DREDGE

LOCATION: L25N;10+75W	Diamond Drill Record		HOLE NO87 KDR #4 Page 1 of 9
AZIMUTH: 092°	DIPS – collar 45 °	CONTRACTOR: ARCTIC DIAMOND DRILLING	PROPERTY: KANGELD
ELEVATION:	– m °	LOGGED BY: S. TOMLINSON	CLAIM NO. 12
LENGTH: 395 FEET	– m °	DATE: JANUARY 23, 1987	SECTION NO. "98" CLAIMS
CORE SIZE: n Q/BQ	– m °		STARTED:
PURPOSE: TO TEST CHARGEABILITY ZONES FROM AN INDUCED POLARIZATION SURVEY.			COMPLETED:

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
0	100	Casing - no core.						Recovery:
100	101	Quartz. Core is mostly coarse (1 - 5 cm) subrounded quartz fragments. Quartz is milky, translucent, no visible sufides. Quartz is possibly overburden.			Very minor rusty iron staining along fractures.			100 - 101 = 100%
101	105	Shear Zone. Core is made up of fine chips, mostly 2 - 5 mm. Appears to have been a quartz muscovite schist that has been finely ground. Some clayey material. May be highly weathered bedrock rather than shear zone.			Whole section is finely ground. Minor coarse quartz fragments to 1 cm.			101 - 105 = 3/4
105	121	Silicified Sericitic Quartz Muscovite Schist. Sericite and muscovite form thin lamellae and irregular bands 1 to 3 mm thick between quartz bands and pods. Very quartz rich, approximate percentages being: Quartz = 70% Muscovite = 20%			Very little alteration aside from sericite (probably altered muscovite). Very minor rusty staining along fractures. Core is moderately fractured into pieces less than 2 cm towards bottom of section			105 - 121 = 6/16

Diamond Drill Record

HOLE NO. KDR #4 | Page 2 of 9

Section from (ft)	Section to (ft)	ROCK DESCRIPTION	Interval from (ft)	Interval to (ft)	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
		Sericite = 9% Others (mainly chlorite) = 1% Layering is poorly developed and very irregular. Schistosity to C.A.: 55°, very irregular, very poorly developed due to large quartz content.			Very poor recovery. Very minor pyrite, less than 1% of core, as fine grained (1 mm) disseminations.			
121	126	Brecciated Graphite. Clasts, from 0.5 cm to 2 cm, generally sub-rounded, are mostly quartz, but may also be silicified quartz muscovite sericite schist (previous unit). Clasts are supported in a convoluted graphitic matrix. No consistent schistosity, as bedding is extremely contorted. Some highly fractured pieces from previous unit occur at contacts.			Very minor pyrite, less than 1% as fine grained disseminations. Core is moderately fractured and has poor recovery. Irregular calcite stringers and blebs, less than 1% of core.			121 - 126 = 2/5
126	138	Silicified Quartz Muscovite Schist. Thin, irregular muscovite lamellae and bands, up to 5 mm thick, occur within quartz bands and pods. Very quartz rich, between 70-80%. Core approaches a quartzite in appearance. Schistosity to C.A.: 25°, very poorly developed due to large quartz content.			Minor pyrite, accounts for 1% of core, as very fine grained (1 - 2 mm) euhedral disseminations.			126 - 138 = 100%

Diamond Drill Record

HOLE NO. KDR #4 | Page 3 of 9

Section from xxxft	Section to xxxft	ROCK DESCRIPTION	Interval from xxxft	Interval to xxxft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
138	152	Brecciated Graphite. Clasts of sub-rounded quartz, up to 1 cm x 2 cm, in a highly contorted graphite matrix. Also, clasts of siliceous quartz muscovite schist. Siliceous quartz muscovite schist also forms bands up to 6 inches long, which is probably inter-fingering between the two units. No schistosity as graphite is convoluted around harder clasts. Upper and lower contacts are gradational and highly fractured, especially lower contact where core is crumbly.			Core is soft, so easily fractured and crumbly, especially at lower contact. Pyrite accounts for less than 1% of core, occurs as fine grained euhedral cubes within graphite and clasts. Irregular calcite stringers and blebs, less than 1% of core.			138 - 152 = 5/14
152	164.5	Siliceous Sericitic Quartz Muscovite Schist. Thin lamellae of muscovite within a quartzite-like matrix. Some sericite is present. Minor chlorite with muscovite. Average percentages: Quartz = 70% Muscovite = 20% Sericite = 9% Others = 1% Schistosity to C.A.: 54°, poorly developed due to high quartz content.			Core may be moderately fractured. Sericite alteration may coat core. Pyrite accounts for 1% of core, very fine grained, disseminated.			152 - 164.5 = 7/12.5

Diamond Drill Record

HOLE NO. KDR #4 | Page 4 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
164.5	191.5	Slightly Sheared Zone. Silice us quartz sericite muscovite schist has been slightly sheared. Highly fractured; no sections longer than 5 cm, often less than 1 cm, except extremely siliceous sections. Core is often clayey. Very sericitic, up to 30% of core. No real schistosity, as only competent sections are very siliceous.			Whole section has been slightly sheared and moderately fractured; very poor recovery. Pyrite accounts for 1% of core, occurs as fine grained euhedral cubes 1 - 2 mm, disseminated. Quartz vein; core is comprised of 1 cm chips of translucent milky quartz. Very poor recovery, only one foot of actual core. Quartz vein, translucent, milky, with very minor (much less than 1%) pyrite as fine grained disseminations.			164.5 - 171 = 3/6.5 171 - 179 = 2/8 179 - 185 = 1.5/6 185 - 188.5 = 100% 188.5 - 191.5 = 2.5/3
			165	171				
			188.5	189				
191.5	263	Quartz Muscovite Schist. Thin lamellae and bands of muscovite between quartz bands. Minor sericite. Quartz may form bands up to 10 cm, but averages 5 mm. Some sections are more siliceous and core has appearance of quartzite. Schistosity to C.A.: 59°, moderately developed (depending on how much quartz is present).			Core may be moderately fractured and slightly clayey. Pyrite accounts for 1% of core, occurs as euhedral disseminations 2 - 3 mm in size. Sericitation may occur anywhere in section, but especially where core is fractured. Main zones of alteration (fracturing, sericitization) are from 201 - 226, and 245 - 250. A few translucent, milky quartz veins to 10 cm.			191.5 - 193 = 1/1.5 193 - 201 = 100% 201 - 212 = 7/11 212 - 217 = 100% 217 - 222 = 0.5/5 222 - 227 = 3.5/5 227 - 235 = 100% 235 - 251 = 11.5/16 251 - 263 = 100%
			195	196	Milky quartz vein.			

Diamond Drill Record

HOLE NO. KDR #4 | Page 5 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
263	295	Slight Shear Zone. Core is a quartz muscovite schist that has been pervasively sericitized and fractured into sections less than 5 cm, often less than 1 cm. Core may be clayey or crumbly. Schistosity is poorly developed due to core's lack of competence. Graphite accounts for 10% of core in last 8 feet of section. Lower contact is gradational.			Whole section has been pervasively sericitized and fractured. A few translucent, milky quartz veins to 10 cm.			263 - 265 = 1/2 265 - 275 = 5/10 275 - 285 = 6.5/10 285 - 287 = 1/2 287 - 295 = 5/8
295	299	Brecciated Graphite. Clasts of quartz and quartz muscovite schist in a graphite matrix. Clasts range in size from 1 mm to 5 cm, averaging around 1 cm. Clasts are subangular to sub-rounded. 50% of the clasts are quartz, and 50% are quartz muscovite schist. Clasts make up 60% of core. Graphite matrix is convoluted around clasts.			Core may be crumbly in short sections. Pyrite accounts for 1% of core, occurs as fine grained euhedral disseminations, 1 - 2 mm, in both the graphite and the clasts. Very thin and irregular calcite stringers account for less than 1% of core.			295 - 299 = 100%
299	302.5	Diabase Dyke. Massive grey-green dyke. 5% of core is irregular phenocrysts to 2 mm, white, possibly plagioclase. Moderately hard, very competent. Upper contact is at 35° to C.A., lower one is undeterminable.			Generally unaltered. Minor calcite stringers account for less than 1% of core. Greyish colour and softness indicate that may be weathered.			299 - 302.5 = 100%

Diamond Drill Record

HOLE NO. KDR #4 | Page 6 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
302.5	313	Brecciated Graphite. Clasts of quartz and quartz muscovite schist in a graphite matrix. Quartz clasts are rounded, average around 1 cm. Quartz muscovite schist are more irregular, may be up to 10 cm long, may be altered to clay and merge with graphite. Graphite is convoluted around clasts.			Core may be clayey. Pyrite accounts for 1% of core, occurs as 1 mm euhedral cubes in both graphite and clasts. Minor calcite stringers and blebs, irregular.			302.5 - 313 = 100%
313	315.5	Diabase Dyke. Massive, light grey dyke. Very minor (less than 1%) clear smoky quartz as irregular modules up to 1 - 2 mm. 3% of core is made up of small irregular white phenocrysts, probably plagioclase. Upper contact is irregular, lower contact is at 32°.			Very minor irregular calcite stringers and blebs. A 1 cm wide, opaque, coarse grained calcite vein, cuts through diabase at 43° to C.A. Grey colour and softness indicate that dyke may be weathered.			313 - 315.5 = 100%
315.5	321	Brecciated Graphite. Rounded 1 cm clasts of quartz. Irregular 5 cm clasts of siliceous quartz muscovite schist may be sections up to 20 cm long. Clasts in a matrix of graphite.			Pyrite cubes, 1 mm in size, account for 1% of core, occur in both graphite and clasts. Irregular calcite stringers and blebs, very minor.			315.5 - 321 = 100%

Diamond Drill Record

HOLE NO. KDR #4 | Page 7 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
321	328	Diabase Dyke. Black, massive, competent dyke. 2% of dyke is made up of small irregular white phenocrysts, probably plagioclase. This dyke is fresh and hard; unlike previous dykes which were softer and greyer, possibly due to weathering. About 20% of core is made up of small (1 mm) black elongate euhedral crystals, probably hornblende or a pyroxene.			Very little alteration. Very minor calcite as irregular stringers. Slightly magnetic, so magnetite probably present although not discernable.			321 - 328 = 100%
328	330.5	Brecciated Graphite. Clasts of quartz and quartz muscovite schist in a graphitic matrix.			Very minor pyrite, less than 1% as cubes and blebs. Irregular calcite stringers and blebs, less than 1%.			328 - 330.5 = 100%
330.5	331.5	Quartz Muscovite Schist. Muscovite is dark green, forms prominent but irregular bands and lamellae for 30% of core. Most of rest of core is massive quartz. Sericite accounts for about 10% of core. Some graphite present sporadically, 5% of core. This section is probably an interfingering of units, may be a large clast within brecciated graphite. Contacts are irregular and gradational.			Sericitization, especially along fractures. Very minor, less than 1% pyrite as small euhedral disseminated cubes. Minor calcite as stringers and blebs.			330.5 - 331.5 = 100%

Diamond Drill Record

HOLE NO. KDR #4 | Page 8 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
331.5	334.5	Brecciated Graphite. Clasts of quartz and quartz muscovite schist in a graphite matrix. Lower contact is brecciated.			Very minor fine grained disseminated pyrite. Very minor irregular calcite stringers and blebs.			331.5 - 334.5 = 2.5/3
334.5	345	Sericitic Quartz Muscovite Schist. Well layered muscovite and sericite lamellae to 2 mm thick between quartz bands. Muscovite accounts for 25% of core, quartz for 65%, sericite for 10%. Schistosity to C.A.: 69°, moderately developed, very planar.			Very minor pyrite, less than 1% as very fine grained, 1 mm, euhedral cubes disseminated throughout. Sericite alteration present.			334.5 - 345 = 6/10.5
345	346	Carbonaceous Schist. Thin lamellae of graphite between quartz bands. Similar to previous unit, only graphite replaces muscovite. Probably due to interfingering with brecciated graphite unit. Schistosity to C.A.: 58°, planar, moderately defined.			Very minor fine grained pyrite.			345 - 346 = 100%
346	349	Sericitic Quartz Muscovite Schist. Muscovite and sericite form well layered lamellae. Same unit as one before carbonaceous schist, except minor graphite with muscovite. Schistosity to C.A.: 81°, moderately developed, planar.			Very minor pyrite.			346 - 349 = 100%

Diamond Drill Record

HOLE NO. KDR #4 | Page 9 of 9

Section from ft	Section to ft	ROCK DESCRIPTION	Interval from ft	Interval to ft	ALTERATION, MINERALIZATION etc.	VEINLETS Thickness mm	VEINLETS Angle to core	VEINLETS minerals in decreasing abundance
349	352	Brecciated Graphite. 30% graphite matrix around quartz and quartz muscovite schist fragments up to 10 cm. Probably interfingering of this unit with quartz muscovite schist.			Very minor pyrite. Very minor calcite.			349 - 352 = 2/3
352	360	Sericitic Quartz Muscovite Schist. Muscovite and sericite form well layered lamellae between quartz bands. Schistosity to C.A.: 78°, very planar, moderately developed.			Very minor pyrite.			352 - 360 = 100%
360	374	Diabase Dyke. Massive light grey competent dyke. Contacts are highly fractured.			May be slightly weathered as not as hard as fresh dyke. Very minor calcite stringers.			360 - 374 = 11/14
374	395	Chloritic Quartz Muscovite Schist. Well layered chlorite and muscovite lamellae and bands, up to 1 cm, but averaging 1 mm thick, between quartz bands and lamellae, also up to 1 cm thick. Percentages: Quartz = 50% Muscovite = 35% Chlorite = 15% Schistosity to C.A.: 70°, moderately developed, planar; may vary to sub-parallel and wavy, especially near bottom of section.	374	379	Very minor pyrite. Very minor calcite stringers. Core is moderately fractured into pieces less than 5 cm.			374 - 386.5 = 10/12.5 386.5 - 395 = 100%

Assay Data Sheet

HOLE NO8/ KDR #4 | Page 1 of 3

From ft.	To ft.	Length ft.	Ag ppm	Au ppb	Au oz FA	Cu %	Cu ppm	Fe%	Zn ppm	Pb ppm	Rock	Sample Number		
100	101	1									Qtz.	37744G		
101	105	4									shear	37745		
105	121	16									silserqms	37746		
121	126	5									brx graph	37747		
126	132	6									sil qms	37748		
132	138	6									sil qms	37749		
138	152	14									brx graph	37750		
152	161	9									silserqms	37751		
161	164.5	3.5									silserqms	37752		
164.5	179	14.5									shear	37753	slight	
179	187	8									shear	37754	slight	
187	191.5	4.5									shear	37755	slight	
191.5	196.5	5									qms	37756		
196.5	201	4.5									qms	37757		
201	207	6									qms	37758		
207	213	6									qms	37759		
213	217	4									qms	37760		
217	227	10									qms	37761		
227	232.5	5.5									qms	37762		
232.5	238	5.5									qms	37763		
238	244.5	6.5									qms	37764		
244.5	250	5.5									qms	37765		
250	254.5	4.5									qms	37766		
254.5	259	4.5									qms	37767		

Assay Data Sheet

HOLE NO KDR #4 | Page 2 of 3

From ft.	To ft.	Length ft.	Ag ppm	Au ppb	Au oz FA	Cu %	Cu ppm	Fe%	Zn ppm	Pb ppm	Rock	Sample Number		
259	263	4									qms	37768G		
263	268	5									shear	37769	slight	
268	277	9									shear	37770	slight	
277	284.5	7.5									shear	37771	slight	
284.5	289	4.5									shear	37772	slight	
289	295	6									shear	37773	slight	
295	299	4									brx graph	37774		
299	302.5	3.5									Diabase	37775	dyke	
302.5	308	5.5									brx graph	37776		
308	313	5									brx graph	37777		
313	315.5	2.5									Diabase	37778	dyke	
315.5	321	5.5									brx graph	37779		
321	328	7									Diabase	37780	dyke	
328	330.5	2.5									brx graph	37781		
330.5	331.5	1									qms	37782		
331.5	334.5	3									brx graph	37783		
334.5	340	5.5									ser qms	37784		
340	345	5									ser qms	37785		
345	346	1									carb s	37786		
346	349	3									ser qms	37787		
349	352	3									brx graph	37788		
352	356	4									ser qms	37789		
356	360	4									ser qms	37790		
360	364	4									Diabase	37791	dyke	

Assay Data Sheet

HOLE NO KDR #4 | Page 3 of 3

From ft.	To ft.	Length ft.	Ag ppm	Au ppb	Au oz FA	Cu %	Cu ppm	Fe%	Zn ppm	Pb ppm	Rock	Sample Number		
364	369	5									Diabase	37792G	dyke	
369	374	5									Diabase	37793	dyke	
374	379.5	5.5									chl qms	37794		
379.5	385	5.5									chl qms	37795		
385	390	5									chl qms	37796		
390	395	5									chl qms	37797G		