.050	6.178
	27.14 28.10	Very weakly altered. 3.5 centimetre quartz carbonate tourmaline vein at 27.63.								
	28.10 29.16	Gradational lower contact.								
29.16	55.66	GABBRO								
		Fine grained to medium grained dark green fairly homogenous gabbro. Locally weakly magnetic. Thin calcite veins common and occasional quartz veinlet. Locally to 10% calcite rhombs making rock highly calcareous.	FX224127	29.16	29.72	.56	TR	-	.010	6.183
			FX224127	29.72	30.78	1.06	TR	-	.010	6.194
			FX224128	30.78	32.28	1.50	TR	-	.005	6.201
			FX224129	32.28	33.83	1.55	TR	-	.015	6.224
	41.76 42.66	Pitted from dissolution of water soluble mineral- possibly calcite filled amygdules. At 42.38 m thin carbonate quartz veinlet at 30 degrees to core axis with 5% pyrite for 1-2 cm into wallrock. Sharply gradational lower contact cut by thin quartz vein with 5 % pyrite..	FX224130	33.83	35.42	1.59	TR	F45	.015	6.248
			FX224131	35.42	36.88	1.46	TR	-	.015	6.270
			FX224132	36.88	38.38	1.50	TR	-	.015	6.293
			FX224133	38.38	39.93	1.55	TR	-	.005	6.300
			FX224134	39.93	41.76	1.83	TR	-	.010	6.319
			FX224135	41.76	42.66	.90	3	-	.185	6.485
			FX224136	42.66	43.27	.61	4	F45	.095	6.543
	42.66 43.27	Thin quartz veinlet subparallel to core axis with pyritic contacts.	FX224137	43.27	45.68	2.41	TR	-	.110	6.808
			FX224138	45.68	46.16	.48	TR	-	.010	6.813

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX224139	46.16	47.84	1.68	TR	-	.010	6.830
			FX224140	47.84	49.49	1.65	TR	-	.010	6.846
			FX224141	49.49	51.22	1.73	TR	-	<.005	6.846
			FX224142	51.22	52.79	1.57	TR	-	.010	6.862
			FX224143	52.79	54.47	1.68	TR	F50	<.005	6.862
			FX224144	54.47	55.66	1.19	TR	-	.085	6.963
55.66	55.92	VEIN								
		Predominantly irregular carbonate quartz veining with 4% pyrite.	FX224145	55.66	55.92	.26	4	-	.370	7.059
55.92	57.64	GABBRO								
		As to 55.66. Quartz gabbro.	FX224146	55.92	57.64	1.72	TR	C50	.200	7.403
57.64	57.93	VEIN								
		Milky white quartz vein. Sharp lower contact at 50.	FX224147	57.64	57.93	.29	TR	C30	.035	7.414
57.93	66.10	GABBRO								
		Fine grained dark green massive to weakly foliated	FX224148	57.93	60.00	2.07	TR	F48	.005	7.424
		gabbro with numerous quartz calcite veinlets.	FX224149	60.00	61.59	1.59	TR	-	.005	7.432
		66.00 66.10 Aphanitic to fine grained chloritic chilled	FX224150	61.59	63.03	1.44	TR	F45	.005	7.439
		gabbro or siltstone ?.	FX224151	63.03	64.31	1.28	2	-	.035	7.484
			FX224152	64.31	66.00	1.69	TR	C50	.015	7.509
			FX224153	66.00	66.10	.10	TR	-	.030	7.512
66.10	69.86	GABBRO								
		Halo alteration. Fine grained to medium grained quartz	FX224153	66.10	66.85	.75	2	-	.030	7.535

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		gabbro. Light gray weakly to moderately foliated and carbonatized, alteration increasing downhole.	FX224154	66.85	68.34	1.49	4	F48	.180	7.803
		66.10 66.85 9 centimetres of quartz carbonate veining with silicified pyritic gabbro at 66.10.	FX224155	68.34	69.86	1.52	TR	F40	.035	7.856
		66.85 68.34 Diffuse silicification around thin quartz veinlets.								
		68.34 69.86 Foliation so strong that rock has a tuffaceous appeaarance.								
69.86	73.22	GABBRO								
		Altered. Foliation gives a finely laminated appearance.	FX224156	69.86	70.26	.40	TR	F45	.005	7.858
		Fine grained pale gray to green carbonatized silicified	FX224157	70.26	71.15	.89	TR	F42	<.005	7.858
		gabbro.	FX224158	71.15	71.86	.71	TR	-	.280	8.057
		69.86 70.26 1 to 3 centimetre pinkish gray dolomite veins common parallel to core axis. locally weakly fuchsitic.	FX224159	71.86	73.22	1.36	2	-	.275	8.431
		70.26 71.15 Mylonitized appearance..								
		71.15 71.86 Large boudinaged dolomite veins giving clast appearance. Irregular brecciated quartz carbonate tourmaline vein at lower contact.								
		71.86 73.22 Predominantly finely laminated fuchsitic sericitized rock riddled with brecciated cross cutting boudinaged carbonate dolomite tourmaline veins. Oxidized fracture at 72.50.								
73.22	74.22	VEIN								
		Predominantly brecciated boudinaged carbonate dolomite quartz chlorite tourmaline veining. About 30% chloritic to fuchsitic strongly foliated gabbro inclusions.	FX224160	73.22	74.22	1.00	TR	F40	.115	8.546

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
74.22	76.35	GABBRO								
		Altered. Strongly foliated weakly carbonatized light gray green gabbro. Thin dolomite and quartz carbonate veins common.	FX224161	74.22	75.11	.89	TR	F48	<.005	8.546
			FX224162	75.11	76.35	1.24	TR	F30	.010	8.558
		75.11 76.35 Few stringers of lime green fuchsite alteration. Gradational lower contact.								
76.35	83.86	GABBRO								
		Halo alteration. Fine grained to medium grained light gray to light green weakly to moderately carbonatized gabbro. irregular thin quartz carbonate veinlets common.	FX224163	76.35	77.72	1.37	TR	F45	<.005	8.558
			FX224164	77.72	78.93	1.21	TR	-	.010	8.570
			FX224165	78.93	80.36	1.43	4	F45	.115	8.735
		77.72 78.93 Lime green fuchsitic alteration common at contacts to frequent quartz veinlets.	FX224166	80.36	81.86	1.50	4	-	.795	9.927
			FX224167	81.86	83.86	2.00	4	F50	.575	11.077
		78.93 80.36 As above. Veins typically subparallel to core axis.								
83.86	130.55	GABBRO								
		81.86 83.86 Carbonate alteration decreasing downhole. 7 centimetre quartz carbonate vein at 83.52	FX224168	83.86	85.34	1.48	TR	-	.020	11.107
			FX224169	85.34	86.80	1.46	TR	-	.010	11.122
		Fine grained to medium grained mid-green fairly homogeneous quartz gabbro which varies in appearance and texture from a basalt to a diorite or gabbro. Calcite quartz carbonate veinlets common.	FX224170	86.80	88.08	1.28	TR	C45	.045	11.179
			FX224171	88.08	89.91	1.83	TR	-	.145	11.445
			FX224172	89.91	91.44	1.53	TR	-	.005	11.452
			FX224173	91.44	93.08	1.64	TR	-	.005	11.460
			FX224174	93.08	94.49	1.41	TR	-	.005	11.467
		89.91 91.44 Gash type quartz carbonate veins from.5 to 1.5 centimetres common. Feldspars saussuritized.	FX224175	94.49	95.90	1.41	TR	-	<.005	11.467
			FX224176	95.90	97.54	1.64	TR	-	.045	11.541
			FX224177	97.54	99.27	1.73	TR	-	<.005	11.541
		93.08 94.49 More dioritic looking. 7 centimetre dolomite quartz vein at 53 degrees to core axis at	FX224178	99.27	100.58	1.31	TR	-	<.005	11.541
			FX224179	100.58	102.06	1.48	TR	-	<.005	11.541

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

FROM M	TO M	
		94.05.
109.37	111.23	Numerous dolomite carbonate quartz veinlets. Wallrock silicified and fuchsitic at contacts.
111.23	112.78	As above. 4 centimetre quartz vein with speck of chalcopyrite.
112.78	114.30	8 centimetre quartz carbonate chlorite tourmaline vein at end of entry.
114.30	117.35	Gash type quartz veins common.
118.85	120.40	Contacts to narrow quartz veinlets fuchsitic and silicified.
123.44	124.94	Few ptygmatic dolomite carbonate veins.
124.94	130.55	Dioritic looking. Fine grained to medium grained.
130.55	135.91	GABBRO
		Halo alteration. Fine grained moderately carbonatized and silicified weakly fuchsitic gabbro cut by numerous thin quartz carbonate veins. Alteration increasing down hole.
130.55	131.43	Numerous brecciated contorted dolomite carbonate quartz tourmaline veins. Locally fuchsitic.
131.43	131.95	Very fine grained to fine grained tan-brown highly siliceous carbonatized highly irregular inclusions of altered volcanic

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

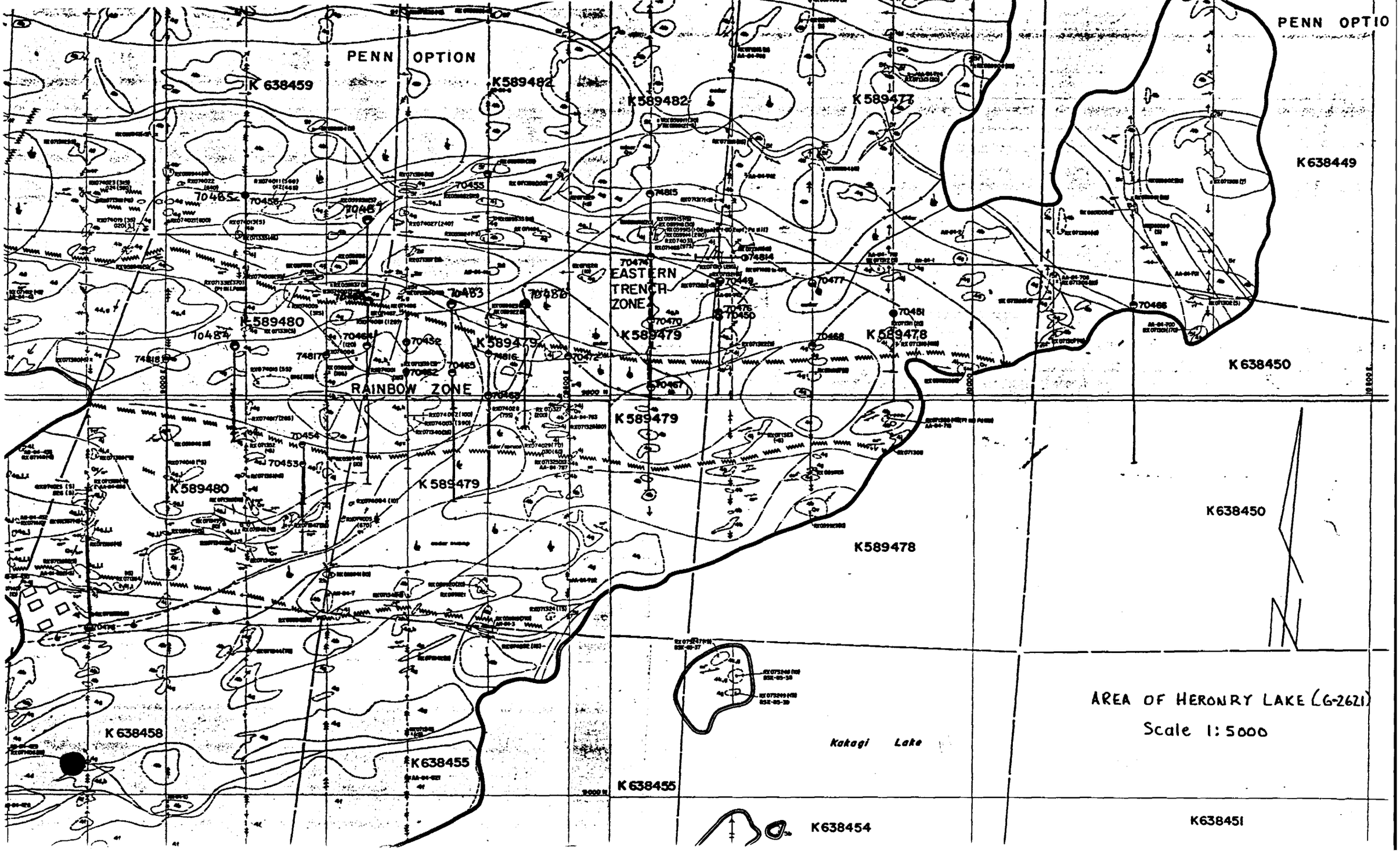
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224180	102.06	103.63	1.57	TR	-	<.005	11.541
FX224181	103.63	105.13	1.50	TR	-	<.005	11.541
FX224182	105.13	106.68	1.55	TR	-	.010	11.557
FX224183	106.68	108.05	1.37	TR	-	.005	11.564
FX224184	108.05	109.37	1.32	TR	-	<.005	11.564
FX224185	109.37	111.23	1.86	TR	F45	<.005	11.564
FX224186	111.23	112.78	1.55	TR	-	<.005	11.564
FX224187	112.78	114.30	1.52	TR	-	<.005	11.564
FX224188	114.30	115.80	1.50	TR	-	<.005	11.564
FX224189	115.80	117.35	1.55	TR	-	<.005	11.564
FX224190	117.35	118.85	1.50	TR	-	.020	11.594
FX224191	118.85	120.40	1.55	TR	-	.010	11.609
FX224192	120.40	121.96	1.56	TR	-	.040	11.672
FX224193	121.96	123.44	1.48	TR	-	.135	11.871
FX224194	123.44	124.94	1.50	2	-	.060	11.961
FX224195	124.94	126.49	1.55	TR	F45	.065	12.062
FX224196	126.49	128.10	1.61	TR	F48	.005	12.070
FX224197	128.10	129.54	1.44	TR	-	<.005	12.070
FX224198	129.54	130.55	1.01	TR	-	<.005	12.070
FX224199	130.55	131.43	.88	3	-	2.810	14.543
FX224200	131.43	131.95	.52	3	-	3.960	16.602
FX224201	131.95	133.30	1.35	3	-	.055	16.676
FX224202	133.30	134.53	1.23	TR	-	.050	16.738
FX224203	134.53	135.91	1.38	TR	-	.020	16.765

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		or sediment within fine grained weakly fuchsitic gabbro cut by thin quartz carbonate veins.								
		131.95 133.30 Moderately carbonatized gabbro to quartz gabbro riddled with open-space filling carbonate patches and dolomite ankerite quartz veins. Locally fuchsitic around veins. 5% tan-yellow leucoxene.								
		133.30 134.53 Diffuse wispy patches of fuchsite alteration at both top and bottom of sample, seemingly concentrated around quartz veins. Two 3 centimetre and one 5 centimetre quartz carbonate veins between 134.17 and 134.41..								
		134.53 135.91 Rusty oxidized fracture at 135.30. Abundant tourmaline needles in thin quartz vein.								
135.91	139.66	GABBRO								
		Fuchsitic. Bright apple to emerald green strongly fuchsitic massive gabbro to quartz gabbro. Numerous irregular quartz carbonate veins with minor tourmaline. 7% leucoxene. Irregular lower contact.	FX224204	135.91	137.80	1.89	TR	F55	.025	16.813
			FX224205	137.80	139.66	1.86	TR	-	<.005	16.813
139.66	142.45	GABBRO								
		Altered. Weakly carbonatized and silicified light gray to green fine grained to medium grained quartz gabbro to diorite. 10% pale yellow to tan leucoxene. Few thin quartz carbonate veins.	FX224206	139.66	141.15	1.49	TR	F45	.005	16.820
			FX224207	141.15	142.45	1.30	TR	-	.130	16.989
		141.15 142.45 2 centimetre quartz vein at 15 to 20								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		degrees to core axis at 141.73.								
142.45	143.96	GABBRO Fuchsitic. Varies from gabbro as above to strongly fuchsitic. Alteration most intense around larger quartz carbonate veins. Sharply gradational lower contact.	FX224208	142.45	143.96	1.51	TR	F45	.010	17.004
143.96	145.02	GABBRO As to 142.45.	FX224209	143.96	145.02	1.06	TR	-	<.005	17.004
145.02	149.95	GABBRO Fuchsitic. Strongly fuchsitic bright emerald green medium grained quartz gabbro. 10 to 15% leucoxene. Few older dolomite quartz carbonate veins at 48 degrees cut by younger tourmaline- bearing quartz veins. 146.27 147.44 35% quartz carbonate dolomite veining locally brecciated. 147.44 149.25 As above. 10% veining.	FX224210	145.02	146.27	1.25	TR	F48	.025	17.035
			FX224211	146.27	147.44	1.17	TR	-	.010	17.047
			FX224212	147.44	149.25	1.81	TR	-	<.005	17.047
			FX224213	149.25	149.95	.70	TR	C35	.025	17.065
149.95	150.43	VEIN Milky white fractured quartz vein. 3 to 5 millimetre rim of ankerite and dolomite at contacts. Sharp lower contact 35 degrees.	FX224214	149.95	150.43	.48	TR	C35	.005	17.067
150.43	152.32	GABBRO Fuchsitic. Moderately to strongly fuchsitic quartz gabbro with 10 15% leucoxene. 10% veining.	FX224215	150.43	151.28	.85	TR	-	.025	17.088
			FX224216	151.28	152.32	1.04	TR	C50	.100	17.192

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		151.28 152.32 As above. 20 centimetre quartz vein at top of sample. 1 to 3 centimetre older carbonate vein runs parallel to core axis entire length of sample, cut by younger large quartz veins to 20 centimetres. Fine accicular tourmaline needles in quartz veins. Last 10 centimetre of gabbro contains 7% pyrite. Sharp lower contact 50 degrees.								
152.32	152.89	VEIN 80% Fractured tourmaline-bearing quartz vein. 20% fuchsitic gabbro.	FX224217	152.32	152.89	.57	TR	-	.010	17.198
152.89	153.42	GABBRO Fuchsitic. 20 to 25% veining.	FX224218	152.89	153.42	.53	TR	-	.055	17.227
153.42	155.79	VEIN Fractured white quartz with 2% acicular needles of tourmaline and numerous inclusion of fuchsitic to hematitic gabbro cutting intensely brecciated quartz carbonate veining.	FX224219	153.42	154.85	1.43	TR	-	.015	17.249
			FX224220	154.85	155.79	.94	TR	-	<.005	17.249
155.79	156.24	GABBRO Fuchsitic. 25% quartz carbonate veining. Sharp lower contact 45.	FX224221	155.79	156.24	.45	TR	C45	.015	17.255

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANS	AU PPM	PPM*M
156.24	157.45	VEIN As to 155.79. Sharp lower contact 15 degrees to core axis	FX224222	156.24	157.45	1.21	TR	C15	<.005	17.255
157.45	158.48	GABBRO Fuchsitic. Moderately to strongly fuchsitic quartz gabbro with 10% leucoxene. Well pronounced foliation. 10 to 15% veining.	FX224223	157.45	158.48	1.03	TR	F37	.015	17.271
158.48	159.30	VEIN 75% Brecciated quartz carbonate vein running subparallel to core axis.	FX224224	158.48	159.30	.82	TR	-	.005	17.275
159.30	163.94	GABBRO Fuchsitic as before.	FX224225	159.30	161.02	1.72	TR	F40	.015	17.301
		159.30 161.02 Younger smokey quartz vein cutting older carb veins.	FX224226	161.02	162.54	1.52	TR	-	.020	17.331
			FX224227	162.54	163.94	1.40	TR	F38	.010	17.345
		161.02 162.54 20% veining. Hematitized quartz vein at 15 degrees to core axis at 161.55.								
		162.54 163.94 25% veining. Sharp lower contact 40.								
163.94	164.90	VEIN 60% Brecciated quartz carbonate dolomite chlorite tourmaline vein. 40% emerald green fuchsitic quartz gabbro with 10% leucoxene. Numerous acicular tourmaline needles.	FX224228	163.94	164.90	.96	TR	-	<.005	17.345
		Foot of hole.								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K638455
Kakagi Lake
K638455
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K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

PROJECT	: Fort Knox JV	LATITUDE	:N 9500.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-11-87
PROPERTY	: Penn	DEPARTURE	:E 9400.0 M	TOWNSHIP	:	COMPLETED	: 02-14-87
BOREHOLE	: BH 70463-0	ELEVATION	: 1353.5 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -50.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Hydracore 28
DEPTH	: 177.1 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQWL	ASSAYED FOR	: Gold

COMMENTS : Collar is 270 m W and 185 m S of number one post.

LEFT IN HOLE:12.19 m BW casing

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
11.58		-50.00	60.96		-48.00	123.75		-44.00	177.09		-43.50

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

FROM M	TO M	DESCRIPTION
.00	11.58	OVERBURDEN Casing through boulders and gravel.
11.58	15.21	GABBRO Fine grained to medium grained massive homogeneous dark green gabbro with few calcite veinlets. Locally weakly magnetic decreasing down hole. Minor leucoxene. Top 120 centimetres pitted. Sharp lower contact at 55 degrees.
15.21	16.70	DIORITE Dark gray medium grained homogeneous dioritic phase of gabbro. Sharp lower contact cut by quartz vein.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224229	11.58	13.33	1.75	TR	-	<.005	.000
FX224230	13.33	15.21	1.88	TR	C55	<.005	.000
FX224231	15.21	16.70	1.49	TR	-	<.005	.000

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
16.70	18.77	GABBRO								
		As to 15.21.	FX224232	16.70	17.90	1.20	2	-	.095	.114
		16.70 17.90 Bottom of sample cut by 4 centimetre irregular quartz carbonate leucoxene vein with 10% coarse grained subhedral pyrite.	FX224233	17.90	18.77	.87	5	C45	.015	.127
		17.90 18.77 Locally feldspar porphyritic. Cut by 5 thin quartz veins. Total 10% veining. 5% disseminated medium grained to coarse grained subhedral pyrite. Sharp lower contact								
18.77	19.12	VEIN								
		White quartz vein with minor chloritic stringers. Few specks pyrite. Sharp lower contact at 65 degrees to core axis.	FX224234	18.77	19.12	.35	TR	C65	.025	.136
19.12	42.17	GABBRO								
		As to 15.21.	FX224235	19.12	20.60	1.48	TR	-	.005	.143
		23.89 25.03 Few minor quartz carbonate veins. Gabbro bleached and silicified at contacts for 2 to 4 centimetres. 5% subhedral pyrite.	FX224236	20.60	22.14	1.54	TR	-	<.005	.143
			FX224237	22.14	23.89	1.75	TR	-	<.005	.143
			FX224238	23.89	25.03	1.14	5	-	.030	.177
		26.58 28.10 Pitted surface..	FX224239	25.03	26.58	1.55	TR	-	<.005	.177
		29.55 31.04 Bleached silicified alteration around thin quartz veinlet for 4 centimetres.	FX224240	26.58	28.10	1.52	TR	-	<.005	.177
			FX224241	28.10	29.55	1.45	TR	-	<.005	.177
		32.55 34.67 Few thin quartz veins with minor wallrock alteration.	FX224242	29.55	31.04	1.49	TR	-	.070	.282
			FX224243	31.04	32.55	1.51	TR	-	.005	.289
		34.67 35.84 Several quartz carbonate veins with alteration to 15 centimetres wide. 15% veining.	FX224244	32.55	34.67	2.12	2	-	.025	.342
			FX224245	34.67	35.84	1.17	5	-	.200	.576
			FX224246	35.84	37.37	1.53	TR	-	.015	.599

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		35.84 37.37 Coarse grained more dioritic looking..	FX224247	37.37	38.60	1.23	5	-	.025	.630
		37.37 38.60 Cut by older fine grained carbonate quartz veins which are cut by younger white to translucent quartz veins. 20% veining.	FX224248	38.60	40.25	1.65	3	F38	.035	.688
			FX224249	40.25	42.17	1.92	4	F44	.195	1.062
		38.60 40.25 15% veining as to 38.60.								
		40.25 42.17 16 centimetre quartz vein at 65 degrees to core axis. Foliation becoming more pronounced..								
42.17	45.54	GABBRO								
		Halo alteration. Weakly carbonatized slightly bleached to dark gray fine grained to medium grained gabbro.	FX224250	42.17	43.68	1.51	3	F35	.100	1.213
			FX224251	43.68	45.54	1.86	TR	F40	<.005	1.213
		42.17 43.68 Strongly silicified and carbonatized around 2 thin quartz carbonate veins.								
45.54	47.50	GABBRO								
		Altered. Bleached to pale gray. Pervasive carbonate and silica alteration especially around thin quartz veins. 10% veining.	FX224252	45.54	46.52	.98	10	-	.475	1.679
			FX224253	46.52	47.50	.98	8	-	.275	1.948
47.50	50.41	GABBRO								
		Halo alteration. As to 45.54. Moderately to strongly carbonatized. Darker gray than altered gabbro above.	FX224254	47.50	48.85	1.35	2	F40	.010	1.962
			FX224255	48.85	50.41	1.56	5	-	.035	2.016
		47.50 48.85 5 centimetre quartz vein.								
		48.85 50.41 10% quartz carbonate veining.								
50.41	51.71	GABBRO								
		Altered. Highly silicified carbonatized bleached gabbro	FX224256	50.41	51.71	1.30	10	-	.350	2.471

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		cut by large quartz carbonate veins to 40 centimetres wide. 10% pyrite mostly in gabbro but also disseminated in veins.								
51.71	52.81	VEIN White quartz vein with large patches of carbonate. Minor pyrite and tourmaline. Few pyritic gabbro inclusions.	FX224257	51.71	52.81	1.10	5	-	.255	2.752
52.81	55.25	GABBRO Altered. Chloritic silicified carbonatized gabbro with numerous quartz carbonate veins. Green to bleached gray. 54.07 55.25 Few wispy inclusions of very pale weakly fuchsitic gabbro. Gabbro maintains foliation despite being cut by numerous veins	FX224258 FX224259	52.81 54.07	54.07 55.25	1.26 1.18	8 8	F40 F45	.390 .610	3.243 3.963
55.25	56.14	VEIN As to 52.81. Patches and needles of tourmaline..	FX224260	55.25	56.14	.89	8	-	.220	4.159
56.14	56.47	GABBRO Altered. As to 51.71.	FX224261	56.14	56.47	.33	8	-	.240	4.238
56.47	57.20	VEIN Predominantly quartz carbonate vein with numerous irregular inclusions of altered gabbro. Few stylolites..	FX224261	56.47	57.20	.73	8	-	.240	4.413
57.20	58.74	GABBRO								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Halo alteration. Dark green to dark gray fine grained moderately silicified gabbro. Numerous thin quartz carbonate veins at various core angles, predominantly at 35 degrees to core axis.	FX224262	57.20	58.74	1.54	4	F30	.105	4.575
58.74	65.70	GABBRO								
		Dark green to gray fine grained to medium grained weakly silicified and carbonatized gabbro.	FX224263	58.74	59.74	1.00	3	-	.125	4.700
		58.74 59.74 50% quartz carbonate veins.	FX224264	59.74	61.27	1.53	3	-	.330	5.205
		59.74 61.27 35% veining. Few stylolites.	FX224265	61.27	62.17	.90	4	-	.225	5.407
		61.27 62.17 40% veining.	FX224266	62.17	63.50	1.33	4	F40	.250	5.740
		62.17 63.50 20% veining. Altered strongly at vein contacts.	FX224267	63.50	65.70	2.20	TR	F35	.030	5.806
		63.50 65.70 Fine grained basaltic looking. Few thin quartz veins.								
65.70	66.12	VEIN								
		Predominantly white quartz vein with tourmaline patches. Last 15 centimetres silicified carbonatized gabbro cut by thin quartz veins. Weakly fuchsitic.	FX224268	65.70	66.12	.42	TR	-	.030	5.818
66.12	67.12	GABBRO								
		Parallel zones of tan to buff carbonatized gabbro for 30 centimetres. Diffuse cross-cutting irregular lower contact.	FX224269	66.12	67.12	1.00	TR	F35	.040	5.858
67.12	67.57	GABBRO								
		Altered. Buff highly silicified carbonatized aphanitic	FX224270	67.12	67.57	.45	7	C35	.455	6.063

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		gabbro. Sharp lower contact.								
67.57	75.70	GABBRO								
		Dark green fine grained to locally medium grained basaltic looking gabbro with minor quartz carbonate tourmaline veining.	FX224271	67.57	69.45	1.88	TR	F40	.015	6.091
			FX224272	69.45	70.80	1.35	TR	-	.010	6.105
			FX224273	70.80	71.93	1.13	TR	-	.005	6.110
		69.45 71.93 Veining folded with fold axes at 35 degrees to core axis.	FX224274	71.93	73.43	1.50	TR	-	.010	6.125
			FX224275	73.43	74.98	1.55	TR	F35	.020	6.156
			FX224276	74.98	75.70	.72	TR	F38	.010	6.164
75.70	76.60	VEIN								
		Predominantly irregular quartz carbonate veining. Few wispy patches of fine grained weakly fuchsitic gabbro.	FX224277	75.70	76.60	.90	TR	-	<.005	6.164
76.60	102.41	GABBRO								
		Fairly homogeneous moderately foliated mid gray weakly silicified? fine grained to medium grained gabbro cut by irregular quartz carbonate dolomite veins.	FX224278	76.60	78.03	1.43	TR	-	.015	6.185
			FX224279	78.03	79.53	1.50	TR	-	<.005	6.185
			FX224280	79.53	81.08	1.55	TR	-	.005	6.193
		79.53 81.08 Minor tourmaline in thin quartz veins.	FX224281	81.08	82.58	1.50	TR	F35	<.005	6.193
		81.08 82.58 Minor stretched patches or eyes of silicification.	FX224282	82.58	84.12	1.54	TR	-	.025	6.231
			FX224283	84.12	85.62	1.50	TR	-	<.005	6.231
		82.58 84.12 10% veins and patches of dolomitic veining.	FX224284	85.62	87.17	1.55	TR	-	.010	6.247
		85.62 87.17 Two 5 centimetre quartz dolomite carbonate veins.	FX224285	87.17	88.50	1.33	TR	-	.010	6.260
			FX224286	88.50	89.76	1.26	TR	-	.005	6.266
		91.52 93.46 Abundant pink to orange dololmitic veins and patches parallel to foliation at 30 degrees to core axis.	FX224287	89.76	90.22	.46	3	-	<.005	6.266
			FX224288	90.22	91.52	1.30	TR	-	.005	6.273
			FX224289	91.52	93.46	1.94	TR	F30	<.005	6.273
			FX224290	93.46	94.77	1.31	TR	-	<.005	6.273
			FX224291	94.77	96.32	1.55	TR	-	<.005	6.273

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
			FX224292	96.32	97.82	1.50	TR	-	<.005	6.273
			FX224293	97.82	99.36	1.54	TR	-	<.005	6.273
			FX224294	99.36	100.86	1.50	TR	-	.005	6.280
			FX224295	100.86	102.41	1.55	TR	-	<.005	6.280
102.41	110.79	GABBRO Dark gray fine grained to medium grained weakly foliated weakly carbonatized gabbro with numerous pink to orange carbonate dolomite veinlets typically parallel to foliation. Occasional 1 to 4 centimetre quartz carbonate dolomite tourmaline veins with minor coarse grained pyrite. 109.00 110.79 Sharp lower contact to vein at 68 degrees to core axis.	FX224296	102.41	104.15	1.74	TR	-	.005	6.289
			FX224297	104.15	106.26	2.11	TR	-	<.005	6.289
			FX224298	106.26	107.58	1.32	TR	F35	<.005	6.289
			FX224299	107.58	109.00	1.42	TR	-	.030	6.332
			FX224300	109.00	110.79	1.79	TR	F25	.205	6.699
110.79	111.71	VEIN Predominantly brecciated orange to pink carbonate dolomite vein with stylolites.	FX224301	110.79	111.71	.92	2	-	.105	6.795
111.71	116.58	GABBRO As to 110.79. 113.05 116.58 3 to 4% medium grained to coarse grained pyrite.	FX224302	111.71	113.05	1.34	TR	-	.030	6.835
			FX224303	113.05	114.60	1.55	3	-	.220	7.176
			FX224304	114.60	116.58	1.98	4	-	.220	7.612
116.58	117.50	GABBRO Halo alteration. Dark gray green fine grained weakly to moderately carbonatized and silicified. Several quartz carbonate veins. 5% coarse grained to very coarse	FX224305	116.58	117.50	.92	5	-	.500	8.072

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		grained pyrite.								
117.50	118.00	VEIN								
		Predominantly quartz carbonate vein with irregular altered inclusions. 3 to 5% fine grained to very coarse grained pyrite.	FX224306	117.50	118.00	.50	4	-	.180	8.162
118.00	121.10	GABBRO								
		Altered. Fine grained bleached pale gray to buff silicified carbonatized gabbro with numerous irregular quartz carbonate veins. 7 to 10% fine grained to very coarse grained pyrite.	FX224307	118.00	118.83	.83	8	-	.600	8.660
			FX224308	118.83	120.33	1.50	7	F35	.430	9.305
			FX224309	120.33	121.10	.77	10	F50	2.440	11.184
		118.83 120.33 Not quite as altered. Large quartz carbonate veins to 20 centimetres.								
		120.33 121.10 Sharp lower contact to rainbow zone at 50 degrees to core axis.								
121.10	148.57	GABBRO								
		Altered- the rainbow zone as per BH70452. Dusty pink gray fine grained to medium grained pervasively carbonatized weakly foliated to massive quartz gabbro. 40% disseminated carbonate.	FX224310	121.10	122.83	1.73	3	-	.280	11.668
			FX224311	122.83	124.33	1.50	TR	-	.145	11.886
			FX224312	124.33	125.75	1.42	TR	-	.085	12.006
			FX224313	125.75	127.25	1.50	TR	-	.050	12.081
		1 to 3% fine grained to very coarse grained disseminated pyrite. Occasional thin quartz carbonate vein with pyritic contacts.	FX224314	127.25	128.59	1.34	TR	-	<.005	12.081
			FX224315	128.59	129.75	1.16	TR	-	<.005	12.081
			FX224316	129.75	130.70	.95	TR	F35	.015	12.096
		121.10 122.83 Foliation parallel to core axis at upper contact.	FX224317	130.70	131.95	1.25	TR	-	.005	12.102
			FX224318	131.95	132.40	.45	TR	F38	.005	12.104
		128.59 133.53 Brick pink to pinkish gray green fine grained weakly foliated quartz gabbro.	FX224319	132.40	133.53	1.13	TR	F38	<.005	12.104
			FX224320	133.53	134.58	1.05	TR	-	.040	12.146

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Weakly silicified and possibly hematitized. Thin quartz carbonate veins common. From 131.95 to 132.40 riddled with orange to pink carbonate dolomite veins with stylolites parallel to foliation at 38 degrees to core axis. Locally foliated such that rock looks tuffaceous..	FX224321	134.58	135.24	.66	TR	-	<.005	12.146
			FX224322	135.24	136.10	.86	TR	F45	.060	12.198
			FX224323	136.10	137.54	1.44	TR	F20	.560	13.004
			FX224324	137.54	139.10	1.56	TR	F40	.005	13.012
			FX224325	139.10	140.60	1.50	TR	F40	.015	13.034
		135.24 136.10 Four quartz carbonate veins over first 28 centimetres with minor coarse grained pyrite.	FX224326	140.60	142.10	1.50	TR	F45	.095	13.177
			FX224327	142.10	142.82	.72	TR	F40	.010	13.184
			FX224328	142.82	143.28	.46	TR	-	.235	13.292
		139.10 140.60 Primary igneous gabbroic texture still evident even though altered.	FX224329	143.28	145.06	1.78	TR	F38	.035	13.355
			FX224330	145.06	146.56	1.50	TR	F45	.170	13.610
		140.60 142.10 Fifteen % veining.	FX224331	146.56	148.06	1.50	TR	F40	<.005	13.610
		142.10 142.82 Wispy patches and stringers of very weakly fuchsitic alteration.	FX224332	148.06	148.57	.51	3	F35	.735	13.984
		142.82 143.28 As above but 70% brecciated quartz carbonate veining.								
		143.28 146.56 As to 142.82 with 10 to 15% veining.								
		146.56 148.06 As to 140.60.								
		148.06 148.57 Wine-red pervasive hematitization.								
148.57	149.52	VEIN								
		Brecciated locally rusty oxidized carbonate quartz vein with irregular contacts.	FX224333	148.57	149.52	.95	TR	-	.235	14.208
149.52	151.00	GABBRO								
		Altered as before. Dusty pink gray fine grained carbonatized weakly silicified gabbro. Foliation warped around numerous quartz dolomite veins. About 15 to 20% veining.	FX224334	149.52	151.00	1.48	2	-	.620	15.125

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
151.00	151.32	VEIN								
		Quartz carbonate vein with altered gabbro inclusions.	FX224335	151.00	151.32	.32	TR	-	.930	15.423
151.32	153.95	GABBRO								
		Altered as to 151.00.	FX224336	151.32	152.45	1.13	TR	F40	1.120	16.688
			FX224337	152.45	153.95	1.50	TR	F40	.040	16.748
153.95	155.44	GABBRO								
		Altered. Becoming less pink and becoming greener down hole. Locally weakly fuchsitic. 10% quartz carbonate veins with fine needles of tourmaline. Original igneous texture now obvious.	FX224338	153.95	155.44	1.49	TR	F35	.205	17.054
155.44	156.92	GABBRO								
		Altered. Pale gray to light brown weakly fuchsitic carbonatized gabbro. Alteration decreasing down hole. Foliation typically 40 degrees but warps to subparallel around quartz carbonate tourmaline veins.	FX224339	155.44	156.92	1.48	TR	-	.035	17.106
156.92	158.80	GABBRO								
		Halo alteration. Light gray weakly to moderately carbonatized gabbro.	FX224340	156.92	157.94	1.02	TR	F40	<.005	17.106
			FX224341	157.94	158.80	.86	TR	-	<.005	17.106
158.80	171.57	GABBRO								
		Dark gray to green fine grained to medium grained locally very weakly carbonatized gabbro with few thin quartz dolomite veinlets.	FX224342	158.80	159.90	1.10	TR	F40	<.005	17.106
			FX224343	159.90	161.46	1.56	TR	-	.015	17.129
			FX224344	161.46	162.90	1.44	TR	-	<.005	17.129

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	161.46	162.90 Weakly fuchsitic around 5 centimetre quartz vein with minor tourmaline.	FX224345	162.90	164.40	1.50	TR	-	<.005	17.129
			FX224346	164.40	165.87	1.47	TR	-	.005	17.136
	164.40	165.87 Diffuse patchy fuchsitic alteration around thin quartz carbonate veins.	FX224347	165.87	167.40	1.53	TR	-	<.005	17.136
			FX224348	167.40	168.87	1.47	TR	-	<.005	17.136
	169.37	171.57 Sharp lower contact 48 degrees.	FX224349	168.87	169.37	.50	TR	-	<.005	17.136
			FX224350	169.37	171.57	2.20	TR	C48	<.005	17.136
171.57	177.09	FELDSPAR PORPHYRY								
		Massive very homogeneous tan-cream feldspar porphyry. 30% white feldspar phenocrysts. Rare millimetre size clots of fuchsite. Minor thin quartz veins. 2 to 4% disseminated pyrite.	FX224351	171.57	173.33	1.76	2	-	.010	17.154
			FX224352	173.33	174.84	1.51	2	-	<.005	17.154
			FX224353	174.84	177.09	2.25	2	-	.010	17.177
		177.09 Foot of hole.								

PENN OPTION
PENN OPTIO
K 638459
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70455
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EASTERN
TRENCH
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RAINBOW ZONE
K638450
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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 JV	LATITUDE	:n 9560.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-14-87
PROPERTY	: Penn	DEPARTURE	:e 9250.0 M	TOWNSHIP	:	COMPLETED	: 02-17-87
BOREHOLE	: 70464-0	ELEVATION	: 1360.6 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	COUNTRY	: Canada	DRILLED BY	: Ultramobile
DIP	: -45.9	GRID BEARING	:	CLAIM #	: K589480	DRILL TYPE	: JK Smit 300
DEPTH	: 234.7 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ-thin wall	ASSAYED FOR	: Gold

COMMENTS : Collar is 10 m W and 145 m S of number 1 post.

LEFT IN HOLE:2.72 m BW casing.

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
60.96		-42.50	121.92		-38.00	182.90		-36.00	234.70		-36.50

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
									**********ANALYSES**********	
.00	2.72	OVERBURDEN Casing.								
2.72	3.59	GABBRO Fine grained to medium grained mid-green moderately foliated gabbro. Gradational lower contact.	FX224354	2.73	3.59	.86	TR	F40	.005	.004
3.59	5.17	GABBRO Fine grained phase of gabbro with few quartz carbonate veins. Sharply gradational lower contact.	FX224355	3.59	5.17	1.58	TR	-	.010	.020

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

FROM M	TO M	DESCRIPTION
5.17	19.18	GABBRO
		Fine grained to medium grained massive to weakly foliated gabbro. Locally basaltic looking.
		9.80 10.33 Gray green slightly bleached around 12 centimetre quartz carbonate vein.
		12.19 13.98 Fine grained with several patchy zones of calcite quartz carbonate veining.
		13.98 15.24 Medium grained massive as to 3.59. Moderately magnetic.
		18.29 19.18 As above. Sharp lower contact.
19.18	36.70	GABBRO
		Fine grained to locally medium grained dark green weakly magnetic to non-magnetic. Few irregular quartz calcite veins with pyritic contacts. Possibly basalt or fine grained phase of gabbro.
		21.92 23.32 Minor thin quartz vein with pyritic contacts.
		24.80 26.28 Several highly irregular quartz calcite veins subparallel to core axis.
		26.28 27.80 Last 3 centimetres quartz vein at 35 degrees to core axis.
		29.28 30.71 Few quartz calcite veinlets.
		30.71 32.27 Fine grained basaltic looking.
		32.27 33.66 As above. Irregular quartz calcite veining subparallel to core axis.
		33.66 35.16 As above. 5 to 10% calcite quartz veinlets at 65 to 85 degrees to core axis.
		35.16 36.70 As above. Becoming medium grained down hole. 5 to 10 % veining.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224356	5.17	6.80	1.63	TR	F45	.005	.028
FX224357	6.80	8.30	1.50	TR	-	<.005	.028
FX224358	8.30	9.80	1.50	TR	-	.045	.096
FX224359	9.80	10.33	.53	5	-	.665	.448
FX224360	10.33	12.19	1.86	TR	-	.040	.523
FX224361	12.19	13.98	1.79	TR	-	.005	.532
FX224362	13.98	15.24	1.26	TR	-	.010	.544
FX224363	15.24	16.74	1.50	TR	-	.010	.559
FX224364	16.74	18.29	1.55	TR	-	.020	.590
FX224365	18.29	19.18	.89	TR	C40	.115	.692
FX224366	19.18	20.50	1.32	3	-	.165	.910
FX224367	20.50	21.92	1.42	TR	-	.005	.917
FX224368	21.92	23.32	1.40	2	-	.065	1.008
FX224369	23.32	24.80	1.48	TR	F28	.395	1.593
FX224370	24.80	26.28	1.48	2	F28	2.140	4.760
FX224371	26.28	27.80	1.52	TR	-	.020	4.791
FX224372	27.80	29.28	1.48	TR	-	.005	4.798
FX224373	29.28	30.71	1.43	TR	-	.060	4.884
FX224374	30.71	32.27	1.56	TR	-	.010	4.899
FX224375	32.27	33.66	1.39	TR	-	.005	4.906
FX224376	33.66	35.16	1.50	TR	-	.010	4.921
FX224377	35.16	36.70	1.54	TR	-	.010	4.937

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
36.70	44.17	GABBRO								
		Medium grained to locally fine grained massive locally	FX224378	36.70	38.20	1.50	TR	-	.005	4.944
		weakly magnetic dark green gabbro. Locally 5 to 10 %	FX224379	38.20	39.70	1.50	TR	-	.005	4.952
		quartz calcite veining.	FX224380	39.70	41.20	1.50	TR	-	.010	4.967
		42.67 44.17 Becoming fine grained down hole.	FX224381	41.20	42.67	1.47	TR	-	<.005	4.967
			FX224382	42.67	44.17	1.50	TR	-	.010	4.982
44.17	61.98	GABBRO								
		Fine grained locally medium grained massive to weakly	FX224383	44.17	45.75	1.58	TR	-	.005	4.990
		foliated homogenous fine grained phase of gabbro or	FX224384	45.75	47.25	1.50	TR	-	.005	4.997
		basalt. 5 to 7% thin calcite quartz veining.	FX224385	47.25	48.61	1.36	TR	-	<.005	4.997
		Gradational lower contact.	FX224386	48.61	50.11	1.50	TR	-	.020	5.027
		48.61 50.11 Few thin quartz veins.	FX224387	50.11	51.70	1.59	TR	-	<.005	5.027
		50.11 51.70 Two 4 centimetre quartz carbonate veins.	FX224388	51.70	53.18	1.48	TR	-	<.005	5.027
		51.70 53.18 Two 4 to 5 centimetre quartz carbonate veins.	FX224389	53.18	54.63	1.45	TR	-	<.005	5.027
		53.18 54.63 Minor leucoxene.	FX224390	54.63	56.06	1.43	TR	-	<.005	5.027
		54.63 56.06 4 centimetre quartz calcite vein subparallel	FX224391	56.06	57.62	1.56	TR	F35	.110	5.199
		to core axis.	FX224392	57.62	59.10	1.48	TR	-	<.005	5.199
		59.10 60.52 30 centimetres of irregular quartz dolomite	FX224393	59.10	60.52	1.42	TR	-	.015	5.220
		veining.	FX224394	60.52	61.98	1.46	TR	-	.010	5.235
		60.52 61.98 Gradational to medium grained.								
61.98	79.58	GABBRO								
		Sub-halo alteration. Fine grained to medium grained	FX224395	61.98	63.39	1.41	TR	-	.005	5.242
		massive to weakly foliated dark green gray gabbro with	FX224396	63.39	64.85	1.46	TR	-	.070	5.344
		numerous gash type ankerite veins and patches. 5 to 10	FX224397	64.85	66.30	1.45	TR	-	.010	5.358
		% veining.	FX224398	66.30	67.70	1.40	TR	-	.010	5.372
		69.27 75.15 As above but veins now pink and dolomitic.	FX224399	67.70	69.27	1.57	TR	-	.050	5.451
		10 to 15% veining.	FX224400	69.27	70.74	1.47	TR	-	.045	5.517

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		75.15 79.58 As above. Becoming lighter gray and weakly to moderately carbonatized down hole.	FX224401	70.74	72.20	1.46	TR	-	<.005	5.517
			FX224402	72.20	73.65	1.45	TR	-	<.005	5.517
			FX224403	73.65	75.15	1.50	TR	-	<.005	5.517
			FX224404	75.15	76.47	1.32	TR	-	.105	5.656
			FX224405	76.47	77.97	1.50	TR	-	.075	5.768
			FX224406	77.97	79.58	1.61	TR	-	.345	6.324
79.58	86.84	GABBRO								
		Halo-alteration. Fine grained slightly pinkish gray green weakly to moderately carbonatized gabbro with few irregular dolomite quartz veins.	FX224407	79.58	81.42	1.84	TR	-	.085	6.480
			FX224408	81.42	82.88	1.46	TR	-	.020	6.509
			FX224409	82.88	84.10	1.22	TR	-	.205	6.759
		79.58 81.42 Minor coarse grained pyrite in dolomite vein.	FX224410	84.10	85.56	1.46	TR	F38	.020	6.789
		82.88 84.10 Sharp lower contact 10 degrees to core axis.	FX224411	85.56	86.84	1.28	TR	F30	<.005	6.789
		84.10 85.56 Dusty pink gray fine grained moderately carbonatized gabbro. Sharp lower contact cut by dolomite quartz veins.								
		85.56 86.84 Darker gray green medium grained strongly foliated. Few irregular dolomite carbonate quartz veins.								
86.84	87.31	VEIN								
		Irregular quartz carbonate dolomite vein with chloritic inclusions of gabbro. Sharp lower contact.	FX224412	86.84	87.31	.47	TR	C75	.815	7.172
87.31	97.54	GABBRO								
		Halo alteration. Dusty pink gray to gray green fine grained to medium grained weakly foliated weakly to moderately carbonatized weakly silicified gabbro. Occasional quartz carbonate vein.	FX224413	87.31	88.18	.87	4	C30	.015	7.185
			FX224414	88.18	90.04	1.86	TR	-	<.005	7.185
			FX224415	90.04	91.44	1.40	TR	F30	.010	7.199
			FX224416	91.44	92.94	1.50	2	F32	.010	7.214

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		87.31 88.18 Dusty pink. Resembles the rainbow zone. 3 to 5% pyrite. pervasive carbonate alteration. Possibly hematitized. Sharp lower contact to gray green weakly carbonatized gabbro.	FX224417	92.94	94.49	1.55	TR	-	.005	7.221
			FX224418	94.49	95.99	1.50	TR	-	.020	7.251
			FX224419	95.99	97.54	1.55	TR	F35	.005	7.259
		91.44 92.94 Thin irregular quartz vein at top of sample with pyritic fuchsitic contacts.								
97.54	101.07	GABBRO								
		Altered. Wine-pink with patchy lime to emerald green fuchsitic alteration. Fine grained weakly silicified strongly foliated gabbro. Pervasive hematitization. Resembles the rainbow zone. Minor leucoxene.	FX224420	97.54	99.04	1.50	TR	F00	<.005	7.259
			FX224421	99.04	100.00	.96	TR	-	.005	7.264
			FX224422	100.00	101.07	1.07	TR	F45	.045	7.312
		97.54 99.04 Hematitized rusty wine-gray strongly foliated parallel to core axis. Last 25 centimetres brecciated quartz carbonate vein.								
		99.04 100.00 Moderately fuchsitic pale green fine grained to medium grained. 10 to 15% dolomite quartz carbonate veining.								
		100.00 101.07 Strongly fuchsitic gabbro. Approximately 50 to 60% brecciated and boudinaged veining.								
101.07	102.79	VEIN								
		Buff-tan brecciated irregular carbonate quartz dolomite veining with minor tourmaline and fuchsitic gabbro inclusions. 8% fine grained disseminated pyrite.	FX224423	101.07	102.79	1.72	8	-	.450	8.086
102.79	114.05	GABBRO								
		Altered. Rainbow zone?. Dusty wine to pink with	FX224424	102.79	103.89	1.10	TR	-	.190	8.295

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		discontinous wispy patches of pale lime green fuchsite.	FX224425	103.89	105.64	1.75	TR	F32	.005	8.304
		Moderately to strongly silicified and pervasively	FX224426	105.64	107.24	1.60	TR	F35	.075	8.424
		carbonatized. Strongly foliated.	FX224427	107.24	109.10	1.86	TR	-	<.005	8.424
		103.89 105.64 Chloritic clots stretched parallel to	FX224428	109.10	110.60	1.50	TR	-	.080	8.544
		foliation giving a tuffaceous appearance.	FX224429	110.60	112.38	1.78	TR	F38	.020	8.579
		109.10 110.60 10% quartz carbonate dolomite veining	FX224430	112.38	114.05	1.67	TR	-	<.005	8.579
		locally subparallel to core axis.								
		110.60 112.38 5% veining as above. Carbonate veins								
		consist of coarse grained megacrysts of								
		carbonate.								
		112.38 114.05 5% very fine grained pink orange dolomite								
		quartz veining with stylolites and minor								
		tourmaline.								
114.05	115.23	VEIN								
		Predominantly vein of fine grained to medium grained	FX224431	114.05	115.23	1.18	TR	-	.005	8.585
		carbonate quartz. Brick coloured. Cut by later ankerite								
		quartz veins. Few irregular fuchsitic gabbro inclusions.								
115.23	126.55	GABBRO								
		Altered. Similar to rainbow zone. As to 114.05.	FX224432	115.23	116.51	1.28	TR	-	.025	8.617
		116.51 118.01 Chloritic clots as to 105.64.	FX224433	116.51	118.01	1.50	TR	F40	<.005	8.617
		118.01 119.45 Moderately altered medium grained gabbro.	FX224434	118.01	119.45	1.44	TR	-	<.005	8.617
		Igneous texture still apparent.	FX224435	119.45	121.03	1.58	TR	-	<.005	8.617
		Non-fuchsitic.	FX224436	121.03	122.53	1.50	TR	-	<.005	8.617
		119.45 121.03 As above but fine grained to medium grained	FX224437	122.53	124.03	1.50	TR	F45	<.005	8.617
		121.03 126.55 Chloritic clots give tuffaceous appearance.	FX224438	124.03	125.50	1.47	TR	-	<.005	8.617
			FX224439	125.50	126.55	1.05	TR	-	<.005	8.617

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
126.55	131.85	GABBRO								
		Halo alteration. Light green gray fine grained to medium grained weakly foliated homogeneous moderately carbonatized gabbro with occasional irregular quartz carbonate vein to 7 centimetres wide.	FX224440	126.55	128.02	1.47	TR	-	<.005	8.617
			FX224441	128.02	129.52	1.50	TR	-	<.005	8.617
			FX224442	129.52	130.73	1.21	TR	-	<.005	8.617
			FX224443	130.73	131.85	1.12	TR	-	<.005	8.617
		128.02 130.73 Minor fuchsite alteration at vein contacts.								
		130.73 131.85 Gradational lower contact.								
131.85	138.95	GABBRO								
		Altered. Dusty pink to fuchsitic green fine grained highly carbonatized and silicified gabbro. Numerous irregular quartz carbonate veins. Minor stylolites, needles of tourmaline and leucoxene. Gradational lower contact.	FX224444	131.85	132.98	1.13	TR	F45	.010	8.629
			FX224445	132.98	134.48	1.50	TR	F40	.005	8.636
			FX224446	134.48	135.98	1.50	3	-	.530	9.431
			FX224447	135.98	137.45	1.47	2	F38	1.030	10.945
			FX224448	137.45	138.95	1.50	3	-	.085	11.073
		134.48 135.98 20% quartz carbonate dolomite veins with 3% pyrite at vein contacts.								
		137.45 138.95 Becoming more fuchsitic down hole. 30% veining. 3% pyrite at vein contacts. Gradational lower contact.								
138.95	144.98	GABBRO								
		Fuchsitic. Pale green to bright green locally pinkish-gray strongly fuchsitic carbonatized and silicified gabbro. Riddled with numerous irregular quartz carbonate dolomite tourmaline veins. minor leucoxene.	FX224449	138.95	140.46	1.51	TR	-	.050	11.148
			FX224450	140.46	141.96	1.50	TR	-	.005	11.156
			FX224451	141.96	143.50	1.54	TR	-	<.005	11.156
			FX224452	143.50	144.98	1.48	TR	-	<.005	11.156
		138.95 140.46 45% veining. 20 centimetre quartz vein with radiating needles of tourmaline.								
		140.46 141.96 20% veins.								
		141.96 143.50 15% veins.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		143.50 144.98 15% veins. Gradational to non-fuchsitic.								
144.98	161.90	GABBRO								
		Altered. Pale gray green fine grained strongly silicified and carbonatized massive to weakly foliated gabbro. Non-fuchsitic. Minor leucoxene. Numerous quartz carbonate dolomite veins.	FX224453	144.98	146.43	1.45	TR	-	<.005	11.156
			FX224454	146.43	147.93	1.50	TR	-	<.005	11.156
			FX224455	147.93	149.32	1.39	TR	F50	<.005	11.156
			FX224456	149.32	149.90	.58	TR	F50	<.005	11.156
		146.43 147.93 First 45 centimetres is brecciated dolomite quartz ankerite vein with fuchsite stringers. fuchsitic around thin quartz carbonate veins. 40% veins.	FX224457	149.90	151.63	1.73	TR	-	.035	11.216
			FX224458	151.63	152.75	1.12	TR	-	.045	11.267
			FX224459	152.75	154.21	1.46	TR	-	.010	11.281
			FX224460	154.21	156.00	1.79	TR	-	<.005	11.281
		147.93 149.32 25% veining with fuchsitic contacts.	FX224461	156.00	157.50	1.50	TR	F45	<.005	11.281
		149.32 149.90 Yellowish green with chlorite pseudomorphs of ferromags to 5 millimetres. No veining.	FX224462	157.50	159.18	1.68	TR	-	<.005	11.281
			FX224463	159.18	160.86	1.68	TR	F42	.015	11.306
		149.90 152.75 Riddled with contorted brecciated dolomite carbonate quartz veins. 60% veins with numerous angular altered inclusions.	FX224464	160.86	161.90	1.04	TR	-	.015	11.322
		152.75 156.00 15% veining. 5 to 10% leucoxene.								
		156.00 157.50 5% veining. Less altered.								
		157.50 159.18 Dark gray green. 5% veining. Top 20 centimetres purplish black fine grained very soft unidentified mineral.								
		159.18 160.86 40% quartz carbonate veining.								
		160.86 161.90 Gradational to fuchsitic gabbro. 30 to 40% dolomite carbonate quartz veining.								
161.90	163.20	GABBRO								
		Fuchsitic. Fine grained to medium grained pale green to bright emerald green moderately to strongly fuchsitic strongly silicified and carbonatized gabbro to quartz	FX224465	161.90	163.20	1.30	TR	-	.015	11.342

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		gabbro. Riddled with irregular brecciated carbonate quartz dolomite veins with stylolites and tourmaline. 45% veining. Up to 10% leucoxene.								
163.20	163.75	VEIN								
		Highly brecciated irregular carbonate quartz dolomite veining with highly altered fuchsitic gabbro inclusions. Minor pyrite.	FX224466	163.20	163.75	.55	TR	-	.195	11.449
163.75	165.78	GABBRO								
		Fuchsitic. As to 163.20. 25% veining.	FX224467	163.75	165.78	2.03	TR	F47	.070	11.591
165.78	166.96	VEIN								
		As to 163.75. 80% vein and 20% highly altered inclusions.	FX224468	165.78	166.96	1.18	2	-	.185	11.809
166.96	174.28	GABBRO								
		Fuchsitic. As to 163.20.	FX224469	166.96	168.27	1.31	TR	-	.035	11.855
		168.27 172.22 5% pink dolomite carbonate quartz veining.	FX224470	168.27	169.80	1.53	TR	-	.015	11.878
		172.22 173.10 Cut by quartz carbonate vein parallel to	FX224471	169.80	171.02	1.22	TR	-	.040	11.927
		core axis. Also by banded dolomite smokey	FX224472	171.02	172.22	1.20	TR	-	.020	11.951
		black quartz veins.	FX224473	172.22	173.10	.88	TR	-	.030	11.977
		173.10 174.28 As to 172.22. Sharp lower contact to	FX224474	173.10	174.28	1.18	TR	-	.030	12.013
		quartz vein at 90 degrees to core axis.								
174.28	174.65	VEIN								
		White quartz vein with fine tourmaline needles at vein contacts.	FX224475	174.28	174.65	.37	TR	-	<.005	12.013

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
174.65	177.52	GABBRO Fuchsitic. As to 163.20. 174.65 176.06 40% dolomite quartz carbonate veining. 176.06 177.52 30 to 35% veining as above. Also several black smokey quartz veins.	FX224476 FX224477	174.65 176.06	176.06 177.52	1.41 1.46	TR TR	- -	.030 .040	12.055 12.113
177.52	178.36	GABBRO Altered. Fine grained massive soft strongly carbonatized purplish- green syenitic looking with 5% disseminated pyrite. Cut by dolomite quartz carbonate veins and black smokey veins with inclusions of fuchsitic gabbro and patches and stringers of fine grained to coarse grained pyrite.	FX224478	177.52	178.36	.84	10	-	1.320	13.222
178.36	180.04	GABBRO Altered. Fine grained light green strongly carbonatized massive gabbro with 3% disseminated pyrite. Gradational to darker green down hole. Sharp lower contact.	FX224479	178.36	180.04	1.68	3	C50	.030	13.273
180.04	180.40	VEIN Predominantly brecciated carbonate quartz veining with stringers of yellow green sericite and fuchsitic gabbro. 2% very fine grained disseminated pyrite.	FX224480	180.04	180.40	.36	2	-	.120	13.316
180.40	184.94	GABBRO Halo alteration. Pink green medium grained massive to	FX224481	180.40	182.00	1.60	TR	-	.005	13.324

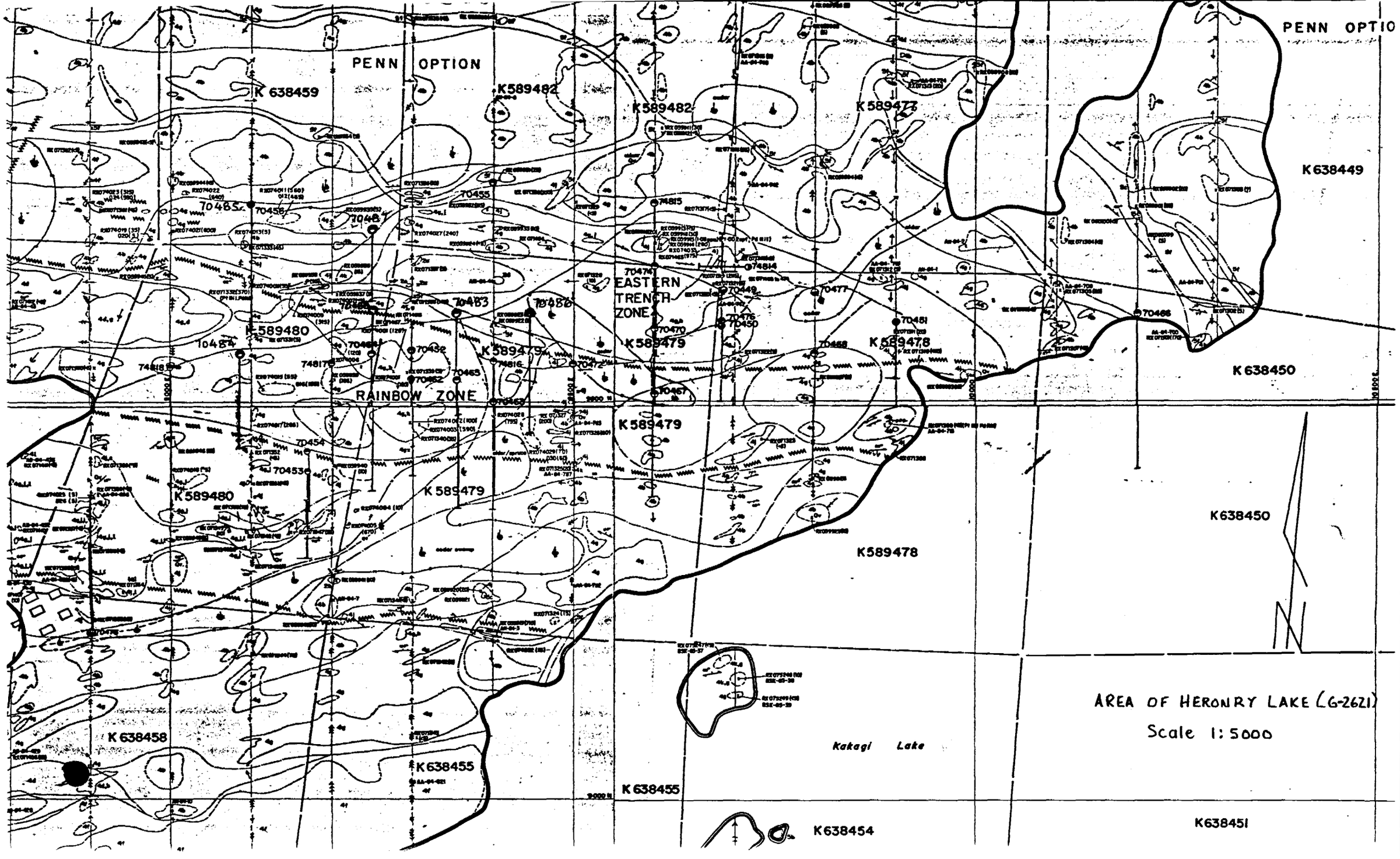
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		weakly foliated very weakly silicified and carbonatized gabbro cut by frequent milky white carbonate quartz veins.	FX224482	182.00	183.45	1.45	TR	-	<.005	13.324
			FX224483	183.45	184.94	1.49	TR	-	<.005	13.324
		183.45 184.94 Quartz carbonate vein 35 centimetres wide.								
184.94	205.08	GABBRO								
		Fresh medium grained homogenous dark green massive to weakly foliated gabbro. Locally to 10% leucoxene. Thin quartz carbonate veins common.	FX224484	184.94	186.39	1.45	TR	-	<.005	13.324
			FX224485	186.39	187.94	1.55	TR	-	<.005	13.324
			FX224486	187.94	189.41	1.47	TR	-	<.005	13.324
		189.41 190.91 5 to 10% veining.	FX224487	189.41	190.91	1.50	TR	-	<.005	13.324
		192.37 196.85 15 to 20% veining.	FX224488	190.91	192.37	1.46	TR	-	<.005	13.324
		196.85 198.35 10% veining.	FX224489	192.37	193.87	1.50	TR	-	<.005	13.324
		199.85 201.28 Aphanitic stringers and patches of dark green chlorite.	FX224490	193.87	195.35	1.48	TR	-	<.005	13.324
			FX224491	195.35	196.85	1.50	TR	-	<.005	13.324
		201.28 202.34 Slightly bleached to gray green and weakly silicified. 15 centimetre quartz carbonate vein with smokey black margins.	FX224492	196.85	198.35	1.50	TR	F35	<.005	13.324
			FX224493	198.35	199.85	1.50	TR	-	<.005	13.324
			FX224494	199.85	201.28	1.43	TR	-	.010	13.338
		202.34 203.69 As above. 11 centimetre quartz vein.	FX224495	201.28	202.34	1.06	TR	-	.005	13.343
		203.69 205.08 As above. 15 to 20% veining including a 25 centimetre quartz carbonate vein at top of section.	FX224496	202.34	203.69	1.35	TR	-	<.005	13.343
			FX224497	203.69	205.08	1.39	2	-	.015	13.364
205.08	205.48	VEIN								
		Banded carbonate chlorite dolomite quartz vein.	FX224498	205.08	205.48	.40	2	-	.010	13.368
205.48	207.26	GABBRO								
		As to 202.34. Gradational to peridotite.	FX224499	205.48	207.26	1.78	TR	F45	.005	13.377

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

FROM M	TO M	
207.26	234.70	PERIDOTITE Black to dark green medium grained to coarse grained soapy feeling very homogeneous soft peridotite. moderately foliated to massive. Occasional thin carbonate vein. 232.34 233.84 10 centimetre carbonate quartz vein at 25 degrees to core axis. Foot of hole.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224500	207.26	208.66	1.40	TR	-	<.005	13.377
FX224501	208.66	210.16	1.50	TR	-	<.005	13.377
FX224502	210.16	211.61	1.45	TR	-	<.005	13.377
FX224503	211.61	213.11	1.50	TR	F45	<.005	13.377
FX224504	213.11	214.73	1.62	TR	-	<.005	13.377
FX224505	214.73	216.23	1.50	TR	-	<.005	13.377
FX224506	216.23	217.69	1.46	TR	-	<.005	13.377
FX224507	217.69	219.46	1.77	TR	-	<.005	13.377
FX224508	219.46	220.87	1.41	TR	-	<.005	13.377
FX224509	220.87	222.37	1.50	TR	-	<.005	13.377
FX224510	222.37	223.70	1.33	TR	-	<.005	13.377
FX224511	223.70	225.20	1.50	TR	-	<.005	13.377
FX224512	225.20	226.56	1.36	TR	F45	<.005	13.377
FX224513	226.56	228.16	1.60	TR	-	<.005	13.377
FX224514	228.16	229.40	1.24	TR	-	<.005	13.377
FX224515	229.40	231.90	2.50	TR	-	<.005	13.377
FX224516	231.90	232.34	.44	TR	-	<.005	13.377
FX224517	232.34	233.84	1.50	TR	-	<.005	13.377
FX224518	233.84	234.70	.86	TR	-	<.005	13.377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EASTERN TRENCH ZONE
RAINBOW ZONE
Kakagi Lake
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

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

PROJECT	: Fort Knox JV	LATITUDE	:N 9530.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-18-87
PROPERTY	: Penn	DEPARTURE	:E 9358.0 M	TOWNSHIP	:	COMPLETED	: 02-21-87
BOREHOLE	: 70465-0	ELEVATION	: 1359.7 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	: JK Smit 300
DEPTH	: 222.2 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQ thinwwall	ASSAYED FOR	: Gold

COMMENTS : Collar is 75 m W and 75 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
6.10		-46.00	60.96		-44.00	121.92		-43.50	182.88		-43.50

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

FROM M	TO M	DESCRIPTION
.00	2.14	OVERBURDEN Casing.
2.14	18.84	BASALT Fine grained locally medium grained dark green weakly to moderately foliated locally variolitic basalt. Possibly pillowed. 2.14 3.60 Medium grained. 3.60 5.04 Fine grained. 30 centimetre discontinous quartz carbonate vein. 6.50 8.00 Variolites? stretched parallel to foliation. 8.00 8.12 As above. Sharply gradational lower contact. 8.12 9.02 Fine grained massive basalt. Sharp irregular

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224641	2.14	3.60	1.46	TR	F40	.025	.036
FX224642	3.60	5.04	1.44	TR	-	.010	.051
FX224643	5.04	6.50	1.46	TR	F47	<.005	.051
FX224644	6.50	8.00	1.50	TR	F50	<.005	.051
FX224645	8.00	8.12	.12	TR	-	.005	.051
FX224645	8.12	9.02	.90	TR	-	.005	.056
FX224645	9.02	9.25	.23	-		.005	.057
FX224646	9.25	10.75	1.50	TR	-	<.005	.057
FX224647	10.75	12.42	1.67	2	F50	.015	.082

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		lower contact with minor pyrite.	FX224648	12.42	13.92	1.50	TR	-	.015	.105
	9.02 9.25	Variolitic.	FX224649	13.92	15.25	1.33	TR	-	.015	.125
	9.25 10.75	Rapid variations from variolitic looking to fine grained massive and chloritic which may be pillow selvage material. 2% pyrite and chalcopyrite.	FX224650	15.25	16.75	1.50	TR	F45	.015	.147
			FX224651	16.75	17.98	1.23	TR	-	<.005	.147
			FX224652	17.98	18.84	.86	TR	-	.005	.151
	10.75 12.42	As above. 15 centimetres of coalescing variolites at 50 degrees to core axis. Patch of chalcopyrite 4 by 0.5 centimetres. Few carbonate quartz veins with weakly fuchsitic contacts.								
	12.42 13.92	5 to 8% veining.								
	13.92 15.25	Possible pillow margin at 14.53 metres at 55 degrees to core axis. First 20 centimetres quartz carbonate vein with weak fuchsite alteration.								
18.84	19.65	VEIN								
		Quartz carbonate vein with millimetre size chloritic inclusions and unidentified hard gray mineral.	FX224653	18.84	19.65	.81	TR	-	.060	.200
19.65	36.12	BASALT								
		As to 18.84 metre. Few thin quartz veins with pyritic contacts. Minor leucoxene.	FX224654	19.65	21.03	1.38	3	-	.040	.255
			FX224655	21.03	22.53	1.50	TR	-	<.005	.255
	26.89 28.31	Several quartz carbonate veins to 4 centimetres wide with stringers of fuchsitic alteration at contacts and disseminated pyrite to 10% over several centimetres.	FX224656	22.53	24.08	1.55	TR	-	.015	.279
			FX224657	24.08	25.46	1.38	TR	-	.010	.292
			FX224658	25.46	26.89	1.43	TR	-	.055	.371
			FX224659	26.89	28.31	1.42	TR	-	.100	.513
	28.31 29.67	9 centimetre carbonate quartz vein with minor weak fuchsite alteration and minor	FX224660	28.31	29.67	1.36	TR	-	.330	.962
			FX224661	29.67	31.10	1.43	TR	F20	.010	.976

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		pyrite at contacts at 20 degrees to core axis.	FX224662	31.10	32.50	1.40	TR	-	.120	1.144
			FX224663	32.50	33.97	1.47	TR	-	.305	1.592
	29.67 31.10	Variolites stretched parallel to foliation.	FX224664	33.97	35.47	1.50	TR	-	.015	1.615
	31.10 32.50	As above for first 50 centimetres then fine grained. Several quartz carbonate veins with fuchsitic pyritic contacts.	FX224665	35.47	36.12	.65	TR	-	.005	1.618
	33.97 35.47	Fine grained to medium grained gabbroic looking.								
36.12	50.00	BASALT								
		Fine grained to locally medium grained dark green basalt	FX224665	36.12	36.95	.83	TR	-	.005	1.622
		or gabbro with 10 to 15% fine grained disseminated	FX224666	36.95	38.47	1.52	TR	F30	.005	1.630
		magnetite and specularite. strongly magnetic. Very	FX224667	38.47	39.77	1.30	TR	F40	<.005	1.630
		homogeneous. Occasional thin calcite quartz veinlet.	FX224668	39.77	41.18	1.41	TR	-	.010	1.644
	44.15 45.49	Irregular pyrite quartz vein subparallel to	FX224669	41.18	42.65	1.47	TR	-	<.005	1.644
		core axis at 45.42 metres.	FX224670	42.65	44.15	1.50	TR	-	.010	1.659
	45.49 46.99	16 centimetre pyrite quartz vein with 15%	FX224671	44.15	45.49	1.34	3	-	.235	1.974
		pyrite.	FX224672	45.49	46.99	1.50	4	-	.270	2.379
	48.46 50.00	Sharp lower contact at 40 degrees to core	FX224673	46.99	48.46	1.47	TR	-	.015	2.401
		axis.	FX224674	48.46	50.00	1.54	TR	-	<.005	2.401
50.00	50.43	VEIN								
		First 18 centimetres non-pyritic carbonate veining then	FX224675	50.00	50.43	.43	15	-	.505	2.618
		diffuse contact to pinkish white very hard quartz carbonate vein with 15% disseminated pyrite.								
50.43	60.10	BASALT								
		As to 50.00. 15% gray coarse grained leucoxene crystals.	FX224676	50.43	51.43	1.00	TR	-	<.005	2.618
	55.78 57.17	10 centimetre highly vuggy quartz carbonate	FX224677	51.43	52.90	1.47	TR	-	<.005	2.618

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		vein with minor pyrite.	FX224678	52.90	54.35	1.45	TR	F38	.030	2.662
		57.17 58.60 22 centimetre vuggy vein as above. Magnetite	FX224679	54.35	55.78	1.43	TR	-	.020	2.690
		content decreasing down hole.	FX224680	55.78	57.17	1.39	2	-	.640	3.580
		58.60 60.10 2% magnetite gradational to non-magnetic	FX224681	57.17	58.60	1.43	TR	-	.175	3.830
		down hole.	FX224682	58.60	60.10	1.50	TR	-	.005	3.838
60.10	62.97	BASALT								
		Fine grained dark green non-magnetic basalt.	FX224683	60.10	61.60	1.50	TR	F45	.010	3.853
		61.60 62.97 As above but becoming coarser grained down	FX224684	61.60	62.97	1.37	TR	-	.125	4.024
		hole. Gradational to gabbro.								
62.97	85.04	GABBRO								
		Fine grained to medium grained dark green massive to	FX224685	62.97	64.43	1.46	TR	-	.005	4.031
		weakly foliated homogeneous gabbro with 5% gray	FX224686	64.43	66.47	2.04	6	-	.325	4.694
		leucoxene. Bleached and altered around occasional thin	FX224687	66.47	67.43	.96	2	-	.235	4.920
		quartz carbonate veins.	FX224688	67.43	68.90	1.47	TR	-	.030	4.964
		64.43 66.47 As above but 6 separate areas of bleaching	FX224689	68.90	70.31	1.41	TR	-	<.005	4.964
		to buff colour around thin quartz carbonate	FX224690	70.31	71.81	1.50	TR	-	.005	4.971
		veins. Alteration to 12 centimetres wide.	FX224691	71.81	73.25	1.44	3	-	1.960	7.794
		Altered zones highly silicified and	FX224692	73.25	74.75	1.50	TR	-	.020	7.824
		carbonatized and contain to 10% fine grained	FX224693	74.75	76.10	1.35	TR	-	.020	7.851
		pyrite.	FX224694	76.10	77.60	1.50	TR	-	.010	7.866
		66.47 67.43 Several altered areas as above to 2	FX224695	77.60	79.08	1.48	TR	-	.070	7.969
		centimetres wide.	FX224696	79.08	80.58	1.50	TR	-	.025	8.007
		67.43 68.90 10 centimetre irregular quartz carbonate vein	FX224697	80.58	82.07	1.49	TR	-	.005	8.014
		77.60 79.08 10 centimetres of bleaching around thin	FX224698	82.07	83.57	1.50	TR	-	<.005	8.014
		quartz vein.	FX224699	83.57	85.04	1.47	TR	F30	<.005	8.014
		83.57 85.04 Becoming lighter gray coloured and becoming								
		strongly foliated down hole. Few thin								
		carbonate veins. Gradational to weakly								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		altered.								
85.04	88.68	GABBRO Halo alteration. Very weakly carbonatized fine grained dark gray foliated gabbro with frequent thin carbonate quartz veinlets. 86.54 88.09 18 centimetre quartz carbonate vein at top of sample. Two quartz carbonate tourmaline veins at end of sample, 4 and 7 centimetres wide with pyritic contacts. 88.09 88.68 Slightly more bleached and carbonatized. Cut by several quartz veins to 6 centimetres wide with fine needles of tourmaline. 5 to 8% disseminated pyrite. Two large patches of chalcopyrite in thin smokey quartz vein. Gradational lower contact.	FX224700 FX224701 FX224702	85.04 86.54 88.09	86.54 88.09 88.68	1.50 1.55 .59	TR 3 5	F33 F38 -	<.005 .165 .115	0.014 0.270 0.338
88.68	90.38	GABBRO Altered. Fine grained rose-brown strongly silicified and carbonatized gabbro. Locally sericitized and hematitized. Thin gash type quartz carbonate veins common typically at 70 degrees to core axis. 3 to 8% fine grained to coarse grained disseminated pyrite. 88.68 89.48 Gradational from halo alteration to intensely altered. 89.48 90.38 15% veining. 5% coarse grained pyrite. Speck of chalcopyrite in a quartz vein. Sharp lower contact.	FX224703 FX224704	88.68 89.48	89.48 90.38	.80 .90	3 5	F40 C40	.100 .185	0.418 0.584

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
90.38	91.21	GABBRO Altered. Light gray green weakly to moderately carbonatized soft gabbro. Few quartz veins with coarse grained ankerite along contacts.	FX224705	90.38	91.21	.83	TR	F45	.810	9.257
91.21	91.91	VEIN Banded quartz carbonate and black chlorite tourmaline vein parallel to core axis. Minor chalcopyrite.	FX224706	91.21	91.91	.70	2	-	2.430	10.958
91.91	93.66	GABBRO Altered. As to 91.21. Very coarse grained metamorphic pyrite at sharp vein contact at 67 degrees to core axis.	FX224707	91.91	93.66	1.75	2	F35	.325	11.526
93.66	94.76	VEIN Brecciated milky white quartz vein with coarse graired ankerite and tan highly altered wallrock inclusions. Chlorite and tourmaline stringers and tourmaline needles. Sharp lower contact at 30 degrees to core axis.	FX224708	93.66	94.76	1.10	3	C30	1.950	13.671
94.76	97.64	GABBRO Altered. Light gray green fine grained slightly bleached moderately carbonatized strongly silicified gabbro. 95.84 97.64 Few quartz carbonate veins. Sharp lower contact to vein.	FX224709 FX224710	94.76 95.89	95.89 97.64	1.13 1.75	TR 5	F40 -	.025 .095	13.700 13.866
97.64	99.05	VEIN 80% Brecciated quartz carbonate vein with 5% fine	FX224711	97.64	99.05	1.41	6	-	1.280	15.671

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		grained acicular tourmaline needles. 20% highly altered gabbro inclusions. Sharp irregular lower contact.								
99.05	100.84	GABBRO Altered. Buff highly silicified gabbro? with soft sericitized fuchsitic stringers. 3% coarse grained metamorphic pyrite. Cut by several irregular quartz carbonate veins with a speck of visible gold at 100.44 metres.	FX224712	99.05	100.84	1.79	TR	F30	.850	17.192
100.84	106.90	GABBRO Altered. Buff to pale brown aphanitic to fine grained moderately to strongly silicified and carbonatized gabbro. few irregular quartz carbonate veins. 103.33 104.20 Fine grained to medium grained with chlorite clots. Less altered as original igneous texture still weakly preserved. Coarse grained pyrite along 4 centimetre quartz carbonate vein at 18 degrees to core axis. 105.30 106.90 Igneous texture still apparent. Minor chalcopyrite in thin quartz carbonate vein. Sharp lower contact cut by thin quartz vein.	FX224713	100.84	102.03	1.19	3	-	.005	17.198
			FX224714	102.03	103.33	1.30	3	F35	<.005	17.198
			FX224715	103.33	104.20	.87	5	F35	.100	17.285
			FX224716	104.20	105.30	1.10	TR	F35	<.005	17.285
			FX224717	105.30	106.90	1.60	TR	-	<.005	17.285
106.90	107.39	GABBRO Dark green fine grained to medium grained relatively unaltered gabbro with few carbonate veins. Sharply gradational lower contact.	FX224718	106.90	107.39	.49	TR	-	<.005	17.285

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
107.39	108.26	GABBRO Fuchsitic. Pale yellowish-green weakly fuchsitic sericitized fine grained to medium grained weakly to moderately carbonatized and silicified gabbro. Minor pyrite.	FX224719	107.39	108.26	.87	TR	F38	.010	17.294
108.26	108.70	GABBRO Altered. Medium grained black to green gabbro with patchy epidote and fuchsite alteration.	FX224720	108.26	108.70	.44	TR	-	<.005	17.294
108.70	120.81	GABBRO Fuchsitic. As to 108.26. Variably fuchsitic with zones of darker green chloritic gabbro. Few thin quartz carbonate veins. 112.00 112.90 Cut by 40 centimetre banded quartz carbonate tourmaline vein parallel to core axis. Minor chalcopyrite in thin quartz vein. 112.90 114.25 15% quartz carbonate tourmaline veins with few specks of chalcopyrite. One vein at 12 degrees to core axis. Possible speck of visible gold. 114.25 115.72 5 by 5 millimetre patch of chalcopyrite in thin black quartz vein. 115.72 117.20 Less fuchsitic. Mid-green in colour. 117.20 118.57 10% quartz carbonate veins. Occasional patch of chalcopyrite. 118.57 120.07 3% coarse grained metamorphic pyrite.	FX224721	108.70	110.25	1.55	TR	-	<.005	17.294
			FX224722	110.25	112.00	1.75	TR	F45	.010	17.311
			FX224723	112.00	112.90	.90	8	-	2.760	19.795
			FX224724	112.90	114.25	1.35	5	-	2.520	23.197
			FX224725	114.25	115.72	1.47	3	F45	.130	23.388
			FX224726	115.72	117.20	1.48	2	F45	.030	23.433
			FX224727	117.20	118.57	1.37	3	F45	.015	23.453
			FX224728	118.57	120.07	1.50	4	F40	.060	23.543
			FX224729	120.07	120.81	.74	TR	-	.005	23.547

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Black smokey quartz vein with few chalcopyrite patches and possible very fine grained specks of visible gold.								
	120.07 120.81	Gradational to non-fuchsitic. Becoming gray green down hole. Gradational lower contact.								
120.81 128.91		GABBRO								
		Halo alteration. Massive light gray fine grained to medium grained moderately silicified and carbonatized slightly bleached gabbro with thin dolomite carbonate quartz veins. Igneous texture readily apparent.	FX224730	120.81	122.60	1.79	TR	C55	<.005	23.547
			FX224731	122.60	124.47	1.87	TR	-	.005	23.556
			FX224732	124.47	125.95	1.48	TR	-	.005	23.564
			FX224733	125.95	127.45	1.50	TR	-	.160	23.804
	120.81 122.60	Upper 50 centimetres weakly hematitized. Sharp lower contact to fuchsitic alteration cross cuts foliation and is bounded by a 2 millimetre wide quartz veinlet.	FX224734	127.45	128.91	1.46	2	-	.390	24.373
	122.60 124.47	Top 20 centimetres weakly fuchsitic.								
	124.47 125.95	Medium grained to coarse grained gabbro bleached to light gray colour. 5% irregular quartz carbonate veining.								
	127.45 128.91	Gradational lower contact.								
128.91 137.37		GABBRO								
		Sub-halo alteration. Dark gray green fine grained to medium grained massive to weakly foliated very weakly altered gabbro. Minor leucoxene.	FX224735	128.91	130.43	1.52	TR	-	.010	24.388
			FX224736	130.43	131.84	1.41	TR	F45	.010	24.403
			FX224737	131.84	133.32	1.48	TR	-	.005	24.410
	128.91 130.43	Few dolomite carbonate veins.	FX224738	133.32	134.73	1.41	TR	-	<.005	24.410
	130.43 131.84	Locally saussuritized. Minor fuchsite alteration of thin quartz vein contacts.	FX224739	134.73	136.23	1.50	TR	F40	<.005	24.410
			FX224740	136.23	137.37	1.14	TR	F40	.005	24.416

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		136.23 137.37 Gradational to slightly more altered.								
137.37	138.60	GABBRO								
		Halo alteration. Weakly carbonatized , silicified and sericitized gray green gabbro. 10% thin carbonate quartz veins. Gradational to altered.	FX224741	137.37	138.60	1.23	TR	-	<.005	24.416
138.60	144.90	GABBRO								
		Altered. Pale yellowish-green bleached fine grained to medium grained strongly foliated moderately to strongly carbonatized and sericitized gabbro. Up to 10% leucoxene. Very weakly fuchsitic except at vein contacts where alteration is weak to moderate. Note that this section is not silicified. 5 to 10% quartz carbonate dolomite veins.	FX224742	138.60	139.07	.47	TR	-	<.005	24.416
			FX224743	139.07	140.50	1.43	TR	-	<.005	24.416
			FX224744	140.50	141.98	1.48	2	F40	<.005	24.416
			FX224745	141.98	143.40	1.42	TR	-	<.005	24.416
			FX224746	143.40	144.90	1.50	TR	F40	.095	24.558
		141.98 143.40 20 centimetres of irregular quartz carbonate veining with minor pyrite.								
		143.40 144.90 Veins becoming dolomitic. Speck of chalcopyrite.								
144.90	146.48	GABBRO								
		Altered. Pale lime green to pinkish brown weakly fuchsitic gabbro with pervasive carbonate alteration. 20% quartz carbonate veins to 22 centimetres wide with tourmaline needles.	FX224747	144.90	146.22	1.32	2	-	.035	24.604
			FX224748	146.22	146.48	.26	10	C45	24.900	31.078
		146.22 146.48 Sericitized. Brownish green very soft very fine grained waxy feeling intensely sericitized fuchsitic gabbro cut by quartz carbonate vein with tourmaline. 10% coarse								

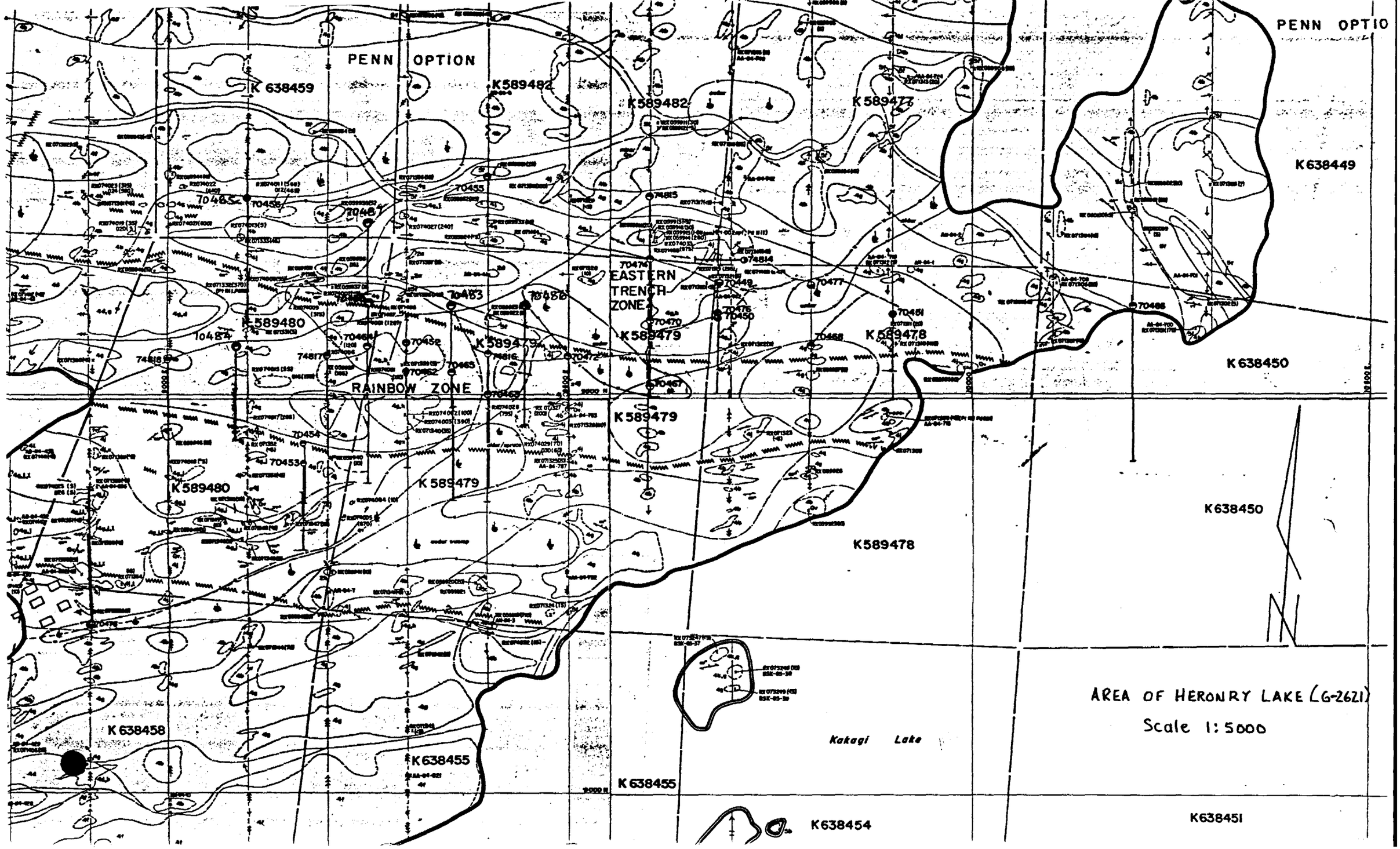
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		grained metamorphic pyrite. Very schistose. Sharp lower contact to vein.								
146.48	146.93	VEIN Quartz vein with irregular patches of carbonate , fine needles of tourmaline and stylolites. minor pyrite. Sharp lower contact.	FX224749	146.48	146.93	.45	TR	C50	2.850	32.361
146.93	148.05	GABBRO Sericitized. Waxy brownish green fuchsitic sericitized gabbro as to 146.48. Very schistose with schistosity warped around quartz veins. 40% quartz carbonate vein stockwork with altered inclusions. Sharp irregular lower contact.	FX224750	146.93	148.05	1.12	4	-	2.980	35.698
148.05	148.84	GABBRO Altered. Pink to buff aphanitic to very fine grained highly silicified carbonatized gabbro. Weakly hematitized looking. This may be an altered quartz feldspar porphyry dike. The different types of alteration may reflect different primary lithologies. Riddled with at least 3 generations of quartz carbonate veins with tourmaline. 5% coarse grained pyrite concentrated along black quartz veinlet.	FX224751	148.05	148.84	.79	5	-	2.180	37.421
148.84	149.91	GABBRO Sericitized. As to 148.05 with irregular zones of pink buff gabbro as above. Riddled with quartz carbonate	FX224752	148.84	149.91	1.07	5	-	.745	38.218

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		veins with tourmaline. Sharp irregular lower contact.								
149.91	150.35	VEIN								
		White and black quartz carbonate tourmaline vein.	FX224753	149.91	150.35	.44	4	-	.915	38.620
150.35	153.75	GABBRO								
		Sericitized. As to 149.91.	FX224754	150.35	150.94	.59	12	F30	4.440	41.240
		150.35 150.94 10 to 15% coarse grained metamorphic pyrite	FX224755	150.94	151.88	.94	4	F30	.175	41.404
		150.94 151.88 40% sericitized and 60% altered as to 148.84. Irregular contacts between two types of alteration. 4% very coarse grained metamorphic pyrite. Different types of alteration may reflect different original lithologies.	FX224756	151.88	153.08	1.20	4	F20	.695	42.238
			FX224757	153.08	153.75	.67	3	C25	.155	42.342
		153.08 153.75 Sharp lower contact at 25 degrees to core axis.								
153.75	154.50	GABBRO								
		Altered. As to 148.84. 25% black smokey quartz carbonate veins. Sharp lower contact.	FX224758	153.75	154.50	.75	TR	C30	.010	42.350
154.50	160.44	GABBRO								
		Altered. Bleached pale pinkish-green weakly fuchsitic	FX224759	154.50	155.75	1.25	TR	F35	.010	42.362
		moderately carbonatized weakly silicified possibly	FX224760	155.75	156.45	.70	TR	-	.020	42.376
		hematitized gabbro. Strongly foliated. Gabbroic texture	FX224761	156.45	158.88	2.43	TR	F35	.015	42.413
		weakly preserved. Locally clots of chlorite stretched	FX224762	158.88	159.30	.42	TR	-	<.005	42.413
		parallel to core axis. Numerous irregular dolomite	FX224763	159.30	160.44	1.14	TR	C25	<.005	42.413
		carbonate veinlets. Minor leucoxene.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		158.88 159.30 Minor fuchsite alteration at dolomite carbonate vein contacts. 159.30 160.44 Sharp lower contact.								
160.44	163.20	GABBRO Altered. As to 151.88. Fine grained tan pink to brown silicified and carbonatized patchs within stringers of foliated brownish-green weakly fuchsite sericitized gabbro. Large patchs of carbonate dolomite riddled with thin black veinlets of quartz tourmaline chlorite giving brecciated appearance. 161.82 163.20 Sharp lower contact.	FX224764 FX224765	160.44 161.82	161.82 163.20	1.38 1.38	3 TR	- -	<.005 <.005	42.413 42.413
163.20	163.56	VEIN Banded black and white quartz carbonate vein parallel to core axis.	FX224766	163.20	163.56	.36	TR	-	.050	42.431
163.56	164.88	GABBRO Altered. As to 163.20. Foliation parallel to core axis.	FX224767	163.56	164.88	1.32	TR	-	.005	42.437
164.88	167.55	GABBRO Altered. Dusty pink brown fine grained strongly foliated weakly silicified possibly hematitized gabbro with pervasive carbonate alteration. Several quartz carbonate veins and dolomite carbonate veins and patchs. Minor ptygmatic stylolites. 166.38 167.55 Gradational lower contact to dark gray colour.	FX224768 FX224769	164.88 166.38	166.38 167.55	1.50 1.17	TR TR	F40 F45	.005 .020	42.445 42.468

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
167.55	174.50	GABBRO								
		Halo alteration. Light gray bleached moderately carbonatized strongly foliated gabbro. Minor leucoxene. Cut by occasional quartz carbonate vein. Contacts of veins locally sericitized and weakly fuchsitic.	FX224770	167.55	169.18	1.63	TR	F40	.025	42.509
			FX224771	169.18	170.60	1.42	TR	-	<.005	42.509
			FX224772	170.60	172.10	1.50	TR	-	.010	42.524
			FX224773	172.10	173.43	1.33	TR	F30	.040	42.577
		167.55 169.18 10 to 15% quartz carbonate veins to 10 centimetres wide.	FX224774	173.43	174.50	1.07	TR	-	<.005	42.577
		169.18 170.60 5 centimetre ptygmatic quartz carbonate vein parallel to core axis.								
		172.10 173.43 Hematitized around several fractures.								
		173.43 174.50 12 centimetre quartz carbonate vein with fuchsitic contacts at 25 degrees to core axis. Foliation decreasing in intensity down hole. Gradational lower contact.								
174.50	193.95	GABBRO								
		Mid green gray fine grained to medium grained massive gabbro. Occasional thin dolomite carbonate veinlet. Very homogeneous. 10% leucoxene.	FX224775	174.50	176.30	1.80	TR	-	.005	42.586
			FX224776	176.30	177.75	1.45	TR	-	<.005	42.586
			FX224777	177.75	179.25	1.50	TR	-	<.005	42.586
		189.50 191.00 10% dolomite quartz veining. Slightly bleached contacts.	FX224778	179.25	180.75	1.50	TR	-	.005	42.594
			FX224779	180.75	182.25	1.50	TR	-	<.005	42.594
		191.00 192.45 As above. Contacts weakly fuchsitic. Carbonate veins are parallel to foliation and dolomite veins have no preferred orientation.	FX224780	182.25	183.75	1.50	TR	-	.010	42.609
			FX224781	183.75	185.25	1.50	TR	-	<.005	42.609
			FX224782	185.25	186.60	1.35	TR	F40	<.005	42.609
			FX224783	186.60	188.10	1.50	TR	-	<.005	42.609
		192.45 193.95 Several thin carbonate veins with fuchsitic contacts.	FX224784	188.10	189.50	1.40	TR	-	.035	42.658
			FX224785	189.50	191.00	1.50	TR	-	<.005	42.658
			FX224786	191.00	192.45	1.45	TR	F50	<.005	42.658
			FX224787	192.45	193.95	1.50	TR	-	<.005	42.658

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
193.95	205.60	GABBRO								
		Very weakly altered. Pale lime green gray slightly	FX224788	193.95	195.35	1.40	TR	-	<.005	42.658
		bleached fuchsitic and silicified fine grained to medium	FX224789	195.35	196.85	1.50	TR	F45	<.005	42.658
		grained gabbro. Weakly foliated. Cut by frequent thin	FX224790	196.85	198.25	1.40	TR	-	<.005	42.658
		carbonate veins with patchs of quartz typically parallel	FX224791	198.25	199.75	1.50	TR	-	<.005	42.658
		to foliation at 45 degrees to core axis. Veins locally	FX224792	199.75	201.20	1.45	TR	F45	<.005	42.658
		have fuchsitic contacts.	FX224793	201.20	202.70	1.50	TR	-	<.005	42.658
		204.10 205.60 Gradational lower contact.	FX224794	202.70	204.10	1.40	TR	-	<.005	42.658
			FX224795	204.10	205.60	1.50	TR	F60	<.005	42.658
205.60	222.20	GABBRO								
		As above. Weakly altered but bleached gray in colour	FX224796	205.60	207.03	1.43	TR	-	.005	42.665
		with no lime green fuchsitic alteration. Minor	FX224797	207.03	208.53	1.50	TR	-	.050	42.740
		leucoxene. Only a few carbonate veins.	FX224798	208.53	210.00	1.47	TR	-	<.005	42.740
		205.60 207.03 2 centimetre quartz vein with fuchsitic	FX224799	210.00	211.50	1.50	TR	-	.005	42.747
		contacts.	FX224800	211.50	213.06	1.56	TR	-	<.005	42.747
		215.96 217.40 10% very irregular quartz carbonate veins.	FX224801	213.06	214.56	1.50	TR	-	<.005	42.747
		217.40 218.85 As above. 5 millimetre carbonate vein	FX224802	214.56	215.96	1.40	TR	-	<.005	42.747
		parallel to core axis microfaulted 8 times	FX224803	215.96	217.40	1.44	TR	F48	<.005	42.747
		over a span of 20 centimetres.	FX224804	217.40	218.85	1.45	TR	-	<.005	42.747
		218.85 222.20 10% quartz carbonate vein veining.	FX224805	218.85	220.32	1.47	TR	-	<.005	42.747
		Foot of hole.	FX224806	220.32	222.20	1.88	TR	-	<.005	42.747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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 9610.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-12-87
PROPERTY	: Penn	DEPARTURE	:E 10200.0 M	TOWNSHIP	:	COMPLETED	: 02-16-87
BOREHOLE	: BH 70466	ELEVATION	: 337.0 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: B5	COUNTRY	: Canada	DRILLED BY	: Wynne
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K 638450	DRILL TYPE	: Super LY 38
DEPTH	: 269.4 M	LOGGED BY	: M. Dudar	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 115 m east & 50 m south of post #4.

LEFT IN HOLE:7.94 m of BW casing + casing shoe.

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
7.92		-44.50	121.92		-40.50	243.84		-34.00			
60.96		-42.50	182.88		-38.50						

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	7.92	OVERBURDEN Casing in overburden.								
7.92	13.99	GABBRO Dark green to green with 40% white feldspathic crystals. Medium grained to coarse grained, crystalline texture, (leopard skin). Massive, equigranular. Homogeneous. 5% chloritic quartz carbonate veins and stringers. Moderately hard. 12.27 13.99 Locally pink to brown hematitic staining in feldspathic stringers and blebs. Sharp irregular lower contact.	FX222080	7.92	9.41	1.49	TR	-	<.005	.000
			FX222081	9.41	10.78	1.37	TR	-	<.005	.000
			FX222082	10.78	12.27	1.49	TR	-	<.005	.000
			FX222083	12.27	13.99	1.72	TR	F74	<.005	.000

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
13.99	17.21	LAMPROPHYRE Dike. Dark green to green - gray. Fine grained, massive, with 5% medium grained mafic clots. Trace to 2% quartz carbonate stringers and veinlets with 5% iron carbonate. Calcareous. 1 to 2% subhedral to cubic pyrite. 3% fine grained, gray leucoxene. 13.99 15.46 2% subhedral pyrite in and adjacent to quartz carbonate veinlets. 15.46 16.16 3% pyrite crystals as cubes, subhedral, and stringers replacing quartz carbonate stringers. 16.16 17.21 Pervasive rusty red brown hematitization.	FX222084	13.99	15.46	1.47	2	-	<.005	.000
			FX222085	15.46	16.16	.70	3	-	<.005	.000
			FX222086	16.16	17.21	1.05	TR	-	<.005	.000
17.21	17.61	FAULT Muddy feldspathic and mafic gouge. Slightly lithified. Very soft.	FX222087	17.21	17.61	.40	TR	-	.005	.002
17.61	27.01	LAMPROPHYRE 17.61 18.92 Locally slightly bleached. 1% subhedral pyrite adjacent to quartz carbonate veins with iron carbonate stringers. 18.92 21.62 1% subhedral and cubic pyrite. 21.62 24.57 1% scattered subhedral pyrite. 24.57 25.33 Gradational contact. 25.33 27.01 Altered. Slightly bleached. 10% composite chloritic quartz carbonate veins and stringers parallel and cross cutting. 7% iron carbonate as stringers and blebs. 3%	FX222088	17.61	18.92	1.31	1	-	<.005	.002
			FX222089	18.92	20.35	1.43	1	-	<.005	.002
			FX222090	20.35	21.62	1.27	1	-	<.005	.002
			FX222091	21.62	23.05	1.43	1	-	.005	.009
			FX222092	23.05	24.57	1.52	1	-	<.005	.009
			FX222093	24.57	25.33	.76	1	F40	<.005	.009
			FX222094	25.33	27.01	1.68	TR	F39	<.005	.009

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		yellow leucoxene.								
27.01	29.16	GABBRO Dark green to green with 40% feldspathic white crystals. Medium grained to coarse grained. Massive and equigranular. Locally a light red hematite stain is found along fractures and in the feldspar. 10% chloritic composite quartz carbonate veins. 5 to 7% iron carbonate blebs. Homogeneous. 28.95 29.16 Gradational contact.	FX222095 FX222096	27.01 28.95	28.95 29.16	1.94 .21	TR TR	- F30	<.005 <.005	.009 .009
29.16	29.78	GABBRO Locally altered. Bleached. Light gray green, fine grained with medium grained stringers of mafic fragments. Well foliated. 10% stretched and boudinaged quartz carbonate stringers and veinlets. 10% iron carbonate stringers. 2% yellow leucoxene. 2% subhedral to cubic pyrite. Moderately hard.	FX222097	29.16	29.78	.62	2	F30	<.005	.009
29.78	33.12	LAMPROPHYRE Dark gray green. Fine grained to medium grained. Slightly foliated with stretched black mafic fragments. 10% brown hematite staining. Calcareous. Trace quartz carbonate veinlets. 1 to 2% subhedral to cubic pyrite. Locally rusty. 2% tan to yellow leucoxene. Silicified. Hard. 29.78 33.12 Locally rusty pyrite.	FX222098 FX222099	29.78 32.18	32.18 33.12	2.40 .94	2 1	F43 F32	<.005 .005	.009 .014

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
33.12	33.68	LAMPROPHYRE Altered, slightly bleached. Light green gray. Fine grained with 10% dark gray mafic clots. Slightly foliated. 5% anastomosing quartz carbonate veinlets and stringers.	FX222100	33.12	33.68	.56	TR	-	<.005	.014
33.68	37.70	GABBRO Dark green to green with 50% white feldspar. Medium grained to coarse grained, massive and equigranular. 5% chloritic quartz carbonate veinlets stringers. 3% yellow leucoxene. Homogeneous. 33.68 35.09 Locally 3 centimetre thick composite vuggy quartz carbonate vein. 35.09 36.48 Phase of gabbro. 10 centimetre thick band of silicified feldspar. Locally pale red with cross cutting quartz carbonate stringers. Locally pitted and soft. Very rubbly. 36.48 37.70 Pervasive hematite staining. Very pitted. Soft.	FX222101	33.68	35.09	1.41	TR	-	<.005	.014
			FX222102	35.09	36.48	1.39	TR	-	<.005	.014
			FX222103	36.48	37.70	1.22	TR	-	<.005	.014
37.70	41.00	FAULT Very altered. Chloritic muddy fault gouge. Blue green to tan. Locally lithified, with altered tan leucoxene, and pale blue feldspar. Very soft. Locally well foliated. 20% iron carbonate. Very rubbly. 40.72 41.00 Consolidated.	FX222104	37.70	38.66	.96	TR	F33	.005	.019
			FX222105	38.66	40.72	2.06	TR	F33	.005	.029
			FX222106	40.72	41.00	.28	TR	-	<.005	.029
41.00	41.85	GABBRO Dark green to black with light green matrix. Medium	FX222107	41.00	41.85	.85	TR	F55	<.005	.029

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		grained to coarse grained. Pitted. Slightly foliated. 1% quartz carbonate stringers. 2% tan leucoxene. Very soft. Sharp contact.								
41.85	44.67	GABBRO Slightly silicified weakly altered. Gray green with 20% chloritic quartz carbonate veinlets, stringers and stretched blebs. Slightly foliated. Fine grained to medium grained. 2% tan leucoxene. Moderately hard to hard 41.85 43.71 Feldspathic stringers and veinlets parallel to core axis. 1% cubic and subhedral pyrite.	FX222108 FX222109 FX222110	41.85 43.10 43.71	43.10 43.71 44.67	1.25 .61 .96	TR 1 1	- - -	<.005 <.005 <.005	.029 .029 .029
44.67	46.90	GABBRO Slightly altered and bleached. Gray to light gray with 30% white feldspar. Medium grained and massive, (leopard skin) texture. Boudinaged quartz carbonate veinlets and stringers. Calcareous. 2% tan leucoxene.	FX222111	44.67	46.90	2.23	TR	-	<.005	.029
46.90	48.46	GABBRO Gray to dark gray. Fine grained to medium grained, with 50% composite chloritic quartz carbonate vein 3 centimetres thick parallel to core axis. 5% iron carbonate. 47.13 48.46 Well foliated.	FX222112 FX222113	46.90 47.13	47.13 48.46	.23 1.33	TR TR	- F35	.015 <.005	.032 .032
48.46	52.90	LAMPROPHYRE Slightly altered and bleached. Gray with 5% stretched black chloritic clots. Fine grained. Slightly foliated.	FX222114 FX222115	48.46 50.16	50.16 51.57	1.70 1.41	TR TR	F38 F33	.010 <.005	.049 .049

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		10% composite quartz carbonate veins and stringers cross cutting and parallel. 2% tan leucoxene.	FX222116	51.57	52.90	1.33	1	C30	<.005	.049
		50.16 51.57 15% cross cutting and parallel composite quartz carbonate stringers and veinlets.								
		51.57 52.90 1% subhedral and cubic pyrite. Sharp contact.								
52.90	55.91	LAMPROPHYRE								
		Gray to black. Fine grained, massive and equigranular.	FX222117	52.90	53.70	.80	2	C55	.010	.057
		Calcareous with 1% iron carbonate. Trace to 1% subhedral	FX222118	53.70	55.31	1.61	1	F58	<.005	.057
		and cubic pyrite. 1% stretched black mafic clots. 2 to	FX222119	55.31	55.91	.60	1	C15	.065	.096
		3% composite chloritic quartz carbonate veinlets and stringers cross cutting and parallel. Moderately hard. Moderately foliated.								
		52.90 53.70 Locally cut by a silicified feldspar porphyry dike parallel to foliation, 5 centimetres thick with 2% pyrite cubes hematitized stringers. Lamprophyre is composed of locally 5% stretched black mafic clots. Sharp contact.								
		55.31 55.91 Poorly foliated. Sharp contact.								
55.91	68.92	FELDSPAR PORPHYRY								
		Pale red to light gray. Fine grained with 2 to 3	FX222120	55.91	57.31	1.40	2	-	.030	.138
		millimetre feldspar phenocrysts, locally altered. 5%	FX222121	57.31	58.75	1.44	2	-	.020	.167
		black mafic clots with 1 to 2% pyrite crystals. 5%	FX222122	58.75	60.27	1.52	1	-	.010	.182
		quartz carbonate veins and stringers cross cutting and	FX222123	60.27	61.76	1.49	1	-	.085	.309
		parallel with 2% iron carbonate and 1% pyrite cubes.	FX222124	61.76	63.20	1.44	1	-	.015	.331
		Feldspar porphyry is locally bleached adjacent to	FX222125	63.20	64.70	1.50	1	-	.095	.473
		fractures. Moderately hard.	FX222126	64.70	66.06	1.36	1	F26	.010	.487
		55.91 57.31 Mottled pale red to light gray. Trace	FX222127	66.06	67.58	1.52	1	C15	.010	.502

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		chloritic stringers.	FX222128	67.58	68.92	1.34	1	-	<.005	.502
	57.31 58.75	Pale red. Locally bleached adjacent to fractures. Locally muddy fault gouge and broken core. Rusty pyrite.								
	58.75 60.27	Light gray. Slightly pale red. Bleached adjacent to mafic clots and fractures.								
	60.27 61.76	Light gray, slightly pale red. Locally 2 centimetre thick quartz carbonate vein with 1% iron carbonate, 5% chlorite at periphries								
	61.76 63.20	Light gray green. Locally a 2 centimetre thick chloritic quartz carbonate vein with trace tourmaline crystals.								
	63.20 64.70	Light gray green.								
	64.70 66.06	Locally foliated. Slightly sericitized, (sheared?).								
	67.58 68.92	Sharp undulating contact.								
		NOTE: Core from 68.71 to 80.35 m was spilled from boxes..								
68.92	71.82	LAMPROPHYRE								
		Dark gray green. Fine grained with 2% medium grained mafic clots. Calcareous. Massive and equigranular. 3% chloritic quartz carbonate veinlets cross cutting and parallel with 1% iron carbonate. Trace to 1% scattered subhedral and cubic pyrite. Moderately hard.	FX222129	68.92	70.48	1.56	1	-	<.005	.502
			FX222130	70.48	71.82	1.34	1	-	<.005	.502
		70.48 71.82 Sharp contact.								
71.82	73.02	FELDSPAR PORPHYRY								
		As at 55.91 to 68.92 metres. Hematite staining at	FX222131	71.82	73.02	1.20	2	C90	.035	.544

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		contact. 2% subhedral and cubic pyrite. sharp contact.								
73.02	73.82	LAMPROPHYRE As at 68.92 to 71.82 metres. Stretched mafic clots. Well foliated.	FX222132	73.02	73.82	.80	TR	F64	<.005	.544
73.82	77.71	FELDSPAR PORPHYRY As at 55.91 to 68.92 metres. 73.82 75.27 2% pyrite crystals in mafic clots. 75.27 76.86 Locally hematitic staining. 76.86 77.71 Sharp contact.	FX222133	73.82	75.27	1.45	2	-	.010	.558
			FX222134	75.27	76.86	1.59	2	-	<.005	.558
			FX222135	76.86	77.71	.85	2	C75	.930	1.349
77.71	80.00	QUARTZ FELDSPAR PORPHYRY Coarse grained, angular feldspar and quartz phenocrysts in a very fine grained tan to dark green matrix. 5% iron carbonate blebs. calcareous. The porphyry is in sharp contact with a dark green, well foliated lamprophyre. 1% pyrite crystals in the lamprophyre. 78.81 80.00 50% lamprophyre, locally silicified with 20% quartz carbonate veins up to 3 centimetres thick, locally contorted. sharp contact.	FX222136	77.71	78.81	1.10	1	F40	<.005	1.349
			FX222137	78.81	80.00	1.19	TR	C36	<.005	1.349
80.00	84.94	FELDSPAR PORPHYRY As at 55.91 to 68.92 metres. 83.85 84.94 Sharp contact.	FX222138	80.00	80.47	.47	TR	-	<.005	1.349
			FX222139	80.47	82.12	1.65	TR	-	<.005	1.349
			FX222140	82.12	83.52	1.40	TR	-	.020	1.377
			FX222141	83.52	84.94	1.42	TR	C23	<.005	1.377

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
84.94	90.34	LAMPROPHYRE								
		Dark green, very fine grained to fine grained. Well foliated, with stretched mafic clots. 15% chloritic quartz carbonate veins cross cutting and parallel to foliation. Calcareous. 2% scattered tan leucoxene.	FX222142	84.94	86.65	1.71	TR	F32	<.005	1.377
			FX222143	86.65	87.36	.71	TR	F32	<.005	1.377
			FX222144	87.36	88.86	1.50	TR	F35	<.005	1.377
			FX222145	88.86	90.34	1.48	TR	C54	<.005	1.377
		84.94 86.65 Anastomosing quartz vein 15 centimetres thick, slightly calcareous at periphries, cross cuts foliation.								
		86.65 87.36 10% chloritic quartz carbonate veins 1 centimetre thick parallel to foliation.								
		87.36 88.86 Poorly foliated.								
		88.86 90.34 10% anastomosing quartz carbonate vein 3 centimetres thick with chloritic quartz carbonate veinlets and iron carbonate. Sharp contact interupted by quartz carbonate veinlets.								
90.34	117.04	GABBRO								
		As at 7.92 to 13.99 metres. Leopard skin texture.	FX222146	90.34	91.76	1.42	TR	-	<.005	1.377
		91.76 92.96 5% anastomosing quartz veinlets.	FX222147	91.76	92.96	1.20	TR	-	<.005	1.377
		95.87 97.29 5% anastomosing quartz veins 1 centimetre thick cross cutting chloritic quartz carbonate veinlets.	FX222148	92.96	94.38	1.42	TR	-	<.005	1.377
			FX222149	94.38	95.87	1.49	TR	-	<.005	1.377
			FX222150	95.87	97.29	1.42	TR	-	<.005	1.377
		101.80 103.22 10% chloritic - feldspathic stringers.	FX222151	97.29	98.83	1.54	TR	-	<.005	1.377
		103.22 104.64 Locally blood red hematite staining in feldspathic stringers and veins.	FX222152	98.83	100.24	1.41	TR	-	<.005	1.377
			FX222153	100.24	101.80	1.56	TR	-	.005	1.385
		104.64 106.06 Cut by a 20 centimetre thick lamprophyre dike.	FX222154	101.80	103.22	1.42	TR	-	<.005	1.385
			FX222155	103.22	104.64	1.42	TR	-	<.005	1.385
		107.48 108.90 3 centimetre thick composite quartz carbonate vein with slate hematite	FX222156	104.64	106.06	1.42	TR	-	<.005	1.385
			FX222157	106.06	107.48	1.42	TR	-	.005	1.392

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		staining and adjacent alteration halo.	FX222158	107.48	108.90	1.42	TR	-	<.005	1.392
	113.30 114.78	5 centimetre thick anastomosing quartz vein	FX222159	108.90	110.30	1.40	TR	-	<.005	1.392
	116.20 117.04	5% anastomosing quartz carbonate veins 2	FX222160	110.30	111.88	1.58	TR	-	<.005	1.392
		centimetres thick. Sharp contact.	FX222161	111.88	113.30	1.42	TR	-	<.005	1.392
			FX222162	113.30	114.78	1.48	TR	-	<.005	1.392
			FX222163	114.78	116.20	1.42	TR	-	.090	1.520
			FX222164	116.20	117.04	.84	TR	C60	<.005	1.520
117.04	117.99	LAMPROPHYRE								
		Dike. Dark green gray, fine grained with 5% medium grained mafic clots. 10% composite chloritic quartz carbonate vein 5 centimetres thick. Slightly calcareous. 3% pyrite crystals scattered and forming along fractures. Sharp contact.	FX222165	117.04	117.99	.95	3	C55	.015	1.534
117.99	145.99	GABBRO								
		As at 7.92 to 13.99 metres. Leopard skin texture.	FX222166	117.99	119.41	1.42	TR	-	<.005	1.534
	117.99 119.41	10% composite chloritic quartz carbonate	FX222167	119.41	120.91	1.50	TR	-	<.005	1.534
		vein 5 centimetres thick with trace rusty	FX222168	120.91	122.31	1.40	TR	-	<.005	1.534
		staining.	FX222169	122.31	123.81	1.50	TR	-	<.005	1.534
	125.23 126.90	5% anastomosing quartz carbonate veins up	FX222170	123.81	125.23	1.42	TR	-	<.005	1.534
		to 5 centimetres thick with trace iron	FX222171	125.23	126.90	1.67	TR	-	<.005	1.534
		carbonate. Locally hematitic staining and	FX222172	126.90	128.32	1.42	TR	-	<.005	1.534
		chloritic stringers at periphries.	FX222173	128.32	129.64	1.32	TR	-	<.005	1.534
	129.64 131.06	Trace hematite staining. 2 centimetre	FX222174	129.64	131.06	1.42	TR	-	<.005	1.534
		thick composite quartz carbonate vein with	FX222175	131.06	132.60	1.54	TR	-	<.005	1.534
		alteration halo extending 3 centimetres	FX222176	132.60	133.94	1.34	TR	-	<.005	1.534
		into the gabbro.	FX222177	133.94	134.82	.88	TR	-	<.005	1.534
	131.06 132.60	10% composite quartz carbonate vein, very	FX222178	134.82	136.24	1.42	TR	-	<.005	1.534
		contorted, 2 centimetres thick with 3	FX222179	136.24	137.66	1.42	TR	-	<.005	1.534

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

FROM M	TO M	
		centimetre alteration halo and possible chemical front.
132.60	133.94	1.5 centimetre thick composite quartz carbonate vein with tourmaline crystals at periphry. 6 Centimetre thick dark green alteration halo. Trace hematite stain adjacent to vein.
133.94	134.82	quartz flooded alteration zone. Contorted composite quartz carbonate veins approximately up to 10 centimetres thick with stringers and veinlets. Dark green alteration halo with possible chemical front. Trace pyrite in halo.
134.82	136.24	50% altered gabbro halo surrounding composite quartz carbonate veins and stringers. Distinct contact between alteration and gabbro with alteration having relic texturing. Possible chemical front.
139.08	142.23	15% 5 centimetre altered gabbro halo with chemical front, adjacent to 2 centimetre thick composite quartz carbonate vein. 5% iron carbonate.
143.65	144.97	5% white feldspathic bleb 5 centimetres thick.
144.97	145.99	Altered gabbroic stringer 1 centimetre thick parallel to core axis.
145.99	162.06	GABBRO
		Altered. Dark gray green to gray with stretched mafic and feldspar crystals. Well foliated. Locally folded.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222180	137.66	139.08	1.42	TR	-	<.005	1.534
FX222181	139.08	140.50	1.42	TR	-	<.005	1.534
FX222182	140.50	142.23	1.73	TR	-	<.005	1.534
FX222183	142.23	143.65	1.42	TR	-	<.005	1.534
FX222184	143.65	144.97	1.32	TR	-	<.005	1.534
FX222185	144.97	145.99	1.02	TR	C30	<.005	1.534
FX222186	145.99	147.47	1.48	1	-	<.005	1.534
FX222187	147.47	148.40	.93	TR	F44	<.005	1.534

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

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

FROM M	TO M	
		Fine grained to medium grained. 15% composite quartz carbonate veins, locally contorted with boudinaged veinlets and wispy stringers, parallel to foliation. 5% iron carbonate. Locally slightly altered stretched fragments of gabbro. Locally silicified. 2 to 3% tan to yellow leucoxene. Trace to 1% blebby pyrite. Moderately hard to hard.
145.99	147.47	1% blebby pyrite. Slightly contorted and folded.
147.47	148.40	10% composite chloritic veinlets and stringers parallel and cross cutting foliation.
148.40	149.25	Lower gradational contact with gabbro at 30 degrees. Poorly foliated. Fragments of unaltered gabbro.
149.25	150.35	2% altered gabbroic stringers.
150.35	150.91	40% altered gabbro halo surrounding composite chloritic silicified feldspathic vein 1.5 centimetres thick parallel to core axis and stringers.
150.91	152.33	Locally hematitic staining in feldspathic stringers and lenses.
153.97	155.39	Locally altered gabbroic halos adjacent to hematitic quartz carbonate veinlets.
156.96	158.38	Locally 3 centimetre thick anastomosing quartz carbonate vein with chloritic contacts and 1 centimetre thick alteration halo. Feldspathic stringer parallel to foliation.
158.38	159.71	Locally chloritic quartz carbonate vein in broken core.
159.71	161.11	Locally slightly altered.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222188	148.40	149.25	.85	TR	-	<.005	1.534
FX222189	149.25	150.35	1.10	TR	-	<.005	1.534
FX222190	150.35	150.91	.56	TR	-	<.005	1.534
FX222191	150.91	152.33	1.42	TR	-	.010	1.548
FX222192	152.33	153.97	1.64	TR	-	<.005	1.548
FX222193	153.97	155.39	1.42	TR	-	<.005	1.548
FX222194	155.39	156.96	1.57	TR	-	<.005	1.548
FX222195	156.96	158.38	1.42	TR	-	<.005	1.548
FX222196	158.38	159.71	1.33	TR	-	<.005	1.548
FX222197	159.71	161.11	1.40	TR	-	<.005	1.548
FX222198	161.11	162.06	.95	TR	C78	<.005	1.548

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		161.11 162.06 20% altered, silicified gabbroic halo adjacent to 2 centimetre thick anastomosing quartz carbonate vein. Sharp contact with feldspar porphyry dike.								
162.06	166.95	FELDSPAR PORPHYRY								
		As at 55.91 to 68.92 metres. 1 to 2% finely disseminated pyrite.	FX222199	162.06	163.48	1.42	2	-	.035	1.598
			FX222200	163.48	165.10	1.62	1	-	.050	1.679
		162.06 163.48 Locally dark green alteration halo adjacent to composite quartz veinlets and stringers.	FX222201	165.10	166.15	1.05	3	-	.015	1.695
			FX222202	166.15	166.95	.80	1	-	<.005	1.695
		165.10 166.15 3% disseminated pyrite and blebs.								
		166.15 166.95 15 centimetre thick composite chloritic quartz carbonate vein with altered dark green feldspar porphyry halo extent unknown because of broken core. Sharp contact between quartz carbonate vein and gabbro.								
166.95	184.20	GABBRO								
		As at 7.92 to 13.99 metres. Homogeneous, leopard skin texture.	FX222203	166.95	168.37	1.42	TR	-	<.005	1.695
			FX222204	168.37	169.71	1.34	TR	-	<.005	1.695
		168.37 169.76 Locally alteration halo adjacent to quartz flooded gabbro.	FX222205	169.71	171.23	1.52	TR	-	<.005	1.695
			FX222206	171.23	172.65	1.42	TR	-	.005	1.702
		171.23 172.65 Trace hematitic staining in fractures.	FX222207	172.65	174.01	1.36	TR	-	<.005	1.702
		172.65 174.01 Trace hematitic staining in quartz carbonate stringers.	FX222208	174.01	175.43	1.42	TR	-	<.005	1.702
			FX222209	175.43	177.07	1.64	TR	-	<.005	1.702
		175.43 177.07 Silicified chloritic feldspathic vein 2 centimetres thick with tourmaline crystals at periphries.	FX222210	177.07	178.49	1.42	TR	-	<.005	1.702
			FX222211	178.49	179.94	1.45	TR	-	<.005	1.702
			FX222212	179.94	181.36	1.42	TR	-	<.005	1.702

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	177.07 179.94	Hematitic stained silicified feldspathic vein 1.5 centimetre thick with tourmaline crystals and alteration halo.	FX222213	181.36	182.78	1.42	TR	-	<.005	1.702
			FX222214	182.78	184.20	1.42	TR	C17	<.005	1.702
	181.36 182.78	15% composite quartz carbonate veins up to 10 centimetres thick with minor alteration halos.								
	182.78 184.20	Gradational contact with altered gabbro.								
184.20 186.31	GABBRO									
		Altered. Light gray, with stretched, medium grained mafic and feldspathic crystals. Calcareous, silicified. Fine grained. Relic texture. 5% silicified feldspathic veinlets. 5% chloritic quartz carbonate stringers. Moderately hard to hard. 2 to 3% scattered tan leucoxene	FX222215	184.20	185.31	1.11	TR	-	<.005	1.702
			FX222216	185.31	186.31	1.00	TR	-	<.005	1.702
	185.31 186.31	Gradational lower contact with gabbro.								
186.31 219.19	GABBRO									
		As at 7.92 to 13.99 metres. Homogeneous, leopard skin texture.	FX222217	186.31	187.65	1.34	TR	-	<.005	1.702
			FX222218	187.65	189.06	1.41	TR	-	<.005	1.702
	186.31 187.65	Dark green alteration halo adjacent to silicified feldspathic boudinaged veinlet.	FX222219	189.06	190.58	1.52	TR	-	<.005	1.702
			FX222220	190.58	192.01	1.43	TR	-	<.005	1.702
	190.58 192.01	Trace dark green alteration halo adjacent to feldspathic stringer.	FX222221	192.01	194.48	2.47	TR	-	<.005	1.702
			FX222222	194.48	195.94	1.46	TR	-	<.005	1.702
	192.01 194.48	Chloritic, silicified feldspathic veinlet approximately parallel to core axis.	FX222223	195.94	196.38	.44	TR	-	<.005	1.702
			FX222224	196.38	198.01	1.63	TR	-	<.005	1.702
	194.48 195.94	5% chloritic quartz veinlets and stringers.	FX222225	198.01	199.34	1.33	TR	-	<.005	1.702
	195.94 196.38	Pale pink 3 centimetre thick silicified feldspathic vein with inclusions of wallrock , hematitic staining, and trace iron carbonate. 2% cross cutting chloritic	FX222226	199.34	200.74	1.40	TR	-	<.005	1.702
			FX222227	200.74	202.39	1.65	TR	-	<.005	1.702
			FX222228	202.39	203.76	1.37	TR	-	<.005	1.702
			FX222229	203.76	205.30	1.54	1	-	<.005	1.702

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

FROM M	TO M	
		quartz veinlets with trace pyrite cubes.
196.38	198.01	30 centimetre thick dark green to light gray feldspar porphyry dike, with chill margins.
198.01	199.34	Locally quartz carbonate veinlet with alteration halo. 5% silicified feldspathic stringers.
199.34	200.74	Quartz carbonate stringers with dark green alteration halo.
202.39	203.76	Locally microfaulted feldspathic vein 1 centimetre thick with dark green chloritic alteration halo.
203.76	205.30	4 centimetre thick anastomosing quartz carbonate vein with alteration halo and 1% pyrite cubes replacing calcareous stringers.
205.30	206.73	Feldspathic composite veinlet with alteration halo and hematitic staining.
206.73	208.15	5% chloritic quartz carbonate veins up to 3 centimetres thick with trace hematitic staining and iron carbonate. silicified feldspathic blebs with hematite staining.
208.15	209.58	Locally composite chloritic quartz carbonate stringers with 10 centimetre alteration halo.
209.58	211.10	Feldspathic stringers.
211.10	212.48	Feldspathic blebs with wallrock inclusions.
216.98	218.33	5% silicified feldspathic stringers with dark green alteration halos.
218.33	219.19	5% composite quartz carbonate veins 1 centimetre thick. Sharp upper contact with feldspar porphyry dike.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222230	205.30	206.73	1.43	TR	-	<.005	1.702
FX222231	206.73	208.15	1.42	TR	-	.005	1.709
FX222232	208.15	209.58	1.43	TR	-	.005	1.716
FX222233	209.58	211.10	1.52	TR	-	.005	1.723
FX222234	211.10	212.48	1.38	TR	-	.005	1.730
FX222235	212.48	214.00	1.52	TR	-	<.005	1.730
FX222236	214.00	215.37	1.37	TR	-	<.005	1.730
FX222237	215.37	216.98	1.61	TR	-	.005	1.738
FX222238	216.98	218.33	1.35	TR	-	<.005	1.738
FX222239	218.33	219.19	.86	TR	-	<.005	1.738

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
219.19	220.01	FELDSPAR PORPHYRY Dike. Dark gray green with white feldspars phenocrysts. Fine grained. Calcareous stringers. 2% cubic and subhedral pyrite crystals. Lower contact in lost core.	FX222240	219.19	220.01	.82	2	C30	.010	1.747
220.01	239.39	GABBRO As at 7.94 to 13.99 metres. Homogeneous, leopard skin texture.	FX222241	220.01	221.36	1.35	TR	-	<.005	1.747
			FX222242	221.36	222.81	1.45	TR	-	.005	1.754
		221.36 222.81 2 centimetre thick composite quartz carbonate vein parallel to core axis. Trace hematitic staining.	FX222243	222.81	224.30	1.49	TR	-	<.005	1.754
			FX222244	224.30	225.88	1.58	TR	-	<.005	1.754
			FX222245	225.88	227.23	1.35	TR	-	<.005	1.754
		224.30 225.88 Trace pale pink feldspathic veinlet adjacent to quartz carbonate veinlet.	FX222246	227.23	228.73	1.50	TR	-	<.005	1.754
			FX222247	228.73	229.91	1.18	TR	-	<.005	1.754
		231.42 232.92 Locally feldspathic veinlet with dark green alteration halo.	FX222248	229.91	231.42	1.51	TR	-	<.005	1.754
			FX222249	231.42	232.92	1.50	TR	-	.010	1.769
		232.92 238.36 Alteration halos adjacent to composite chloritic quartz carbonate veinlets.	FX222250	232.92	234.37	1.45	TR	-	<.005	1.769
			FX222251	234.37	235.76	1.39	TR	-	.005	1.776
		238.36 239.39 Increasing alteration intensity. Sharply gradational contact to slightly altered basalt unit.	FX222252	235.76	237.23	1.47	TR	-	<.005	1.776
			FX222253	237.23	238.36	1.13	TR	-	<.005	1.776
			FX222254	238.36	239.39	1.03	TR	-	<.005	1.776
239.39	242.15	BASALT Altered. Dark gray to light gray with stretched black mafic clots. Locally foliated. 20% composite chloritic quartz carbonate veinlets and stringers. 2% tan leucoxene. Locally 2% subhedral and cubic pyrite, 1% finely disseminated crystals. Moderately hard.	FX222255	239.39	240.81	1.42	2	F62	.010	1.790
			FX222256	240.81	242.15	1.34	2	C50	.065	1.877
		239.39 240.81 Locally 2% pyrite cubes in composite								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		chloritic quartz carbonate folded basalt.								
	240.81 242.15	Sharp contact with felsite dike.								
242.15	243.71	FELSITE								
		Dike. Dark green, fine grained, massive and equigranular. Homogeneous. 1% scattered pyrite crystals. Sharp upper contact with altered basalt.	FX222257	242.15	243.71	1.56	1	-	.035	1.932
243.71	246.88	BASALT								
		As at 239.39 to 242.15 metres. Sharp contact with felsite dike.	FX222258	243.71	245.20	1.49	TR	C90	.005	1.939
			FX222259	245.20	246.88	1.68	TR	C75	<.005	1.939
246.88	248.21	FELSITE								
		As at 242.15 to 243.71 metres.	FX222260	246.88	248.21	1.33	2	-	.095	2.066
248.21	253.44	BASALT								
		Green to dark green, fine grained with medium grained black mafic clots. Massive, homogeneous. Slightly calcareous. 5% chloritic quartz carbonate veinlets and stringers. 5% composite quartz carbonate veins up to 5 centimetres thick with hematite staining. 1 to 3% pyrite as subhedral and cubic crystals. 2% disseminated pyrite. Moderately hard.	FX222261	248.21	248.89	.68	1	-	.060	2.106
			FX222262	248.89	250.35	1.46	3	-	.010	2.121
			FX222263	250.35	251.75	1.40	4	F60	.045	2.184
			FX222264	251.75	252.78	1.03	2	-	.060	2.246
			FX222265	252.78	253.44	.66	5	-	.025	2.262
	248.21 248.89	5 centimetre thick composite quartz carbonate vein with trace inclusion of wallrock.								
	248.89 250.35	5 centimetre thick composite quartz carbonate vein with 3% iron carbonate and								

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

FROM M	TO M	
		orange iron stains. 1% Subhedral and cubic pyrite and 2% finely disseminated crystals.
	250.35 251.75	Locally altered basalt. Light green with stretched mafic clots adjacent to contorted composite quartz carbonate veins and chloritic quartz carbonate veinlets with 10% iron carbonate. Slightly foliated. 2% scattered subhedral and cubic pyrite, 2% finely disseminated crystals.
	251.75 252.78	4 centimetre thick chloritic quartz carbonate vein, locally contorted. 2% disseminated pyrite.
	252.78 253.44	Mottled dark gray to light gray basalt. Slightly altered. 5% subhedral and cubic pyrite.
253.44 258.31	BASALT	
		Altered. Locally dark gray to light gray with stretched black mafic clots. Locally foliated. 20% composite chloritic quartz carbonate veinlets and stringers. 2% tan leucoxene. Locally 2% subhedral cubic pyrite, 1% finely disseminated crystals.
	254.70 255.20	Lensoidal altered basalt fragments up to 5 centimetres long in a very fine grained gray matrix. Slightly foliated. 1% scattered pyrite crystals in matrix.
	255.20 257.59	Locally contorted. Foliated. 6 centimetre thick anastomosing quartz vein with calcareous margins. 10% composite

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222266	253.44	254.70	1.26	3	-	<.005	2.262
FX222267	254.70	255.20	.50	1	F50	<.005	2.262
FX222268	255.20	256.20	1.00	2	F15	<.005	2.262
FX222269	256.20	257.59	1.39	2	F15	.055	2.339
FX222270	257.59	258.31	.72	3	C56	.025	2.357

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		chloritic quartz carbonate veins and boudinaged stringers, with cross cutting stringers. 2% tan leucoxene. 2% scattered subhedral and cubic pyrite.								
	257.59 258.31	Gradational alteration into slightly altered basalt. 20% composite quartz carbonate veins up to 1.5 centimetres thick, locally contorted, with 5% iron carbonate. Locally 3% subhedral and cubic pyrite. Lower contact with basalt is sharp								
258.31	260.70	BASALT								
		As at 248.21 to 253.44 metres. 2% scattered pyrite crystals up to 5 millimetre.	FX222271	258.31	259.76	1.45	2	-	.055	2.436
			FX222272	259.76	260.70	.94	3	C33	.050	2.483
	258.31 259.76	2% subhedral and cubic pyrite in locally medium grained basalt.								
	259.76 260.70	3% scattered and disseminated pyrite crystals. Sharp upper contact with altered feldspar porphyry dike.								
260.70	261.40	FELDSPAR PORPHYRY								
		Dike. Dark green, fine grained to medium grained with stretched feldspathic and mafic phenocrysts. Up to 4 centimetre thick fragments of wallrock. 20% quartz carbonate veins and veinlets. Calcareous. Foliated. Sharp lower contact with basalt.	FX222273	260.70	261.40	.70	TR	C20	<.005	2.483
261.40	265.04	BASALT								
		As at 248.21 to 253.44 metres. Locally silicified.	FX222274	261.40	262.60	1.20	3	-	.060	2.555

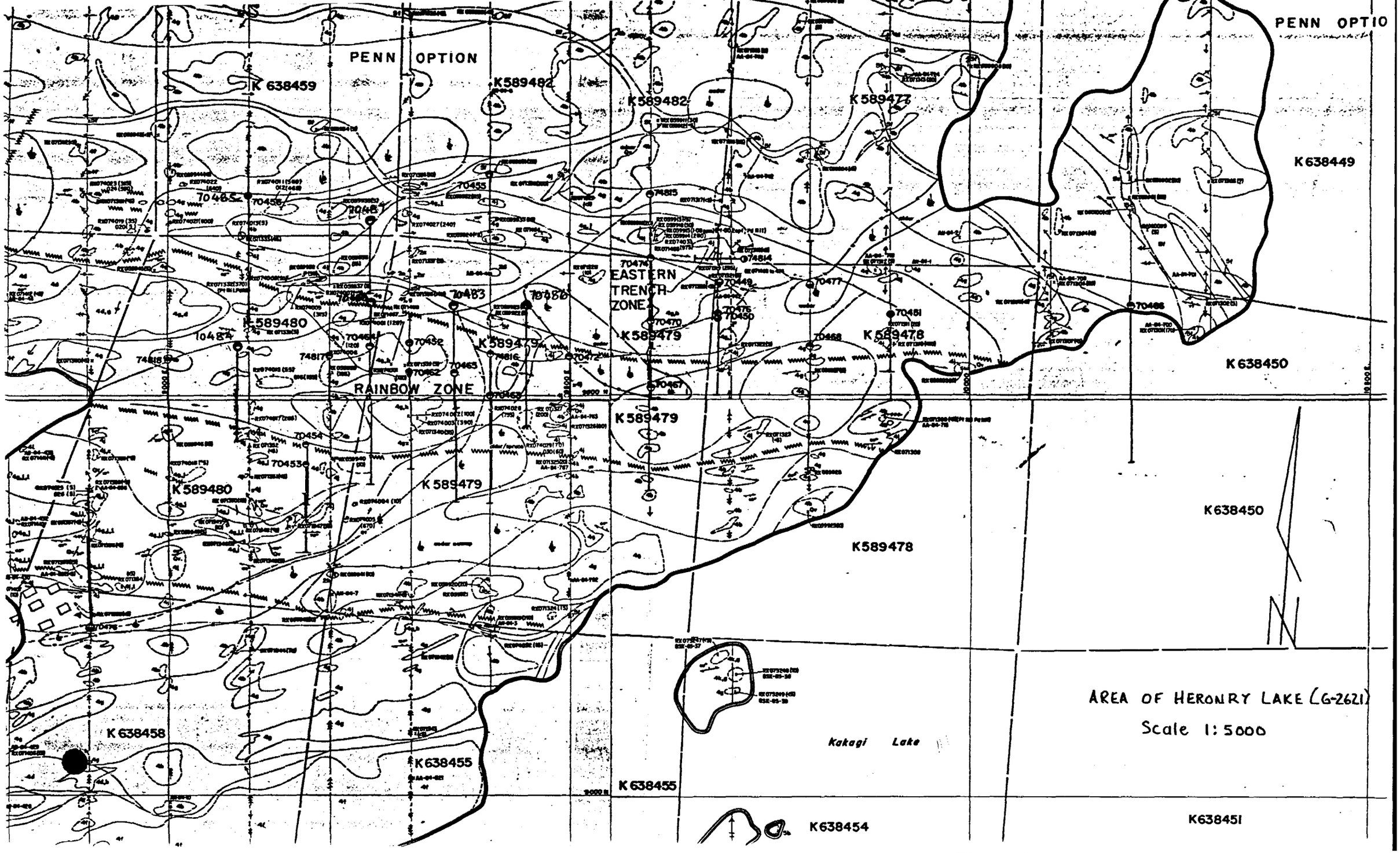
**********DESCRIPTION**********

FROM M	TO M	DESCRIPTION
261.40	262.60	2% subhedral and cubic pyrite, with 1% disseminated crystals.
262.60	263.13	Locally altered, with stretched dark green clots. 10 centimetre blow-outs of chloritic quartz carbonate, with 4% pyrite crystals. Moderately hard.
263.13	264.05	Locally silicified, hard, with stretched black mafic clots. 5% subhedral and cubic pyrite up to 5 millimetres.
264.05	265.04	Slightly altered. Mottled gray to dark green. Hard. 50% chloritic quartz carbonate folded. Slightly foliated. 2% scattered pyrite. Sharp undulating contact with felsite dike.
265.04	266.49	FELSITE Dike. Light brown gray. Fine grained with feldspathic phenocrysts. Slightly foliated with faint tan stringers. 4% scattered pyrite crystals as cubes and disseminated. Trace scattered quartz carbonate stringers and chloritic stringers. Large contorted fragments of wallrock. Sharp lower contact with altered gabbro.
266.49	269.44	GABBRO Dark gray green. Fine grained with medium grained stringers of feldspathic and mafic crystals. Well foliated. 15% composite chloritic quartz carbonate veins, veinlets and stringers. Calcareous. 2% scattered tan leucoxene. trace to 1% pyrite crystals. 267.94 269.44 2 centimetre thick composite chloritic

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222275	262.60	263.13	.53	4	-	.005	2.558
FX222276	263.13	264.05	.92	5	-	.110	2.659
FX222277	264.05	265.04	.99	2	C10	.020	2.679
FX222278	265.04	266.49	1.45	4	F40	.060	2.766
FX222279	266.49	267.94	1.45	2	-	.005	2.773
FX222280	267.94	269.44	1.50	3	-	.005	2.781

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		quartz carbonate vein with 1% cubic pyrite in and adjacent to the vein. 2% finely disseminated pyrite.								
		269.44 Foot of hole.								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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	: Fort Knox JV	LATITUDE	:N 9510.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-17-87
PROPERTY	: Penn	DEPARTURE	:E 9600.0 M	TOWNSHIP	:	COMPLETED	: 02-19-87
BOREHOLE	: 70467-0	ELEVATION	: 1359.7 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	: 175.9 M	LOGGED BY	: R. Bell	GRID NAME	:	TEST METHOD	: Acid
				CORE SIZE	: BQwl	ASSAYED FOR	: Gold

COMMENTS : Collar is 70 m W and 155 m S of number one post.

LEFT IN HOLE:3.05 m casing

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

DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP	DEPTH	AZIM	DIP
60.96		-40.50	121.92		-40.50	175.87		-38.00			

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.00	2.18	OVERBURDEN Casing in sand and gravel.								
2.18	3.25	GABBRO Altered. Yellow -lime green locally fuchsitic sericitized strongly carbonatized silicified gabbro riddled with quartz carbonate veins.	FX224519	2.18	3.25	1.07	TR	-	.065	.070
3.25	11.03	GABBRO Halo alteration. Gray to green fine grained slightly bleached looking weakly to moderately carbonatized gabbro. 5% pink dolomite carbonate veins. Weakly to	FX224520	3.25	5.10	1.85	TR	F48	.460	.921
			FX224521	5.10	6.54	1.44	TR	-	.015	.942
			FX224522	6.54	8.04	1.50	TR	F50	.055	1.025

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		moderately foliated.	FX224523	8.04	9.53	1.49	TR	F48	.050	1.099
		8.04 9.53 Few carbonate dolomite veins to 4 centimetres wide.	FX224524	9.53	11.03	1.50	TR	F45	<.005	1.099
		9.53 11.03 Gradational lower contact.								
11.03	34.63	GABBRO								
		Dark green fine grained to medium grained massive to	FX224525	11.03	12.51	1.48	TR	-	.020	1.129
		weakly foliated gabbro with few dolomite carbonate	FX224526	12.51	14.00	1.49	TR	-	.020	1.159
		quartz veins. Slightly bleached around some veins.	FX224527	14.00	15.50	1.50	TR	-	.030	1.204
		18.48 19.98 5 to 10% veining.	FX224528	15.50	17.00	1.50	TR	-	.020	1.234
		19.98 21.45 15% contorted dolomite quartz veins.	FX224529	17.00	18.48	1.48	TR	F42	.020	1.263
		27.43 28.93 5 to 8% quartz carbonate veining parallel to	FX224530	18.48	19.98	1.50	TR	-	.010	1.278
		foliation.	FX224531	19.98	21.45	1.47	TR	-	.030	1.322
		30.31 31.74 Minor pyrite at thin quartz vein contacts.	FX224532	21.45	22.95	1.50	TR	F45	.010	1.337
		33.24 34.63 Sharply gradational lower contact.	FX224533	22.95	24.43	1.48	TR	-	<.005	1.337
			FX224534	24.43	25.93	1.50	TR	-	<.005	1.337
			FX224535	25.93	27.43	1.50	TR	-	<.005	1.337
			FX224536	27.43	28.93	1.50	TR	F35	.050	1.412
			FX224537	28.93	30.31	1.38	TR	F48	.005	1.419
			FX224538	30.31	31.74	1.43	TR	F45	.075	1.526
			FX224539	31.74	33.24	1.50	TR	-	.040	1.586
			FX224540	33.24	34.63	1.39	TR	-	.055	1.663
34.63	36.29	GABBRO								
		Altered. Very pale green weakly fuchsitic fine grained	FX224541	34.63	36.29	1.66	4	F50	.265	2.103
		carbonatized sericitized gabbro. 10% black smokey quartz								
		veins and carbonate veins. 4% fine grained to coarse								
		grained disseminated pyrite. Few less altered chloritic								
		sections.								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
36.29	37.06	VEIN Predominantly ankerite and black quartz vein from parallel to core axis to 50 degrees to core axis. 30% bleached altered gabbro wallrock as to 36.29. 1 to 2% each pyrite and chalcopyrite.	FX224542	36.29	37.06	.77	3	-	.330	2.357
37.06	49.34	GABBRO As to 34.63. Very homogeneous. 37.70 39.12 5% milky white quartz veins. 44.98 46.45 15% thin quartz dolomite veinlets with bleached altered contacts. 46.45 47.95 Quartz carbonate vein 20 centimetres wide with minor pyrite at contacts.	FX224543	37.06	37.70	.64	TR	-	.025	2.373
			FX224544	37.70	39.12	1.42	TR	-	.015	2.394
			FX224545	39.12	40.54	1.42	TR	-	<.005	2.394
			FX224546	40.54	42.04	1.50	TR	-	.010	2.409
			FX224547	42.04	43.46	1.42	TR	-	.015	2.430
			FX224548	43.46	44.98	1.52	TR	F55	.005	2.438
			FX224549	44.98	46.45	1.47	TR	-	.010	2.453
			FX224550	46.45	47.95	1.50	2	-	.015	2.475
			FX224551	47.95	49.34	1.39	TR	F53	.010	2.489
49.34	49.84	GABBRO Halo alteration. Bleached light gray fine grained moderately carbonatized gabbro with few thin quartz carbonate veins.	FX224552	49.34	49.84	.50	TR	F55	.050	2.514
49.84	51.30	GABBRO Altered. Buff to very pale lime green highly pervasive carbonate and silica alteration. Riddled with quartz carbonate veins. Weakly fuchsitic and sericitized stringers. 7 to 10% fine grained to coarse grained pyrite.	FX224553	49.84	51.30	1.46	10	-	.960	3.916

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
51.30	66.96	GABBRO Halo alteration. Slightly bleached gray green to locally pink -tan weakly to moderately carbonatized fine grained gabbro. 51.30 52.34 50% pink-brown altered gabbro especially around quartz veins. 52.34 53.84 20% strongly altered in bands to 15 centimetres wide. Patchy silicified areas. 53.84 55.40 Bleached around 1 thin quartz veinlet. 56.90 58.31 Alteration around 5 centimetre quartz carbonate vein for 15 centimetres. 59.81 61.31 50% of section altered in bands to 15 centimetres wide. 61.31 64.20 As above. 10% altered. 64.20 65.70 35% pink dolomite veins typically 5 millimetres but up to 30 centimetres wide parallel to foliation. 65.70 66.96 As above. Becoming more altered down hole.	FX224554	51.30	52.34	1.04	5	-	.825	4.774
			FX224555	52.34	53.84	1.50	3	F50	.170	5.029
			FX224556	53.84	55.40	1.56	TR	-	.065	5.130
			FX224557	55.40	56.90	1.50	TR	-	.010	5.145
			FX224558	56.90	58.31	1.41	2	-	.520	5.878
			FX224559	58.31	59.81	1.50	2	-	.230	6.223
			FX224560	59.81	61.31	1.50	3	F35	.350	6.748
			FX224561	61.31	62.84	1.53	TR	-	.455	7.444
			FX224562	62.84	64.20	1.36	4	F45	.210	7.730
			FX224563	64.20	65.70	1.50	TR	F35	.205	8.038
			FX224564	65.70	66.96	1.26	5	-	.285	8.397
66.96	67.75	GABBRO Altered. Strongly foliated rusty brown hematitized looking strongly carbonatized fine grained gabbro. 7% fine grained disseminated pyrite. 3 white quartz veins to 20 centimetres wide. Sharp lower contact.	FX224565	66.96	67.75	.79	7	-	1.020	9.203
67.75	69.10	FELDSPAR PORPHYRY Medium grained to coarse grained hematitized looking red-brown to brownish white massive dike.	FX224566	67.75	69.10	1.35	3	-	.375	9.709

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
69.10	69.65	GABBRO Altered as to 67.25.	FX224567	69.10	69.65	.55	TR	F37	.205	9.822
69.65	70.28	GABBRO Halo alteration. Green chloritic to weakly hematitized and carbonatized gabbro.	FX224568	69.65	70.28	.63	TR	-	.025	9.837
70.28	70.90	GABBRO Altered. As to 67.25. Sharp lower contact at 30 degrees to core axis.	FX224569	70.28	70.90	.62	TR	F40	.140	9.924
70.90	74.56	QUARTZ PORPHYRY Fine grained to medium grained light green to purplish gray quartz porphyry dike ? This may be a phase of gabbro but is distinctly different than surrounding gabbro. Massive. Slight bleaching at occasional thin quartz vein contact. Contacts very pyritic with up to 15% for 2 centimetres. 70.90 72.40 Green gray in colour. 72.40 73.89 Purplish gray with dolomitic patches. 73.89 74.56 Chilled lower contact at 20 degrees to core axis.	FX224570	70.90	72.40	1.50	TR	-	.135	10.127
			FX224571	72.40	73.89	1.49	TR	-	.375	10.685
			FX224572	73.89	74.56	.67	TR	-	.070	10.732
74.56	82.10	GABBRO Halo alteration. As to 66.96. Gradational down hole to fine grained unaltered basalt.	FX224573	74.56	76.20	1.64	TR	F42	.560	11.651
			FX224574	76.20	77.65	1.45	TR	F50	.635	12.571

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		74.56 76.20 Quartz dolomite tourmaline vein 20 centimetres wide.	FX224575	77.65	79.08	1.43	TR	-	.095	12.707
			FX224576	79.08	80.64	1.56	TR	-	.020	12.738
		76.20 77.65 5 to 10% pink dolomite veining.	FX224577	80.64	82.10	1.46	TR	-	.015	12.760
		77.65 79.08 Becoming fine grained down hole.								
		79.08 80.64 Veins changing from dolomite to ankerite.								
		80.64 82.10 3% thin quartz carbonate veins with minor fuchsitic alteration at contacts.								
82.10	98.50	BASALT								
		Fairly homogenous fine grained dark green massive to weakly foliated basalt. Thin calcite quartz veinlets common.	FX224578	82.10	83.65	1.55	TR	-	<.005	12.760
			FX224579	83.65	85.08	1.43	TR	F50	.090	12.889
			FX224580	85.08	86.58	1.50	TR	-	<.005	12.889
			FX224581	86.58	88.00	1.42	TR	F55	<.005	12.889
			FX224582	88.00	89.56	1.56	TR	-	<.005	12.889
			FX224583	89.56	91.03	1.47	TR	-	<.005	12.889
			FX224584	91.03	92.50	1.47	TR	-	<.005	12.889
			FX224585	92.50	93.94	1.44	TR	-	<.005	12.889
			FX224586	93.94	95.48	1.54	TR	-	<.005	12.889
			FX224587	95.48	96.92	1.44	TR	-	<.005	12.889
			FX224588	96.92	98.50	1.58	TR	-	<.005	12.889
98.50	100.54	BASALT								
		Weakly altered. Bleached to yellowish-green moderately silicified , carbonatized and epidotic around several quartz carbonate veins to 10 centimetres wide.	FX224589	98.50	99.54	1.04	4	F52	.245	13.144
			FX224590	99.54	100.54	1.00	4	-	.205	13.349
100.54	131.04	BASALT								
		Fine grained to medium grained as to 98.50.	FX224591	100.54	102.11	1.57	TR	-	.015	13.372
		127.99 129.54 Quartz carbonate vein 20 centimetres wide.	FX224592	102.11	103.61	1.50	TR	-	.020	13.402

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

FROM M TO M

131.04 144.73 GABBRO

Fine grained to medium grained massive homogenous dark green gabbro with 10% white feldspars. Few thin quartz calcite veins.

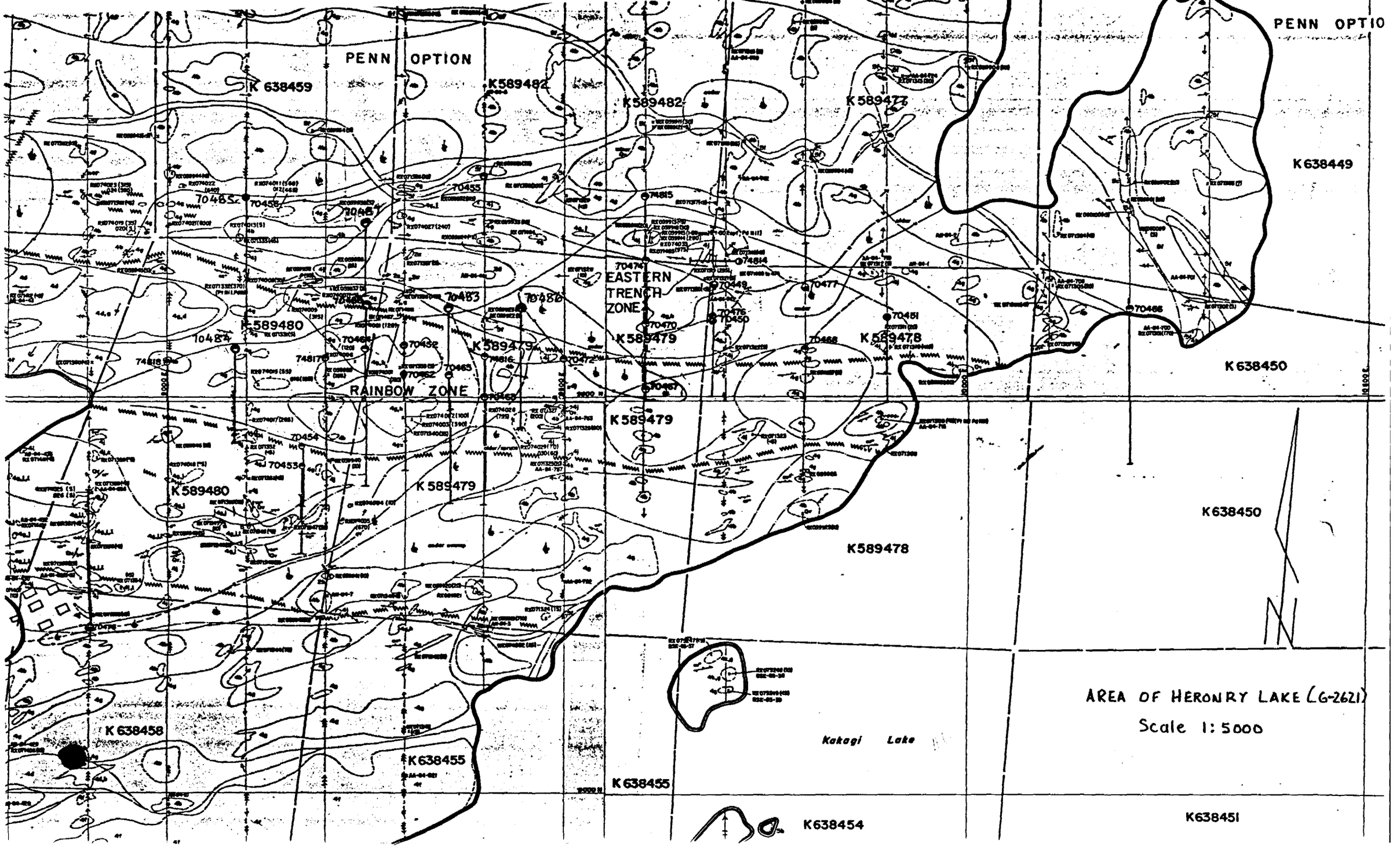
143.23 144.73 Sharply gradational lower contact.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224593	103.61	105.16	1.55	TR	-	<.005	13.402
FX224594	105.16	106.66	1.50	TR	-	.035	13.455
FX224595	106.66	108.20	1.54	TR	-	<.005	13.455
FX224596	108.20	109.70	1.50	TR	-	<.005	13.455
FX224597	109.70	111.25	1.55	TR	-	<.005	13.455
FX224598	111.25	112.75	1.50	TR	-	<.005	13.455
FX224599	112.75	114.30	1.55	TR	-	<.005	13.455
FX224600	114.30	115.85	1.55	TR	-	<.005	13.455
FX224601	115.85	117.35	1.50	TR	-	.005	13.462
FX224602	117.35	118.85	1.50	TR	F45	.010	13.477
FX224603	118.85	120.40	1.55	TR	-	.020	13.508
FX224604	120.40	121.90	1.50	TR	-	.020	13.538
FX224605	121.90	123.44	1.54	TR	-	.040	13.600
FX224606	123.44	124.94	1.50	TR	-	.060	13.690
FX224607	124.94	126.49	1.55	TR	-	.065	13.791
FX224608	126.49	127.99	1.50	TR	-	.010	13.806
FX224609	127.99	129.54	1.55	TR	-	<.005	13.806
FX224610	129.54	131.04	1.50	TR	-	<.005	13.806
FX224611	131.04	132.59	1.55	TR	-	<.005	13.806
FX224612	132.59	134.29	1.70	TR	-	<.005	13.806
FX224613	134.29	135.72	1.43	TR	-	<.005	13.806
FX224614	135.72	137.22	1.50	TR	-	.005	13.813
FX224615	137.22	138.75	1.53	TR	-	<.005	13.813
FX224616	138.75	140.25	1.50	TR	-	.005	13.821
FX224617	140.25	141.73	1.48	TR	-	<.005	13.821
FX224618	141.73	143.23	1.50	TR	-	<.005	13.821
FX224619	143.23	144.73	1.50	TR	F55	<.005	13.821

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
144.73	163.91	BASALT								
		Fine grained to locally medium grained dark green basalt. Thin calcite quartz veins very common.	FX224620	144.73	146.20	1.47	TR	-	<.005	13.821
		152.07 153.56 Medium grained gabbroic looking.	FX224621	146.20	147.65	1.45	TR	F30	<.005	13.821
		162.42 163.91 Gradational lower contact.	FX224622	147.65	149.15	1.50	TR	-	<.005	13.821
			FX224623	149.15	150.58	1.43	TR	-	.025	13.856
			FX224624	150.58	152.07	1.49	TR	-	<.005	13.856
			FX224625	152.07	153.56	1.49	TR	-	<.005	13.856
			FX224626	153.56	155.17	1.61	TR	-	<.005	13.856
			FX224627	155.17	156.56	1.39	TR	-	.010	13.870
			FX224628	156.56	158.00	1.44	TR	F15	.015	13.892
			FX224629	158.00	159.50	1.50	TR	-	.030	13.937
			FX224630	159.50	160.92	1.42	TR	F42	<.005	13.937
			FX224631	160.92	162.42	1.50	TR	-	.075	14.049
			FX224632	162.42	163.91	1.49	TR	-	<.005	14.049
163.91	175.87	GABBRO								
		Massive dark green medium grained to coarse grained homogenous gabbro. Few fine grained basaltic looking sections.	FX224633	163.91	165.45	1.54	TR	-	<.005	14.049
		168.58 170.00 Gradational down hole to fine grained.	FX224634	165.45	166.86	1.41	TR	-	.005	14.057
		170.00 171.43 Fine grained basaltic looking. Sharply gradational down hole to medium grained.	FX224635	166.86	168.58	1.72	TR	-	<.005	14.057
		175.87 Foot of hole.	FX224636	168.58	170.00	1.42	TR	-	<.005	14.057
			FX224637	170.00	171.43	1.43	TR	-	.010	14.071
			FX224638	171.43	172.87	1.44	TR	-	<.005	14.071
			FX224639	172.87	174.56	1.69	TR	-	<.005	14.071
			FX224640	174.56	175.87	1.31	TR	-	<.005	14.071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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 9560.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-15-87
PROPERTY	: Penn	DEPARTURE	:E 9800.0 M	TOWNSHIP	:	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. Dudar	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	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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 anygdules. 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	.000
			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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	16.44 17.91	Locally muddy fault gouge at 17.43. Blue gray chloritic mud. Parallel to foliation.	FX222297	20.11	21.46	1.35	TR	F45	<.005	.079
			FX222298	21.46	23.12	1.66	TR	F35	.025	.120
	17.91 18.69	Poorly foliated. Weakly magnetic.	FX222299	23.12	24.57	1.45	TR	F58	<.005	.120
	18.69 20.11	15% contorted , composition chloritic quartz vein with 5% iron carbonate. Weakly foliated.	FX222300	24.57	26.00	1.43	TR	F57	<.005	.120
			FX222301	26.00	27.47	1.47	TR	F55	<.005	.120
	20.11 21.46	10% cross cutting and parallel quartz veinlets with iron carbonate.	FX222302	27.47	29.05	1.58	TR	F48	.005	.128
			FX222303	29.05	30.53	1.48	TR	F46	.010	.143
	21.46 29.05	Trace quartz veinlets. Foliated. Weakly magnetic. Locally at 22.65, blue green very soft peridotite, slightly muddy.	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
	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.	FX222307	33.78	34.33	.55	2	-	.085	.200
34.33	49.21	GABBRO								
		Gray with 40% stretched dark green to black mafic clots.	FX222308	34.33	35.55	1.22	2	F53	.010	.212

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
		34.33 35.55 5% cross cutting and parallel quartz veinlets with iron carbonate. 2% scattered subhedral and cubic pyrite up to 3 millimetre.	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
		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	F48	<.005	2.959

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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. 62.68 64.18 1% scattered pyrite crystals. 64.18 65.60 5% quartz veinlets with iron carbonate and 1% disseminated pyrite. 65.60 67.25 Weakly magnetic. 67.25 68.87 Weakly magnetic. Sharp contact with lamprophyre.	FX222328	62.68	64.18	1.50	1	F40	<.005	3.006
			FX222329	64.18	65.60	1.42	1	F48	<.005	3.006
			FX222330	65.60	67.25	1.65	TR	F50	<.005	3.006
			FX222331	67.25	68.87	1.62	TR	F54	<.005	3.006
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. 68.87 71.69 20% medium grained to coarse grained blebby iron carbonate.	FX222332	68.87	70.27	1.40	2	F53	<.005	3.006
			FX222333	70.27	71.69	1.42	TR	C28	<.005	3.006

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

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

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

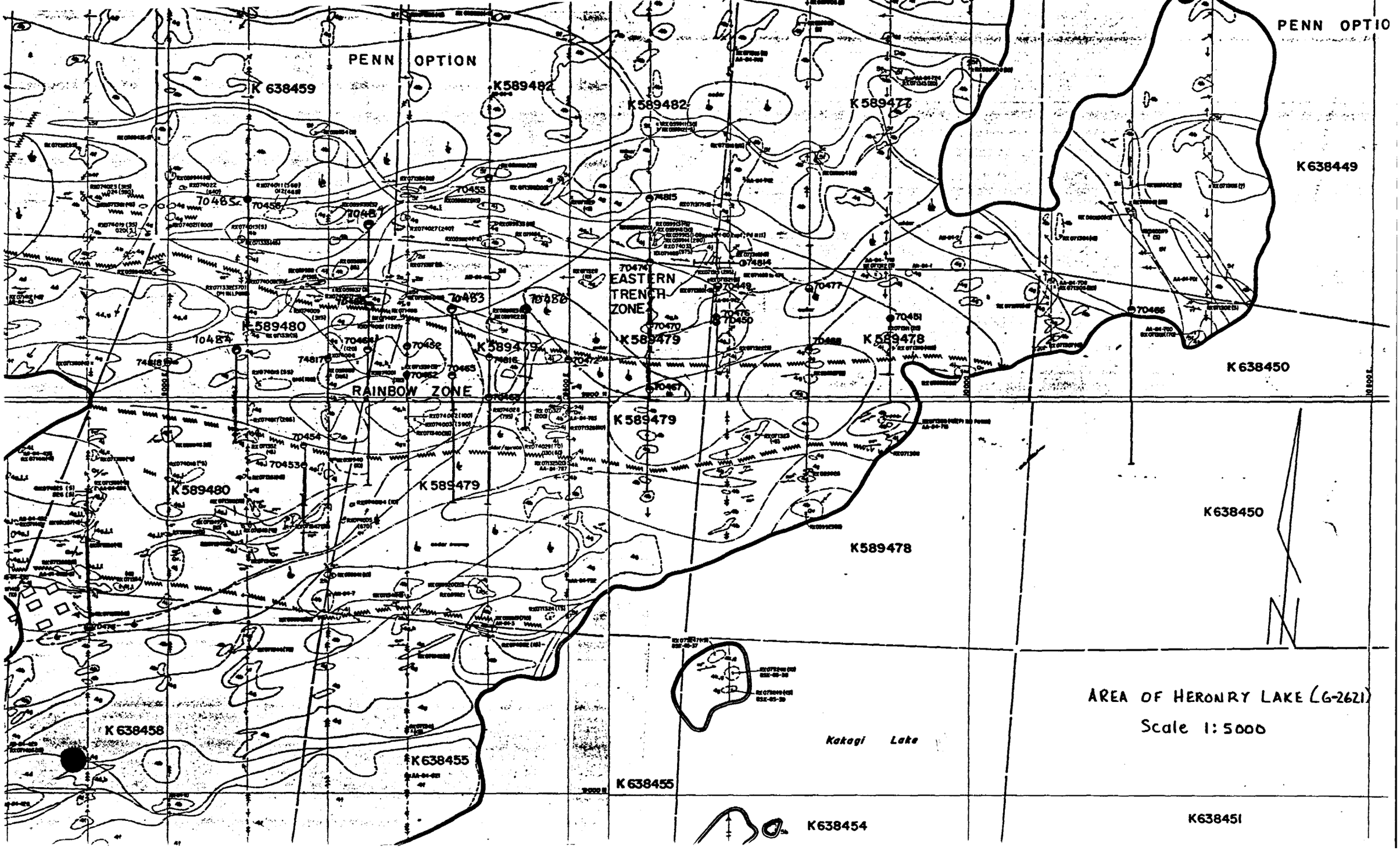
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		92.28 93.58 Locally light gray, muddy fault gouge with quartz fragments. Locally 1% pyrite crystals.	FX222349	93.58	95.25	1.67	TR	F54	<.005	3.154
			FX222350	95.25	96.73	1.48	2	F59	.040	3.213
		95.25 96.73 Locally boudinaged 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 ANG	AU PPM	PPM*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.	FX222380	136.50	137.98	1.48	3	F50	<.005	3.461
		Foliated. 10 to 15% boudinaged, chloritic white opaque	FX222381	137.98	138.13	.15	2	F55	.220	3.494
		quartz carbonate veinlets, with scattered brown iron	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	AU PPM	PPM*M
		carbonate staining. Locally slightly bleached. 5% pale	FX222383	139.59	142.58	2.99	1	F50	.015	3.546
		yellow to tan leucoxene streaks and stringers.	FX222384	142.58	144.16	1.58	1	F50	<.005	3.546
		Stretched mafic and feldspathic clots. 2% disseminated	FX222385	144.16	145.52	1.36	1	-	<.005	3.546
		pyrite and scattered crystals, locally concentrated	FX222386	145.52	147.02	1.50	TR	-	<.005	3.546
		adjacent to quartz veins.	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	FX222388	148.65	150.15	1.50	TR	-	<.005	3.546
		quartz carbonate streaks and blebs. Weakly foliated.	FX222389	150.15	151.64	1.49	TR	-	.015	3.569
		Homogeneous. Fine grained. Locally slightly bleached. 5%	FX222390	151.64	152.14	.50	TR	-	<.005	3.569
		quartz carbonate stringers and veinlets, locally with	FX222391	152.14	154.66	2.52	TR	-	.010	3.594
		brown iron carbonate staining. Trace to 1% pyrite crystal	FX222392	154.66	156.28	1.62	TR	-	.015	3.618
		156.28 156.87 17 centimetre thick quartz vein with iron	FX222393	156.28	156.87	.59	TR	-	.015	3.627
		carbonate and gray alteration halo. 1%	FX222394	156.87	158.37	1.50	TR	-	<.005	3.627
		pyrite crystals and 20% cross cutting	FX222395	158.37	159.20	.83	TR	F54	.005	3.631
		quartz carbonate veinlets.	FX222396	159.20	160.07	.87	TR	F70	<.005	3.631
		159.20 160.07 Light gray chloritic quartz carbonate vein	FX222397	160.07	161.68	1.61	TR	F65	.015	3.655
		with bleached, silicified peridotite.	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	FX222400	164.36	165.61	1.25	TR	-	.010	3.689
		homogeneous. Up to 10% quartz carbonate veins and	FX222401	165.61	166.93	1.32	TR	-	.010	3.702
		veinlets. Locally silicified. Trace disseminated	FX222402	166.93	168.43	1.50	2	-	.070	3.807
		pyrite. Interfingering peridotite. Moderately hard to	FX222403	168.43	169.64	1.21	TR	C45	.010	3.819
		hard. Sharp upper contact with peridotite.								
		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	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
			FX222411	178.55	179.36	.81	TR	-	.025	3.887
	177.58 178.55	5 centimetre thick composite chloritic, weakly iron carbonate stained quartz carbonate vein.	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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		veins and veinlets. Locally iron carbonate	FX222426	197.79	198.54	.75	TR	-	<.005	4.069
		stained.	FX222427	198.54	199.51	.97	TR	F70	<.005	4.069
		220.67 Foot of hole.	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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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	:	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	: Ultramafic
DIP	: -45.0	GRID BEARING	:	CLAIM #	: K589479	DRILL TYPE	: Hydracore 20
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

FROM M	TO M	DESCRIPTION	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	1.65	3.00	1.35	TR	-	.020	.027
			FX224808	3.00	5.00	2.00	TR	-	.025	.077
			FX224809	5.00	6.71	1.71	TR	F50	.050	.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	6.71	8.21	1.50	TR	F40	.030	.208
			FX224811	8.21	9.30	1.09	TR	-	.070	.284
			FX224812	9.30	10.80	1.50	TR	F35	.020	.314

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	13.84	1.50	TR	-	<.005	.314
		12.34 13.84 25% veining with weakly fuchsitic contacts.								
13.84	48.43	GABBRO								
		Mid-green fine graired to medium grained weakly foliated	FX224815	13.84	15.34	1.50	TR	-	.015	.336
		gabbro. Locally basaltic looking. Occasional thin	FX224816	15.34	17.07	1.73	TR	-	.020	.371
		quartz carbonate vein. Minor laucoxene.	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	FX224821	23.12	24.69	1.57	TR	-	.015	.501
		intense silicification and 5% pyrite	FX224822	24.69	26.29	1.60	TR	-	.040	.565
		adjacent to thin quartz carbonate vein.	FX224823	26.29	27.91	1.62	TR	-	.015	.589
		26.29 27.91 Scoriaceous looking - very pitted surface.	FX224824	27.91	29.41	1.50	TR	-	<.005	.589
		Badly broken core.	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	FX224828	33.83	35.33	1.50	TR	-	<.005	.596
		quartz vein with fuchsitic contacts.	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	FX224831	38.22	39.64	1.42	TR	-	<.005	.812
		veinlets.	FX224832	39.64	41.03	1.39	2	F45	<.005	.812
		38.22 39.64 Quartz carbonate fuchsite vein parallel to	FX224833	41.03	42.57	1.54	TR	-	.130	1.012
		core axis with speck of chalcopyrite.	FX224834	42.57	44.00	1.43	TR	-	<.005	1.012
		39.64 41.03 65 centimetres of discontinuous carbonate	FX224835	44.00	45.50	1.50	TR	-	.005	1.020
		quartz veining with fuchsitic pyritic	FX224836	45.50	46.96	1.46	3	F40	.625	1.932
		contacts.	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.								

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

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	AU PPM	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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. 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.	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
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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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. Pyritic 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.	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
		73.46 74.96 20 centimetre brecciated quartz carbonate vein.	FX224862	79.27	80.73	1.46	TR	-	.120	7.196
			FX224863	80.73	82.18	1.45	TR	-	.010	7.211
		77.90 79.27 30% veining with weakly bleached contacts.	FX224864	82.18	83.68	1.50	TR	F55	.020	7.241
		79.27 80.73 As above. Contacts moderately bleached and fuchsitic. 16 centimetre quartz carbonate vein.	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
		83.68 85.17 20 centimetre quartz carbonate dolomite vein.	FX224868	88.10	89.45	1.35	1	F50	.015	7.824

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	B	-	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 .97	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
93.05	97.84	GABBRO								
		Light green fine grained weakly bleached and fuchsitic	FX224874	93.05	94.79	1.74	TR	-	.005	8.690
		gabbro with 5 to 10% yellowish-green leucoxene. 10 to	FX224875	94.79	96.29	1.50	TR	F60	<.005	8.690
		15% millimetre to centimetre wide carbonate veinlets.	FX224876	96.29	97.84	1.55	TR	F58	<.005	8.690
		94.79 96.29 Darker green than above. 5% veinlets.								
		96.29 97.84 5% dolomite veinlets.								
97.84	131.25	GABBRO								
		Dark green homogeneous fine grained to medium grained	FX224877	97.84	98.34	.50	TR	-	<.005	8.690
		gabbro locally basaltic looking. Massive to locally	FX224878	98.34	100.89	2.55	TR	-	.010	8.715
		weakly foliated. occasional thin carbonate dolomite or	FX224879	100.89	102.39	1.50	TR	-	.005	8.723
		carbonate quartz vein.	FX224880	102.39	103.94	1.55	TR	F55	.020	8.754
		97.84 98.34 10 centimetre discontinous quartz carbonate	FX224881	103.94	105.44	1.50	TR	-	<.005	8.754
		chlorite vein.	FX224882	105.44	106.98	1.54	TR	F50	<.005	8.754
		103.94 105.44 Quartz carbonate vein with weakly	FX224883	106.98	108.48	1.50	TR	-	<.005	8.754
		fuchsitic contacts parallel to core axis	FX224884	108.48	110.03	1.55	TR	-	<.005	8.754
		for 40 centimetres.	FX224885	110.03	111.53	1.50	TR	-	.010	8.769
		111.53 113.08 Highly irregular 5 centimetre quartz	FX224886	111.53	113.08	1.55	TR	-	<.005	8.769
		carbonate vein with fuchsitic contacts.	FX224887	113.08	114.58	1.50	TR	-	.020	8.799
		113.08 114.59 Two quartz veins to 3 centimetres wide and	FX224888	114.58	116.03	1.45	TR	-	<.005	8.799
		several thin veinlets with moderately	FX224889	116.03	117.45	1.42	TR	-	<.005	8.799
		fuchsitic contacts for 3 to 4 centimetres.	FX224890	117.45	118.95	1.50	TR	-	<.005	8.799
		118.95 120.40 5 to 10% quartz carbonate veins with	FX224891	118.95	120.40	1.45	TR	-	.005	8.806
		bleached silicified and carbonatized	FX224892	120.40	121.90	1.50	TR	F60	.005	8.814
		contacts for 7 to 10 centimetres.	FX224893	121.90	123.29	1.39	TR	-	<.005	8.814
		123.29 124.43 Few dolomite carbonate veins with weakly	FX224894	123.29	124.43	1.14	TR	F45	.040	8.859
		fuchsitic contacts.	FX224895	124.43	125.43	1.00	3	-	1.930	10.789
		124.43 125.43 Top 25 centimetres is discontinous quartz	FX224896	125.43	126.93	1.50	1	-	.035	10.842
		carbonate veining with bleached	FX224897	126.93	128.32	1.39	TR	F50	<.005	10.842
		silicified carbonatized and pyritic	FX224898	128.32	129.82	1.50	TR	-	<.005	10.842
		contacts. Section also contains 2 10	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	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
		131.25 132.08 Moderately hematitized rusty brown colour. 10% carbonate quartz veining.	FX224901	132.08	132.45	.37	3	F52	1.400	11.396
		132.08 132.45 As above with 45% dolomite quartz veining.	FX224902	132.45	133.32	.87	2	-	.140	11.518
		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.

**********ANALYSIS**********

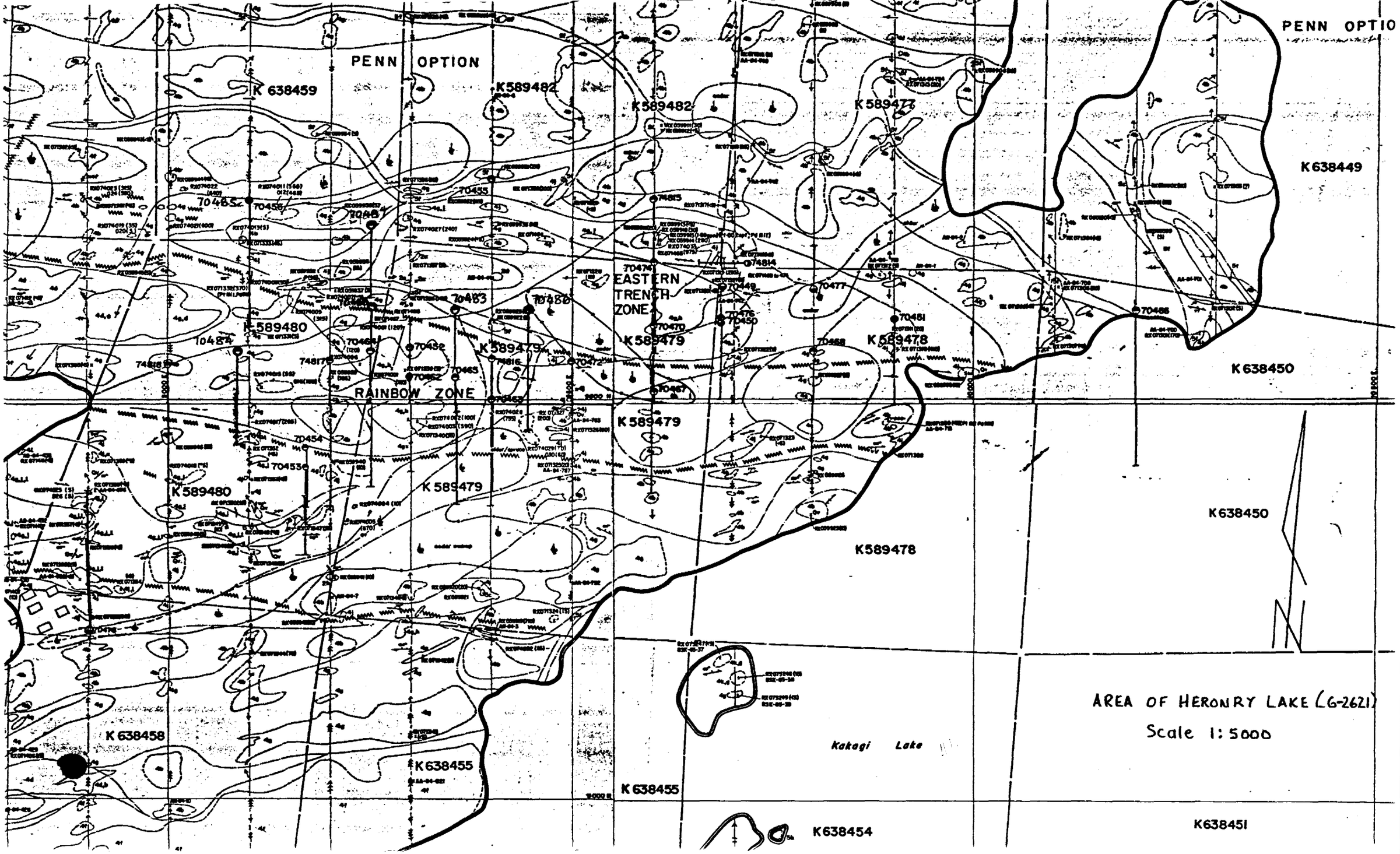
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX224907	136.58	137.46	.88	TR	-	.050	11.754
FX224908	137.46	138.76	1.30	TR	-	.040	11.806
FX224909	138.76	139.58	.82	TR	-	.025	11.827
FX224910	139.58	141.06	1.48	TR	F50	.010	11.842
FX224911	141.06	142.54	1.48	TR	F55	<.005	11.842
FX224912	142.54	144.04	1.50	2	F48	.015	11.864
FX224913	144.04	144.87	.83	8	-	.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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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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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 : 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 :	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	DESCRIPTION
.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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	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
	48.58 50.14	Locally stretched black mafic clasts.	FX222471	56.78	58.28	1.50	TR	F45	<.005	16.084
	50.14 51.52	10% stretched black mafic clasts.	FX222472	58.28	59.44	1.16	TR	-	<.005	16.084
	52.46 53.77	Locally altered and bleached light green to tan halos adjacent to quartz carbonate stringers.	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
	56.78 58.28	Dark green to black chloritic fault gouge at 57.15 metres.	FX222476	64.06	65.44	1.38	TR	F25	<.005	16.084
			FX222477	65.44	66.94	1.50	TR	-	<.005	16.084
	58.28 62.56	Massive with no clasts.	FX222478	66.94	68.28	1.34	TR	-	<.005	16.084
	62.56 64.06	Locally black, fine grained, foliated, soft, possibly sheared tuff.	FX222479	68.28	69.76	1.48	TR	F25	<.005	16.084
			FX222480	69.76	71.18	1.42	TR	F17	<.005	16.084
	64.06 65.44	Locally rusty iron carbonate quartz carbonate veinlet.	FX222481	71.18	72.68	1.50	TR	F17	<.005	16.084
			FX222482	72.68	74.18	1.50	TR	F20	<.005	16.084

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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
			FX222484	75.67	77.11	1.44	TR	-	<.005	16.084
	69.76 71.18	Matrix to framework supported.	FX222485	77.11	78.59	1.48	TR	-	<.005	16.084
	71.18 72.68	Locally bleached and altered adjacent to quartz carbonate veinlet.	FX222486	78.59	80.08	1.49	1	-	<.005	16.084
			FX222487	80.08	81.53	1.45	TR	-	<.005	16.084
	77.11 78.59	Locally iron carbonate stained quartz carbonate veinlets.	FX222488	81.53	83.03	1.50	TR	F18	<.005	16.084
			FX222489	83.03	84.21	1.18	TR	F20	<.005	16.084
	78.59 80.08	1% blebby pyrite in matrix.								
	81.53 83.03	1% blebby pyrite in matrix.								
	83.03 84.21	Sharp contact with dacitic ash tuff.								
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
			FX222491	85.30	86.42	1.12	1	-	<.005	16.084
			FX222492	86.42	87.89	1.47	TR	F05	<.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?).	FX222493	87.89	89.22	1.33	TR	F10	<.005	16.084
			FX222494	89.22	90.27	1.05	TR	-	.005	16.090
	87.89 89.22	As above with local fault gouge and broken core at 89.21 metres obscuring transition into massive tuff.								
	89.22 90.27	As at 84.21 to 86.42 metres. Gradational into lapilli tuff.								
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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		agglomerate.	FX222496	91.75	93.25	1.50	TR	-	<.005	16.090
	91.75 93.25	Locally rusty iron carbonate quartz carbonate stringers.	FX222497	93.25	94.60	1.35	TR	-	<.005	16.090
			FX222498	94.60	96.06	1.46	1	-	.005	16.097
	94.60 96.06	1% blebby pyrite in quartz carbonate stringers. Locally tan alteration adjacent to quartz carbonate veinlets.	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
	96.06 97.64	2% blebby pyrite in matrix.	FX222502	100.45	101.75	1.30	TR	-	<.005	16.104
	97.64 98.98	Light green to tan bleached and altered adjacent to contorted quartz carbonate vein 1 centimetre thick.	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
	98.98 100.45	Locally bleached and altered to light green adjacent to dolomitic chloritic quartz carbonate veinlets.	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
	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.	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
	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	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

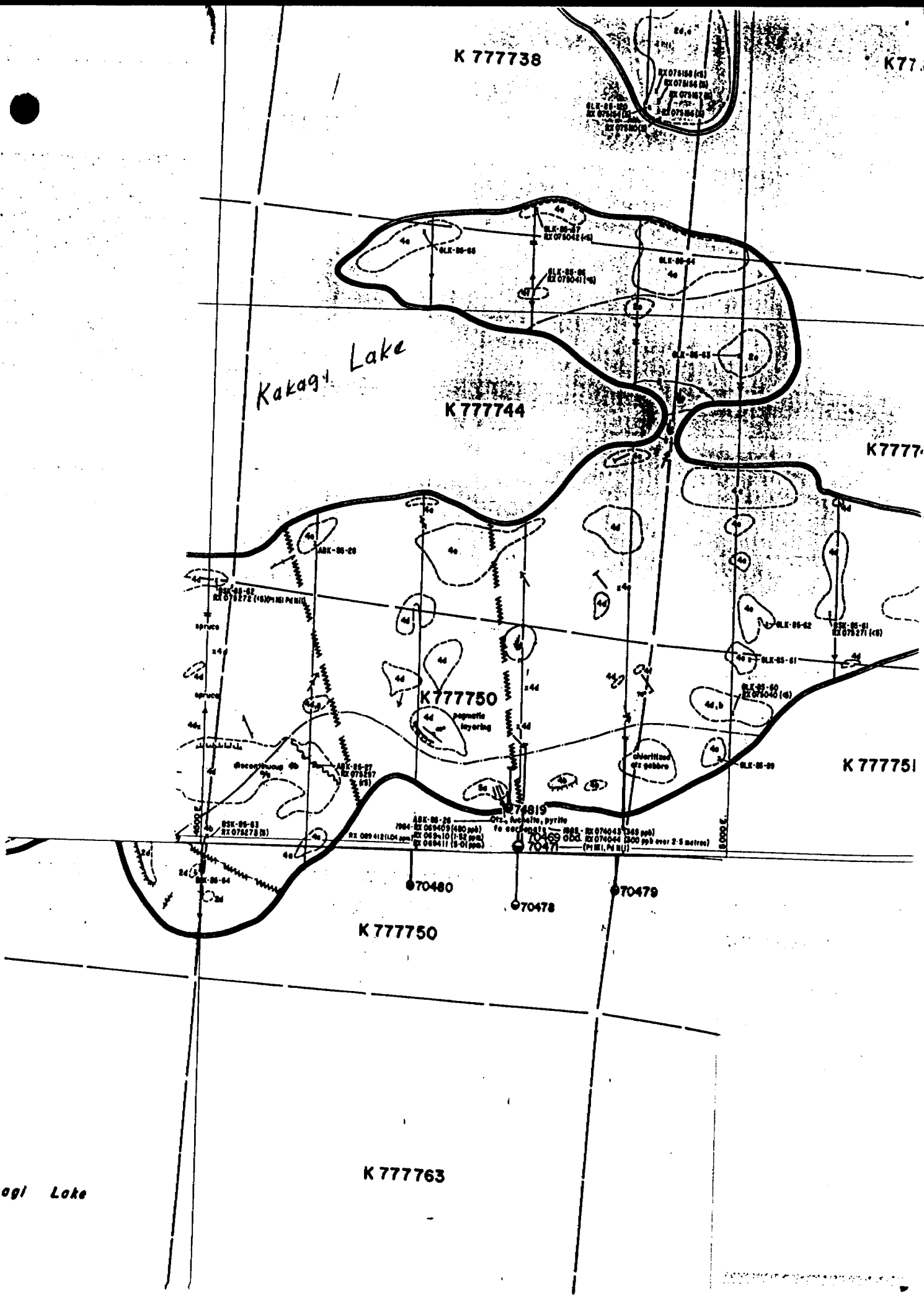
**********DESCRIPTION**********

FROM M	TO M	
		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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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.								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K 777750
K 777751
K 777763
tagi Lake
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70478
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70469
spruce
magnetite layering
chloritized qtz gabbro

**********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	:	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

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

FROM M	TO M	DESCRIPTION
.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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX222529	3.49	4.02	.53	TR	F40	.005	.003
FX222530	4.02	5.55	1.53	TR	F40	.020	.033
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

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

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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, thining 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	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
			FX222561	48.46	49.90	1.44	1	-	<.005	2.275
		45.42 47.01 2 centimetre thick chloritic quartz vein with scattered calcareous stringers.	FX222562	49.90	51.51	1.61	TR	-	.010	2.292
			FX222563	51.51	53.01	1.50	TR	F36	.040	2.352
		51.51 55.79 Light green to green with alteration halos.	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	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
		60.16 61.66 Locally up to 2% pyrite.	FX222572	64.73	66.03	1.30	1	F35	.020	12.370
		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.	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
		64.73 66.03 Weaker alteration halos adjacent to 6 centimetre wide chloritic quartz carbonate veins, locally dolomitic. 1% pyrite.	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
		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.	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
		68.89 70.39 5 to 7% weakly dolomitic quartz carbonate stringers with bleached, silicified light tan alteration. 1% scattered pyrite.	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
		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	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	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	FX222590	91.13	92.64	1.51	1	-	<.005	13.416
		adjacent to quartz carbonate veinlets. 1 to	FX222591	92.64	94.18	1.54	1	-	<.005	13.416
		2% pyrite in halos.	FX222592	94.18	95.66	1.48	3	-	.810	14.615
	92.64 94.18	Locally dolomitic veinlets.	FX222593	95.66	97.23	1.57	1	F44	.030	14.662
	94.18 95.66	10% white, chloritic quartz carbonate vein,	FX222594	97.23	98.74	1.51	5	-	.765	15.817
		weakly dolomitic with pale green, fuchsitic	FX222595	98.74	100.28	1.54	TR	-	.015	15.840
		alteration halos. 3% fine pyrite crystals in	FX222596	100.28	101.79	1.51	TR	-	<.005	15.840
		halo, becoming coarser in slightly altered	FX222597	101.79	103.33	1.54	TR	-	<.005	15.840
		gabbro. 15% iron carbonate.	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		weak pale green to tan halos and 1% pyrite.	FX222600	106.38	107.89	1.51	TR	-	.005	15.894
97.23	98.74	As above with 3% pyrite crystals in quartz	FX219601	107.89	109.42	1.53	TR	-	<.005	15.894
		carbonate veinlets and halos. 6 centimetre	FX219602	109.42	110.93	1.51	TR	-	<.005	15.894
		thick white, chloritic, slightly dolomitic	FX219603	110.93	112.47	1.54	TR	-	<.005	15.894
		quartz carbonate vein with locally 5% fine	FX219604	112.47	113.38	.91	TR	-	.010	15.903
		grained blebby pyrite. Weakly fuchsitic. 2%	FX219605	113.38	114.44	1.06	TR	-	.005	15.908
		coarse grained pyrite cubes in gabbro.	FX219606	114.44	115.61	1.17	TR	-	<.005	15.908
98.74	104.85	Dark green with 5 to 7% chloritic quartz	FX219607	115.61	117.10	1.49	TR	F60	<.005	15.908
		carbonate veinlets and stringers. Weakly	FX219608	117.10	118.57	1.47	TR	-	<.005	15.908
		altered adjacent to veinlets. 1 to 2%	FX219609	118.57	120.06	1.49	TR	-	<.005	15.908
		leucoxene.	FX219610	120.06	121.61	1.55	TR	-	<.005	15.908
104.85	106.38	Up to 6 centimetre thick quartz carbonate	FX219611	121.61	122.87	1.26	TR	-	<.005	15.908
		veins, locally dolomitic, locally	FX219612	122.87	123.31	.44	TR	-	<.005	15.908
		brecciated.	FX219613	123.31	124.65	1.34	TR	-	<.005	15.908
106.38	110.93	As at 98.74 to 104.85 metres.	FX219614	124.65	126.18	1.53	TR	-	<.005	15.908
110.93	112.47	3 to 4% leucoxene. 15% calcareous blebs.	FX219615	126.18	127.71	1.53	TR	-	<.005	15.908
113.38	114.44	Locally 7% leucoxene at gradational sharp	FX219616	127.71	129.22	1.51	TR	-	<.005	15.908
		contact with alteration halo.	FX219617	129.22	130.76	1.54	TR	-	<.005	15.908
114.44	115.61	Quartz carbonate flooded gabbro.	FX219618	130.76	132.28	1.52	TR	-	<.005	15.908
		Dolomitic. Light brown to tan. White,	FX219619	132.28	133.81	1.53	TR	-	<.005	15.908
		green. 15% leucoxene. 10% chlorite	FX219620	133.81	135.33	1.52	TR	-	<.005	15.908
		crystals. Cross cutting quartz carbonate	FX219621	135.33	136.85	1.52	TR	-	<.005	15.908
		veinlets. Hard. Sharp lower contact with	FX219622	136.85	138.37	1.52	TR	-	.015	15.931
		unaltered gabbro at 58 degrees to core axis	FX219623	138.37	139.90	1.53	TR	-	.015	15.954
115.61	117.10	Locally altered and bleached adjacent to	FX219624	139.90	141.43	1.53	TR	-	<.005	15.954
		dolomitic quartz carbonate veinlets.	FX219625	141.43	142.95	1.52	TR	-	<.005	15.954
		Locally folded and contorted composite	FX219626	142.95	144.48	1.53	TR	-	<.005	15.954
		chloritic, dolomitic quartz carbonate	FX219627	144.48	146.00	1.52	TR	-	<.005	15.954
		veins up to 2 centimetres thick. Foliated.	FX219628	146.00	147.53	1.53	TR	-	<.005	15.954
117.10	118.57	Chloritic quartz veins with calcareous	FX219629	147.53	149.05	1.52	TR	-	<.005	15.954
		margins up to 2 centimetres thick. Locally	FX219630	149.05	150.58	1.53	TR	-	<.005	15.954
		10% blebby calcite.	FX219631	150.58	152.10	1.52	2	-	.145	16.174

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

FROM M	TO M	
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 dolomitic margins.
142.95	146.00	As above with 5% fuchsitic quartz carbonate veins and veinlets.

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

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

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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								

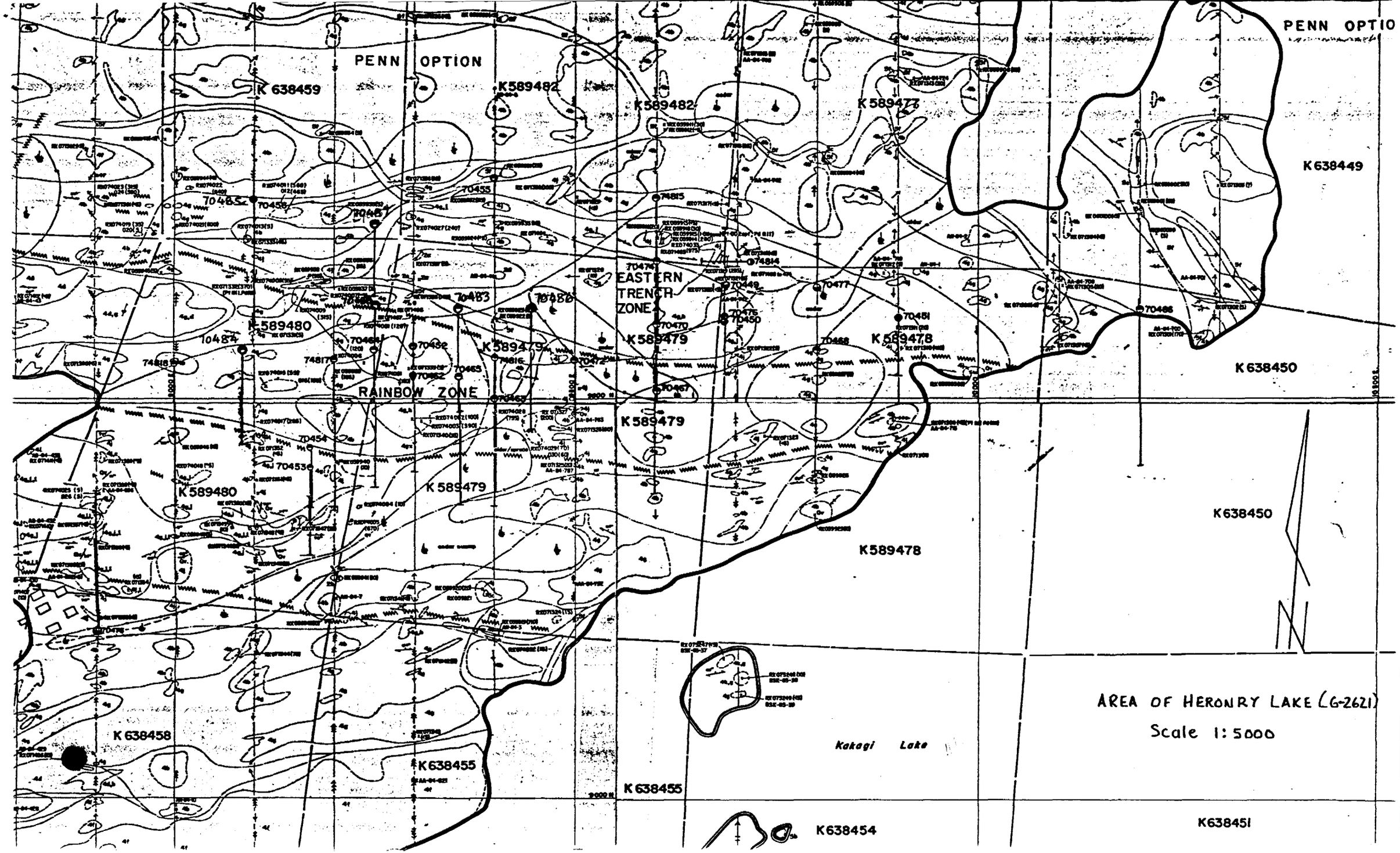
**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Dark green to black. Medium grained, massive,	FX219661	192.68	193.86	1.18	TR	-	<.005	16.628
		homogeneous. Shot with carbonate veins and veinlets. 15	FX219662	193.86	194.77	.91	TR	-	<.005	16.628
		to 20% iron carbonate. 2 to 3% quartz carbonate	FX219663	194.77	196.49	1.72	TR	-	<.005	16.628
		veinlets. Bleached and altered to a pale green - gray	FX219664	196.49	197.81	1.32	TR	F55	<.005	16.628
		with 5% blotchy pale yellow leucoxene. Locally up to 2%	FX219665	197.81	199.33	1.52	TR	-	<.005	16.628
		fine grained pyrite crystals.	FX219666	199.33	200.86	1.53	TR	-	.005	16.636
	194.77 196.49	Locally 2% fine grained disseminated	FX219667	200.86	202.38	1.52	TR	-	<.005	16.636
		pyrite adjacent to smokey gray quartz	FX219668	202.38	203.91	1.53	1	-	.005	16.643
		veinlets cross cutting carbonate veins.	FX219669	203.91	205.44	1.53	TR	-	<.005	16.643
	199.33 200.86	Locally brecciated texture to carbonate	FX219670	205.44	206.96	1.52	1	-	.010	16.658
		veins and veinlets.	FX219671	206.96	208.48	1.52	TR	-	.030	16.704
	200.86 202.38	Locally hematitic staining along fractures.	FX219672	208.48	210.00	1.52	TR	-	<.005	16.704
	202.38 203.91	Quartz carbonate veinlets cut by chloritic	FX219673	210.00	211.53	1.53	TR	-	<.005	16.704
		stringers. Locally hematitic staining	FX219674	211.53	213.05	1.52	TR	F65	.005	16.712
		along fracture. Locally 1% pyrite crystals.	FX219675	213.05	214.58	1.53	TR	-	.005	16.719
	205.44 206.96	Locally brecciated texture. Locally 1%	FX219676	214.58	216.10	1.52	TR	-	<.005	16.719
		pyrite crystals.	FX219677	216.10	217.58	1.48	TR	-	.010	16.734
	213.05 214.58	Centre of sample fuchsitic. Brecciated	FX219678	217.58	218.54	.96	TR	-	.010	16.744
		texture.	FX219679	218.54	219.52	.98	TR	-	<.005	16.744
	214.58 216.10	Weakly fuchsitic.	FX219680	219.52	221.02	1.50	TR	-	<.005	16.744
	217.58 218.54	Bleached light tan to white with pale	FX219681	221.02	222.26	1.24	TR	-	<.005	16.744
		green fuchsite. Brecciated texture.	FX219682	222.26	223.78	1.52	TR	-	<.005	16.744
	218.54 219.52	Weakly fuchsitic.	FX219683	223.78	224.54	.76	TR	-	<.005	16.744
	221.02 224.54	Locally bleached light gray with chloritic	FX219684	224.54	226.05	1.51	TR	-	.005	16.751
		stringers.	FX219685	226.05	227.85	1.80	TR	F50	.005	16.760
	224.54 226.05	5% slightly dolomitic quartz carbonate	FX219686	227.85	229.35	1.50	TR	-	.015	16.783
		veinlets. Trace disseminated pyrite.	FX219687	229.35	230.84	1.49	TR	F50	.015	16.805
	226.05 227.85	10% dolomitic quartz carbonate veins up to	FX219688	230.84	232.30	1.46	TR	-	.005	16.812
		3 centimetre thick parallel to weak	FX219689	232.30	233.54	1.24	1	F50	<.005	16.812
		foliated. Pink - brown with cross cutting	FX219690	233.54	235.05	1.51	TR	-	.010	16.827
		black chloritic stringers.	FX219691	235.05	236.62	1.57	TR	F55	.005	16.835
	227.85 229.35	As above with 15% dolomitic quartz	FX219692	236.62	237.44	.82	TR	F35	<.005	16.835

FROM M	TO M	DESCRIPTION
		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	AU PPM	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.								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RAINBOW ZONE
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K589479
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70453
K589479
K589480
K638450
K589478
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 JV	LATITUDE	:N 9200.0 M	NTS SHEET #	: 52-F-4	STARTED	: 02-23-87
PROPERTY	: Penn	DEPARTURE	:E 8400.0 M	TOWNSHIP	:	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 #	: K638462	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

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

FROM M	TO M	DESCRIPTION
.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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		core axis. Olivine texture gives a foliated	FX225150	61.14	62.96	1.82	TR	-	<.005	.068
		appearance at 72 degrees to core axis.	FX225151	62.96	64.46	1.50	TR	-	<.005	.068
	79.27 80.77	Quartz carbonate vein 10 centimetres wide	FX225152	64.46	65.79	1.33	TR	-	<.005	.068
		perpendicular to core axis.	FX225153	65.79	67.29	1.50	TR	-	<.005	.068
	80.77 82.32	Quartz carbonate vein 3 centimetres wide	FX225154	67.29	68.69	1.40	2	F40	<.005	.068
		perpendicular to core axis.	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	FX225157	71.63	73.13	1.50	TR	-	<.005	.068
		more siliceous and lighter gray in colour.	FX225158	73.13	74.82	1.69	2	-	<.005	.068
		Patchy carbonate hematite alteration	FX225159	74.82	77.72	2.90	TR	F72	<.005	.068
		increasing down hole.	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	FX225165	85.25	86.76	1.51	TR	-	.070	.188
		to moderately carbonatized and weakly hematitized	FX225166	86.76	88.25	1.49	TR	-	<.005	.188
		gabbro. Few quartz veins 1 to 4 centimetres wide with	FX225167	88.25	89.73	1.48	TR	F68	<.005	.188
		ankerite along contacts.	FX225168	89.73	91.21	1.48	TR	-	<.005	.188
	88.25 89.73	Quartz carbonate vein 5 to 6 centimetres								
		wide. Highly irregular carbonate is								
		hematitized.								
	89.73 91.21	Alteration increasing down hole.								
91.21	97.08	GABBRO								
		Altered. Rusty brick-red to brown fine grained	FX225169	91.21	92.71	1.50	TR	-	<.005	.188
		pervasively hematitized and carbonatized gabbro with 25	FX225170	92.71	94.15	1.44	TR	-	.010	.203
		to 45% coarse grained carbonate crystals. Numerous thin	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	AU PPM	PPM*M
		chlorite stringers at 70 degrees to core axis. Carbonate quartz veins and patches common. 91.21 92.71 10% chloritic patches. Alteration increasing down hole.	FX225172	95.65	97.08	1.43	TR	-	<.005	.225
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. 101.07 102.47 Smokey black quartz vein 6 centimetres wide 102.47 104.03 Numerous irregular patches and crystals of ankerite. 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.	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
			FX225178	105.44	106.99	1.55	TR	-	<.005	.248
			FX225179	106.99	108.39	1.40	TR	-	<.005	.248
			FX225180	108.39	109.86	1.47	TR	-	<.005	.248
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	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	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. 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.	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
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

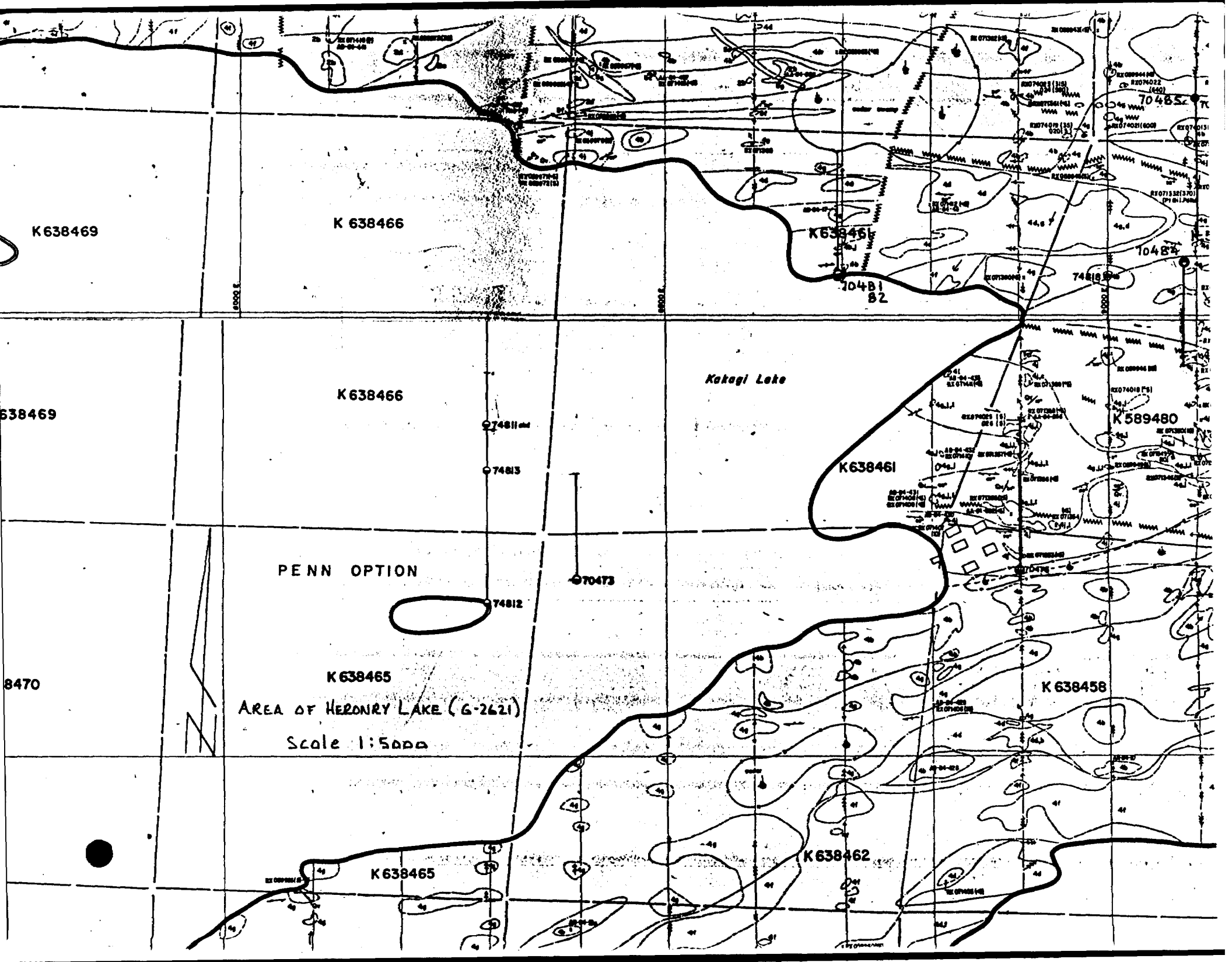
**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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. 132.12 132.66 Minor veining. 134.46 135.44 Sharp lower contact at 45 degrees to core axis.	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
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. 149.35 151.15 Becoming fine grained and less altered down hole.	FX225210	137.10	138.68	1.58	TR	-	.010	.819
			FX225211	138.68	140.20	1.52	TR	-	<.005	.819
			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	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
			FX225220	152.55	153.92	1.37	TR	-	<.005	2.556
		153.92 155.78 Sharp lower contact cut by carbonate vein.	FX225221	153.92	155.78	1.86	TR	-	.005	2.565
		155.78 156.93 Medium grained gabbroic looking basalt. Last 15 centimetres fine grained orange dolomite vein.	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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
174.28	184.40	LAPILLI TUFF								
		As to 172.54 metres.	FX225235	174.28	175.64	1.36	TR	-	<.005	4.352
		180.20 181.52 Several oxidized fractures.	FX225236	175.64	177.27	1.63	TR	-	<.005	4.352
		184.40 Foot of hole.	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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K 638466
K638461
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Kakagi Lake
K589480
74811
74813
K638461
PENN OPTION
70473
74812
8470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638462
K638465

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

FIELD EXPLORATION DIAMOND DRILL LOG

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	:	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	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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	2.85	4.36	1.51	TR	-	<.005	.000
			FX224927	4.36	5.77	1.41	TR	-	<.005	.000
			FX224928	5.77	6.23	.46	TR	-	.010	.005
6.23	10.67	BASALT Fine grained dark green massive basalt. Occasional thin quartz calcite veinlet.	FX224928	6.23	7.32	1.09	TR	-	.010	.016
			FX224929	7.32	8.75	1.43	TR	-	.005	.023

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		parallel to core axis.	FX224950	36.37	36.75	.38	TR	-	.175	.611
29.50	31.65	Two 4 to 5 centimetre wide quartz carbonate	FX224951	36.75	38.25	1.50	TR	-	.005	.619
		veins with tourmaline at 35 degrees to core	FX224952	38.25	39.93	1.68	TR	-	.015	.644
		axis.	FX224953	39.93	41.43	1.50	TR	-	<.005	.644
35.66	36.37	Cut by two 11 to 12 centimetre wide quartz	FX224954	41.43	42.84	1.41	TR	-	<.005	.644
		veins. One is milky white quartz and other	FX224955	42.84	44.34	1.50	TR	-	<.005	.644
		is quartz carbonate vein with 4% pyrite.	FX224956	44.34	45.77	1.43	TR	-	<.005	.644
45.77	47.27	Quartz carbonate vein 5 centimetres wide.	FX224957	45.77	47.27	1.50	TR	-	.030	.689
59.06	60.61	Quartz vein 4 centimetres wide.	FX224958	47.27	48.72	1.45	TR	-	.020	.718
70.88	72.35	Slightly bleached adjacent to 2.5 centimetre	FX224959	48.72	50.18	1.46	TR	-	.005	.725
		quartz carbonate vein.	FX225061	50.18	51.70	1.52	TR	-	.005	.733
78.35	79.90	5 centimetre quartz vein with ankerite at	FX225062	51.70	53.08	1.38	TR	-	.300	1.147
		contacts. Wallrock bleached and pyritic for	FX225063	53.08	54.67	1.59	TR	-	.015	1.171
		5 millimetres. Vein at 45 degrees to core	FX225064	54.67	56.10	1.43	TR	-	.010	1.185
		axis.	FX225065	56.10	57.59	1.49	TR	-	.010	1.200
79.90	80.56	5% millimetre size patches of carbonate.	FX225066	57.59	59.06	1.47	TR	-	.055	1.281
80.56	80.93	Three quartz carbonate veins to 3	FX225067	59.06	60.61	1.55	TR	-	.010	1.296
		centimetres wide with bleached pyritic	FX225068	60.61	61.97	1.36	TR	-	.010	1.310
		contacts. Altered for 1 to 1.5 centimetres	FX225069	61.97	63.46	1.49	TR	-	.015	1.332
		from vein contacts.	FX225070	63.46	64.95	1.49	TR	-	.005	1.340
80.93	81.42	As to 80.56 metres. 3 centimetre quartz vein.	FX225071	64.95	66.37	1.42	TR	-	<.005	1.340
85.81	87.22	Ankerite quartz vein 4 centimetres wide.	FX225072	66.37	67.92	1.55	TR	-	.005	1.348
100.54	102.00	1 to 2 centimetre boudinaged pink orange	FX225073	67.92	69.35	1.43	TR	-	.005	1.355
		dolomite vein.	FX225074	69.35	70.88	1.53	TR	-	.030	1.401
102.00	103.54	Several fine grained orange pink dolomite	FX225075	70.88	72.35	1.47	TR	-	.025	1.437
		veins.	FX225076	72.35	73.95	1.60	TR	-	.010	1.453
104.99	106.44	Several thin carbonate calcite quartz veins	FX225077	73.95	75.41	1.46	TR	-	.010	1.468
106.44	107.89	Quartz calcite carbonate vein 2	FX225078	75.41	76.96	1.55	TR	-	.010	1.483
		centimetres wide parallel to core axis.	FX225079	76.96	78.35	1.39	TR	-	.010	1.497
107.89	109.19	5% disseminated dolomite crystals	FX225080	78.35	79.90	1.55	1	-	.035	1.552
		concentrated around thin quartz dolomite	FX225081	79.90	80.56	.66	TR	-	.035	1.575
		veinlets.	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	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.	FX225104	109.44	111.08	1.64	TR	-	.010	1.808
		111.08 112.78 5% tan-brown leucoxene.	FX225105	111.08	112.78	1.70	TR	F50	<.005	1.808
		112.78 113.72 About 50% ankerite quartz veining. Gabbro	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	AU PPM	PPM*M
		slightly bleached.	FX225107	113.72	114.85	1.13	TR	F45	.005	1.823
		113.72 114.85 Strongly foliated.	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.	FX225111	117.60	118.87	1.27	TR	-	.015	2.566
		120.29 121.92 30% carbonate quartz veining with slightly	FX225112	118.87	120.29	1.42	TR	-	.010	2.581
		bleached and carbonatized contacts.	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	FX225119	128.30	129.80	1.50	TR	-	.010	2.880
		green very slightly bleached weakly carbonatized gabbro.	FX225120	129.80	131.20	1.40	TR	F40	.005	2.887
		Few wispy diffuse carbonate patches and occasional	FX225121	131.20	132.75	1.55	TR	-	<.005	2.887
		quartz carbonate vein with bleached weakly fuchsitic	FX225122	132.75	133.60	.85	TR	F45	<.005	2.887
		contacts.								
		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	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
			FX225124	134.95	136.15	1.20	TR	C30	<.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.								
		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

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

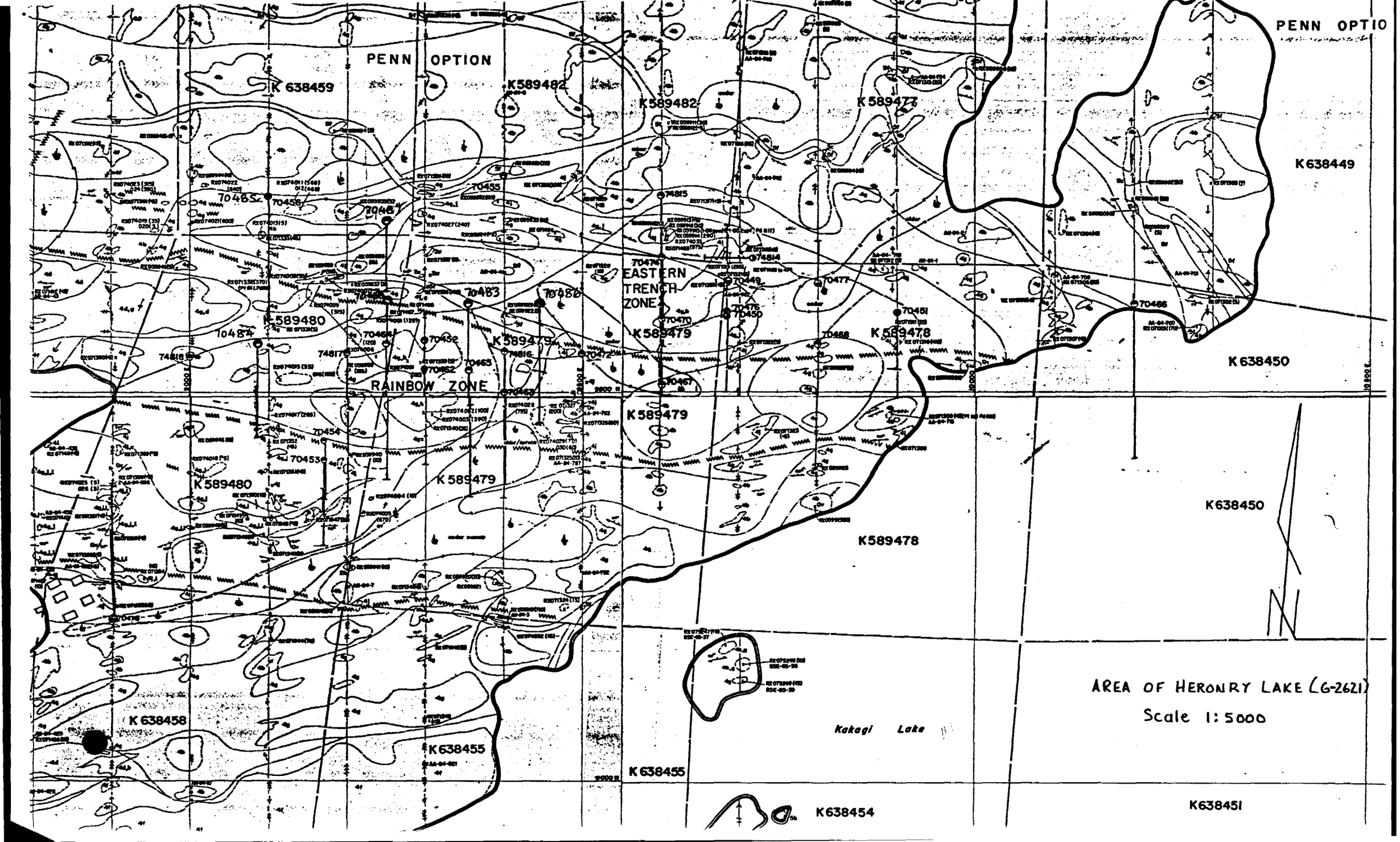
FROM M	TO M	
		leucoxene or sericite. Numerous quartz carbonate veins.
	142.17 145.21	15% veining.
	145.21 145.48	Two 2 centimetre quartz veins with carbonate at contacts. 7 to 10 % yellow leucoxene or sericite. 5% fine grained disseminated pyrite.
	145.48 146.27	Tan-brown to pale green in colour. 15% 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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		156.97 Foot of hole.								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K589478
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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	: 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	DESCRIPTION
.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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		brown quartz carbonate veins.	FX219716	17.95	19.51	1.56	1	F55	<.005	.007
		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.	FX219717	19.51	21.03	1.52	1	F50	<.005	.007
		Massive, very homogeneous. Weakly foliated. 15% feldspar	FX219718	21.03	22.55	1.52	2	-	.005	.015
		phenocrysts. 5% streaky leucoxene. Locally weakly	FX219719	22.55	24.07	1.52	1	F55	<.005	.015
		altered and bleached to a gray adjacent to quartz	FX219720	24.07	25.59	1.52	1	-	<.005	.015
		carbonate veins. 5% composite quartz carbonate veins,	FX219721	25.59	27.11	1.52	1	F50	.005	.023
		locally slightly dolomitic with inclusions of chlorite.	FX219722	27.11	28.63	1.52	1	-	<.005	.023
		1 to 2% scattered pyrite crystals. Locally silicified.	FX219723	28.63	30.15	1.52	1	F50	.005	.030
		28.63 30.15 Weakly fuchsitic alteration adjacent to	FX219724	30.15	31.67	1.52	2	-	<.005	.030
		quartz carbonate veinlets and veins.	FX219725	31.67	33.19	1.52	2	F55	<.005	.030
		31.67 33.19 Locally fuchsitic quartz carbonate veinlets.	FX219726	33.19	34.71	1.52	1	-	<.005	.030
		33.19 34.71 15% contorted quartz carbonate veins with	FX219727	34.71	36.23	1.52	1	F45	<.005	.030
		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.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
			FX219729	37.75	38.33	.58	4	-	<.005	.053
		37.75 38.33 With interfingering wallrock. Sharp lower contact with fuchsitic gabbro. Chill margins								
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	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
		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,	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	FX219748	59.52	60.48	.96	6	-	.010	.082
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.	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
		61.12 62.08 Pervasive pale green fuchsitic alteration. 3% fine grained disseminated pyrite.	FX219752	63.32	64.48	1.16	TR	F55	<.005	.088
			FX219753	64.48	65.38	.90	1	-	<.005	.088
		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.	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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANB	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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*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.	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
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	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	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
			FX219775	90.53	91.88	1.35	TR	-	.005	.410
		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.	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 ANG	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

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	FX219806	129.83	130.77	.94	TR	-	.020	1.069
	131.56 132.28	Dark forest green, shot with 20% dolomitic quartz carbonate veins.	FX219807	130.77	131.56	.79	TR	-	.010	1.077
			FX219808	131.56	132.28	.72	TR	-	<.005	1.077
	132.28 133.52	Rusty iron oxidized fracture.	FX219809	132.28	133.52	1.24	2	-	.040	1.126
	133.52 135.78	Pervasive light green fuchsitic alteration, intensifying adjacent to composite , chloritic, dolomitic quartz carbonate veins and veinlets, with 2% adjacent pyrite.	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
	135.78 136.33	15 centimetre thick quartz carbonate vein with inclusions of wallrock, chlorite, and tourmaline, with adjacent fuchsitic alteration.	FX219815	139.31	140.11	.80	2	-	.105	1.399
	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.								

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

FROM M	TO M	
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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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								

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

FROM M	TO 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.
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.
166.37	167.89	Locally rusty iron oxidized carbonate adjacent to fractures.
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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX219835	162.05	163.43	1.38	TR	-	<.005	1.677
FX219836	163.43	164.95	1.52	TR	-	<.005	1.677
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
FX219840	169.40	170.92	1.52	TR	-	<.005	1.677
FX219841	170.92	171.91	.99	TR	-	<.005	1.677

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

FROM M	TO 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.
	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

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

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

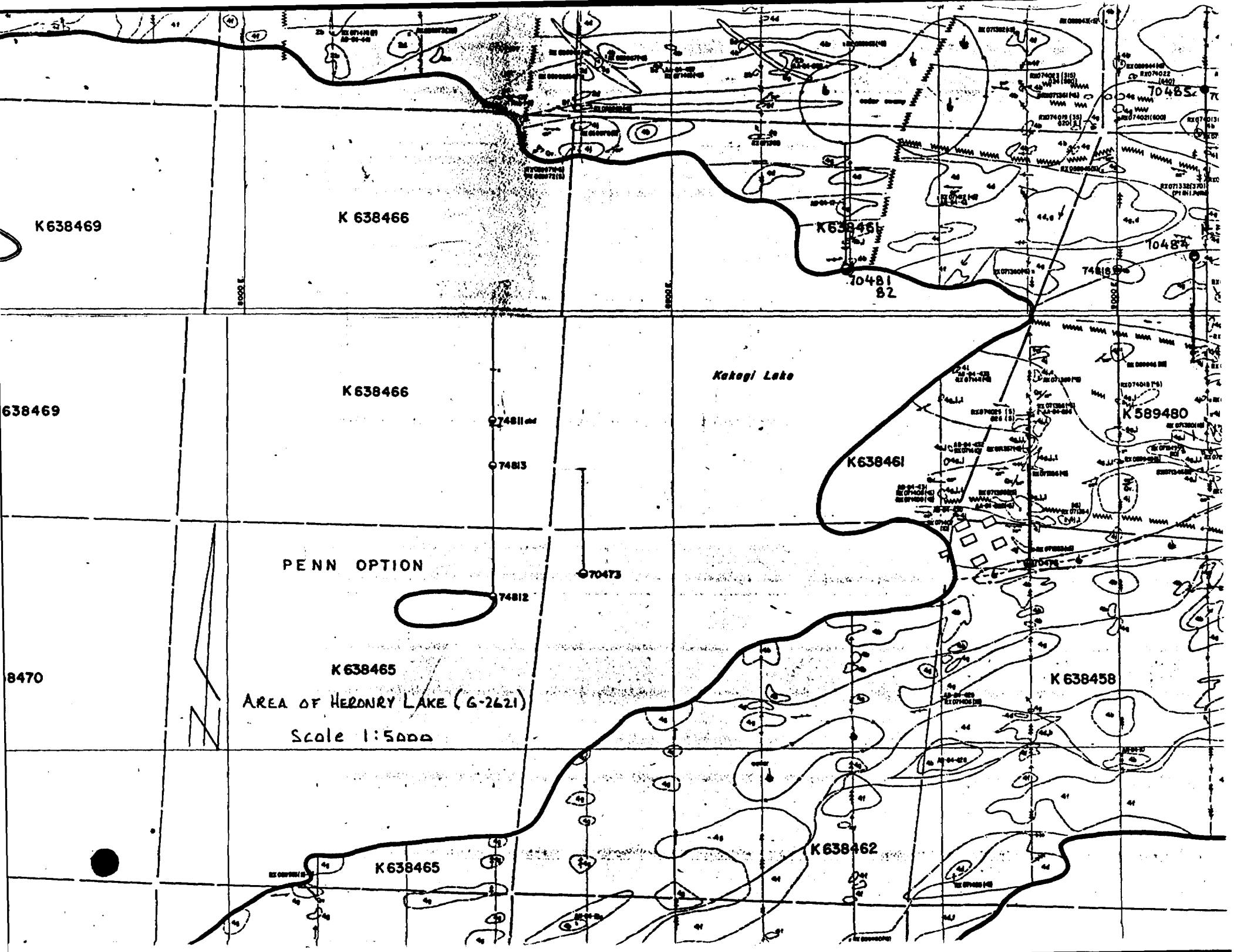
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		fractures, decreasing towards end of sample.	FX219867	208.48	210.01	1.53	TR	-	<.005	1.720
			FX219868	210.01	211.53	1.52	TR	F57	.035	1.773
	201.39 202.39	Dark green to green. Weak hematitic staining. 15% tan leucoxene. 5% weakly dolomitic quartz carbonate veins and veinlets. Trace pyrite.	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
	208.48 211.53	Locally coarse grained.	FX219873	217.63	219.15	1.52	TR	F50	<.005	1.773
	216.11 219.15	Dark forest green. Weakly dolomitic. Medium grained to coarse grained.	FX219874	219.15	220.67	1.52	TR	-	.010	1.788
			FX219875	220.67	222.19	1.52	1	-	.010	1.803
	219.15 223.72	Hematitic stringers. 15% weakly dolomitic quartz carbonate veins. Locally with 15% streaky tan leucoxene, and 1% disseminated pyrite.	FX219876	222.19	223.72	1.53	1	-	<.005	1.803
			FX219877	223.72	224.55	.83	3	-	.055	1.849
	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.	FX219878	224.55	226.07	1.52	5	C35	.085	1.978
226.07 248.11		PERIDOTITE								
		Transitional gabbro to peridotite. Dark green to black.	FX219879	226.07	226.77	.70	1	-	.070	2.027
		Fine grained to medium grained. Massive, homogeneous.	FX219880	226.77	228.30	1.53	1	-	.010	2.042
		Weakly locally foliated. 10% pale yellow streaky	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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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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K638461
PENN OPTION
70473
74812
8470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638462
K638465

**********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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
15.29	22.70	PERIDOTITE								
		Transition zone to gabbro. Dark green fine grained to	FX224967	15.29	17.06	1.77	TR	F45	<.005	.000
		medium grained weakly to moderately foliated weakly	FX224968	17.06	18.50	1.44	TR	-	<.005	.000
		magnetic peridotite to gabbro. 5 to 10% yellow green	FX224969	18.50	20.00	1.50	TR	F40	<.005	.000
		saussuritized feldspars. Thin quartz calcite carbonate	FX224970	20.00	21.34	1.34	TR	-	.005	.007
		veins common.	FX224971	21.34	22.70	1.36	TR	-	<.005	.007
		21.34 22.70 5% quartz carbonate veins.								
22.70	23.89	VEIN								
		Predominantly highly irregular ankerite quartz veining	FX224972	22.70	23.89	1.19	TR	-	.030	.042
		with minor tourmaline cut by late quartz tourmaline vein								
		3 centimetres wide. Gabbro to peridotite inclusions								
		contain 5% leucoxene.								
23.89	38.97	GABBRO								
		Fine grained to medium grained dark green weakly to	FX224973	23.89	24.38	.49	TR	-	<.005	.042
		strongly magnetic gabbro with 5 to 15% disseminated fine	FX224974	24.38	25.76	1.38	TR	F42	<.005	.042
		grained magnetite and specularite. Numerous calcite	FX224975	25.76	27.27	1.51	TR	-	.045	.110
		veinlets.	FX224976	27.27	28.73	1.46	1	-	.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	FX224979	31.62	33.10	1.48	TR	-	.010	.278
		contacts.	FX224980	33.10	34.50	1.40	TR	-	<.005	.278
		33.10 34.50 Magnetite and specularite becoming coarser	FX224981	34.50	36.08	1.58	TR	-	.005	.286
		grained.	FX224982	36.08	37.51	1.43	TR	-	<.005	.286
		34.50 36.08 4 to 7% medium grained to coarse grained	FX224983	37.51	38.97	1.46	TR	-	<.005	.286
		magnetite and specularite.								
		37.51 38.97 Gradational to medium grained to coarse								
		grained massive saussuritized gabbro.								

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
67.05	77.12	GABBRO								
		As to 49.27 but non-magnetic. Medium grained to coarse	FX225003	67.05	68.32	1.27	TR	-	.005	.373
		grained yellow green massive saussuritized very	FX225004	68.32	69.82	1.50	TR	-	.010	.388
		homogeneous gabbro. Occasional thin quartz carbonate	FX225005	69.82	71.28	1.46	TR	-	<.005	.388
		vein.	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	FX225010	77.12	78.60	1.48	TR	-	.010	.402
		with 5 to 8% calcite quartz veins to 1 centimetre wide.	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	FX225013	81.56	82.94	1.38	TR	-	.010	.432
		amygdaloidal. 11 centimetre white quartz	FX225014	82.94	84.40	1.46	TR	-	.035	.483
		vein. Few specks chalcopyrite in fracture.	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	FX225023	95.71	97.54	1.83	TR	F40	<.005	.721
		gabbro. Thin quartz carbonate calcite veins common.	FX225024	97.54	99.09	1.55	TR	-	<.005	.721
		95.71 97.54 Fine grained with 17 centimetre quartz	FX225025	99.09	100.49	1.40	TR	F45	<.005	.721
		carbonate vein parallel to foliation.	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	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	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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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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	: 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	DESCRIPTION
.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.
9.04	12.57	PERIDOTITE

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX219894	6.43	7.51	1.08	TR	-	<.005	.000
FX219895	7.51	9.04	1.53	TR	-	<.005	.000

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

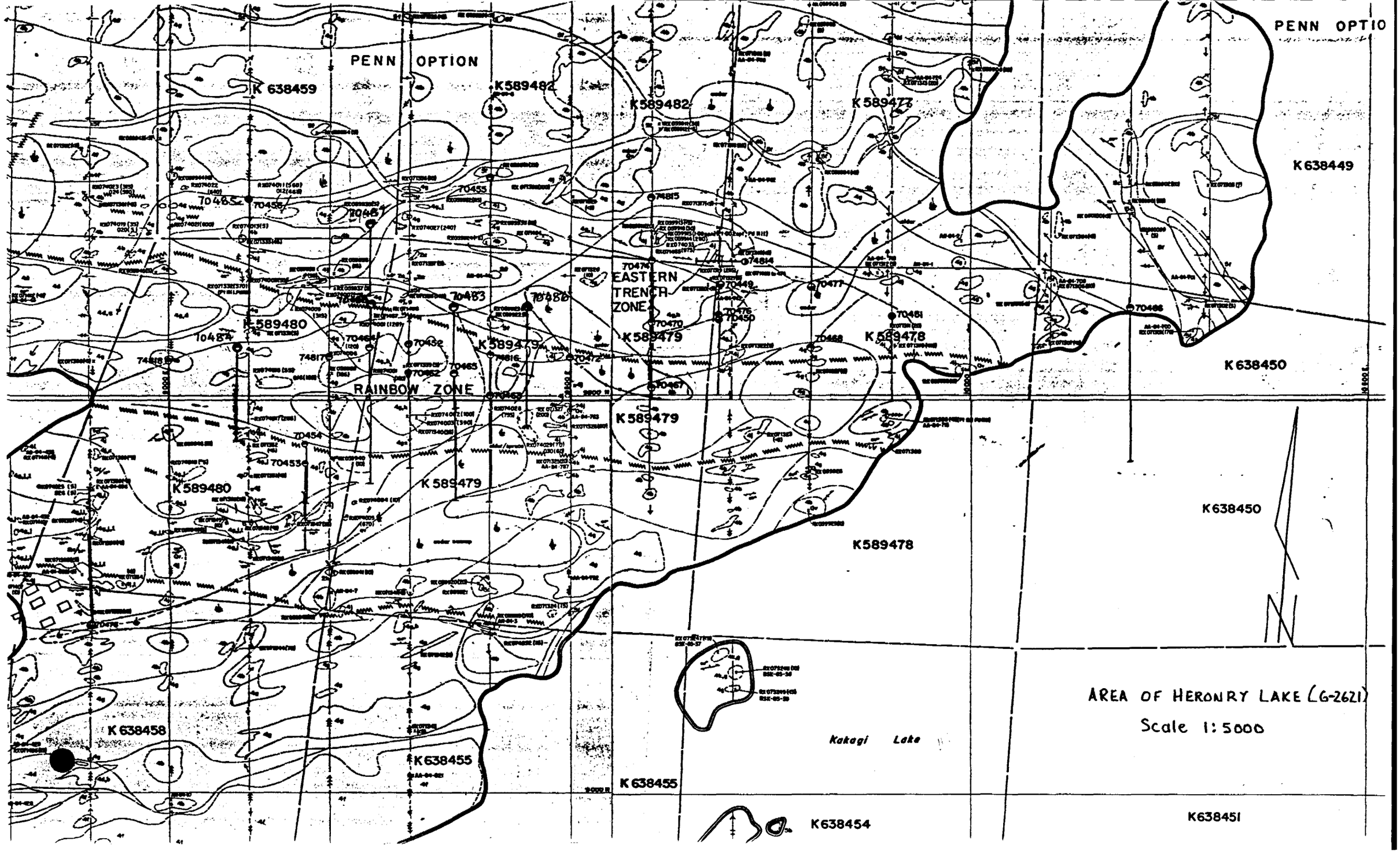
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		Very dark green to black. Fine grained to medium grained. Massive, very homogeneous. Weakly foliated. Weakly iron carbonatized. Soapy surface. 5 to 7% dolomitic quartz carbonate veinlets and blebs. Locally chloritic clots. 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.	FX219901	14.85	15.63	.78	2	-	<.005	.010
		14.85 15.63 Locally 3 centimetre thick dolomitic, chloritic quartz carbonate veins. Locally 2% disseminated pyrite concentrated near contact with dike.	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	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
			FX219909	24.38	25.91	1.53	TR	-	<.005	.010
		22.97 24.34 1% scattered and disseminated pyrite.	FX219910	25.91	27.43	1.52	TR	-	<.005	.010
		27.43 28.96 15% blebby iron carbonate.	FX219911	27.43	28.96	1.53	TR	-	<.005	.010
		28.96 30.48 2 centimetre thick chloritic quartz carbonate vein at 15 degrees to core axis.	FX219912	28.96	30.48	1.52	TR	-	.040	.071
			FX219913	30.48	32.01	1.53	TR	-	.020	.102
		42.67 44.20 Locally with chloritic, pale gray quartz carbonate vein with trace pyrite crystals.	FX219914	32.01	33.53	1.52	TR	-	.280	.527
			FX219915	33.53	35.05	1.52	TR	-	.005	.535
		45.72 47.25 1% scattered pyrite.	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	AU PPM	PPM*M
47.25	58.27	PERIDOTITE								
		As at 22.61 to 47.25 metres, but not magnetic.	FX219924	47.25	48.77	1.52	TR	-	.010	.565
		50.30 54.86 1% scattered pyrite crystals.	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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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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:

********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.i	-48.00
76.20	355.0	-52.00	162.64	355.0	-51.00	259.08	355.0	-49.00		i	

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

FROM M	TO M	DESCRIPTION
.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%

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
			FX141018	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

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

FROM M	TO M	
		millimetres.
	64.00 65.50	With minor contorted talc patches.
	71.50 73.00	With a 6 centimetre thick talc- quartz carbonate vein at 72.21.
	75.73 76.30	With 30% quartz carbonate as one contorted 1 centimetre thick vein sub parallel to core axis.
	76.30 77.80	Trace pyrite.
	79.30 79.99	Becoming moderately foliated.
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.
81.17	91.75	PERIDOTITE Medium grained to coarse grained, dark gray, soft, weakly foliated to massive. 5% quartz iron carbonate

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX141028	52.00	53.50	1.50	0	-	.080	.278
FX141029	53.50	55.00	1.50	0	-	<.005	.278
FX141030	55.00	56.50	1.50	TR	-	<.005	.278
FX141031	56.50	58.00	1.50	0	-	<.005	.278
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
FX141035	62.50	63.51	1.01	0	-	<.005	.278
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
FX141049	79.99	81.17	1.18	0	-	<.005	.281
FX141050	81.17	82.66	1.49	0	-	<.005	.281
FX141051	82.66	84.12	1.46	0	-	<.005	.281

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

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

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

FROM M	TO M	
		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%

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*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	159.30	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								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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	188.00	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								

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

FROM M	TO 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.
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.

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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
		203.35 207.85 Without leucoxene.	FX139948	208.67	210.05	1.38	0	-	<.005	13.919
		207.85 208.67 Medium grained, weakly foliated to massive. Gray green. 5% contorted quartz carbonate veinlets. Hard.	FX139949	210.05	211.30	1.25	0	-	<.005	13.919
			FX139950	211.30	212.14	.84	TR	-	.010	13.928
		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	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
		213.65 215.16 As above. One boulder 25 centimetres long.	FX139956	219.56	221.06	1.50	0	-	<.005	14.063
		215.16 216.66 As above with light green patches and streaks. 1% fine grained disseminated pyrite.	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
		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								

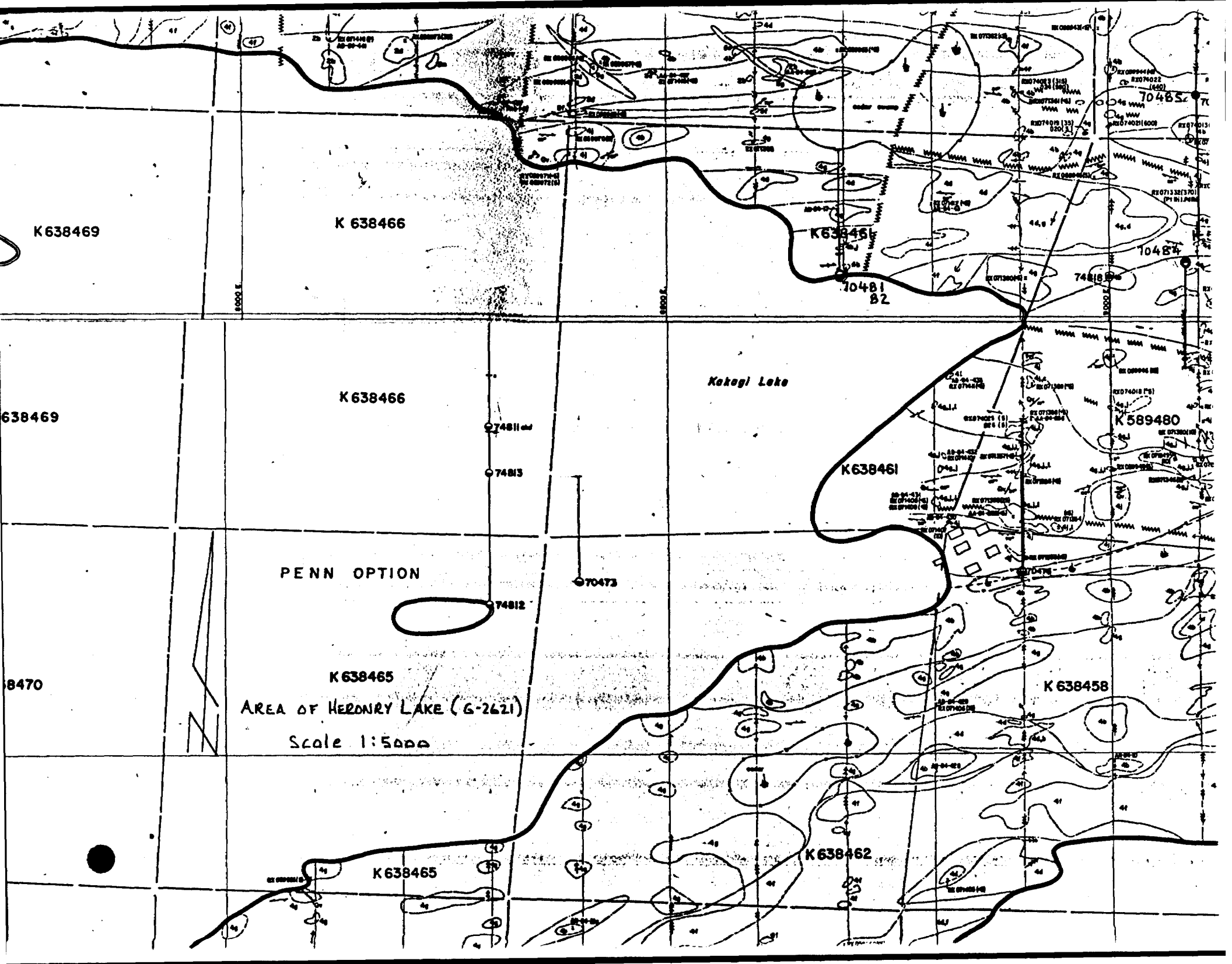
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		centimetres thick with diffuse contacts. 4% disseminated pyrite concentrated primarily in areas of alteration but scattered throughout. Weakly foliated to massive.								
230.62	280.50	LAPILLI TUFF								
		Dacite lapilli 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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		millimetres. Weakly foliated to massive.	FX139989	263.22	263.90	.68	0	-	.025	14.619
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.	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
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.	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
269.45	270.95	As above with decreasing epidote alteration	FX140000	277.15	278.24	1.09	0	F30	<.005	14.685
270.95	276.15	As at 233.60. Locally weakly magnetic.	FX163715	278.24	279.00	.76	0	-	<.010	14.685
276.15	278.24	Dacite lapilli tuff. Pale gray green to green. Moderately to strongly foliated. Minor quartz carbonate veins. Becoming chloritic.	FX163716	279.00	280.50	1.50	0	F33	.010	14.700
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.	FX163717	280.50	282.00	1.50	0	F30	<.010	14.700

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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. 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.	FX163734 FX163735	300.36 301.14	301.14 302.20	.78 1.06	0 0	F37 F30	<.010 <.010	14.700 14.700
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. 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.	FX163737 FX163738 FX163739	303.47 304.30 305.47	304.30 305.47 306.63	.83 1.17 1.16	0 0 0	F40 F36 F30	<.010 <.010 <.010	14.700 14.700 14.700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Kakagi Lake
74811
74813
K589480
K638461
PENN OPTION
70473
74812
8470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638462
K638465

**********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:

********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.i	-48.00
76.20	355.0	-45.00	154.20	355.0	-47.00	243.80	355.0	-48.00		i	

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

FROM M	TO M	DESCRIPTION
.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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
78.42	79.92	With 5% talc veins up to 1 centimetre thick.	FX163745	81.20	82.70	1.50	TR	-	<.010	.000
79.92	80.22	Foliated with 60% irregular talc veins.	FX163746	82.70	84.20	1.50	TR	-	.010	.015
81.20	82.70	With 5% talc veins and veinlets.	FX163747	84.20	85.70	1.50	TR	-	<.010	.015
87.20	90.20	With rare quartz carbonate veins and	FX163748	85.70	87.20	1.50	TR	-	<.010	.015
		patches. Trace hematite.	FX163749	87.20	88.70	1.50	TR	-	<.010	.015
91.70	102.20	Fine grained to medium grained, bluish	FX163750	88.70	90.20	1.50	TR	-	<.010	.015
		black, massive, magnetic, talcose	FX163751	90.20	91.70	1.50	TR	-	<.010	.015
		peridotite. Soft, with 5 to 15% iron	FX163752	91.70	93.20	1.50	TR	-	<.010	.015
		carbonate grains up to 3 millimetres in	FX163753	93.20	94.70	1.50	TR	-	<.010	.015
		size , gray to light brown in colour.	FX163754	94.70	96.20	1.50	TR	-	<.010	.015
		Trace disseminated pyrite. Rare talc	FX163755	96.20	97.70	1.50	TR	-	.005	.023
		veinlets.	FX163756	97.70	99.20	1.50	TR	-	<.010	.023
102.20	103.70	As above with 5% quartz carbonate veining.	FX163757	99.20	100.70	1.50	TR	-	<.010	.023
111.00	117.00	Strongly saussuritized feldspars.	FX163758	100.70	102.20	1.50	TR	-	<.010	.023
117.00	121.50	As at 91.70. Strongly saussuritized	FX163759	102.20	103.70	1.50	TR	-	<.010	.023
		feldspars.	FX163760	103.70	105.00	1.30	TR	-	<.010	.023
121.50	124.50	As above with 5% quartz carbonate bands	FX163761	105.00	106.50	1.50	TR	-	<.010	.023
		and veins.	FX163762	106.50	108.00	1.50	TR	-	<.010	.023
124.50	126.00	As above but weakly foliated.	FX163763	108.00	109.50	1.50	TR	-	<.010	.023
126.00	130.50	As at 91.70 with 15 to 30% disseminated	FX163764	109.50	111.00	1.50	TR	-	<.010	.023
		iron carbonate grains up to 3 millimetres	FX163765	111.00	112.50	1.50	TR	-	<.010	.023
		in size. Weakly foliated, trace pyrite.	FX163766	112.50	114.00	1.50	TR	-	<.010	.023
130.50	132.00	As above with 5% quartz carbonate veins	FX163767	114.00	115.50	1.50	TR	-	<.010	.023
		and quartz carbonate talc veins.	FX163768	115.50	117.00	1.50	TR	-	<.010	.023
132.00	138.00	As at 91.70, weakly foliated.	FX163769	117.00	118.50	1.50	TR	-	<.010	.023
138.00	141.00	As above, weakly to moderately foliated.	FX163770	118.50	120.00	1.50	TR	-	<.010	.023
		Several narrow fault gouge seams. Several	FX163771	120.00	121.50	1.50	TR	-	<.010	.023
		quartz carbonate veins up to 5 millimetres	FX163772	121.50	123.00	1.50	TR	-	<.010	.023
		thick with some associated light green	FX163773	123.00	124.50	1.50	TR	-	<.010	.023
		talc. Trace pyrite.	FX163774	124.50	126.00	1.50	TR	50	<.010	.023
141.00	145.50	Fine grained to medium grained, soft,	FX163775	126.00	127.50	1.50	TR	40	<.010	.023
		talcose peridotite. Weakly to moderately	FX163776	127.50	129.00	1.50	TR	45	<.010	.023

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		foliated with several scattered thin fault	FX163777	129.00	130.50	1.50	TR	-	<.010	.023
		seams up to 1 centimetre thick.	FX163778	130.50	132.00	1.50	TR	-	.010	.038
	145.50 147.35	Fine grained to medium grained, soft,	FX163779	132.00	133.50	1.50	TR	-	<.010	.038
		talcose, magnetic, dark bluish gray to	FX163780	133.50	135.00	1.50	TR	45	<.010	.038
		black peridotite. 10 to 20% fine grained	FX163781	135.00	136.50	1.50	TR	-	<.010	.038
		to medium grained disseminated iron	FX163782	136.50	138.00	1.50	TR	43	<.010	.038
		carbonate. Massive to weakly foliated.	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,	FX163790	147.35	147.90	.55	0	-	<.010	.045
		black, equigranular. Not magnetic.								
147.90 215.50		PERIDOTITE								
		Fine grained to medium grained, soft, talcose, magnetic	FX163791	147.90	149.00	1.10	0	-	<.010	.045
		dark bluish gray to black with 10 to 20% fine grained to	FX163792	149.00	150.50	1.50	0	-	<.010	.045
		medium grained disseminated iron carbonate. Massive.	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	FX163795	153.50	155.00	1.50	0	-	<.010	.060
		spots 1 to 2 millimetres in size.	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	FX163798	158.00	159.50	1.50	0	-	<.010	.060
		carbonate veins, several black chlorite	FX163799	159.50	161.00	1.50	0	-	<.010	.060
		talc seams up to 4 millimetres thick and	FX163800	161.00	162.50	1.50	0	-	<.010	.060
		fault fractures at various angles to core	FX163801	162.50	164.00	1.50	0	-	<.010	.060

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		axis which are commonly iron stained and	FX163802	164.00	165.50	1.50	0	-	<.010	.060
		some times have minor fault gouge.	FX163803	165.50	167.00	1.50	0	-	<.010	.060
171.60	172.88	Fractured with several gouge filled fault	FX163804	167.00	168.50	1.50	0	-	<.010	.060
		fractures up to 1 centimetre thick and 5%	FX163805	168.50	170.00	1.50	0	-	<.010	.060
		chlorite talc quartz carbonate veining	FX163806	170.00	171.60	1.60	0	-	<.010	.060
		with the chlorite talc being present as	FX163807	171.60	172.88	1.28	TR	-	<.010	.060
		very soft green to black streaks and	FX163808	172.88	174.38	1.50	0	-	<.010	.060
		patches. Trace pyrite. Moderately hard to	FX163809	174.38	175.75	1.37	0	-	<.010	.060
		soft.	FX163810	175.75	177.25	1.50	0	-	<.010	.060
172.88	174.38	Moderately hard to soft, locally fractured	FX163811	177.25	178.75	1.50	0	-	<.010	.060
		and filled with fault gouge up to 1	FX163812	178.75	180.22	1.47	0	-	<.010	.060
		centimetre thick. Rare serpentine veins.	FX163813	180.22	181.25	1.03	0	-	<.010	.060
175.75	177.25	As at 172.88.	FX163814	181.25	181.82	.57	0	-	.125	.131
180.22	181.82	Strongly fractured and brecciated with	FX163815	181.82	182.62	.80	0	-	<.010	.131
		numerous fault gouge seams at various	FX163816	182.62	183.28	.66	0	-	<.010	.131
		angles to core axis. 5% fine grained	FX163817	183.28	184.54	1.26	0	-	<.010	.131
		chlorite, 10% light green talc and 5%	FX163818	184.54	185.50	.96	0	-	.030	.160
		quartz carbonate as streaks and veins	FX163819	185.50	187.00	1.50	0	-	<.010	.160
		within the fractured and brecciated zones.	FX163820	187.00	188.50	1.50	0	-	<.010	.160
181.82	183.28	Moderately fractured with some thin fault	FX163821	188.50	190.00	1.50	0	-	<.010	.160
		gouge, chlorite and talc.	FX163822	190.00	191.50	1.50	0	-	<.010	.160
183.28	184.54	As at 180.22.	FX163823	191.50	193.00	1.50	0	-	<.010	.160
187.00	190.00	With 2 to 3% serpentine and chlorite talc	FX163824	193.00	194.50	1.50	0	-	<.010	.160
		veins up to 1 centimetre thick and with	FX163825	194.50	196.00	1.50	0	-	<.010	.160
		minor quartz carbonate veining.	FX163826	196.00	197.50	1.50	0	-	<.010	.160
190.00	191.50	With 5% dark green chlorite veins and	FX163827	197.50	199.00	1.50	0	-	.015	.183
		streaks, 2% contorted quartz carbonate	FX163828	199.00	200.50	1.50	0	-	<.010	.183
		veins.	FX163829	200.50	202.00	1.50	0	-	<.010	.183
194.50	196.00	With minor serpentine veining up to 5	FX163830	202.00	203.50	1.50	0	-	<.010	.183
		millimetre thick, 5% white quartz	FX163831	203.50	205.00	1.50	TR	-	<.010	.183
		carbonate veins up to 2 centimetres thick.	FX163832	205.00	206.50	1.50	0	-	<.010	.183
199.00	200.50	As at 194.50.	FX163833	206.50	208.00	1.50	0	-	<.010	.183

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.	FX163835	209.50	211.00	1.50	0	-	.010	.213
		Minor fracturing. trace pyrite.	FX163836	211.00	212.50	1.50	0	-	.010	.228
	205.00 206.50	Fracturing at low angle to core axis. In	FX163837	212.50	214.00	1.50	0	-	<.010	.228
		part very chloritic. 20 to 40% iron	FX163838	214.00	215.50	1.50	0	-	<.010	.228
		carbonate.								
	206.50 208.00	With 5% quartz carbonate as a banded vein 8 centimetres thick.								
	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								
	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,	FX163839	215.50	216.31	.81	0	-	<.010	.228
		massive, moderately hard. Weakly magnetic to non magnetic	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	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

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

FROM M	TO M	
		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

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

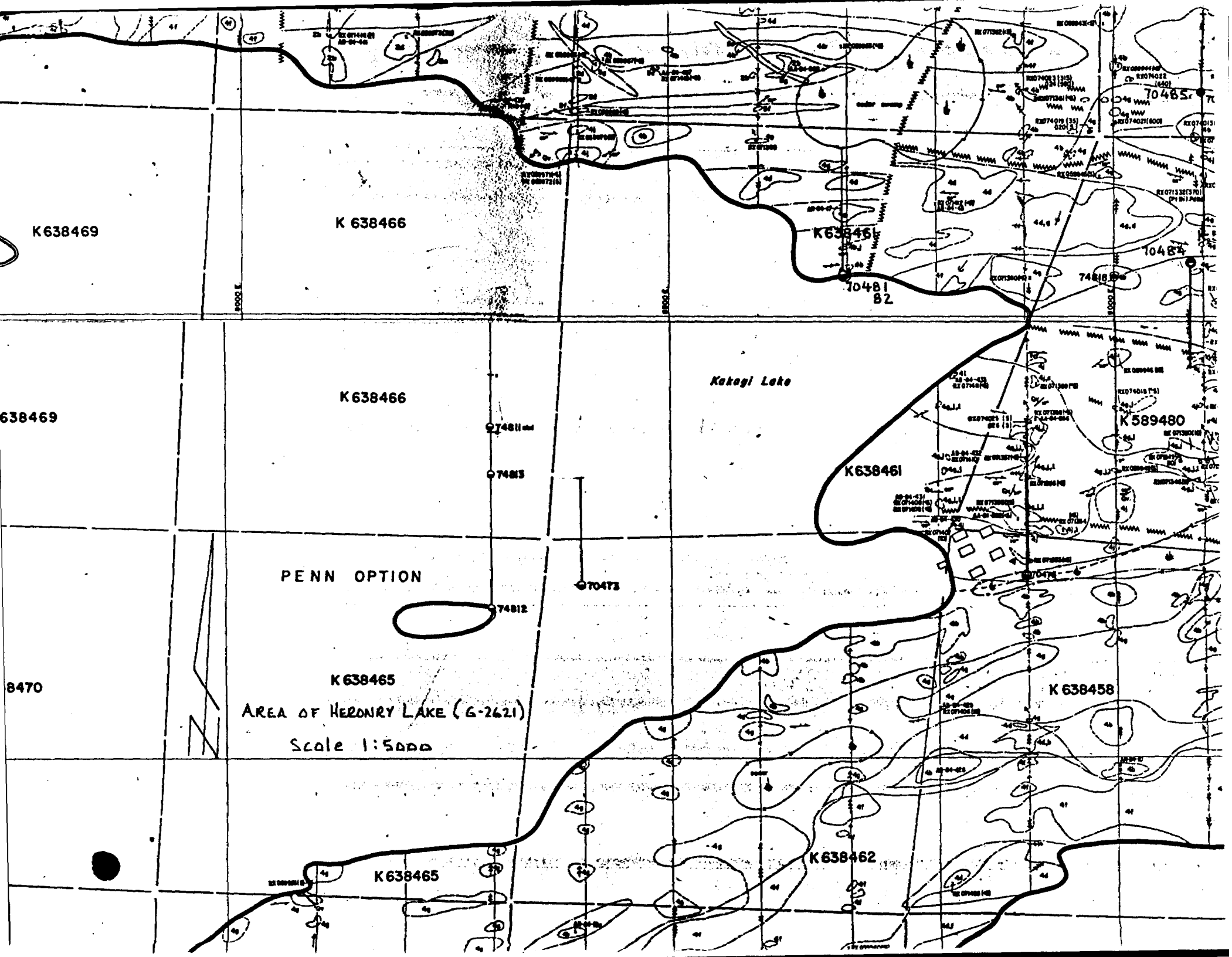
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX163855	234.78	235.96	1.18	TR	-	<.010	.228
FX163856	235.96	236.52	.56	TR	-	<.010	.228
FX163857	236.52	238.02	1.50	TR	-	<.010	.228
FX163858	238.02	239.52	1.50	TR	-	.445	.895
FX163859	239.52	241.02	1.50	TR	-	<.010	.895
FX163860	241.02	242.52	1.50	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	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
	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	D25	<.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	AU FPM	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.	FX163908	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. 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.	FX163909 FX163910 FX163911	301.23 302.32 303.43	302.32 303.43 303.75	1.09 1.11 .32	0 0 0	- F10 -	<.010 <.010 <.010	.935 .935 .935
303.75	305.71	FAULT Strongly fractured and brecciated with 30 to 60% fault gouge. Calcareous. 5% white quartz carbonate veins, veinlets and streaks. 305.00 305.71 As above. Ultramafic rock fragments strongly foliated. Foot of hole.	FX163912 FX163913	303.75 305.00	305.00 305.71	1.25 .71	0 0	- -	<.010 <.010	.935 .935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PENN OPTION
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AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
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K638462
K638465

**********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	: 74B14-0	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

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	**********ANALYSES********** AU PPM	PPM*M
.00	79.11	GABBRO								
		Weakly to moderately altered gabbro. Medium grained to	FX163914	.00	1.00	1.00	0	F10	<.010	.000
		coarse grained, gray green, moderately foliated.	FX163915	1.00	2.00	1.00	0	-	<.010	.000
		Consists of stretched clots of chlorite and iron	FX163916	2.00	3.05	1.05	0	-	<.010	.000
		carbonate rich felsic clots. 20 to 30% disseminated fine	FX163917	3.05	4.50	1.45	0	F05	<.010	.000
		grained iron carbonate, mainly in the felsic clots and	FX163918	4.50	6.00	1.50	0	-	<.010	.000
		10% limonite clots up to 2 millimetres in size. 1%	FX163919	6.00	6.72	.72	0	F05	<.010	.000
		light yellow leucoxene. Soft. 40 to 60% chlorite. Rare	FX163920	6.72	7.66	.94	0	-	<.010	.000
		quartz carbonate veins.	FX163921	7.66	9.05	1.39	TR	-	<.010	.000
		6.72 7.66 With fewer limonite clots.	FX163922	9.05	10.55	1.50	TR	-	<.010	.000
		7.66 15.05 1 to 2% limonite clots, trace disseminated	FX163923	10.55	12.05	1.50	TR	-	<.010	.000
		fine grained pyrite.	FX163924	12.05	13.55	1.50	TR	F05	<.010	.000
		15.05 16.55 Rare limonite clots.	FX163925	13.55	15.05	1.50	TR	-	<.010	.000
		16.55 19.55 No limonite clots, weakly to moderately	FX163926	15.05	16.55	1.50	TR	-	<.010	.000

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		foliated. Moderately hard.	FX163927	16.55	18.05	1.50	TR	-	<.010	.000
19.55	21.05	As above with 1% quartz carbonate as	FX163928	18.05	19.55	1.50	TR	-	<.010	.000
		contorted veins and patches.	FX163929	19.55	21.05	1.50	TR	-	<.010	.000
21.05	26.57	As at 16.55.	FX163930	21.05	22.55	1.50	TR	-	<.010	.000
26.57	27.16	As above with 15% quartz carbonate veins and	FX163931	22.55	24.05	1.50	TR	-	<.010	.000
		streaks up to 7 centimetres thick with	FX163932	24.05	25.55	1.50	TR	-	<.010	.000
		sharp contacts. Gabbro is strongly	FX163933	25.55	26.57	1.02	TR	-	<.010	.000
		carbonatized with 30 to 50% fine grained	FX163934	26.57	27.16	.59	2	C50	<.010	.000
		disseminated iron carbonate. 2% disseminated	FX163935	27.16	28.05	.89	1	-	<.010	.000
		pyrite as crystals up to 3 millimetres.	FX163936	28.05	28.65	.60	TR	C32	<.010	.000
27.16	28.05	As at 16.55. 1% pyrite, 2% leucoxene, dark	FX163937	28.65	30.15	1.50	TR	-	<.010	.000
		gray.	FX163938	30.15	31.66	1.51	TR	-	<.010	.000
28.05	28.65	Medium grained, weakly foliated, moderately	FX163939	31.66	33.10	1.44	1	-	<.010	.000
		hard gabbro. Dark gray. more equigranular.	FX163940	33.10	33.80	.70	TR	F25	<.010	.000
		Does not have clotty appearence. 1 to 2%	FX163941	33.80	35.26	1.46	TR	F40	<.010	.000
		leucoxene. Feldspars less altered. 5%	FX163942	35.26	36.78	1.52	TR	-	<.010	.000
		quartz carbonate veins up to 3 centimetre	FX163943	36.78	37.80	1.02	1	-	.020	.020
		thick with sharp contacts. 20 to 30% fine	FX163944	37.80	38.80	1.00	TR	-	<.010	.020
		grained iron carbonate. Trace pyrite.	FX163945	38.80	39.86	1.06	2	F42	.030	.052
28.65	30.15	As above with 1% disseminated pyrite as	FX163946	39.86	41.33	1.47	TR	F15	<.010	.052
		crystals up to 2 millimetres.	FX163947	41.33	42.83	1.50	TR	-	<.010	.052
30.15	31.66	As at 28.05 with 15 centimetre silicified	FX163948	42.83	44.18	1.35	1	-	.010	.066
		section at top. Minor quartz carbonate	FX163949	44.18	45.08	.90	TR	-	<.010	.066
		veins up to 1 centimetre thick.	FX163950	45.08	45.74	.66	3	-	.175	.181
31.66	33.10	As at 28.05. 1% pyrite.	FX163951	45.74	46.94	1.20	TR	-	.070	.265
33.10	33.80	Strongly foliated and contorted with 10%	FX163952	46.94	47.63	.69	TR	F35	<.010	.265
		quartz carbonate as streaks, patches and	FX163953	47.63	48.23	.60	TR	-	.070	.307
		veins. Chloritic. Moderately hard. 2% fine	FX163954	48.23	49.25	1.02	4	-	1.035	1.363
		grained leucoxene, trace pyrite. Strongly	FX163955	49.25	50.21	.96	TR	-	.140	1.497
		carbonatized.	FX163956	50.21	50.61	.40	TR	-	.030	1.509
33.80	35.26	Medium grained to coarse grained gabbro.	FX163957	50.61	51.22	.61	2	-	5.125	4.636
		Strongly carbonatized with 20 to 35%	FX163958	51.22	51.87	.65	2	-	.040	4.662

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

**********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	39.80	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.

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

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

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

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

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

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

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

PENN OPTION
PENN OPTIO
K 638459
K589482
K589482
K589477
K638449
EASTERN TRENCH ZONE
K589480
K589479
K589478
K638450
RAINBOW ZONE
K589479
K589480
K589479
K589478
K638450
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 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			

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

FROM M	TO M	DESCRIPTION
.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.
9.80	10.30	LAMPROPHYRE Mafic dike. Fine grained, dark gray green, with chilled

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX163996	7.72	8.72	1.00	0	-	<.010	.000
FX163987	8.72	9.80	1.08	0	-	<.010	.000
FX163988	9.80	10.30	.50	0	C55	<.010	.000

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
		10.30 11.80 Trace pyrite.	FX163990	11.80	13.30	1.50	0	-	<.010	.000
		22.30 24.83 Moderately calcareous.	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
		Not magnetic to weakly magnetic.	FX164000	25.76	26.90	1.14	0	-	<.010	.000
		24.83 25.76 Moderately foliated.	FX158529	26.90	27.80	.90	0	-	<.010	.000
		25.76 27.80 Massive to weakly foliated.	FX158530	27.80	29.35	1.55	0	F58	<.010	.000
		27.80 29.35 Weakly to moderately foliated, weakly to moderately calcareous. 5% contorted white quartz carbonate veins, streaks and patches.	FX158531	29.35	30.45	1.10	0	-	<.010	.000
			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 ANG	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	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
		48.00 50.90 2% quartz carbonate veinlets.	FX158551	53.95	54.92	.97	1	F55	.030	.126
		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.	FX158552	54.92	55.58	.66	5	-	.725	.604
		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	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
			FX158556	59.39	60.50	1.11	TR	F42	<.010	1.756
		58.13 59.39 As above with 10% quartz carbonate veins	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	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 up 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	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	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	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

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

FROM M	TO M	DESCRIPTION
		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.
97.88	109.05	QUARTZ GABBRO
		Moderately altered. Moderately carbonatized and silicified especially adjacent to quartz carbonate veins.
	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.
	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 veir at 101.16. No

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX158592	96.00	97.50	1.50	0	-	.030	3.574
FX158593	97.50	97.88	.38	0	-	.070	3.600
FX158594	97.88	98.66	.78	TR	-	.010	3.608
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

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

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

FROM M	TO M	
	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

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

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

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

FROM M	TO 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.
	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.
	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.

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

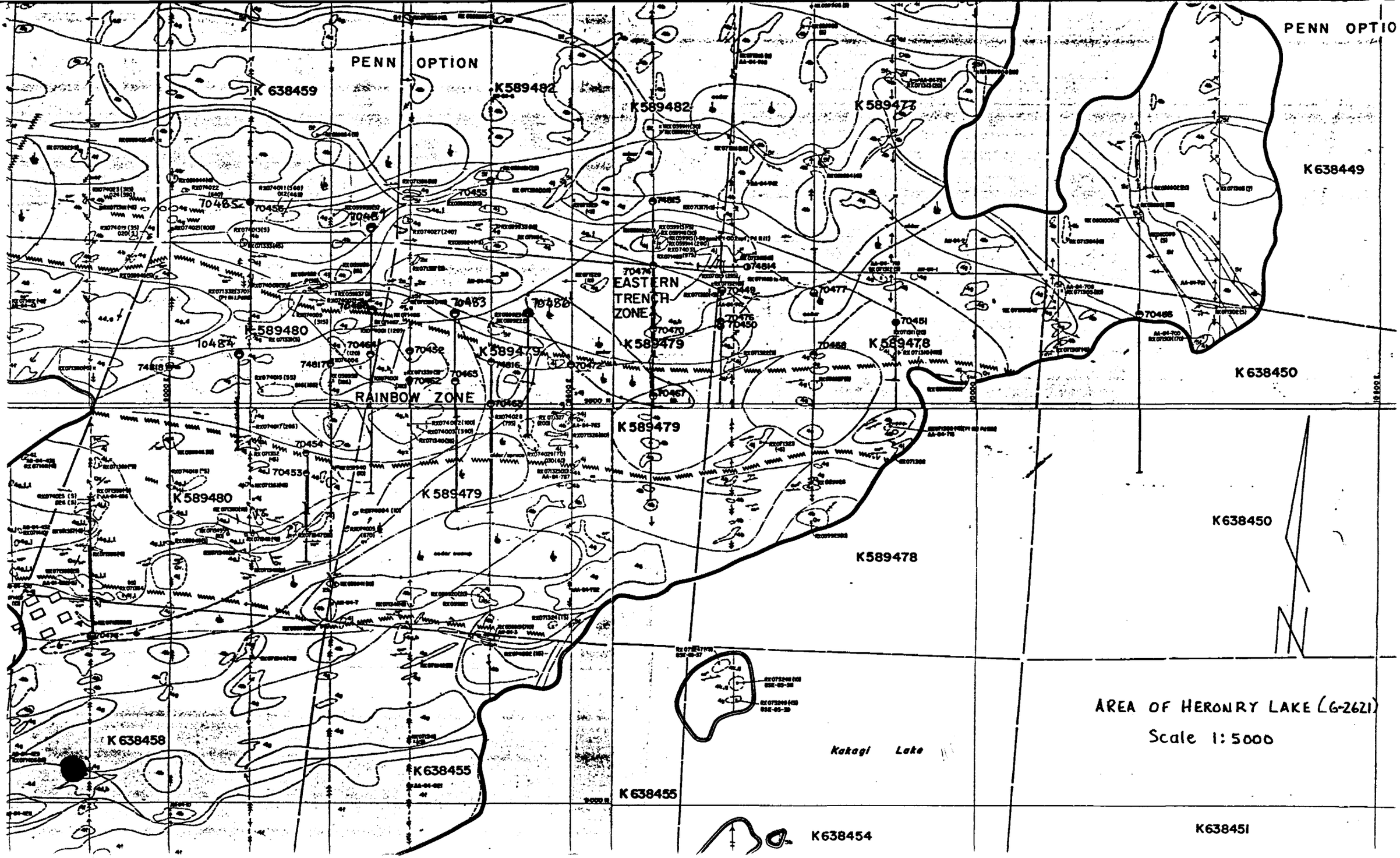
SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188025	131.40	132.90	1.50	0	-	.115	10.034
FX188026	132.90	134.40	1.50	0	-	<.010	10.034
FX188027	134.40	135.90	1.50	0	F40	<.010	10.034
FX188028	135.90	137.40	1.50	0	-	.020	10.064
FX188029	137.40	138.90	1.50	0	-	<.010	10.064
FX188030	138.90	140.40	1.50	0	-	<.010	10.064

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 especially 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
		144.90 149.40 Weakly foliated to massive. Dark gray green. 5% iron carbonate. 3 to 5% diffuse	FX188036	147.90	149.40	1.50	0	-	.010	10.237
			FX188037	149.40	150.90	1.50	0	-	<.010	10.237

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

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	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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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	: 03-16-86
PROPERTY	: Penn Option	DEPARTURE	:E 9400.0 M	TOWNSHIP	:	COMPLETED	: 03-19-86
BOREHOLE	: 74B16-0	ELEVATION	: 1356.6 M	PROVINCE	: Ontario	MEASUREMENTS	: M
AZIMUTH	: 175.0	BL AZIMUTH	: 085	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:

********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		i	
61.00	175.0	-45.00	152.40	175.0	-43.00	243.80	175.0	-37.00		i	

FROM M	TO M	**********DESCRIPTION**********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
.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. 4.38 5.12 Darker green. With 15 to 25% gray to white quartz carbonate streaks, lenses and patches. More calcareous. Weakly magnetic.	FX188040 FX188041	3.66 4.38	4.38 5.12	.72 .74	- -	F47 F43	<.010 <.010	.000 .000

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

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	FX188042	5.12	6.62	1.50	TR	F40	<.010	.000
		chloritic, moderately to strongly foliated. Weakly	FX188043	6.62	8.12	1.50	TR	F42	<.010	.000
		magnetic. 1 to 4% fine grained disseminated magnetite.	FX188044	8.12	9.62	1.50	TR	-	<.010	.000
		Trace pyrite. 10 to 15% iron carbonate as streaks and	FX188045	9.62	11.12	1.50	TR	F46	<.010	.000
		disseminated rhombic crystals. Weakly mottled. 2%	FX188046	11.12	12.62	1.50	TR	-	<.010	.000
		quartz carbonate veins.	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	FX188049	14.04	16.50	2.46	TR	F53	<.010	.000
		leucoxene, weakly to moderately foliated.	FX188050	16.50	18.00	1.50	TR	F55	<.010	.000
		13.79 20.77 Weakly to moderately foliated, 1 to 2% light	FX188051	18.00	19.50	1.50	TR	-	<.010	.000
		yellow leucoxene. Finely spotted	FX188052	19.50	20.77	1.27	TR	-	<.010	.000
		appearance. 15% disseminated fine grained	FX188053	20.77	21.12	.35	TR	-	<.010	.000
		iron carbonate. 3 to 4% quartz carbonate	FX188054	21.12	22.56	1.44	TR	F48	<.010	.000
		veins, usually contorted. Chloritic.	FX188055	22.56	23.36	.80	TR	-	<.010	.000
		20.77 21.12 20% pinkish gray quartz carbonate as	FX188056	23.36	24.12	.76	TR	F45	<.010	.000
		contorted patches.	FX188057	24.12	24.87	.75	TR	-	<.010	.000
		21.12 23.36 As at 13.79 becoming strongly foliated and	FX188058	24.87	26.10	1.23	TR	F55	<.010	.000
		more chloritic.	FX188059	26.10	26.66	.56	TR	-	<.010	.000
		24.12 26.10 As at 21.12 with 5% quartz carbonate veins	FX188060	26.66	28.20	1.54	TR	F48	.005	.008
		and veinlets.								
		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.	FX188061	28.20	29.70	1.50	TR	-	<.010	.008
		Strongly foliated. 10 to 15% strongly contorted quartz	FX188062	29.70	31.20	1.50	TR	F45	<.010	.008
		carbonate wisps, patches, streaks and veins. 1% light	FX188063	31.20	31.70	.50	TR	-	<.010	.008

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.	FX188064	31.70	33.14	1.44	TR	F52	<.010	.008
			FX188065	33.14	34.60	1.46	TR	-	<.010	.008
			FX188066	34.60	36.20	1.60	TR	-	<.010	.008
			FX188067	36.20	37.60	1.40	TR	F40	<.010	.008
			FX188068	37.60	38.88	1.28	TR	-	<.010	.008
			FX188069	38.88	39.76	.88	TR	F43	<.010	.008
			FX188070	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	FX188071	40.91	42.41	1.50	1	-	<.010	.008
			FX188072	42.41	43.76	1.35	1	-	<.010	.008

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

FROM M | TO M

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.

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	AU PPM	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	FX188093	63.26	64.76	1.50	TR	F30	.010	1.653
			FX188094	64.76	65.81	1.05	TR	-	<.010	1.653
			FX188095	65.81	66.57	.76	1	-	.030	1.676

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.	FX188110	82.60	83.30	.70	2	F40	.605	3.136
			FX188111	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,								

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

FROM M	TO M	DESCRIPTION
		trace pyrite.
84.64	89.48	GABBRO
		Halo alteration. Weakly carbonatized and silicified gabbro with 10 to 15% gash type quartz carbonate veins.
	87.70 88.60	Weakly foliated to massive, pale gray, 15% disseminated fine grained iron carbonate.
	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.
	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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188112	84.64	86.20	1.56	TR	F43	.015	3.166
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
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

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

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

FROM M	TO M	
		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

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

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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		vein with 1% chalcopyrite.								
107.24	118.40	GABBRO								
		Altered. As to 101.80 metres.	FX188137	107.24	108.00	.76	2	-	.275	13.308
	107.24 108.00	Light gray, massive to weakly foliated, 2% disseminated pyrite as crystals up to 2 millimetres.	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
	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.	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
	109.08 109.98	Medium grained, pale gray, 10% chlorite, weakly foliated, trace pyrite, weak iron carbonate.	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
	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.	FX188149	117.64	118.40	.76	2	-	.015	15.737
	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.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	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.	FX188150	118.40	119.50	1.10	TR	-	.030	15.770
	118.40	119.50 Light gray to light pink, mottled, 3 to 5% diffuse gray leucoxene and trace pyrite.	FX188151	119.50	121.00	1.50	1	F40	.070	15.875
			FX188152	121.00	122.04	1.04	2	-	.160	16.042
	119.50	121.00 Light pink, minor quartz carbonate veins and veinlets with associated pyritic envelopes. 1% pyrite.	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
	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.	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
	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								

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.		FX1B9159	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.	FX1B8160	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		FX1B8161	130.68	131.20	.52	0	F45	<.005	16.422
			FX1B9162	131.20	131.96	.76	0	F45	<.005	16.422
			FX1B8163	131.96	132.86	.90	0	F40	.010	16.431
			FX1B8164	132.86	133.76	.90	0	-	.020	16.449
			FX1B8165	133.76	134.42	.66	0	F43	.005	16.452
			FX1B8166	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

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

FROM M	TO 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.
	144.54 145.22	Light greenish gray. Trace pyrite.
	145.22 148.22	As above with 1% fine grained disseminated pyrite.
	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.
	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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX188175	144.54	145.22	.68	TR	-	<.005	16.623
FX188176	145.22	146.34	1.12	1	-	.010	16.634
FX188177	146.34	147.15	.81	1	-	.295	16.873
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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		thick. 2% fine grained disseminated pyrite.								
	154.16 155.31	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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

FROM M	TO M	
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 193.27.
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.

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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
			FX189229	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	AU PPM	PPM*M
							ANALYSES			
	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 cash 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,		FX188249	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
		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

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

FROM M	TO M	
		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 appearance.
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

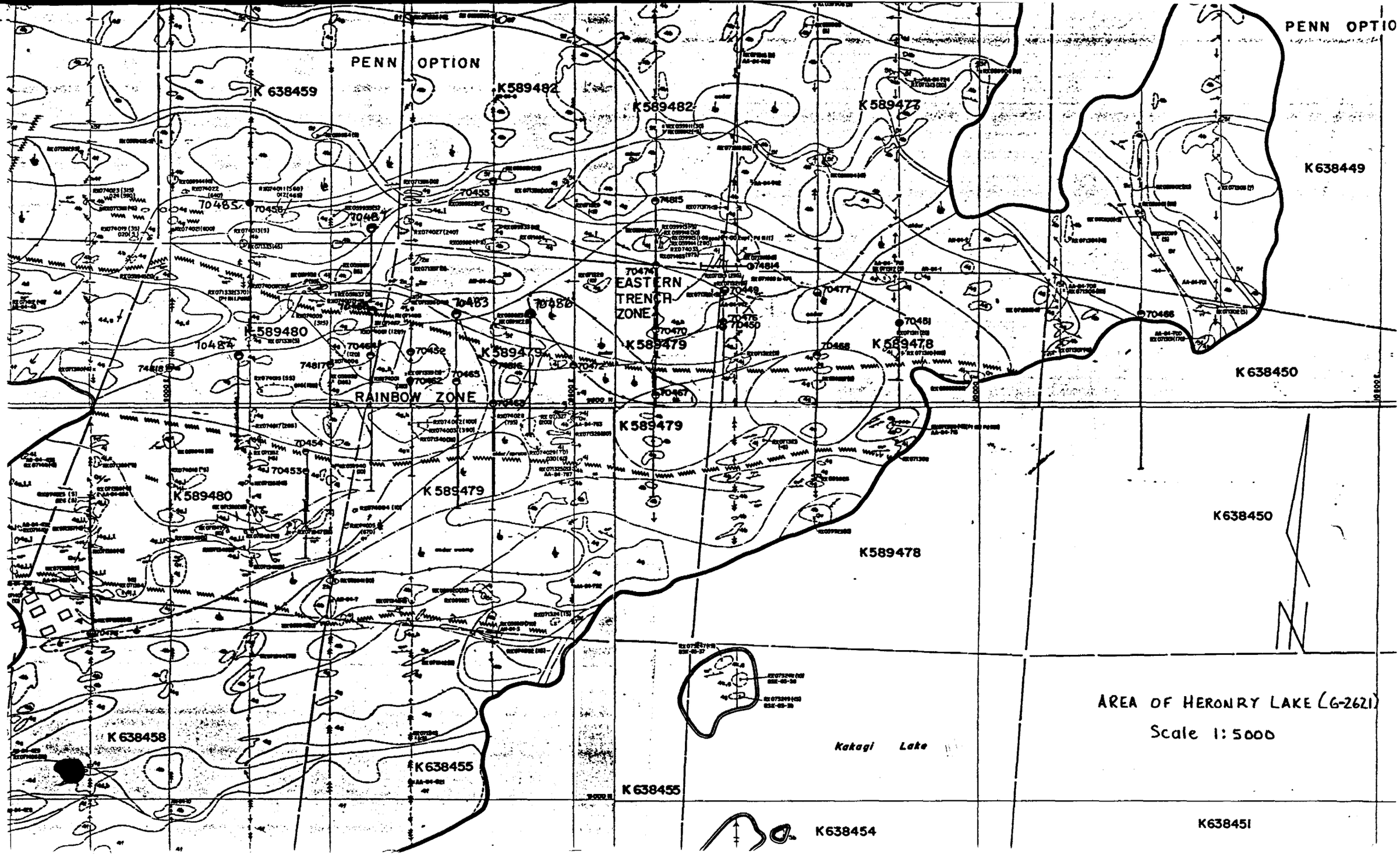
**********ANALYSIS**********

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
FX185261	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	18.759
		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	FX188279	254.12	255.14	1.02	TR	-	.010	20.639
		carbonate veins up to 10 centimetres	FX188280	255.14	255.58	.44	0	F60	.180	20.719
		thick, light buff to light brown in 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 crisscrossed 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
			FX188284	258.54	259.64	1.10	TR	-	<.010	20.733
			FX188285	259.64	260.30	.66	TR	F57	<.010	20.733
	256.25 257.13	Dark green gray, weakly foliated, with 5% contorted quartz carbonate veins and patches with diffuse contacts. 1%								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.								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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	: 095	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		i	
61.00	175.0	-45.00	153.60	175.0	-43.00	251.20	175.0	-34.00		i	

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

FROM M	TO M	DESCRIPTION
.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	.619
FX188290	8.98	10.04	1.06	TR	-	.005	.623

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
10.04	43.37	GABBRO								
		Fine grained, dark green, chloritic, weakly foliated to	FX188291	10.04	11.46	1.42	0	-	.015	.645
		massive. Probably fine grained equivalent of above	FX188292	11.46	12.96	1.50	0	-	.015	.667
		gabbro. Gradational contact. Moderately hard, weakly to	FX188293	12.96	14.46	1.50	0	-	.015	.690
		moderately calcareous, 2 to 3% quartz carbonate veins	FX188294	14.46	15.96	1.50	0	-	.010	.705
		some sub parallel to core. 1% leucoxene.	FX188295	15.96	17.46	1.50	0	-	.010	.720
		14.46 18.96 Weakly magnetic. 1 to 2% fine grained	FX188296	17.46	18.96	1.50	0	-	.010	.735
		disseminated magnetite grains.	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.	FX188300	23.46	24.96	1.50	TR	-	.010	.802
		Weakly magnetic. Magnetite in part altered	FX188301	24.96	26.46	1.50	TR	-	.010	.817
		to light gray leucoxene. Chloritic to very	FX188302	26.46	27.96	1.50	TR	-	.005	.825
		chloritic. Trace pyrite.	FX188303	27.96	29.46	1.50	TR	-	.020	.855
		38.46 43.37 Moderately to strongly calcareous. Minor	FX188304	29.46	30.96	1.50	TR	-	.020	.885
		quartz carbonate veins up to 5 millimetres	FX188305	30.96	32.46	1.50	TR	-	.010	.900
		thick.	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	FX188314	43.37	44.20	.83	TR	-	.005	.988
		foliated, gray green, moderately hard, chloritic. 1 to	FX188315	44.20	45.70	1.50	TR	F35	.015	1.011
		2% quartz carbonate veins up to 6 millimetres thick.	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 AND	AU PPM	PPM*M
		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
			FX188320	49.99	51.30	1.31	TR	-	.575	2.005
	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.	FX188321	51.30	51.67	.37	TR	-	.025	2.014
			FX188322	51.67	52.11	.44	1	FOO	.115	2.065
			FX188323	52.11	52.83	.72	1	FOO	.565	2.472
			FX188324	52.83	53.70	.87	1	FOO	.430	2.846
			FX188325	53.70	54.32	.62	2	FOO	.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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPB	PPM*M
		51.87 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 grained 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.	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
		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								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
	61.42	61.82 Reddish brown, strongly hematitized, 2% fine grained disseminated pyrite.	FX188339	65.08	66.58	1.50	TR	-	.010	4.336
			FX188340	66.58	67.46	.88	0	-	.005	4.340
	65.08	67.46 Not mottled. Fine grained to medium grained, weakly foliated to massive, weakly hematitized in part.	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
	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.	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
	68.96	69.06 As above, weakly to moderately calcareous.	FX188350	76.14	76.64	.50	TR	-	.010	4.581
	69.06	69.76 As at 67.46.	FX188351	76.64	77.16	.52	TR	-	.005	4.583
	69.76	71.32 As above, weakly foliated with 10% iron carbonate as rhombic crystals up to 1 millimetre. Blocky. Locally weakly hematitized.	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
	71.32	74.15 Fine grained, dark reddish gray. Moderately	FX188356	80.47	81.43	.96	0	F38	.010	5.121

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

FROM M	TO M	
		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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
			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
		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.								
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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	.94	TR	F45	.010	5.320
FX188376	100.38	101.32	.94	TR	F38	<.005	5.320

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

FROM M	TO M	
		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.

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

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

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

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

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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 grey, 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	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	FX188424	153.70	154.68	.98	0	F34	<.005	5.807
	153.70 154.68	Slightly brownish gray, fine grained to medium grained, moderately to strongly foliated. 5 to 8% fine grained disseminated iron carbonate.	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
	154.68 155.73	As above with 5% light orange contorted quartz carbonate veins.	FX188429	158.33	158.97	.64	0	F35	<.005	5.807
			FX188430	158.97	159.72	.75	TR	-	<.005	5.807
	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.	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
	156.78 157.56	Dark gray brown. 30% fine grained disseminated iron carbonate. Moderately chloritic.	FX188435	163.94	165.00	1.06	TR	-	<.005	5.826
	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.								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	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.	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
		165.00 165.94 As to 165.00 metres.	FX188440	168.86	170.36	1.50	TR	-	.095	5.978
		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%	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	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	169.86	Dark lime green, medium grained, 15 to 20% light yellow green sericite, weakly fuchsitic, moderately foliated. 5% quartz carbonate veins with diffuse contacts.								
169.86	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
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

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

**********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 sericile. 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

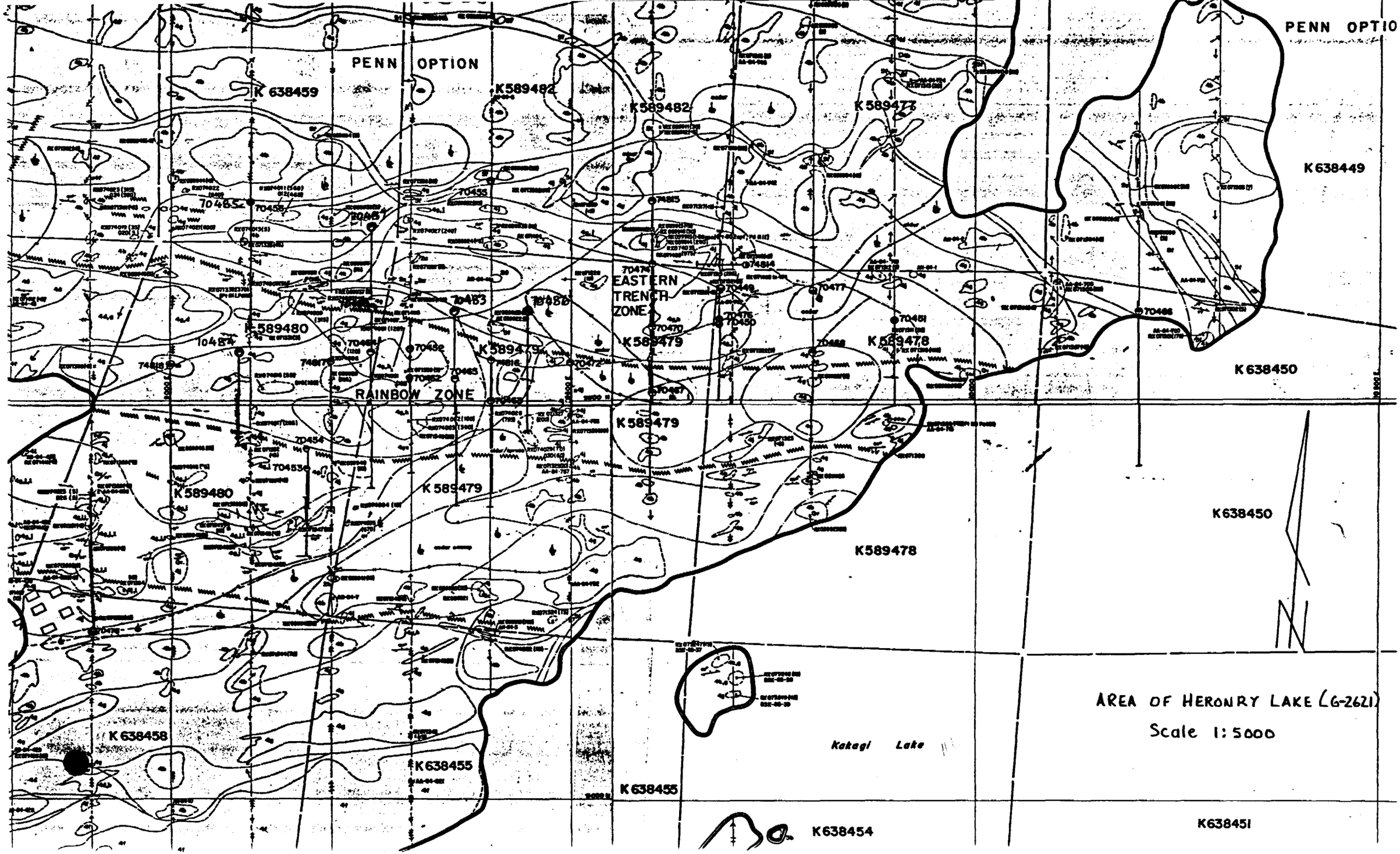
**********INCO LIMITED**********
FIELD EXPLORATION DIAMOND DRILL LOG

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
180.47	182.25	FAULT								
		Oxidized red brown possible fault gouge.	FX188453	180.47	181.05	.58	0	-	<.005	7.290
		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.	FX188454	181.05	181.65	.60	0	-	<.005	7.290
			FX188455	191.65	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.	FX188456	182.25	183.45	1.20	0	-	.005	7.311
		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.	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	FX188459	184.37	185.87	1.50	1	F35	<.005	7.342
	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.	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
	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, weally 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,								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		hematite. Several fault gouge filled	FX188492	232.24	233.74	1.50	TR	-	<.005	7.364
		fractures up to 5 centimetres thick. 2 to	FX188493	233.74	235.24	1.50	TR	-	<.005	7.364
		3% quartz carbonate veins.	FX189494	235.24	236.74	1.50	TR	-	<.005	7.364
242.01	243.15	Moderately foliated with 3% quartz	FX188495	236.74	237.86	1.12	TR	-	<.005	7.364
		carbonate veins up to 1 centimetre thick	FX188496	237.86	238.64	.78	1	-	<.005	7.364
		parallel to foliation.	FX188497	238.64	239.60	.96	TR	F42	<.005	7.364
243.15	251.16	10 to 15% fine grained to medium grained	FX188498	239.60	242.01	2.41	TR	-	<.005	7.364
		disseminated iron carbonate. Foot of hole.	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



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		i	
61.00	175.0	-47.00	152.40	175.0	-45.00	246.90	175.0	-43.00		i	

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

FROM M	TO M	DESCRIPTION
.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.

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	18.54 19.57	Medium grained to coarse grained, 20% white unaltered feldspar.	FX188513	17.04	18.54	1.50	TR	-	<.010	.000
			FX188514	18.54	19.57	1.03	TR	-	<.010	.000
	19.57 20.25	Pegmatitic phase. Coarse grained to medium grained, 70% white to light pink feldspar, 30% chloritic pyroxene crystals up to 5 millimetres long. 5% light green gray skeletal leucoxene.	FX188515	19.57	20.25	.68	TR	-	<.010	.000
			FX188516	20.25	21.75	1.50	TR	-	<.010	.000
			FX188517	21.75	22.52	.77	TR	-	<.010	.000
			FX188518	22.52	23.50	.98	TR	-	<.010	.000
	20.25 21.75	Patches with some unaltered white feldspar crystals.								
	22.52 23.50	Medium grained to coarse grained with 10% unaltered feldspar in patches.								
23.50	29.50	GABBRO								
		Fine grained, dark green, hard, massive to weakly foliated, moderately to strongly calcareous, chloritic. Trace pyrite. minor quartz carbonate veins up to 3 millimetres thick. Contact with medium grained gabbro above is gradational.	FX188519	23.50	25.00	1.50	TR	-	<.010	.000
			FX188520	25.00	26.50	1.50	TR	-	<.010	.000
			FX188521	26.50	28.00	1.50	TR	-	<.010	.000
			FX188522	28.00	29.50	1.50	TR	-	<.010	.000
	28.00 29.50	Fine grained to medium grained.								
29.50	51.78	GABBRO								
		Similar to above but medium grained. Dark green to dark gray green, massive, hard, weakly calcareous. Crystal boundaries diffuse. Thin quartz carbonate veins up to 3 millimetres thick. Trace disseminated pyrite. Trace to 1% light yellow leucoxene.	FX188523	29.50	31.00	1.50	TR	-	<.010	.000
			FX188524	31.00	31.80	.80	TR	-	<.010	.000
			FX188525	31.80	32.00	.20	TR	-	<.010	.000
			FX188526	32.00	33.50	1.50	TR	-	<.010	.000
			FX188527	33.50	34.38	.88	TR	-	<.010	.000
	31.80 32.00	With 50% quartz carbonate tourmaline as a ribboned vein. 5% black tourmaline as veinlets and streaks. 1% disseminated pyrite in the gabbro, which is slightly bleached.	FX188528	34.38	35.30	.92	TR	-	<.010	.000
			FX188529	35.30	36.80	1.50	TR	-	.035	.053
			FX188530	36.80	38.30	1.50	TR	-	.020	.083
			FX188531	38.30	39.80	1.50	TR	-	<.010	.083

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	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

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

**********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	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
140.85	146.09	PERIDOTITE								
		Transition zone from peridotite to gabbro.	FX188608	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.	FX188609	142.35	143.85	1.50	TR	-	<.010	.273
			FX188610	143.85	145.35	1.50	TR	-	<.010	.273
			FX188611	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.	FX188612	146.09	147.52	1.43	TR	-	<.010	.273
			FX188613	147.52	148.24	.72	TR	-	<.010	.273
			FX188614	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.	FX188615	149.16	150.74	1.58	0	-	.005	.281
150.74	152.46	GABBRO								
		Medium grained, mottled gray green to dark green, massive, hard.	FX188616	150.74	151.94	1.20	0	-	<.010	.281
			FX188617	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								

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	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. 153.46 154.98 Light gray to gray.	FX188618 FX188619	152.46 153.46	153.46 154.98	1.00 1.52	0 0	- -	<.010 <.010	.281 .281
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 FX188621 FX188622 FX188623	154.98 156.48 157.98 159.48	156.48 157.98 159.48 160.98	1.50 1.50 1.50 1.50	0 0 0 0	- - - -	<.010 <.010 <.010 <.010	.281 .281 .281 .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. 165.20 166.35 Last 35 centimetres with several bleached	FX188625 FX188626 FX188627 FX188628	161.28 162.76 164.16 165.20	162.76 164.16 165.20 166.35	1.48 1.40 1.04 1.15	0 0 0 0	- - - -	<.010 .010 <.010 <.010	.281 .295 .295 .295

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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	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

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

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

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

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 scapy 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 %	CP ANG	AU PPM	PPM*M
		Possibly transition 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	245.91	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

AREA OF HERONRY LAKE (G-2621)

Scale 1:5000

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

FIELD EXPLORATION DIAMOND DRILL LOG

PROJECT : CROW	LATITUDE : N 8835.0 M	NTS SHEET # : 52-F-4	STARTED : 03-26-86
PROPERTY : Crow	DEPARTURE : E 4790.0 M	TOWNSHIP :	COMPLETED : 07-07-86
BOREHOLE : 74815-0	ELEVATION : 1037.0 M	PROVINCE : Ontario	MEASUREMENTS : M
AZIMUTH : 355.0	PL AZIMUTH : 005	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.Allout	GRID NAME : Crow	TEST METHOD : Acid
		CORE SIZE : BQ	ASSAYED FOR : Gold

COMMENTS : Collar is 100m west and 100m 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	30.00	355.0	-47.00	61.00	355.0	-46.00	76.20	355.0	-45.00

FROM M	TO M	********DESCRIPTION********	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	********ANALYSES******** AU PPM	PPM*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 10% fine grained disseminated iron carbonate. Numerous quartz carbonate veinlets.	FX159694	3.66	4.84	1.18	0	-	.010	.012
4.84	15.50	LAPILLI TUFF								

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

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

FROM M	TO M	
		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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	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 disseminated 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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
			FX188726	33.58	34.25	.67	TR	-	<.005	2.829
33.32	33.58	Strongly foliated, very chloritic with 25% quartz as patches and streaks. Strongly calcareous.	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
			FX188732	38.65	40.15	1.50	TR	-	<.005	2.829
35.65	36.45	Minor quartz patches. In part altered and	FX188733	40.15	41.65	1.50	TR	-	<.005	2.829

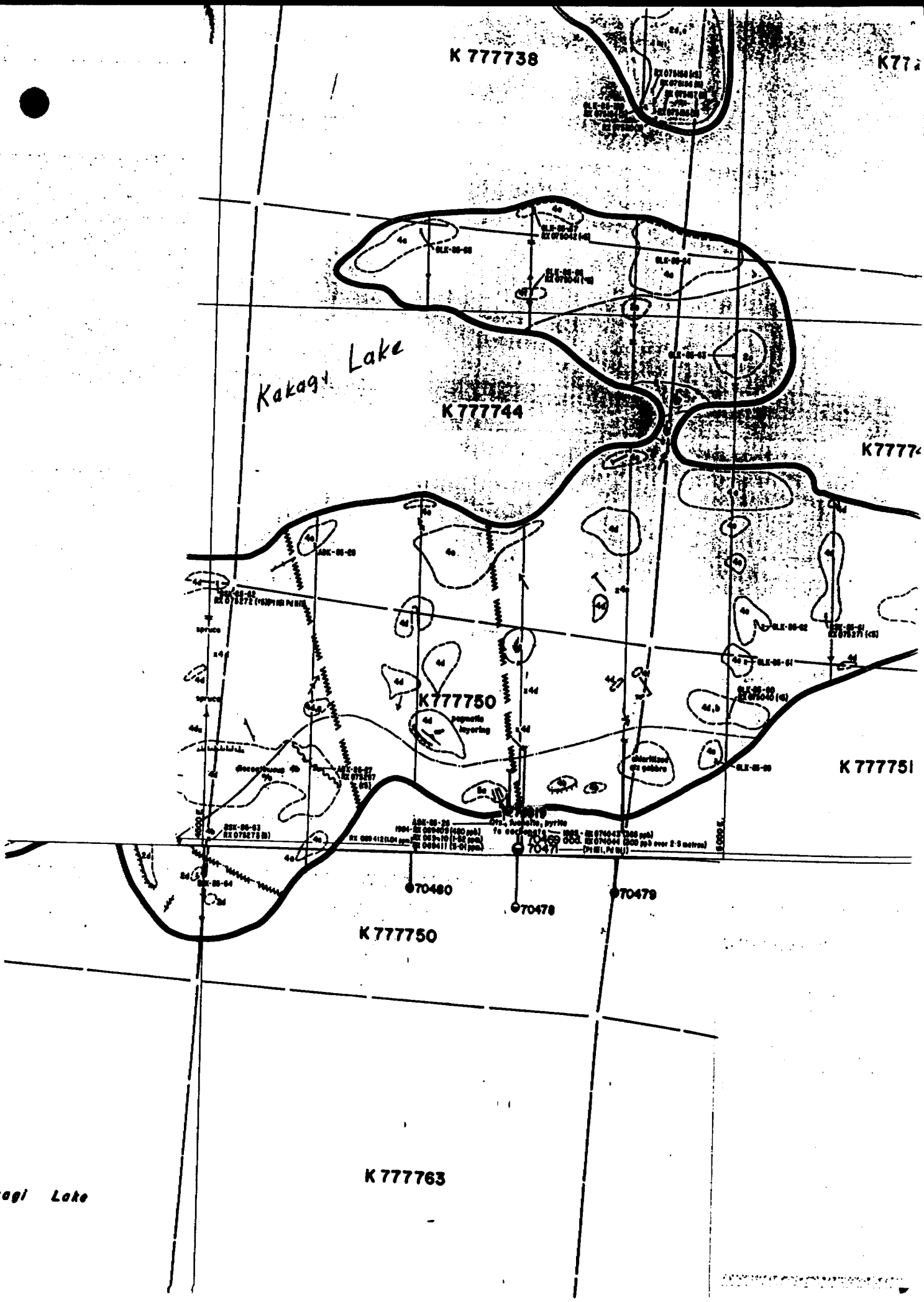
FIELD EXPLORATION DIAMOND DRILL LOG

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		[illegible] chloritic [illegible] grained bottom of cycle	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
36.45	38.65	Top of cycle. To centimetre thick fine grained leucocratic top. Medium grained.	FX188736	43.83	44.96	1.13	TR		<.005	2.859
			FX188737	44.96	46.46	1.50	TR	-	<.005	2.859
43.15	43.93	One cycle. Fine grained at top to coarse grained at bottom..	FX188738	46.46	47.52	1.06	TR	-	<.005	2.859
			FX188739	47.52	48.42	.90	TR	C23	.005	2.863
43.83	44.96	Medium grained to fine grained.	FX188740	48.42	49.90	1.48	TR	-	<.005	2.863
44.96	47.52	Coarse grained to medium grained.	FX188741	49.90	50.60	.70	TR	-	<.005	2.863
47.52	48.42	Top of new cycle. Fine grained, slightly leucocratic relative to rest of section. Contact diffuse. Fine grained to medium grained.	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
48.42	49.90	Medium grained.	FX188746	55.22	56.72	1.50	TR	C36	<.005	2.863
49.90	51.60	Chloritic, epidotized, gray green.	FX188747	56.72	57.48	.76	TR	-	<.005	2.863
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.	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
53.92	55.22	Medium grained to coarse grained.	FX188752	63.30	64.80	1.50	TR	-	<.005	2.863
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.	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
56.72	57.48	Chloritic. Feldspars epidotized to pale green	FX188757	70.77	71.75	.98	TR	-	<.005	2.863
60.30	67.85	Medium grained to coarse grained. weakly to strongly chilled and epidotized, gray green with scattered fresh pegmatitic patches and bands.	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
67.85	73.25	Gray green, strongly chilled and epidotized, medium grained to fine grained, locally up to 10% unaltered white feldspar, weakly calcareous.								

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

FIELD EXPLORATION DIAMOND DRILL LOG

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
73.25	76.20	Moderately to strongly chilled and epidotized, medium grained. Foot of hole.								


K 777738
Kakagi Lake
K777744
K777750
K 777751
K 777750
K 777763
70460
70478
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********** ITED**********

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 PPM	PPM*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	

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. 45.11 46.63 Gradational lower contact into dacite tuff.	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	
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. 49.68 51.21 Gradational lower contact into dacite lapilli tuff to agglomerate.	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	
51.21	62.84	AGGLOMERATE								
		Dacite agglomerate as at 31.70 to 46.63 metres. 61.63 62.84 Gradational lower contact into weakly to moderately altered dacite lapilli tuff.	FX254325	51.21	52.77	1.56	TR	F10	<.005	
			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	

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

FROM M	TO M	
		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
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.	FX254368	108.09	108.79	.70	TR	F26	<.005	
		Well foliated with 12 centimetre quartz iron carbonate vein hosting scattered tourmaline and inclusions of tuff	FX254369	108.79	110.47	1.68	TR	F18	<.005	
		108.79 110.47 Minor interfingering gabbro.								
110.47	114.80	GABBRO								
		Gabbro as at 99.00 to 99.76 metres. Scattered tourmaline	FX254370	110.47	112.00	1.53	1	F*	.005	
		bearing quartz carbonate veinlets with trace	FX254371	112.00	112.87	.87	1	F*	.005	
		disseminated pyrite.	FX254372	112.87	113.73	.86	1	F*	<.005	
		113.73 114.80 Rare chalcopyrite stringers in quartz carbonate veinlets. Sharp lower contact with foliated lapilli tuff.	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.	FX254374	114.80	115.70	.90	1	C20	.005	
		Scattered 1 millimetre pyrite cubes.								
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.								

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

FROM M	TO M	
135.86	137.05	GABBRO
		As at 115.70 to 116.22 metres.
137.05	150.52	AGGLOMERATE
		Dacite agglomerate as at 31.70 to 46.63 metres. Locally 1 to 2% disseminated and euhedral pyrite.
		137.05 139.29 2% scattered disseminated and euhedral pyrite. Locally quartz carbonate vein with very weak pale green alteration halo hosting fine disseminated pyrite.
		139.29 140.44 Large silicified fragment of fine grained gabbro / basalt.
		140.44 140.81 3% euhedral and cubic pyrite up to 3 millimetres in quartz gabbro fragment.
		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 black mafic clasts and 40% light felsic clasts. Foliated. Moderately iron carbonatized. Moderately calcareous. Trace to 1% disseminated and locally euhedral pyrite. Scattered quartz carbonate veins hosting 1 to 2% euhedral and disseminated pyrite, locally with weak alteration halos. Moderately soft.
		158.27 159.72 Tourmaline bearing quartz carbonate

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254391	135.86	137.05	1.19	1	F*	<.005	
FX254392	137.05	139.29	2.24	2	F22	<.005	
FX254393	139.29	140.44	1.15	2	F*	<.005	
FX254394	140.44	140.81	.37	3	F*	<.005	
FX254395	140.81	141.26	.45	1	F23	<.005	
FX254396	141.26	142.74	1.48	TR	F14	<.005	
FX254397	142.74	144.28	1.54	TR	F17	<.005	
FX254398	144.28	145.69	1.41	1	F27	<.005	
FX254399	145.69	147.35	1.66	TR	F26	<.005	
FX254400	147.35	148.84	1.49	TR	F20	<.005	
FX254401	148.84	150.52	1.68	TR	F17	<.005	
FX254402	150.52	151.91	1.39	TR	F15	<.005	
FX254403	151.91	153.47	1.56	TR	F26	.005	
FX254404	153.47	154.96	1.49	TR	F24	<.005	
FX254405	154.96	156.65	1.69	TR	F20	<.005	
FX254406	156.65	158.27	1.62	TR	F27	.010	
FX254407	158.27	159.72	1.45	1	F33	.150	
FX254408	159.72	161.21	1.49	2	F34	<.005	
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	
		164.65 166.15 Strongly foliated.	FX254417	170.71	172.06	1.35	2	F32	<.005	
		167.74 168.95 Moderately altered and contorted. Moderately sericitic.	FX254418	172.06	173.46	1.40	TR	F34	.005	
			FX254419	173.46	174.80	1.34	TR	F30	<.005	
		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	

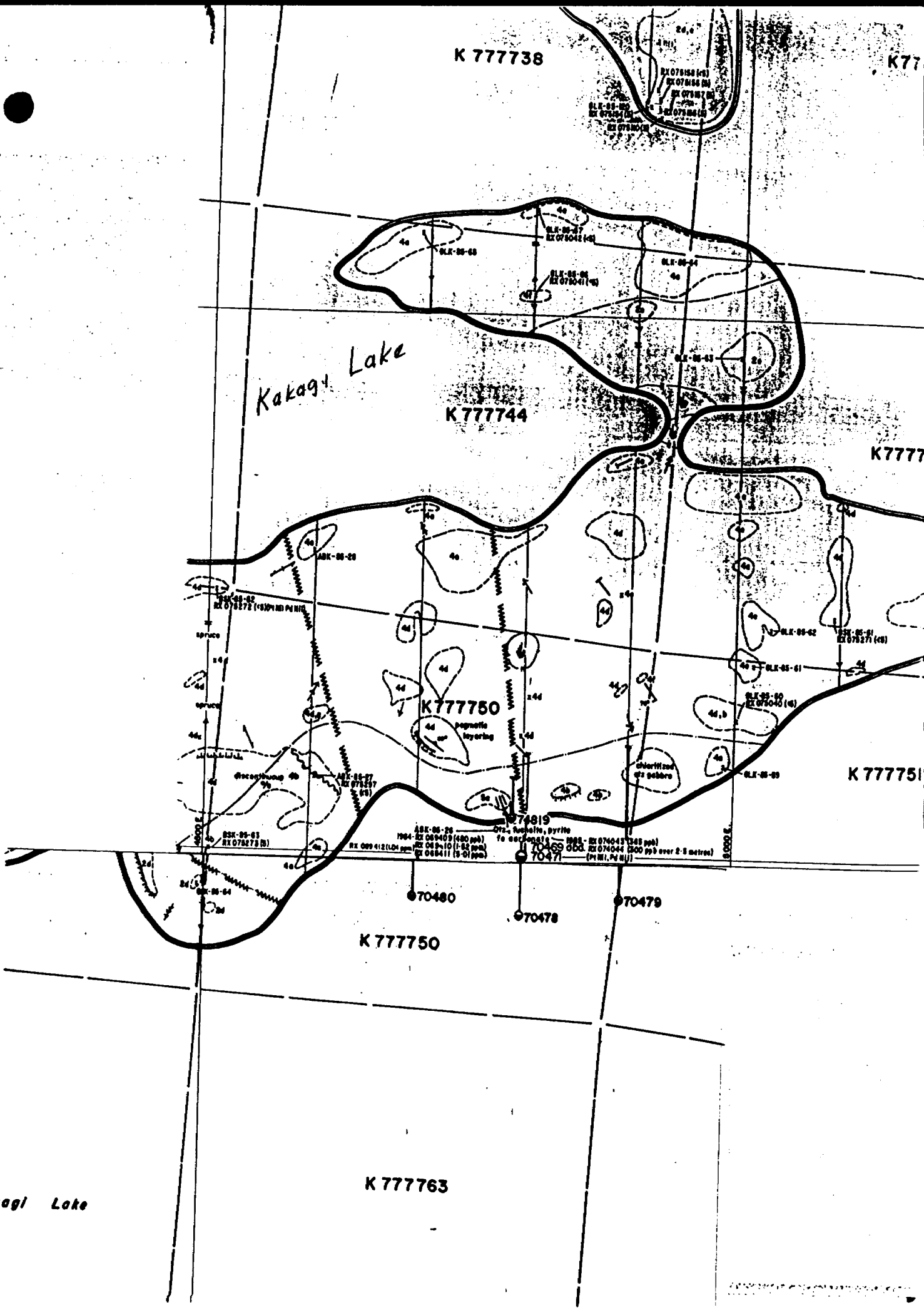
**********DESCRIPTION**********

FROM M	TO M	
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.

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

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

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	DESCRIPTION
.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	

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	

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

FROM M	TO M	
74.64	75.83	Locally up to 1% scattered 1 millimetre pyrite cubes.
78.64	79.54	Wispy alteration halos adjacent to contorted quartz carbonate veinlets and stringers.
79.54	83.81	Alteration becoming more intense downhole. Percentage of quartz carbonate veinlets stringers increasing. Strongly silicified.
83.81	85.23	Foliated gray to pale gray tuff with 15% stretched black chlorite clots. scattered quartz calcite stringers with minor alteration halos.
86.40	88.09	As at 79.54 to 83.81 metres. Alteration cut by quartz stringers limited to the halo.
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.
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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254494	67.58	68.89	1.31	TR	F34	.005	
FX254595	68.89	70.06	1.17	TR	F20	<.005	
FX254496	70.06	71.70	1.64	TR	F20	<.005	
FX254497	71.70	73.20	1.50	TR	F*	<.005	
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	
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	
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	
FX254509	88.09	89.62	1.53	TR	F24	.005	
FX254510	89.62	90.17	.55	1	F25	.005	
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	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	

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

FROM M	TO M	DESCRIPTION
116.66	119.25	TUFF Dacite coarse grained crystal tuff as at 106.60 to 110.81 metres.
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. 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. 126.80 133.15 Locally weakly altered pyritic halos adjacent to quartz calcite veinlets. Patches of zoned calcite crystals 3 to 4 millimetres. 139.01 140.62 Dark gray with rare chalcopyrite in quartz

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

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	
FX254529	116.66	118.02	1.36	TR	F26	<.005	
FX254530	118.02	119.25	1.23	TR	F*	<.005	
FX254531	119.25	120.05	.80	1	F52	.020	
FX254532	120.05	121.04	.99	TR	F41	<.005	
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	
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	
FX254542	134.64	136.17	1.53	TR	F25	<.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		calcite stringers. Weakly calcareous.	FX254543	136.17	137.65	1.48	TR	F20	.005	
	142.16 143.71	Locally buff green brecciated quartz carbonate veins.	FX254544	137.65	139.01	1.36	TR	F16	<.005	
			FX254545	139.01	140.62	1.61	TR	F30	<.005	
	143.71 145.19	Agglomerate becoming green gray, strongly calcareous.	FX254546	140.62	142.16	1.54	TR	F30	<.005	
			FX254547	142.16	143.71	1.55	TR	F16	<.005	
	146.73 148.26	Gradational lower contact into coarse grained crystal tuff.	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	
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.	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	
152.64	178.59	AGGLOMERATE								
		Weakly altered dacite agglomerate as at 121.04 to 148.26 metres.	FX254554	152.64	154.13	1.49	TR	F24	<.005	
			FX254555	154.13	155.68	1.55	TR	F25	<.005	
	161.59 163.17	Well foliated with boudinaged tourmaline bearing quartz carbonate vein 4 centimetre thick parallel to foliation.	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	

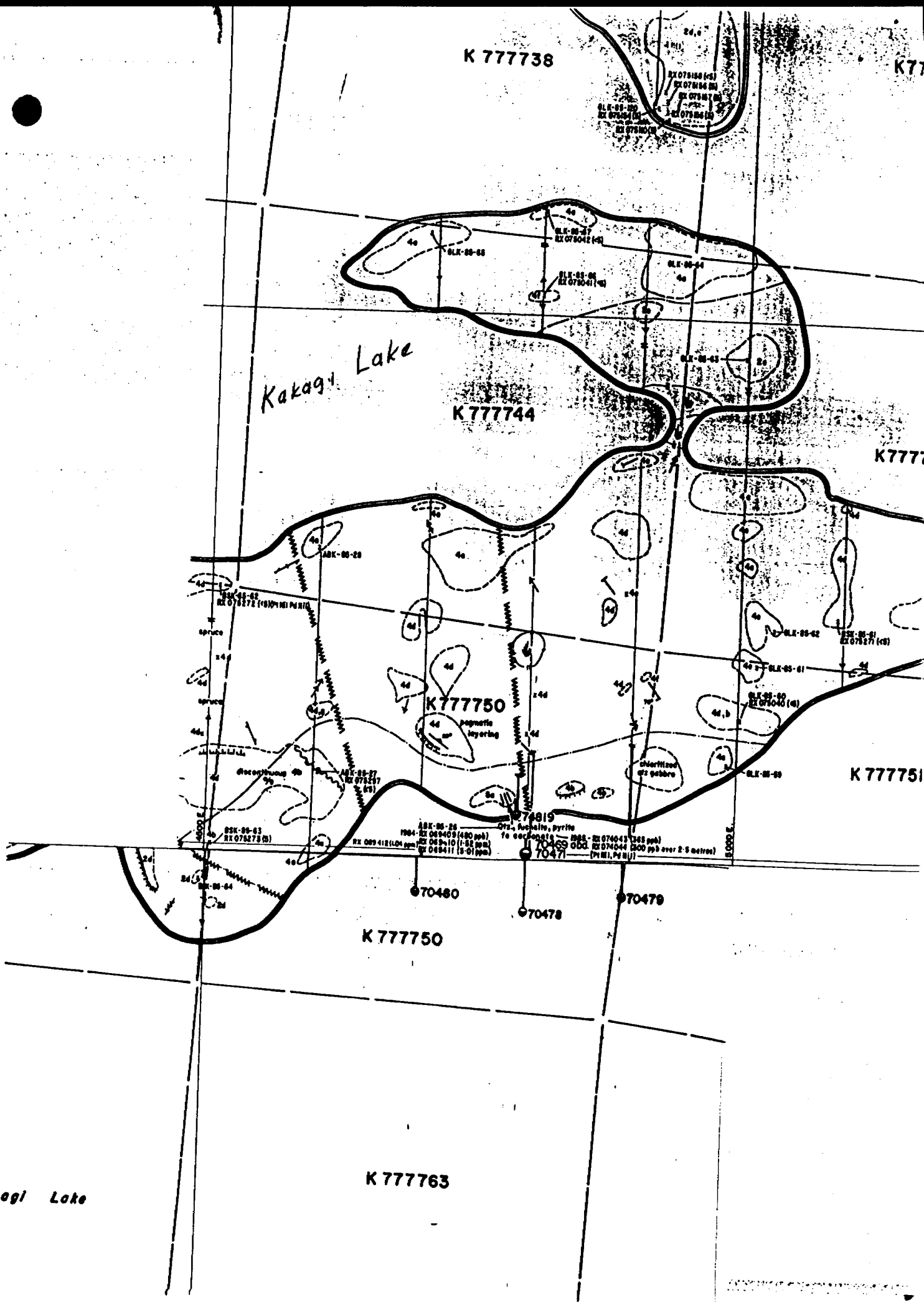
**********DESCRIPTION**********

FROM M	TO M	DESCRIPTION
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. 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. 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. 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.

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

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	
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	
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	
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	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
K 777744
Kakagi Lake
K 777750
K 777750
K 777763
tagi Lake
spruce
spruce
magnetite layering
chloritized qtz gabbro
Qtz., fuchsite, pyrite
70460
70478
70479
70471
70469
5000 E.
5000 E.

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

FIELD EXPLORATION 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	

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	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.	FX254617	74.06	75.59	1.53	TR	F*	<.005	
		Grades into melanogabbro.	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	

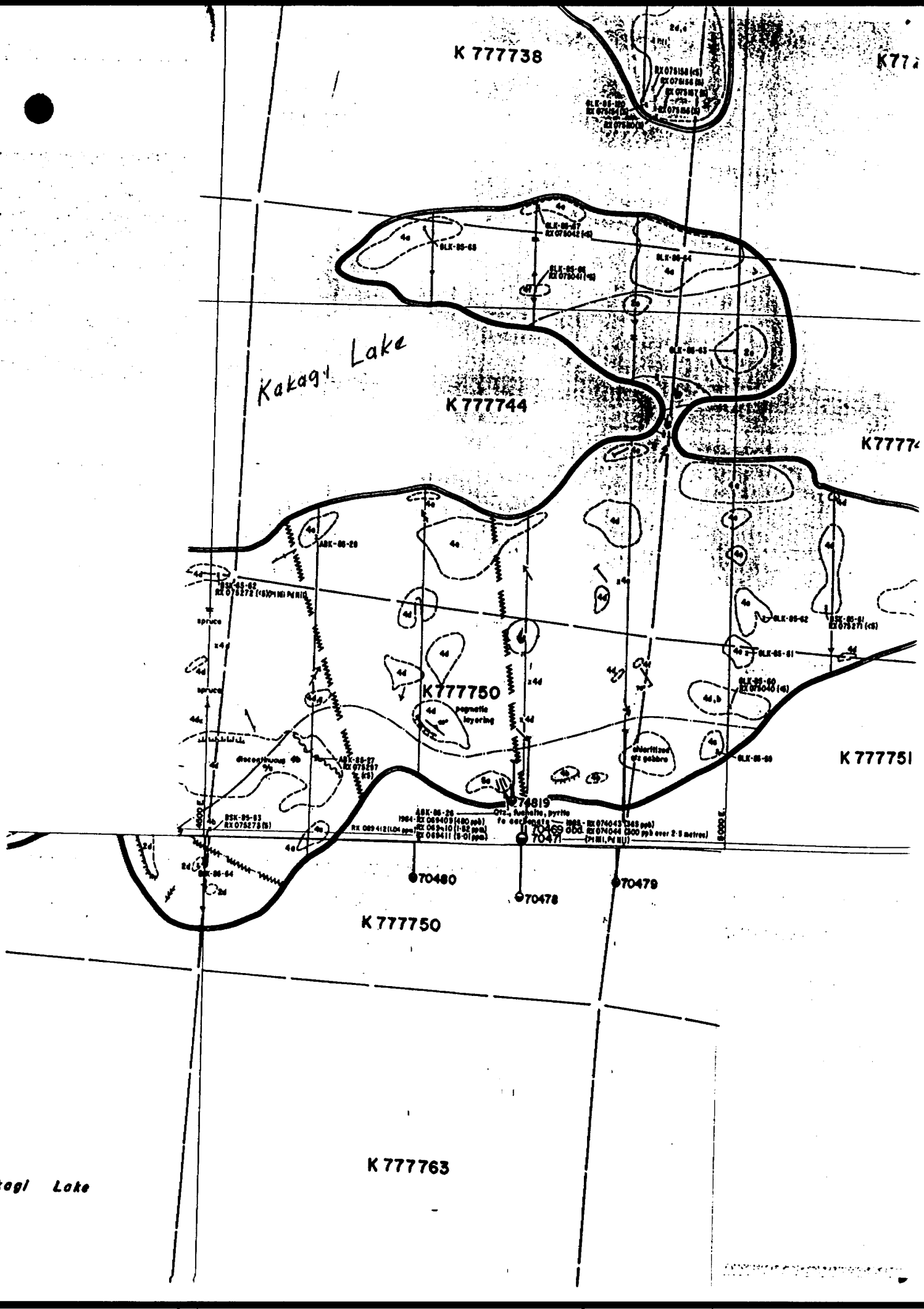
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		vein with 2 to 3% euhedral pyrite.								
84.73	92.30	GABBRO								
		Gabbro as at 74.06 to 83.24 metres.	FX254624	84.73	86.22	1.49	TR	F*	<.005	
		89.32 90.76 Becoming medium grained. Locally foliated.	FX254625	86.22	87.78	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	FX254629	92.30	93.88	1.58	1	F25	.005	
		calcareous.	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
		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. 158.11 159.30 Grading into dacite tuff.	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	
159.30	168.11	TUFF Dacite coarse grained crystal to lapilli tuff as at 139.49 to 146.42 metres. 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.	FX254675	159.30	159.64	.34	TR	F38	<.005	
			FX254676	159.64	161.05	1.41	TR	F21	.005	
			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	


K 777738
K 777744
Kakagi Lake
K 777750
K 777751
K 777763
tagi Lake
spruce
spruce
discontinuous
pegmatite layering
silicified qtz gabbro
70480
70478
70479
70471

**********INC' 'IMITED**********

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#2.1

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		-41.00	300.23		-36.50			

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

FROM M	TO M	DESCRIPTION
.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. 21.63 22.20 3 centimetre thick buff clay seam. 22.20 23.35 14 centimetre composite quartz calcite vein with inclusions of pale green chlorite, buff leucoxene and stringers of calcite.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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	
FX254688	12.80	14.43	1.63	0	F*	<.005	
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	

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	

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

FROM M	TO M	DESCRIPTION
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. 66.84 68.05 27 centimetres of lost core. 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.
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. 73.68 76.62 Locally concentrations of mafic and feldspathic crystals.

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

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	
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	
FX254722	62.48	63.97	1.49	0	F*	<.005	
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	
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	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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	FX254741	89.81	91.29	1.48	0	F*	<.005	
		carbonate vein.	FX254742	91.29	92.84	1.55	0	F*	<.005	
	101.60 102.17	1.5 centimetre quartz carbonate vein with	FX254743	92.84	94.29	1.45	0	F*	<.005	
		chloritic inclusions and 2% disseminated	FX254744	94.29	95.79	1.50	0	F*	.005	
		and euhedral pyrite.	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	FX254752	105.02	106.42	1.40	0	F*	<.005	
		altered gabbro adjacent to quartz carbonate veins and	FX254753	106.42	107.32	.90	0	F*	<.005	
		veinlets.	FX254754	107.32	108.06	.74	0	F*	<.005	
	105.02 106.42	Locally alteration halo adjacent to 3	FX254755	108.06	109.12	1.06	0	F*	<.005	
		centimetre thick quartz iron carbonate vein	FX254756	109.12	109.94	.82	TR	F30	.030	
	107.32 108.06	Moderately altered gabbro as at 84.44 to	FX254757	109.94	111.27	1.33	0	F*	<.005	
		86.74 metres.	FX254758	111.27	112.65	1.38	0	F*	<.005	
	109.12 109.94	Intense iron carbonate alteration adjacent	FX254759	112.65	114.08	1.43	0	F*	.005	
		to composite quartz carbonate vein,	FX254760	114.08	115.21	1.13	0	F*	.005	
		diminishing at periphry of halo. Rusty	FX254761	115.21	116.62	1.41	0	F*	<.005	
		brown iron oxide at quartz carbonate vein	FX254762	116.62	118.18	1.56	0	F*	<.005	
		gabbro contact. Trace pyrite.	FX254763	118.18	119.16	.98	0	F*	<.005	
	114.08 115.21	Moderately altered gabbro as at 84.44 to	FX254764	119.16	120.28	1.12	0	F*	<.005	
		86.74 metres.	FX254765	120.28	121.79	1.51	0	F*	<.005	
	124.89 126.49	Moderately altered gabbro as at 84.44 to	FX254766	121.79	123.41	1.62	0	F*	<.005	
		86.74 metres. Sharp lower contact with	FX254767	123.41	124.89	1.48	0	F*	<.005	
		basalt.	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	FX254814	190.33	191.76	1.43	TR	F*	<.005	
		hosting lapilli to agglomerate sized clasts of dacite	FX254815	191.76	193.55	1.79	TR	F*	<.005	
		tuff and lapilli tuff with rare monzonite fragments.	FX254816	193.55	194.99	1.44	TR	F*	<.005	
		Massive. Weakly to moderately calcareous with scattered	FX254817	194.99	196.37	1.38	TR	F*	<.005	
		quartz calcite stringers. Trace disseminated pyrite.	FX254818	196.37	197.89	1.52	TR	F*	<.005	
		Moderately hard.	FX254819	197.89	199.34	1.45	TR	F*	<.005	
		203.92 205.51 Moderately altered buff to brown	FX254820	199.34	200.85	1.51	TR	F*	<.005	
		agglomerate adjacent to chlorite bearing	FX254821	200.85	202.39	1.54	TR	F*	<.005	
		quartz calcite feldspar vein. Locally 5	FX254822	202.39	203.92	1.53	TR	F*	<.005	
		millimetre quartz carbonate veinlets with	FX254823	203.92	205.51	1.59	1	F*	<.005	
		black chlorite and 1% disseminated and	FX254824	205.51	206.85	1.34	TR	F*	<.005	
		euhedral pyrite.	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	FX254827	208.94	209.21	.27	1	F*	.005	
		grained gabbro dike.	FX254828	209.21	210.62	1.41	TR	F*	<.005	
		208.94 209.21 Mesogabbro dike. Gray, medium grained,	FX254829	210.62	212.26	1.64	TR	F*	<.005	
		massive with 40% black mafic crystals and	FX254830	212.26	213.79	1.53	TR	F*	.005	
		40% feldspathic crystals. 20% calcite	FX254831	213.79	215.18	1.39	TR	F*	.005	
		crystals. 1 to 2% iron carbonate. 1%								
		disseminated and euhedral pyrite.								
		Moderately hard.								
		213.79 215.18 Grading into weakly altered gabbro.								
215.18	222.65	GABBRO								
		Weakly altered gabbro. Gray green, medium grained,	FX254832	215.18	216.63	1.45	TR	F52	.075	
		foliated with stretched black chloritic clots and	FX254833	216.63	217.25	.62	TR	F54	.015	
		altered yellow feldspar crystals. Locally up to 15%	FX254834	217.25	218.63	1.38	TR	F54	<.005	
		quartz iron carbonate veins and veinlets with black	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								

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

FROM M	TO 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.
246.48	248.03	Locally strongly bleached.
248.03	249.62	Broken core. Intense hematitic alteration.
254.02	256.29	Intense alteration halos adjacent to hematitic quartz iron carbonate veins.
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.

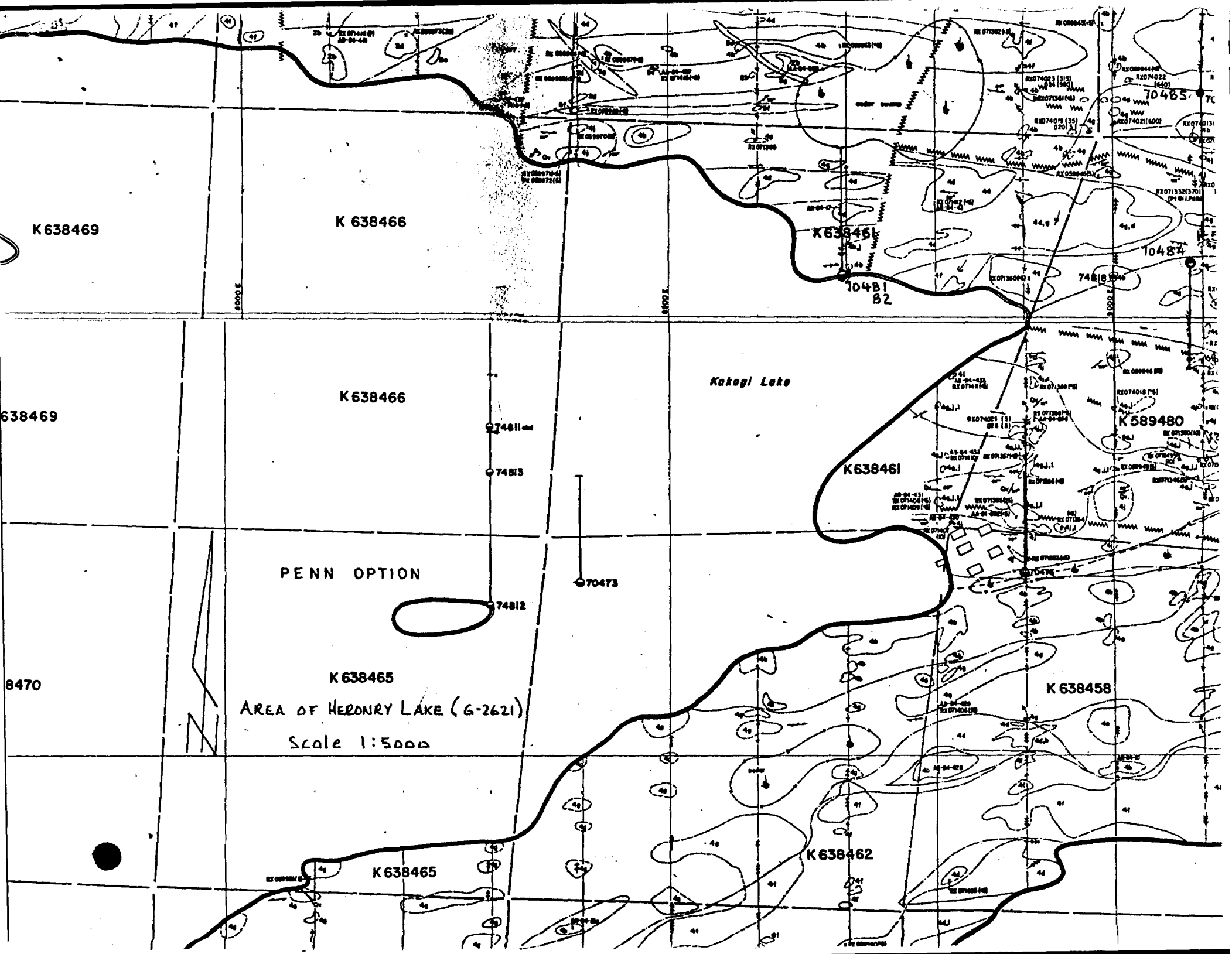
**********ANALYSES**********

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

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
		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. 290.94 292.66 5% disseminated pyrite. Sharp lower contact with strongly altered agglomerate.	FX254889 FX254890	289.12 290.94	290.94 292.66	1.82 1.72	3 5	F* F*	.090 .105	
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 FX254893 FX254894	293.58 295.05 296.61	295.05 296.61 297.39	1.47 1.56 .78	TR TR TR	F* F62 F62	<.005 <.005 <.005	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.								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Kakagi Lake
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74811
74813
K638461
PENN OPTION
70473
74812
8470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K 638458
K638462
K638465

**********INC' 'IMITED**********

FIELD EXPLOR . I 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	DESCRIPTION
.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.

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

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

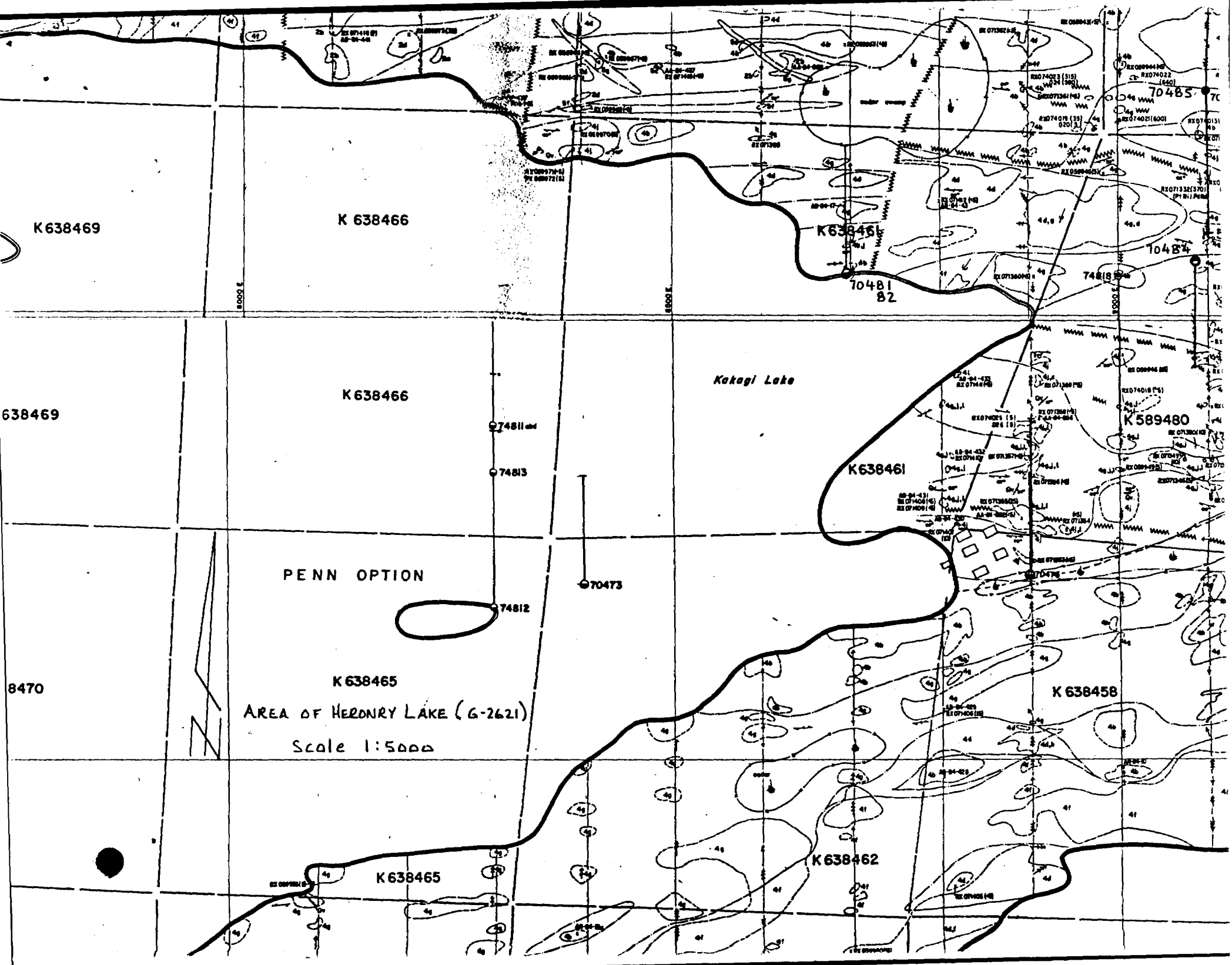
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		28.82 30.29 Weakly bleached to pale green adjacent to chlorite bearing quartz calcite vein.	FX254910	18.19	19.71	1.52	TR	F*	<.005	
			FX254911	19.71	21.24	1.53	TR	F*	<.005	
		42.06 43.44 Grading into mesogabbro.	FX254912	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	
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	
		46.44 48.16 Locally pale green with 10% brown iron carbonate adjacent to quartz carbonate veinlets.	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	
		54.05 55.48 Locally broken core.	FX254934	54.05	55.48	1.43	TR	F*	<.005	
		55.48 57.02 Patchy concentrations of feldspar crystals.	FX254935	55.48	57.02	1.54	TR	F*	<.005	
		57.02 58.46 Grading into leucogabbro.	FX254936	57.02	58.46	1.44	TR	F*	<.005	

**********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 5	?
FX271567	60.05	61.57	1.52	TR	F*	n/a <5	
FX271568	61.57	62.18	.61	TR	F*	n/a 5	


K638469
K 638466
K638461
70481
82
70484
74818
70485
K638466
638469
Kakagi Lake
74811
74813
K589480
K638461
PENN OPTION
70473
74812
8470
K638465
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
K638458
K638462
K638465

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

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	DESCRIPTION
.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 %	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	

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

FROM M	TO M	
		Locally up to 2% disseminated and euhedral pyrite occurring in veining and alteration. Moderately to strongly iron carbonate. Moderately blocky core. Moderately hard.
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.
		Foliated. Moderately iron carbonate. Locally stretched altered buff feldspar crystals. Moderately hard. Locally blocky.
25.08	26.52	5 centimetres lost core. 6 centimetres white to pale pink quartz veins with weakly iron carbonate margins and scattered tourmaline

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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	
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	
FX254957	30.74	32.25	1.51	0	F48	.045	

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
	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	

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

FROM M	TO M	
		tuff. Strongly iron carbonate.
67.99	68.35	Brecciated quartz iron carbonate vein with inclusions of sericitic and chlorite stylolites.
68.35	68.65	Dacite crystal tuff clast as above.
68.65	70.04	10% brecciated quartz iron carbonate vein and veinlets as at 67.99 to 68.35 metres.
70.04	71.43	5 centimetre quartz iron carbonate vein with black chlorite stylolites and green chlorite stringers. 1% fine disseminated pyrite.
71.43	72.82	Lower contact with altered gabbro bounded by quartz iron carbonate vein.
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.
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.
75.78	77.01	Sharp lower contact with silicified magnetic gabbro. 5 centimetre quartz carbonate vein with chloritic inclusions.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254985	67.36	67.99	.63	TR	F38	<.005	
FX254986	67.99	68.35	.36	TR	F38	.010	
FX254987	68.35	68.65	.30	TR	F38	.005	
FX254988	68.65	70.04	1.39	TR	F38	<.005	
FX254989	70.04	71.43	1.39	1	F54	<.005	
FX254990	71.43	72.82	1.39	TR	F50	.010	
FX254991	72.82	74.25	1.43	TR	F46	.015	
FX254992	74.25	75.78	1.53	TR	F56	.005	
FX254993	75.78	77.01	1.23	TR	F*	<.005	

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

FROM M	TO 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. 90.60 92.06 Grading into mesogabbro.
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. 92.06 93.60 Locally olive green olivine stringers. 95.05 96.52 10% quartz calcite veinlets and veins with chloritic inclusions.
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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX254994	77.01	78.57	1.56	1	F*	<.005	
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	
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	
FX300009	99.56	101.05	1.49	TR	F*	.040	
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	
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	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	

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

FROM M	TO M	DESCRIPTION
125.92	139.60	GABBRO
		Gabbro (basalt?) as at 107.28 to 112.35 metres. 15 to 20% iron carbonate crystals.
	127.41 128.97	Locally 3 centimetre chlorite and biotite bearing quartz carbonate vein with minor tourmaline and weak buff alteration halo.
	130.44 136.68	5 to 10 % calcite pods and stringer.
	136.68 139.60	10% iron carbonate crystals.
139.60	146.70	GABBRO
		Halo alteration in gabbro as at 115.11 to 125.92 metres.
	139.60 140.84	10% quartz carbonate veinlets.
	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.
	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.
	150.94 153.55	Series of quartz iron carbonate veins up to 5 centimetres thick with inclusions of tourmaline crystals and tourmaline rims.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300028	125.92	127.41	1.49	TR	F*	.005	
FX300029	127.41	128.97	1.56	TR	F*	.030	
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	
FX300033	133.65	135.21	1.56	TR	F*	.005	
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	
FX300037	139.60	140.84	1.24	TR	F*	<.005	
FX300038	140.84	141.72	.88	TR	F*	.005	
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	
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	
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	
		197.51 199.07 Locally with medium grained chlorite crystals.	FX300076	194.46	195.87	1.41	TR	F*	<.005	
			FX300077	195.87	197.51	1.64	TR	F*	<.005	
		200.56 202.16 Fine grained gabbro with 15% brown iron carbonate crystals.	FX300078	197.51	199.07	1.56	TR	F*	<.005	
			FX300079	199.07	200.56	1.49	TR	F*	<.005	
		202.16 204.41 Locally red brown hematitic quartz carbonate veinlets.	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	

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	
		204.41 205.93 10% quartz carbonate veinlets.	FX300087	208.43	209.02	.59	TR	F*	<.005	
		207.38 208.43 Locally contorted. Locally weakly foliated.	FX300088	209.02	210.56	1.54	TR	F*	.010	
		208.43 210.56 Fine grained, dark green with 15% dark red brown iron carbonate crystals and stringers	FX300089	210.56	212.57	2.01	2	F*	.020	
		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. 225.74 227.31 Pervasive chlorite inclusions with 3% euhedral pyrite.	FX300098	224.30	225.74	1.44	1	F*	.015	
			FX300099	225.74	227.31	1.57	3	F*	.585	
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
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	FX300102	229.59	230.72	1.13	1	F42	<.005	
		foliation.	FX300103	230.72	232.20	1.48	1	F*	<.005	
232.20	236.75	GABBRO								
		Transitional gabbro to peridotite. Mottled gray to black	FX300104	232.20	233.70	1.50	1	F*	<.005	
		with 10% quartz carbonate veinlets and stringers.	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	FX300107	236.75	238.25	1.50	TR	F*	<.005	
		pyroxene crystals. 10% quartz carbonate veinlets.	FX300108	238.25	239.78	1.53	TR	F*	<.005	
		Locally up to 2% euhedral pyrite up to 5 millimetres.	FX300109	239.78	241.26	1.48	TR	F*	<.005	
		3% iron carbonate crystals. Soft.								
242.85	288.30	PERIDOTITE								
		Magnetic peridotite as above with 5 to 7% disseminated	FX300111	242.85	244.35	1.50	1	F*	<.005	
		magnetite.	FX300112	244.35	245.88	1.53	2	F*	<.005	
		274.60 276.05 Locally ground core. 10 centimetres lost	FX300113	245.88	247.36	1.48	1	F*	<.005	
		core.	FX300114	247.36	248.90	1.54	TR	F*	<.005	
		277.58 279.12 Locally 3 centimetre quartz iron carbonate	FX300115	248.90	250.47	1.57	TR	F*	<.005	
		vein and adjacent boudinaged quartz	FX300116	250.47	251.98	1.51	TR	F*	.005	
		carbonate veinlets parallel to weak	FX300117	251.98	253.47	1.49	TR	F*	.005	
		foliation.	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	FX300120	256.55	258.01	1.46	TR	F*	<.005	
		locally brecciated quartz carbonate	FX300121	258.01	259.52	1.51	TR	F*	<.005	
		veinlets. Locally broken core.	FX300122	259.52	261.11	1.59	TR	F*	<.005	

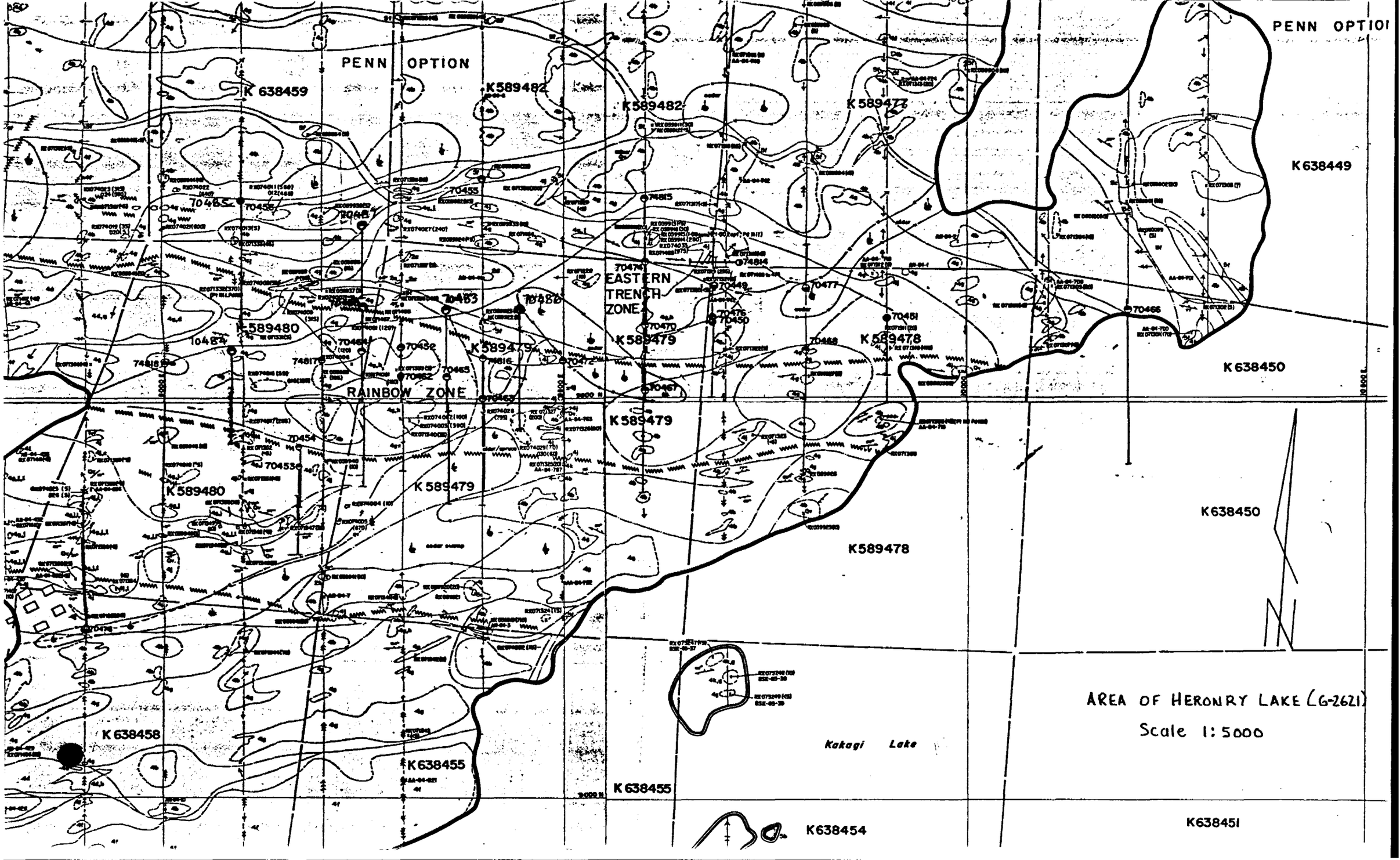
**********DESCRIPTION**********

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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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. 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.	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	
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. 300.62 302.10 Weakly fuchsite.	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	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AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********INC LIMITED**********

FIELD EXPLOI N 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						

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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	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	
		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.	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	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
		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	44.30	45.42	.92	TR	-	.070	
		43.74 44.50 Locally strongly altered along 30 centimetre wide quartz carbonate vein.								
		44.30 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	

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

FROM M	TO 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.
		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.
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271444	74.98	75.59	.61	TR	-	<.005	
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	

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

FROM M	TO 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.
	99.36 100.89	Locally moderately chloritic with epidotized feldspars.
102.41 106.98	GABBRO	

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX271460	97.84	99.36	1.52	TR	-	<.005	
FX271461	99.36	100.89	1.53	TR	-	<.005	
FX271462	100.89	102.41	1.52	TR	-	<.005	

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. 105.46 106.98 Pervasive calcite alteration decreasing down hole grading to halo altered gabbro.	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	
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
		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	

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

FROM M	TO M	
		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

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

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	

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

FROM M	TO M	
		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

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

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	-	.043	
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
		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	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	

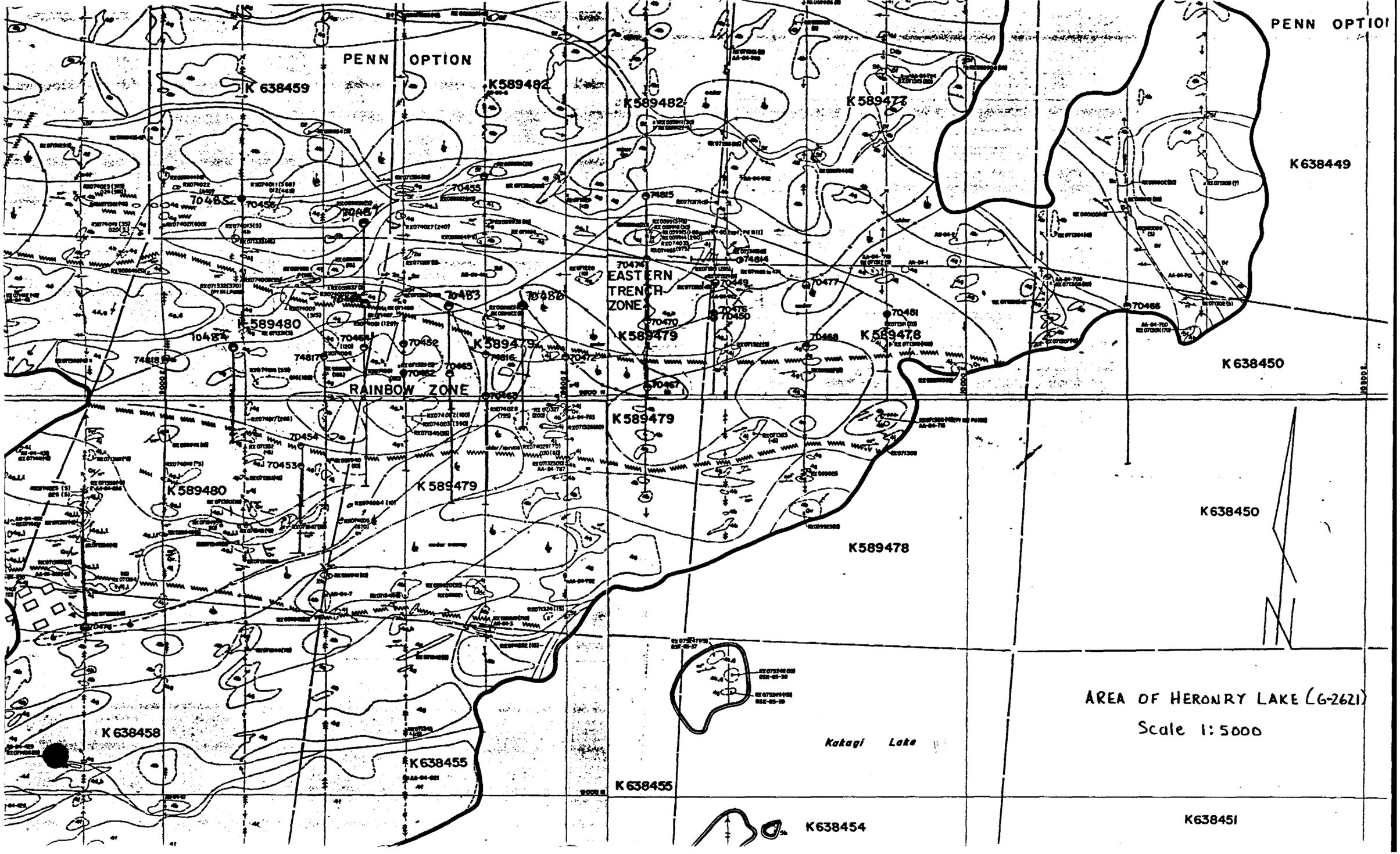
FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
	190.80 192.33	Mottled texture becoming less distinct down hole.								
	192.33 193.85	Locally strongly chloritic.								
	201.47 203.00	Pervasive calcite alteration decreasing down hole grading to halo altered gabbro with 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	

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

FROM M	TO M	
		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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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
PENN OPTIO
K 638459
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RAINBOW ZONE
70463
70467
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70454
70453
K589480
K589479
K638450
K589478
K638458
K638455
Kakagi Lake
K638455
K638454
K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

**********IN' 'LIMITED**********
FIELD EXPLO 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	

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

FROM M	TO M	
		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

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

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

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

FROM M	TO M	
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.

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

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	

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
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	

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

FROM M	TO M	
		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	

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

FROM M	TO 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.
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.

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

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

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. 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.	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	
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	

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

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

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

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	

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

FROM M	TO M	
		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.

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

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
		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	

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

FROM M	TO M	
		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.

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

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	

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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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	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	
	138.99 140.51	Contains 20 centimetre wide section with								

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		brown red to yellow brown patchs at 139.20.								
	143.56	143.08 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	

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

FROM M	TO M	
		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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	

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

FROM M	TO M	
		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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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	

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

FROM M TO 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.

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

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

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

FROM M	TO M	DESCRIPTION
		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.

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

PENN OPTION
PENN OPTIO
K 638459
K589482
K589482
K589473
K638449
K589480
K589479
K589478
K638450
K638450
K589479
K589480
K589479
K589478
K638458
K638455
K638455
K638454
K638451
EASTERN TRENCH ZONE
RAINBOW ZONE
Kakagi Lake
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000
N

**********IN' 'IMITED**********
FIELD EXPLO' 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	

**********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	

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

FROM M	TO 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.
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

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

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

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

FROM M	TO M	DESCRIPTION
		with inclusions of green chlorite and trace euhedral pyrite. Weakly to moderately iron carbonatized.
	51.63 53.15	15% brown pervasive iron carbonate.
	54.60 57.74	Transitional gabbro to peridotite. Locally 2% scattered euhedral pyrite.
57.74	60.12	GABBRO
		Halo alteration. Gabbro as above with 10% pale orange contorted quartz iron carbonate veinlets and stringers. Moderately iron carbonate.
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.
	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

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300185	45.73	47.17	1.44	1	F40	<.005	
FX300186	47.17	48.68	1.51	TR	F40	.010	
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	
FX300193	57.74	59.18	1.44	1	F*	.010	
FX300194	59.18	60.12	.94	1	F37	.010	
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	

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	

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

FROM M	TO M	
		infilling. 2% quartz carbonate veinlets and stringers. Moderately hard. Trace pyrite.
		78.41 80.00 Locally brecciated and bleached areas.
		84.00 85.50 Locally sericitic. Scattered red hematitic quartz carbonate stringers.
		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.
		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.
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.
		93.57 98.15 1% euhedral pyrite in locally bleached alteration.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
FX300214	82.62	84.00	1.38	TR	F40	.010	
FX300215	84.00	85.50	1.50	TR	F34	<.005	
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	
FX300219	89.54	90.14	.60	TR	F19	<.005	
FX300220	90.14	90.73	.59	TR	F20	<.005	
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	
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
	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	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	
155.43	161.51	5 to 7% pale orange quartz carbonate veinlets, 10% iron carbonate crystals.	FX300275	165.31	166.74	1.43	TR	F*	<.005	
			FX300276	166.74	168.01	1.27	TR	F*	<.005	
161.51	162.48	Locally rusty brown iron carbonate crystals	FX300277	168.01	169.45	1.44	TR	F*	<.005	
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.	FX300278	169.45	170.75	1.30	TR	F*	<.005	
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.	FX300279	170.75	171.72	.97	1	F34	<.005	
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.	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
	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	
			FX300294	190.81	191.37	.56	3	F*	.050	
	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.								
	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	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		10% wispy quartz iron carbonate veinlets and stringers with chloritic inclusions. 5% iron carbonate crystals. Very weakly calcareous. 1% fine disseminated pyrite. Moderately hard.	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	
		209.79 212.83 Locally 10 to 15% contorted weakly hematitic quartz carbonate veins.	FX300314	217.37	218.85	1.48	TR	F*	<.005	
			FX300315	218.85	220.42	1.57	TR	F*	<.005	
		214.33 215.86 Euhedral pyrite up to 5 millimetres.	FX300316	220.42	221.52	1.10	TR	F*	<.005	
		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.	FX300317	221.52	222.55	1.03	TR	F*	<.005	
		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.	FX300318	222.55	224.14	1.59	1	F*	<.005	
			FX300319	224.14	225.22	1.08	1	F*	.070	
		224.14 225.22 Chlorite bearing quartz carbonate vein with hematitic alteration at margins.	FX300320	225.22	226.63	1.41	1	F*	.010	
			FX300321	226.63	228.07	1.44	1	F*	.145	
		225.22 226.63 Gray green to gray. Moderately bleached with rare orange quartz carbonate veins. 1% disseminated euhedral pyrite.	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	
		226.63 228.07 As above with patchy fuchsitic alteration. 1% massive chalcopyrite in chloritic stringer in quartz carbonate vein.	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	
		229.61 231.04 Multiple generation cross cutting quartz carbonate veinlets and veins. 1% and euhedral pyrite.	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	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 %	CR ANG	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	
			FX300359	277.74	278.60	.86	2	F*	.015	
		273.71 276.76 Minor feldspar porphyry dikelettes with 2% euhedral pyrite at margins.								
		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	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								

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

FROM M	TO M	
		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.

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

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	AU PPM	PPM*M
		316.96 317.91 Foot of hole.								

AREA OF HERONRY LAKE (G-2621)

Scale 1:5000

**********IN[illegible].IMITED**********

FIELD EXPLO[illegible]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
.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% elongate dark green to medium gray green indistinct fragments of variable composition and textures up to 4 centimetres long with 1 to 2% bomb sized fragments up to 10 millimetres wide in a fine grained, medium green to green gray, moderately hard, not magnetic, moderately to well foliated, locally massive, ash tuff matrix. Locally contains fine grained sections, possibly ash tuff, up to 30 centimetres wide. locally 1 to 2%	FX271264	3.66	4.88	1.22	TR	-	.005	
			FX271265	4.88	6.40	1.52	TR	-	.020	
			FX271266	6.40	7.92	1.52	TR	-	.080	
			FX271267	7.92	8.69	.77	TR	-	.325	
			FX271268	8.69	9.45	.76	TR	-	.140	
			FX271269	9.45	10.21	.76	TR	-	.040	
			FX271270	10.21	10.97	.76	TR	-	<.005	
			FX271271	10.97	12.50	1.53	TR	-	.015	
			FX271272	12.50	14.02	1.52	TR	-	.035	

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

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	
		34.14 35.36 Becoming moderately bleached down hole.	FX271288	35.36	36.12	.76	TR	-	.090	
		35.36 36.12 Strongly altered with contorted foliation down hole.	FX271289	36.12	36.88	.76	TR	F40	.010	
		37.34 38.40 Becoming less strongly altered down hole.	FX271290	36.88	37.34	.46	TR	-	.010	
		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.	FX271291	37.34	38.40	1.06	TR	-	.045	
		39.93 40.84 Locally bleached along quartz carbonate veins	FX271292	38.40	39.93	1.53	TR	-	<.005	
			FX271293	39.93	40.84	.91	TR	-	.005	
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	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	
		45.50 49.07 Contains 2 centimetre wide magnetic iron carbonate stringer at 48.62.	FX271300	47.55	49.07	1.52	TR	F45	.055	
		49.07 50.60 Becoming moderately bleached down hole grading to strongly altered lapilli tuff.	FX271301	49.07	50.60	1.53	TR	F50	<.005	
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	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
		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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		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.	FX271339	102.41	103.94	1.53	TR	F40	<.005	
			FX271340	103.94	105.46	1.52	TR	F50	.005	
		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	FX271341	105.46	106.98	1.52	TR	-	<.005	

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

FROM M	TO M	
		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.

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

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	

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

FROM M	TO M	
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

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

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	

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

FROM M	TO 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.
		144.78 146.61 Strongly bleached and moderately hematitized becoming moderately fractured

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
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	-	<.005	
FX271377	158.80	160.32	1.52	TR	-	.005	

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

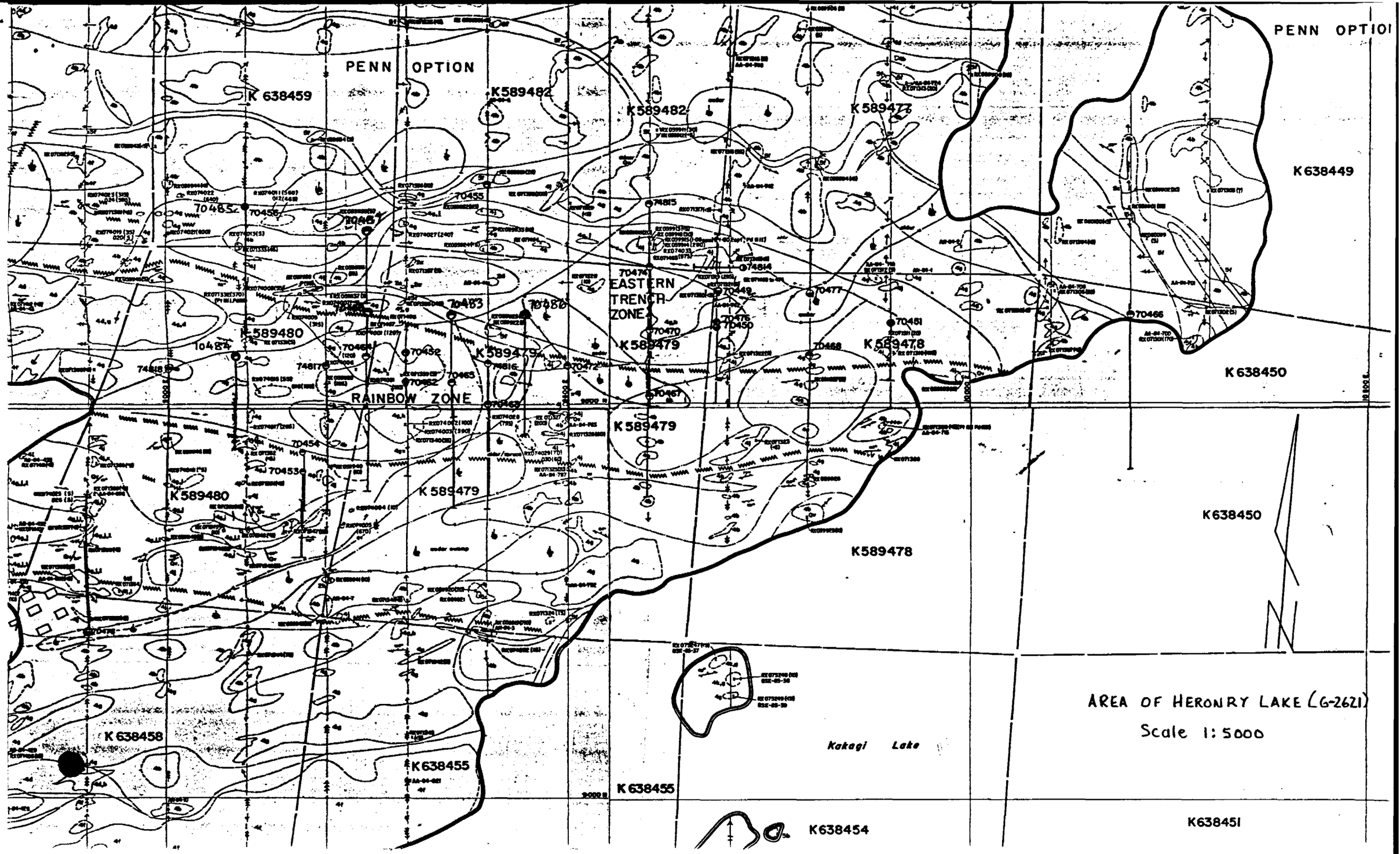
FROM M	TO M	
		and chloritic down hole.
	148.13 149.66	Less strongly hematitized with irregular blue gray patchs.
	149.66 151.18	As above.
	151.18 152.70	As above.
	152.70 154.23	Becoming weakly bleached and moderately silicified down hole.
	158.80 160.32	Less strongly altered tuffaceous section.
160.32 184.71	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.

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

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	

FROM M	TO M	DESCRIPTION
170.99	172.52	Locally moderately bleached.
174.04	175.56	Bands decressing 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.

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



AREA OF HERONRY LAKE (G-2621)

Scale 1:5000

**********IN LIMITED**********
FIELD EXPLO 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			

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

FROM M	TO M	DESCRIPTION
.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

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

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

FROM M	TO M	DESCRIPTION	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		elongated.	FX300399	14.02	15.45	1.43	TR	F26	.010	
		10.97 12.43 5% quartz carbonate veins.	FX300400	15.45	17.08	1.63	TR	F33	<.005	
		12.43 14.02 Pale green. Distortion of fragments.	FX300401	17.08	18.59	1.51	1	F28	<.005	
		17.08 18.59 Weakly sericitic alteration halo with 2% pyrite adjacent to cross cutting quartz carbonate veinlets.	FX300402	18.59	20.17	1.58	TR	F30	.005	
			FX300403	20.17	21.66	1.49	TR	F30	<.005	
		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.	FX300404	21.66	23.16	1.50	TR	F*	<.005	
		23.16 24.67 Grades into basalt.	FX300405	23.16	24.67	1.51	TR	F36	<.005	
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	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	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	SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	AU PPM	PPM*M
		veinlets with 1 to 2% euhedral pyrite adjacent weakly	FX300443	80.46	81.89	1.43	1	F*	.010	
		altered gabbro. 15% pervasive iron carbonate. Feldspar	FX300444	81.89	83.43	1.54	TR	F*	<.005	
		crystals are locally altered to buff sericitic.	FX300445	83.43	84.88	1.45	1	F32	.010	
		Silicified, hard. Poorly to moderately foliated.	FX300446	84.88	86.33	1.45	1	F*	.245	
		74.71 76.11 Buff alteration halo adjacent to boudinaged	FX300447	86.33	87.88	1.55	TR	F*	<.005	
		chloritic quartz carbonate vein. 5%	FX300448	87.88	89.42	1.54	TR	F*	<.005	
		stringers of pale orange iron carbonate	FX300449	89.42	90.92	1.50	TR	F*	<.005	
		concordant to foliation. Trace pyrite in vein	FX300450	90.92	92.17	1.25	TR	F*	.075	
		78.75 81.89 As at 74.71 to 76.11 metres.	FX300451	92.17	93.64	1.47	TR	F47	<.005	
		83.43 84.88 20% buff altered sericitic feldspar. 1%	FX300452	93.64	95.11	1.47	1	F34	.065	
		euhedral pyrite adjacent to quartz carbonate	FX300453	95.11	96.32	1.21	1	F46	.020	
		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,	FX300454	96.32	97.00	.68	1	F48	<.005	
		strongly iron carbonatized. Pale red with pale orang	FX300455	97.00	98.00	1.00	TR	F48	.005	
		quartz iron carbonate veinlets and stringers. Patchy	FX300456	98.00	98.88	.88	TR	F58	.030	
		black chlorite, locally black chloritic stringers. Fine								
		grained to medium grained. Foliated. Trace pyrite.								

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

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	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	

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

FROM M	TO M	
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.

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

SAMPLE#	FROM M	TO M	LENGTH M	MIN %	CR ANG	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.	FX300546	219.46	221.88	2.42	TR	F*	<.005	
		306.34 306.63 Foot of hole.	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*	<.005	
			FX300564	247.20	248.72	1.52	TR	F*	<.005	

**********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*	.010	
FX300566	250.22	251.71	1.49	TR	F*	<.005	
FX300567	251.71	253.25	1.54	TR	F*	<.005	
FX300568	253.25	254.56	1.31	TR	F*	<.005	
FX300569	254.56	256.01	1.45	TR	F*	<.005	
FX300570	256.01	257.51	1.50	TR	F*	<.005	
FX300571	257.51	259.00	1.49	TR	F*	<.005	
FX300572	259.00	260.70	1.70	TR	F*	<.005	
FX300573	260.70	262.22	1.52	TR	F*	<.005	
FX300574	262.22	263.71	1.49	TR	F*	<.005	
FX300575	263.71	265.20	1.49	TR	F*	<.005	
FX300576	265.20	266.82	1.62	TR	F*	<.005	
FX300577	266.82	268.30	1.48	TR	F*	<.005	
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
PENN OPTIOI
K 638459
K589482
K589482
K589477
K638449
EASTERN TRENCH ZONE
K589480
K589479
K589478
K638450
RAINBOW ZONE
K589479
K589480
K589479
K589478
K638450
K638458
K638455
K638455
Kakagi Lake
K638454
K638451
AREA OF HERONRY LAKE (G-2621)
Scale 1:5000

Ministry of
Northern Development
and Mines

Ontario

Ministère du
Développement du Nord
et des Mines

52F04NW8132 2.11451 HERONRY LAKE

900

August 12, 1988

Your file: W8801-167
Our file: 2.11451

Mining Recorder
Ministry of Northern Development and Mines
808 Robertson Street
P.O. Box 5200
Kenora, Ontario
P8N 3X9

Dear Sir:

Re: Data for Assaying submitted under Section 77(19)
of the Mining Act R.S.O. 1980 on Mining Claims
K 589477 et al in the Townships of Phillips and
Tweedsmuir and Areas of Heronry Lake and Dogpaw Lake

The enclosed statement of assessment work credits for Assaying has been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager
Mining Lands Section
Mines & Minerals Division

Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

ONTARIO GEOLOGICAL SURVEY
ASSESSMENT FILES
OFFICE
AUG 25 1988
RECEIVED

AB AB:pl
Enclosure (2)

cc: Resident Geologist
Kenora, Ontario

Canadian Nickel Company Limited
Copper Cliff, Ontario
POM 1NO

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File	
2.11451	
Date	Mining Recorder's Report of Work No.
August 12, 1988	W8801-167

Recorded Holder
Canadian Nickel Company Limited

Township or Area
Townships of Phillips & Tweedsmuir, Areas of Heronry Lake and Dogpaw Lake

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	$71,185.00 SPENT ON OVERBURDEN DRILLING AND ASSAYING SAMPLES TAKEN FROM MINING CLAIMS:
Magnetometer _____ days	K 589477 to 80 inclusive 589482 638450 638458-59 638461-62 638465-66 777750
Radiometric _____ days	
Induced polarization _____ days	
Other _____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological _____ days	
Geochemical _____ days	
Man days ☐ Airborne ☐	
Special provision ☐ Ground ☒	4,745.6 DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT R.S.O. 1980.
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

Ministry of Northern Development and Mines
Ontario

T.5

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

DOCUMENT No. W8801·167

July 26

Instructions: – Please type or print.
– If number of mining claims traversed exceeds space on this form, attach a list.
Note: – Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.
– Do not use shaded areas below.

167-8

Type of Survey(s): Expenditures (assay costs) 2.11451	Township or Area: Phillips, Tweedsmuir, Area of Heronry Lake, Dogpaw Lake
Claim Holder(s): Canadian Nickel Company Limited	Prospector's Licence No.: A 17527
Address: Copper Cliff, Ontario POM 1NO	
Survey Company: Canadian Nickel Company Limited	Date of Survey (from & to): 01 03 85 (Day Mo. Yr.) – 10 05 88 (Day Mo. Yr.)
Total Miles of line Cut	
Name and Address of Author (of Geo-Technical report)	

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days		Days per Claim
Complete reverse side and enter total(s) here	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.	Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
See separate list					

RECEIVED
JUN 29 1988
MINING LANDS SECTION

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

777496

Total number of mining claims covered by this report of work: 80

Expenditures (excludes power stripping)

Type of Work Performed: Expenditures (assay costs)

Performed on Claim(s): K589477-80 incl.; K589482; K638458-59; K638461-62; K638465-66; K777750-51

Calculation of Expenditure Days Credits

Total Expenditures				Total Days Credits
$71,185.00	÷	15	=	4745.6

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only		
Total Days Cr. Recorded: 4745.6	Date Recorded: June 6/88	Mining Recorder: Scott Rivett
	Date Approved as Recorded: See statement.	Branch Director: AB.

Date	Recorded Holder or Agent (Signature)
May 31, 1988	[signature]

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): [signature]

DOCUMENT No.
W8801· 167

Claim No.	Expend. Days. Cr.	Claim No.	Expend. Days Cr.	Claim No.	Expend. Days Cr.
K 777502	60	K 777627	60	K 777704	60
K 777503	60	K 777637	60	K 777705	60
K 777508	60	K 777638	60	K 777706	60
K 777557	60	K 777639	60	K 777707	60
K 777558	60	K 777640	60	K 777708	60
K 777559	60	K 777641	60	K 777710	60
K 777560	60	K 777642	60	K 777711	60
K 777561	60	K 777643	60	K 777712	60
K 777562	60	K 777644	60	K 777713	60
K 777563	60	K 777657	60	K 777714	60
K 777564	60	K 777658	60	K 777715	60
K 777565	60	K 777659	60	K 777716	60
K 777608	60	K 777660	60	K 777789	5.6
K 777609	60	K 777661	60	K 777790	60
K 777610	60	K 777662	60	K 777791	60
K 777614	60	K 777663	60	K 777792	60
K 777615	60	K 777664	60	K 777793	60
K 777616	60	K 777678	60	K 777794	60
K 777617	60	K 777679	60	K 777795	60
K 777618	60	K 777680	60	K 777796	60
K 777619	60	K 777681	60	K 777797	60
K 777620	60	K 777682	60	K 777798	60
K 777621	60	K 777683	60	K 777799	60
K 777622	60	K 777689	60	K 777800	60
K 777623	60	K 777690	60		
K 777624	60	K 777701	60		
K 777625	60	K 777702	60		
K 777626	60	K 777703	60		

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

Total Claims = 80

Total Credits = 4745.6

DOGPAW LAKE G-2613

TURTLE LAKE G-2652

BROOKS LAKE G-2670

PINUS LAKE G-2635

94°00'

93°45'

49°15'

49°07' 30"

Young Bay

Muskie Bay

Kakagi

South Narrow Lake

PHILLIPS TWP.

FOR STATUS REFER TO TWP PLAN

Crow Lake P.O.

AERIAL SPRAYING

Stevens Bay

Stony Portage Bay

Sabaskong Bay

INDIAN RES. NO. 35a

SABASKONG BAY

PROJECTED LINE

Blacky Bay

GODSON TWP.

FOR STATUS REFER TO TWP PLAN

Heronry Lake

Quida Lake

Konodiskitchiwan Lake

Gorkan

SABASKONG PENINSULA

MNR GRAVEL PIT No. 254

MERIDIAN

58' 57' 56' 55' 54' 53' 52' 51' 50' 49' 48' 47'

52F04NW8132 2.11451 HERONRY LAKE

200

PINUS LAKE G-2635

492634

HIGHWAY AND ROUTE N

OTHER ROADS

TRAILS

SURVEYED LINES

TOWNSHIPS, BASE L

LOTS, MINING CLAIM

UNSURVEYED LINES

LOT LINES

PARCEL BOUNDARY

MINING CLAIMS ETC

RAILWAY AND RIGHT

UTILITY LINES

NON PERENNIAL STREA

FLOODING OR FLOODIN

SUBDIVISION OR COMP

RESERVATIONS

ORIGINAL SHORELINE

MARSH OR MUSKE

MINES

TRAVERSE MONUMENT

DISPOSITION

TYPE OF DOCUMEN

PATENT SURFACE & M

" SURFACE RIG

" MINING RIGH

LEASE SURFACE & MI

" SURFACE RIGH

" MINING RIGHT

LICENCE OF OCCUPAT

ORDER IN COUNCIL

RESERVATION

CANCELLED

SAND & GRAVEL

NOTE MINING RIGHTS 1913 VESTED IN LANDS ACT, R.S.

REFE

AREAS WITHDR

M.R.O.

S.R.O.

M.S.

Description Order N

SCALE 1 INCH 30

AREA HE L

M.N.R. ADMINISTRA

KENORA

MINING DIVISION

KENORA

LAND TITLES / REGI

KENORA

Natura Resour

Ontario

DATE MARCH, 1984

M-2475