

015180

88FX-01

DIAMOND DRILL CORE LOG

Date: _____

Hole Number: 88FX-01

Reference Fabric Orientation Diagram:

Project: FARO Northwest Exploration

Location: _____

Claim: _____

^{UTM} ~~Top~~ Plane
Co-ords.: 6,915,610 N

581,350 E

Grid
Co-ords: _____

Elevation: 1259 m.

All symmetry determinations looking

Total Depth: 996 feet (303.6 m)

NW with 52 dipping

Inclination: -90° (vertical)

SW with dip azimuth _____.

Purpose: test favourable horizon (Vanguard - Mt. Myc contact) for sulphides

Reason hole Terminated: No sulphides encountered + out of money

Logged by: C.V. Reed / K.C. Pijago

Date(s) Logged: OCT 18-20, 1988

Drilling Contractor: ARCTIC DIAMOND DRILLING

Hole Cemented: No Steel down Hole: _____

Size	CORE From feet	To	Collar Cased and Capped: <u>yes</u>
<u>NW</u>	<u>0</u>	<u>10 no core</u>	<u>10' casing</u>
<u>NQ</u>	<u>10</u>	<u>996</u>	

Assay Lab: _____

Certificate No's: _____

Started: OCT 13/88 Completed: OCT 18/88

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20	22 24 26 28	30 34 35	
	10	13 6		1	#1	TRIMMED - NO RECOVERY
		41				
	11 13 6	14 15		R	1310	± 9 weak Moderately weathered
		12 6				
						Most hard, dull dark green-grey, thin, PS ₂ laminated, calc-
						silicate phyllite. Contains abundant patchy orange rust on S ₂ &
						fracture surfaces - local slight patchy rust on cut surface near
						TOH. Where fresh, S ₂ surfaces are dull dark green-grey, to
						locally black in greenish hue. Contains abundant thin, PS ₂
						laminated, finely, tabular dark dull green hornblende ± chl? & qtz.
						Within this fine grained thin, laminated "groundmass" are
						thin slightly coarser white-grey, ± apple green glaucous epidote bands, ranging from
						1mm to 4cm thick. Average thickness 4 1/2 cm. Bands are
						aligned to S ₂ and are approx 5% of the unit volume.
						Basite occurs locally in lenses developed in 1 to 2mm
						thick bands to S ₂ .
						Unit is locally slightly carbonaceous in intervals up to
						1.5' thick and are 20% of unit volume. Within these
						carbonaceous "bands", carbon occurs locally concentrated on S ₂
						partings giving the rock a grey-black aspect & darkening
						S ₂ surfaces.
						Only local & minor thin kinked peg. of veins.
						Local thin fractures are filled in cream-white calcite.
						The overall dark green, thin, laminated appearance of the
						non-carbonaceous intervals may suggest a metabasite parent
						for these intervals.
						tot = 14.5 med broken, med ground

Lithologic Log

Date: OCT 19/88 Logged By: LWR

Code	From	To	Recov.	No.	Unit	Description
1	10	14	16	20	22 24 26 28 30 34 35	14.5 - 16.5 rubble, very O.K. 16.5 - 36.4 \bar{v} broken, very O.K. 36.4 - EOT in broken, very O.K. No obvious faults.
	411	5	1472	144	13 1314	# Most weathered. Most soft, medium dull green, thin, PS ₂ laminated, calcareous, chloritic altered metabasite. Margins of unit are sharp, // to S ₂ . Se. sections are dull medium ^{olive} green and locally show patchy rust. Calcite occurs disseminated in \bar{v} thin grey, white laminations which are locally concentrated into thicker bands up to 2cm thick. Core \bar{v} broken, "3" recovered. Minor amounts of flakey gause? sludge recovered.
	4172	1810	247	14	1310	# 9 west Same as unit # 2 except weathering is less intense, carbonaceous intervals are more prominent and thin brown biotite laminations are more common. Moving down the interval, rock is slowly losing green and becoming more grey. Carbonaceous bands range from a few inches to 2 1/2 feet. Margins of bands are gradational over a few inches. Carbonaceous bands are 30-40% of unit volume. Biotite is locally developed in thin brown laminations locally concentrated into thin PS ₂ bands up to 2" thick.

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28	30		34
											Thin light tan-grey to local blue-green hue, gtz + calcite + epidote ± brecciated? bands range from thin to less thick becoming more abundant moving down the interval. These bands locally define lithons. Calc-silicate bands range from 5% of unit volume down to 6.9:8' and are 15% of volume down to the end of the unit.
											TOI - 56.0 in broken, very good.
											56.0 - 56.6 in broken, very O.K.
											56.6 - 57.0 incipient soft flakey gouge - metabasite sand? very O.K.
											57.0 - 59.0 in broken 1.8' we'd.
											59.0 - FOI in broken very good.
	1810		1818.6				15		131D19		± 3 minor
			270								Moderate to very hard, thin, P _{S2} laminated dark grey-black in local slight green hue, carbonaceous, calc silicate phyllite S ₂ surfaces are shiny black and only slightly mark fingers. Contains only local minor thin light grey-green-blue calc silicate ± gtz ± minor calcite bands. Bands are c 1/2 cm thick and are approx 5% of unit volume. Core is most broken. Only slight patch cut on S ₂ + fracture surfaces. No faults.
	1818.6		1819.8				16		131D19		
			304								Same as #5 except light gtz - calc silicate + calcite bands are very trace. Overall appearance is a homogeneous

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20	22 24 26 28	30 34 35	
						dark grey, in green hue. Unit is moderately hard, thin, PS ₂ laminated calc-silicate phyllite. S ₂ surfaces are dull black - local pale green chl slats are visible. Contains local thin Euhedral Qtz veinlets in bottom 1' of interval. Core in broken, very good. No faults. Only local minor thin bio folia visible - may be masked by carbon.
	919 8	11017 0 32 6		17	13K141#	B10 (3D0 ± 9 weak) (1090) 50:40:10 Dominant unit is med soft, thin, PS ₂ laminated, calcareous, biotitic, light brown-grey-green, altered metabasite. Laminations defined by brown bio folia, light grey-white calcite + Qtz + sericite + dol?, and medium to dark green hornblende + chl? Ad. Top 3" ^{hard} against 3D is incipiently brecciated in abundant calcite infilling fractures. S ₂ surfaces are a dull ^{light} green-grey. ^{Entire interval} contains abundant thin fractures infilled in calcite. Interbedded in metabasite are thin intervals of moderately hard, dark grey-green, locally moderately calcareous, calc-silicate phyllite. Calc-silicate bands are thin, PS ₂ laminated and range in thickness from 5" to 1.0'. Muscovs are // to S ₂ . 104.3 - 104.9 is highly broken due to folding? white pegmatitic Qtz vein. Muscovs are highly broken + incipiently brecciated. 101 - 103.3 is broken along local steep fractured muscov.

CURRAGH RESOURCES INC.
Lithologic Log

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
											103.3-EOI \bar{v} broken along fractures, very O.K.
	1110	17	1112	13				18	131D10		9m thick. (364 #) Trace
				37							Mud hard, dark grey \bar{v} local green hue, thin PS ₂ laminated, moderately carbonaceous, calc-silicate phyllite. S ₂ surfaces are dull black \bar{v} local minor bio + chl flakes. Fracture surfaces have abundant orange rust coatings. Unit contains only local \bar{v} minor thin light grey-green "feathers", qtz \neq minor calcite \pm apple green epidote bands aligned // to S ₂ . Top 5' of unit contains abundant steep rusted fractures. Carbon is locally "bleached" out in thin bands within this interval. Thin fractures are infilled \bar{v} calcite. Worked at 108.3 is highly broken + fractured, calcaceous, rusted, 3" thick, mud soft metabasite band. TOI=110.8 \bar{v} broken due to fracturing, very good. 110.8-EOE \bar{v} broken, very good.
	1122	2	1116	17				19	131D10		\pm 9 Mud hard, thin, PS ₂ laminated, medium green-grey to locally black \bar{v} green hue, calc silicate phyllite. Comassional banding, is ^{locally} well developed - defined by 2mm to 2cm thick concentrations of brown bio silica, medium to dark green hornblende \pm chl? \pm qtz? ^{bands} and finely crystalline bands of qtz + apple green epidote + blue-green hornblende. \pm minor calcite. Banding defines S ₂ . Carbon occurs locally on S ₂ partings in ^{local} intervals up to 10' thick. Core is dark grey to black + S ₂ is dull

Lithologic Log

Date: Oct 19/88 Logged By: CVK

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
											carbon black within these intervals. White cream infills local minor steep fractures. Core slightly broken, recovery good. No faults.
L	11617		11703					110	131D10	± GRA (INCIPENT) ± GAUGE ± 9 Trace	TOI-172.5 is highly fractured, medium to pale green, moderately hard, fine-grained, thin PS2-laminated, calc-silicate. Contains local bands, ranging from 0.5 cm - 5 cm consisting of pale apple green epidote/hornblende-quartz with traces of fine biotite. Biotite also defines local thin bands parallel S2. Locally traces of carbon in thin folia also define dark gray to black bands parallel S2. Banding commonly disrupted & displaced by thin abundant fractures which are steep (30° core axis). Thin apple-green rimmed by blue green banding within biotite-matrix is absent in thin unit so probable retrograding? Fractures infilled by coarse white calcite. Interval 172.5-177.0 is very soft, tan green mud gauge and brecciated rubble. Margins of gauge not recovered, rubble consists of highly fractured, very hard, dull light green calc-silicate. Fractures are infilled with white quartz. Only 1.3 feet recovered. Interval 177-EOI is same highly fractured, moderately hard, light green. 3D as @ TOI.
											TOI-172.5 slightly broken w/ good recovery // 172.5-177 gauge & bra w/ 1.3 ft recovered // 177-EOI slightly broken w/ good recovery
L	117183		11827					111	11C1D8	Dominant unit is moderately soft, variegated, pale green-gray, chloritic schist. Abundant chlorite occurs in elongate, pale green clots up to 0.5 cm thick. Chlorite possibly relict andalusite (?). Clot elongate parallel S2 cleage. S2 surfaces are clothed light silvery gray and dull pale green. Local minor biotite developed in thin folia parallel S2. Core made broken w/ good recovery.	

Lithologic Log

Date: Apr 19/08 Logged By: CVA/LCP

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
L	11812	11816	4	8					1112	111F1415	<p>Bio - - - (ICDB) 35. 85:15</p> <p>Moderately soft, thinly P52-laminated, pale tan cream, brown, and dull green banded, altered metabasite. Banding defined by local biotite, chlorite, chloritic variations and ranges on scale 0.5 cm - 3.0 cm. Banding parallel S2. Tabularized w/ metabasite on scale. 3 inches - 10 inches are intervals of pale green-grey, chlorite-clotted, moderately soft, P52-foliated, variscularous schist. Unit same as higher ICDB (Unit # 11) Margins of ICDB bands are parallel S2 and sharp.</p> <p>Entire interval contains local thin fractures infilled w/ fine and lesser albite. Fractures steep - generally less than 20° to core axis.</p> <p>S2 for metabasite range from dull olive green to medium brown.</p> <p>TOI - 183.5 med. broken w/ good recovery // 183.5 - 185.5 very broken on local fractures w/ good recovery // 185.5 - FOI med. broken w/ good recovery.</p>
L	11816	11914	4	3					1113	111C1218	<p>Moderately soft, light to medium green-grey, chlorite-clotted, variscularous schist. Moderately biotitic. S2 surfaces light greyish green w/ local med. green. Lath's of chlorite (clots on cut surface) up to 0.5 cm long. Biotite occurs locally developed in thin folia and bands parallel S2. Minor enclausite (fine) associated with biotite bands locally. Biotite bands less than 0.5 cm thick and are parallel S2. Some local thin white quartz veinlets / commonly w/ dark green chlorite infilling fractures. Veinlets slightly broken because of light filling.</p> <p>TOI - 188.5 very broken w/ good recovery // 188.5 - 189.7 slightly broken w/ good recovery // 189.7 - FOI med. broken along fractures & S2 w/ good recovery.</p>

Code	From	To	Recov.	No.	Unit	Description
L	11914	11919	3	114	11F1	B10
		60	7			Thinly PS2-laminated, dull medium green w/ local thin brown bands, moderately soft to locally hard, locally moderately dolomitic and metabasitic. Top 1 foot is moderately hard with abundant thin qtz-rich laminas - no biotite in this interval. Remaining unit moderately soft and contains thinly laminated brown biotite bands ranging 0.5 cm - 3.0 cm thick. Biotite bands commonly have cores of pale green chlorite. Dolomite occurs locally associated w/ biotite and chlorite bands. S2 surfaces are dull medium green grey and locally contain small brown biotite flakes. Local minor medium green chlorite clots. Clotting only locally poorly developed. Medium dull green colour, lack of chlorite clotting, thinly laminated textures, and local biotite indicates metabasitic rather than metapelite.
						Core med. broken w/ good recovery
L	11919	12117	0	115	11C1018	[1C1018] (1F14) 90:10
		66	1			Dominant unit is moderately soft light brown grey to locally green grey, PS2-foliated, noncalcareous, chlorite-biotite schist. Poorly PS2-banded w/ banding defined by fine brown biotite in matrix. Locally biotite associated w/ minor pinkish-white enclausite. Contains abundant chlorite clots averaging 0.5 cm long - elongate in S2. S2 surfaces are dull brown grey w/ local med. to dk green chlorite clots.
						210.0-211.8 is light tannish green, and tan-white striped, moderately soft, dolomitic, slightly altered metabasite. Banding planar and defined by jagged thin chlorite folia alternating w/ thicker tan grey dolomite. Margins sharp and parallel S2. Unit locally altered to dull yellow tan.
						T&I-212 med. broken on S2, recovery good / 212-214 very broken, recovery good / 214-201 slightly broken, recovery good. Last 8" abundant thin white quartz veins.

Code	From	To	Recov.	No.	Unit	Description
I	10	14 16	20 22 24	26 28 30	34 35	
L	121170	121211 74		116	11F\$1	Homogeneous, thin, banded, dolomitic, medium green metabasite. Moderately soft. SZ surfaces are dull medium green w/ local dark green chlorite specks. Chlorite schist. Abundant chlorite defines medium green PSZ-bands ranging from 1mm - 5mm. White tan dolomite finely dissemin within these bands and localy forms thin laminae parallel SZ. No biotite. Top contact slightly bixiated against veins & lower contact also slightly bixiated. TOI-220 slightly broken, good recovery / 220-EOI very broken on steep fracture, recovery good.
L	121211	121616 81		117	11CID10	± 8 minor (1F\$) TRACE light brown-green to locally green-brown, noncalcareous, PSZ-foliated, biotite-chlorite ± andalusite schist. SZ surfaces mottled brown, pale green, and dark green. Contains abundant poorly defined brown biotite-andalusite bands ranging up to 3cm thick. Also contains abundant chlorite clots which commonly have biotite-andalusite overgrowths; clots range up to 1cm long; elongate parallel SZ. Local intervals up to 1.5' thick, dominantly near EOI - biotite-in-matrix does not occur - only occurs in biotite-andalusite bands/clots. 239.5-240.2 is light olive green and tan-white thinly banded, moderately soft, dolomitic metabasite. Banding less than 0.5 cm thick and defined by local concentrations of chlorite and dolomite, light brown biotite developed in veins parallel SZ. Contains local tiny black specks of a nonmagnetic mineral. SZ surfaces are dull, light apple green. Also has local light brown biotite flakes. Margins sharp parallel SZ. TOI-232 med. broken, recovery good / 232-234.2 very broken on fracture, recovery good / 234.2-242.5 slightly broken, recovery good / 242.5-245.0 med. broken on steep fracture, / 245-264.9 med. broken, rec. good / 250-251.4 highly broken, pyroclastic qtz w/ C.B.I / 1987 E-3A 264.9-EOI very broken recovery good. No obvious fault.

1987 E-3A

Lithologic Log

Date: Oct 19/88 Logged By: CVR/LCP

Core	From	To	Recov.	No.	Unit	Description
I	10	14 16 20	22 24 26 28	30 34 35		
L	1216160	1216192 821		118	11C1D8	(IF & BIO) 75:25 TOI - 267.5 Thinly laminated, medium to dark green, light brown, and light tan, moderately soft, dolomitic metabasite. Local concentrations of thin brown biotite folia define PS2 parallel bands up to 2cm thick. Contains abundant dolomite in ^{tan} matrix and bands parallel S2. S2 surfaces variable - light, dull brown along biotite folia and clotted dark green and tan along chlorite-dolomite folia. Margins of metabasite sharp parallel S2. 267.5 - 268.7 Similar to Unit # 17 () only biotite occurs only in biotite-andalusite clots with no biotite in matrix. 268.7 - 269.2 same metabasite as higher only dolomite less abundant. Biotite bands less than 0.5cm thick. Core med. broken, recovery good.
L	1216192	1310168 93 5		119	11C1D10	8 (IF & BIO) MINOR Very light brown green, PS2-foliated, noncalcareous, ^{muscovite-} chlorite slightly > biotite + andalusite schist. Brown biotite incipiently enveloped in matrix. Biotite more abundant in elongate clots which commonly contain light pink andalusite. Clots range up to 1cm thick. Light green chlorite occurs in abundant clots ranging up to 0.5cm across. Chlorite also dominant component in matrix. S2 surface dominantly clotted silvery grey and dull medium green. Locally S2 has abundant brown biotite flakes. Core med. broken, recovery good. No obvious faults. Centered @ 296' in 2 inch band of pale green and brown, dolomitic PS2-foliated metabasite. Margins parallel S2.

Code	From	To	Recov.	No.	Unit	Description
	10 14 16 20 22 24 26 28 30 34 35					
L	1310168	131145 959		1210	11F1	Homogeneous, finely laminated, med. green and tan, moderately soft, foliatic metabasite. Relict diabasic texture preserved. SZ surfaces are clotted med green w/ lighter apple green and local thin tan patches. Abundant foliatic occurs in thin tan laminae and fine specks which define the relict diabasic texture. No visible biotite. Contains local concentrations of fine black specks (opaque mineral?). Core slightly broken, recovery good. Margins sharp parallel SZ.
L	131145	131444 105/0		121	11C1D GARNET	Medium brown-green, noncalcareous, P2-foliated, moderately soft, chlorite-biotite-andalusite garnet schist. Matrix comprised of biotite ± chlorite in thin brown and green laminae which are locally concentrated to form diffuse bands ranging from 0.5cm - 4cm in thickness. Within matrix are abundant subrounded chlorite clots and biotite with thin pink andalusite intergrowths in clots up to 1cm thick. Garnet is pink and occurs locally in small subhedral porphyroblasts up to 3mm long. Garnets not present below about 329.5 feet. TOI-320.5 very broken on local steep fractures, rec. good / 320.5- EOI med. broken, rec. good
L	131444	131515 107/1		122	11F1 (1CD) 90110	Moderately soft, foliatic, med green & tan-white, P2-laminated metabasite. SZ surfaces are clotted pale apple green, med green w/ local patches of light tan foliatic. Abundant med green chlorite occurs in very thin laminae separated by thicker foliatic - gte bands or laminae. Locally a relict diabasic texture defined by white-tan foliatic specks. Margins sharp parallel SZ. Metabasite contains thin bands of moderately hard, light brown biotite-chlorite schist.

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
											Bands are 6 inches thick lowest band contains small subrounded, med green chlorite clots (ie ICD metapelite) Core med broken, rec good
L	13151	5	13174	4					1213	11CIDB	light green-brown, noncalcareous, chlorite > biotite ± andalusite, PS2-foliated schist. Matrix consists of dominant pale green to locally med green chlorite + muscovite + quartz forming thin PS2-laminae. Pale green, subrounded, chlorite clots occur dominantly in upper half of unit. Chlorite clots appear to be replaced by biotite-andalusite clots in lower half of unit. S2 surfaces are dominantly light shiny grey with abundant pale to medium green chlorite and lesser disgenierated brown biotite. TOI - 357 med broken along local fractures / 357-359.6 slightly broken, rec good / 359.6-360.8, very broken w/ local minor incipient gouge parallel S2, rec good / 360.8 - EOI slightly broken, rec good
L	13174	4	13177	4					1214	11F151	B10 (ICD B) 65135 Very mixed unit consisting of interbedded, thinly laminated metabasite and light green-brown, clotted schist. Metabasite bands are moderately soft to hard and contain locally thick bands of medium green chlorite-quartz - minor dolomite and thinner brown biotite-dolomite bands. Possibly the hard band contains hornblende. Margins with clotted schist gradational over 1 inch parallel S2 Clotted schist med soft, noncalcareous, with abundant med green chlorite clots elongate parallel S2. Biotite-andalusite clots absent. Schist intervals range 2 in - 7 in thick Core slightly broken on S2, rec good

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
L	1317	174	1318	153					1215	11C1D18	<p>Clotted, pale to medium green, med soft, noncalcareous, P52-foliated, chlorite-muscovite-quartz-mirror biotite schist. As go down unit, it becomes lighter green in colour. Contains abundant large, medium greens w/ local brown biotite clots up to 1.5 cm long. Bottom 3 feet of interval has less intense clotting. S2 surfaces are patchy light brown, dark green, and silvery grey and become noticeably lighter near EOI. Last 3 feet contains abundant open thin light tan grey, muscovite folia defining S2 — i.e. matrix consists dominantly of muscovite.</p> <p>TOI - 382.5 interval / 382.5 - EOI very broken on local steep features parallel core axis. Rec OK.</p>
L	1318	153	1319	121					1216	11C1D18	<p>BXA + GOUGE</p> <p>TOI - 387 very soft pale green, incipient flaky med gouge. Within gouge have incipiently biotite light dull green chlorite schist fragments. Major fracture 20°/000 relative S2. Slidescans in gouge indicate strike slip.</p> <p>387 - EOI highly (incipiently) fractured and biotite, light to medium green, thin P52-foliated, chloritic schist. S2 surfaces are dull green grey. Dominant fractures are steep (<20° core axis). Fractures infilled w/ white quartz + trace calcite. Appears to be slight displacement along fractures.</p> <p>388.6 - 389.5 highly fractured & broken, gts vein w/ abundant thin laminated chlorite filling fractures. Bottom 1.5 feet steep features are incipiently gouged. Core very broken. Rec good.</p>

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
L	13912	14103	5					1217	11F101		± 4 MINOR ± 4 MINOR B10 (ICD B) 95:05 TOE-394 and 395.2-395.7 are green to pale brown, soft, P52-foliated, noncalcareous chlorite-muscovite-biotite schist. Unit characterized by locally abundant dark green, subrounded to irregular chlorite clots. Biotite disseminated in matrix (pale brown) and also forms dark brown biotite-andalusite bands and clots elongate parallel S2. Major unit is dark green, planar P52-foliated, locally slightly dolomitic chlorite-hornblende schist. Contains thin bands parallel S2 which are dark brown from locally developed metamorphic biotite. Margins of unit are sharp parallel S2. Locally altered to pale tan with more extensively developed dolomite. S2 surfaces dark green with patchy biotite development. Core intact except for slightly broken 395.2-395.7 Recovery good
		1230									
L	14103	14116	0					1218	11C1D1		(1F B10 ± MINOR) (10QD) 40:30:30 Major unit is moderately soft, greenish-brown, noncalcareous, P52-foliated, biotite-chlorite-andalusite schist. Contains numerous subrounded dark green chlorite clots elongate in S2. Also has dark brown, irregular biotite-andalusite clots and bands. S2 surfaces are silvery brown. Interval contains interbands of moderately soft, locally slightly dolomitic, planar P52-laminated, brown to tan biotite-chlorite schist. More consistently brown. Rare green typically associated with metabasite. Thin bands present in 2.5 and 0.3 feet thick locally (2cm) thick altered to light tan and more dolomitic. Margins sharp parallel S2. Thicker metabasite extensively fractured w/ steep qtz veins @ 15° core axis. Qtz veins also extensively fractured. Core read below, recovery good
		1250									

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
L	14110	0	14131	5	1	1219	11C1D10	[100] Moderately soft, PS2-foliated, grey-brown, noncalcareous, biotite-andalusite-chlorite-quartz schist. Minor irregular, scattered, dark green chlorite clots. Minor small biotite-andalusite aggregates. SZ surfaces are micaceous brown w/ slightly silvery grey tinge/sheen. No garnets noted. Only minor chlorite readily visible. Core intact - recovery good.		
L	14131	5	14143	6	1	1310	11C1D10	(1F0 Bio) 75'25" Dominant unit essentially identical to last unit # 29 (410-435.1). Dark grey-brown, PS2-foliated, noncalcareous, biotite-chlorite-andalusite-quartz schist. Dark green chlorite clots and dark brown biotite-andalusite aggregates are scattered irregularly through schist. SZ surfaces grey w/ brownish biotite tinge. Contains scattered interbands of moderately hard, noncalcareous, PS2-planar laminated, dark green chlorite-biotite-hornblende schist. Contains 1-3 cm thick brown biotite bands. Biotite bands and external marginal contacts sharp parallel SZ. Metabasite range from 0.1-0.8 feet thick. Characterized by planar lamination and dark green colour (typically with slight bluish tinge). Core intact - recovery excellent.		
L	14143	6	14151	9	5	1311	11C1D1	→ ICD 4 minor. Moderately soft, noncalcareous, PS2-foliated biotite-chlorite-muscovite-andalusite-quartz schist. As go down DDH colour changes from grey brown to grey brownish grey and then back to grey brown. Change indicates slight increase in muscovite content. Contains scattered dark green chlorite clots and brown biotite-andalusite aggregates. SZ surfaces are shiny grey to silvery grey w/ brownish biotite tinge. TOI-452 intact w/ good recovery / 450-454.5 med. below w/ good recovery / 454.5-455.5 gauge w/ qtz vein fragments, rec. good / 455.5-EOI intact w/ good rec. C.R.I. 1987 E-3A No major faults		

Code	From	To	Recov.	No.	Unit	Description
	10 14 16 20	22 24 26 28 30 34 35				
L	14519.5	14810.9 146.6		1312	11C1D10	(IF \$) 70:30 Intervals 459.5-461.7, 469.1-470.2, 477.8-480.9 consist of medium to dark green, moderately soft, P52-foliated, moderately dolomitic chloritic schist. SZ surfaces are micaceous medium dark green. Contains thin, scattered, discontinuous, SZ shpping needed by greenish grey dolomite-rich laminae. Marginal contacts gnarled SZ. Not readily able to pick margin because of gradual fading in of biotite and extreme deformation of chlorite clots in enclosing schist. Enclosed by grey-brown, noncalcareous, P52-foliated, biotite-muscovite-chlorite-andalusite schist. Dark green chlorite clots range from 1cm scattered subrounded clots, to much more abundant, fine (1-2mm) subrounded clots. Minor biotite-andalusite aggregates. Clots generally smaller and more flattened in SZ foliation adjacent to metabasite. Therefore contact looks gradational. SZ surfaces silvery white w/ slight patchy brown, biotite tinge. TDI-463 und. taken, rec good / 463-EOT intact, rec good.
L	14810.9	14817.5 148.6		1313	11C1D10	→ (ICD4) 60:40 Moderately soft, P52-foliated, noncalcareous, biotite-muscovite-chlorite-quartz schist. Upper 4' is dark grey-brown with scattered, irregular dark green chlorite clots. SZ surface silvery grey w/ slight brown, biotite tinge. Gradual change as go down DDH to pale grey-brown schist. Chlorite clots are subrounded pale to medium green. SZ surfaces have silvery muscovite sheen. Core intact w/ good recovery. Alteration appears to be associated w/ next unit.

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
L	141817		141912	3					1314	1101Q#	(1CD4) 70:30 Greenish gray, extensively fractured, gneissitic gtz veins. Vein contains numerous randomly oriented schist clasts. Also contains interstitial calcite infilling fractures. Fractures cut across both gtz veins and enclosing schist. Schist is muscovite-bearing, pale green-gray, moderately soft, muscovite-chlorite-biotite-andalusite schist. Minor white biotite-andalusite clast. Faint brownish tinge from minor biotite in matrix. Vein has angle 180/10 relative to S2 and core axis. Core intact w/ good recovery.
L	141912	3	151016	6					1315	11C1D10	154 4 Moderately soft, noncalcareous, PS2-foliated, dark brown, biotite-chlorite-muscovite-andalusite-quartz schist. Chlorite forms large irregular to subrounded dark green clast elongate in S2. Minor dark brown biotite-andalusite compositional bands parallel S2 or irregular clast elongate in S2. S2 surfaces silvery w/ brownish biotite tinge. Uppermost 1 foot slightly altered to pale brown. Related to fractured gtz veins in immediately overlying unit. Schist contains a couple 1-3 cm dark green, moderately hard, slightly dolomitic hornblende-garnet-chlorite bands. Garnet as pale pink, 1-2 mm small irregular grains. However contact gradational into next unit. Core intact w/ good recovery.

Lithologic Log

Date: Oct 20/08 Logged By: LCP

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
L	15016	6	15118	3					1316	11CD164	<p>Moderately soft, pale cream, noncalcareous, muscovite-biotite-andalusite schist. Matrix consists dominantly of muscovite although locally minor biotite is present. Contains irregular to rounded, elongate, dark brown biotite-andalusite lenses/clots. Locally these are extensively altered to a pale cream muscovite and only relict texture is present. SZ surfaces are silvery cream. Minor interstitial pyrobitite infills fractures in pegmatitic white qtz veins. Upper and lower contacts are gradational. Core intact w/ good recovery.</p>
L	15118	3	15158	0					1317	11CD10	<p>Moderately soft, noncalcareous, PS2-foliated, medium brown to gray-brown biotite-muscovite-chlorite-andalusite-quartz schist. Biotite and lesser chlorite disseminated in matrix with muscovite. Also have med green to dark green relict, subrounded chlorite clots elongate in SZ-foliation. Overprinting chlorite clots are dark brown, irregular biotite-andalusite aggregates/clots. Minor quartz veins. In one locale they are extensively fractured. In another veins have pegmatitic pink andalusite associated w/ quartz. Upper contact gradational. Core intact w/ good recovery. SZ surfaces silvery to gray-silvery w/ slight brownish biotite tinges.</p>
L	15158	0	15171	5					1318	11CD164 → (1CD4) (1E4# Bio) BO:20: TRACE	<p>Top 0.6 feet consists of moderately soft, moderately calcareous, tan-green chlorite-calcite schist (i.e. altered metabasite). Biotite occurs as thin streaks parallel SZ locally forming bands up to 1cm thick. Margins sharp jointed SZ.</p>

Lithologic Log

Date: Oct 20/00 Logged By: KUP

Code	From				To				Recov.				No.				Unit	Description
	10	14	16	20	22	24	26	28	30	34	35	1	2	3	4			
																	<p>Dominant unit consists of med soft, micaceous pale grey → cream musc + bio + andalusite schist. Matrix is dominantly musc in minor bio. Schist contains irregular bands + lenses of dark brown bio + andal up to 1 cm thick elongate // to S₂. Locally, bio-andalusite lenses are absent - all that remains are smaller sub-rounded pale green chl-clots. Minor peg vein gtz near FOI contains coarse pink andalusite. Alteration possibly associated in gowgs as described below.</p> <p>TOI - 562.5 core intact, very good</p> <p>562.5 - 563.1 med gowgs - pale cream highly altered, lower contact 000/05°, upper contact 000/25 very good</p> <p>563.1 - FOI med broken, very good</p> <p>S₂ surfaces silvery in faint patch, bio + dark green chl tinges.</p>	
	15171	5	151815	0												1319	11K1D10	<p>med soft, micaceous, PS₂ foliated, brown-green-grey, biotite musc + chl + andalusite schist. Minor scattered diffuse medium green chl lenses - equally minor irregular dark brown bio + andalusite bands + clots. Matrix contains diss musc + chl + bio.</p> <p>S₂ surfaces silvery grey. Minor peg gtz veins have coarse pink andalusite. Both upper + lower contacts gradual.</p> <p>Core in broken, very good.</p>

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
	1518	150	1610	150		1410	11C1D10 2	(1CD) 70:30		
			184	4				most soft, noncalcaneous, PS ₂ foliated, dark grey biotite + chl + andalusite schist. S ₂ surfaces are dark shiny grey. Contains scattered irregular bio + anst. - clots elongate // to S ₂ . Unit is mildly calcaneous rather than strongly calcaneous. Contains interbeds of regular 1CD. S ₂ surfaces silvery-grey, 70E-593.5 is most broken, sand very. 593.5-597.0 is \bar{u} broken, \bar{u} same incident gauge. Core loss of 1' 597.0-201 in to \bar{u} broken very o.k. This may be the favourable horizon ??? unfortunately without an orebody !!!		
	1610	150	1611	15		1411	11C1D10 8	(1FD) 65:35		
			186	4				Dominant unit is a most soft, noncalcaneous, green-brown PS ₂ foliated schist. Matrix contains chl + musc + minor bio. Scattered diffuse bands + clots consisting of biotite + andalusite + chlorite contains intervals up to 1' thick of noncalcaneous plume PS ₂ laminated medium green soft chl schist. Margins of chl schist sharp // to S ₂ . 1CD S ₂ surfaces are green-silver-grey + contain plates / streaks of py. Core is most broken - sand very.		
	1611	15	1612	14		1412	11C1D10 8			
			190	2				Same as #41 only does not contain metabasite		

Lithologic Log

Date: Oct 20/88 Logged By: CLP

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20	22 24 26 28	30 34 35	
						Interbeds
						TOI - 615.0 \bar{v} broken very good.
						615.0 - 617.0 \bar{m} broken "
						617.0 - 617.5 \bar{v} broken "
						617.5 - 601 \bar{m} to \bar{v} broken very good.
	161314 0	161319 0 194 8		1413	11C1D14	± 68
						Most soft micaceous, pale cream-green musc + chl schist. Texturally, we can see \bar{v} elongate relict clots which are more musc + minor chl. Locally relict clots are preserved as biof adal aggregates in fine grained mtx of musc. Near EOT alteration less intense. Bio + chl occur both in mtx + S2 // clots. Alteration appears to be associated in incipiently developed fracture cleavage in orientation at 000/35°.
						Minor biotite + minor py. Pyg white vein gtz has associated pink andalusite. Core is most broken, very good.
	161319 0	161415 5 196 7		1414	11F1E1	(1EDB) 60:40
						TOI - 642.5 soft, dolomitic, medium olive green, chl schist. Thinly banded between dark green chl + light green dolomitic bands up to 5cm thick S2 surfaces shiny olive green. Rest of interval is soft micaceous brown-green biotite-chl schist. Biotite + chl less in mtx, locally abundant fine sub-rounded chl clots elongate // to S2.
						Core intact. Very good.

Lithologic Log

Date: Oct 20/88 Logged By: LCP

Code	From	To	Recov.	No.	Unit	Description	
1	10	14	16	20	22 24 26 28 30	34 35	
	16145	5	16165	0	145	11F15	I 4
				202	7		
							Soft, slightly to med dolomitic, PS ₂ foliated chl schist. Colour ranges in unaltered portions dark green in altered portions pale olive green. Unit is poorly CS ₂ foliated in dark green chl stripes delimiting S ₂ + lighter coloured slab bands between these stripes. S ₂ surfaces are dark green chloritic ranging to pale olive green in altered intervals. Cleavage is through entire interval - No select texture.
							ROI - 657.0 intact
							657.0 - 659.0 in broken to in broken very good.
							659.0 - EOT in broken, very good.
	16165	0	16171	7	146	11C1D1B	
				204	7		
							Med soft PS ₂ foliated noncalcareous, pale green chl + musc schist, locally contains small medium grained chl clots delimiting pelitic regions. Locally faint brown tinge due to bio in matrix. Both contacts sharp, // to S ₂ .
							Core is in broken, very O.K
							At 667.5 there is 0.2' of incipient rubble zone, very O.K
	16171	7	16185	9	147	11F15	minor
				209	1		
							Dark green med soft to hard PS ₂ laminated, slightly dolomitic chl schist. S ₂ surfaces dark micaceous green. Upper 3/4 of interval is fine grained. At bottom of interval more coarse grained, x-talino, in poorly developed CS ₂ fabric in dark green chl stripes separating dolomitic "microlithons."

separating dolomitic "microlithons."

Lithologic Log

Date: Oct 20/88 Logged By: CCP

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24 26 28	30 34 35			
						Core intact very good.
	161815 9	161913 8 211 5		1418	11VFH	\$
						Soft, pale olive green, PS ₂ foliated chl + musc schist. Unit is dolomitic - dolomite desc throughout m _{tz} . Start of alteration at top that has is rapid - is within an inch - from 689 to 692 extremely well developed conjugate box fracture set with chl + qtz infilling fractures. Also extremely soft bluish-green - pink porphyritic mineral infilling fractures. In place? - Not there as a result of drilling? Extensive alteration likely related to this fracture set. Fractures are 30° + 45° to core axis in opposite directions.
						Core is intact 702 - 689.0
						689 - 692.0 Slightly → med. hard.
						692 - 702 intact, very good
	161913 8	171119 0 219 2		1419	11VFH	\$
						Dark green, PS ₂ foliated, slightly dolomitic med-soft → hard, chl schist. S ₂ are shiny micaceous dark green. Unit ranges from fine to medium xtaline. Contains minor qtz-calcite veins.
						Core intact - very perfect.
	171119 0	171317 3 224 7		1510	11C17B	
						Med soft, PS ₂ foliated, noncalciferous, chl + musc + bio schist. Overall colour pale green to pale brown-green in m _{tz} consisting of desc chl musc + bio. Abundant small 1-5mm lenseid chl clots constitute 30-40% of schist.

Code	From	To	Recov.	No.	Unit	Description	
1	10	14	16	20	22 24 26 28 30	34 35	
						70E - 725.5 intact, recryst perfect	
						725.5 - 726.5 \bar{v} broken + rubble, recryst O.K.	
						726.5 - 737 intact recryst perfect	
						733 - 734 rubble recryst O.K.	
						734 - EOT intact recryst perfect.	
	17127	3	17147	0	151	11F1F	(1000) 90:10
			227	7			Dominant unit \bar{v} similar to unit # 49. Soft, slightly dolomitic, PS ₂ foliated dark green. Contains a 1' thick interval of dark brown, micaceous, pelitic schist in the center of the 1F. S ₂ surfaces of 1F dark micaceous green. Core intact, recryst perfect.
	17147	0	17154	7	152	11F14F	"Zebra Rock"
			230	0			Soft, most dolomitic CS ₂ foliated, medium olive green, dol-chl schist, chl forms thin dark green laminae \parallel to S ₂ \bar{v} lighter dol rich interbeds. Straining on order of 1cm thick. Minor interbeds are PS ₂ foliated.
							70E - 750 Intact.
							750 - 751.5 Initially gneissed } Recryst Perfect.
							751.5 - EOT Intact
	17154	7	17160	0	153	11F1F	\pm B10
			231	6			Similar to # 51 (737.0 - 747.0). Soft, dark green, slightly dolomitic contains diffuse brown bands \parallel to S ₂ which are green-brown \bar{v} metamorphic biotite.

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20	22 24 26 28	30 34 35	
						Core intact, very perfect
	17610 0	17711 0		1514	11FM13	"Lepidolite Rock"
		235 0				Soft, dolomitic, pale olive-green, chl-dol schist. CS ₂ foliated in thin dark green chl laminae + thin thick tan-green dol - rich interbeds. Contains quartz + streaks of bright blue-green "fishite". As go down interval chl becomes progressively greener from green chl → musc. S ₂ surfaces silvery.
						70E - 762.0 in broken
						762 - 764.0 intact.
						764 - 766.0 in broken in local subtlely streaked.
						766 - 769 intact
						769 - EOT in broken very good.
						Unit is progressively more altered moving down the drill-hole.
	17711 0	17811 5		1515	11C144	
		238 2				Soft, unconsolidated, green, musc + chl schist S ₂ surfaces pale silvery-green. Unit is PS ₂ foliated. Texturally, one can see relict lamellar clds which now consist mostly of musc. Unit extremely muscovite rich.
						Core in broken in visible sections + incipient gouge.
						Recovery is reasonable. Cannot see major fault although may be related to faulting.

Lithologic Log

Date: Oct 20 / 88 Logged By: LCP

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
	171811		181319	0					1516	11C1D16	4
			255	7							
											<p>Silt. micaceous, pale grey musc + bio + andalusite + minor chl schist. Mtx consists dominantly of musc in minor dark bio + chl. Contains large irregular bio + andalusite clots + bands elongate // to S₂ locally contains minor pale green chl lenses / clots. Proportion of clots varies from 5 to 40%.</p> <p>702 - 783.0 in broken = minor incipient gneiss very good</p> <p>7830 - 807 intact, very good</p>
	181517	0	181518	7					1517	11C1D14	7 BXA
			261	7							
											<p>Similar to # 55 771.0 → 781.5. Relict bio + andalusite clots are now muscovite in muscovite schist. Minor gtz veins - opaque white to coarse pink andalusite. Locally, get intervals of incipient to well developed breccia apparently along steep fractures. BXA includes clast of schist + gtz vein material in a flakey almost gneiss mtx.</p> <p>702 - 842.0 Intact, good very</p> <p>842.0 - 850.5 Breccia + Gneiss core is competent, only mud broken. Top contact slightly steeper than S₂ 000/50°</p> <p>Bottom contact lost a rubble</p> <p>Internal fabric appears to be slightly steeper than S₂</p> <p>850.5 - 855.5 in broken, very good.</p> <p>855.5 - 857.0 incipiently brecciated, only slightly mud broken</p> <p>Fractures 180/45° core in broken, very good.</p> <p>857 - 802 core intact, very is good.</p> <p>Likely not a significant fault.</p>

Lithologic Log

Date: Oct 30/88 Logged By: LLP

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16 20	22 24 26 28 30 34 35				
	181510 5	191013 5 275 4		1510	11C1D16 4	(1CD4) 75:25 Soft, noncalcareous, pale cream grey, musc-schist. Contains lens to 3cm thick irregular bio + andalusite clots // to S ₂ . Locally these clots are altered to musc for 1' to 5' intervals. S ₂ surfaces are silvery-cream. At 894.0, 0.2 inch thick band of pale highly altered olive "metabasite" (similar to 5D4) upper + lower contacts gradational. This interval displays an intermediate degree of alteration. Core intact. Recv. Perfect.
	191013 5	191117 5 279 7		1519	11C1D16 4	Minor Mod soft, PS ₂ foliated, musc + bio + chl + andalusite schist. Overall colour pale green-brown caused by dis ⁵ bio + chl in musc mtx. Biotite rich mtx typically forms diffuse bands several cm thick // to S ₂ . Contains irregular bio + chl + andalusite clots up to 2cm thick // to S ₂ . Most as strongly altered as underlying 1CD64 because it still contains mtx biotite - but it is definitely altered. Minor neg white qtz occurs as thin lenses // to S ₂ . Core intact, recryst. good.
	191117 5	191317 0 282 5		1610	11C1D16 4	Soft, PS ₂ foliated, noncalcareous, musc + chl + qtz schist. Contains minor irregular bio + andalusite bands & clots. Overall colour greenish-cream w/ dark brown spots. Locally bio + andalite clots altered to musc + chl.

Lithologic Log

Date: 07/20/88 Logged By: LCP

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24 26 28	30 34 35		
						S ₂ surfaces are silver-cream
						927 → 926.0 Intact, very good
						926.0 - 927.0 in section, locally incipiently fractured, very good
	191217 0	19132 0 284 1		161	11F141	± B ₂ g
						Most soft, P _{S2} foliated, pale cream, musc + gtz schist.
						Contains thin streaks + laminae of bright green "Fuchsinite"
						928.0 - 930.5 is a coherent bed, consisting of clasts -
						dominantly of opaque white mica gtz in a musc - "Fuchsinite"
						schistose matrix. S ₂ is steeper than higher up unit. Fractures
						in section are nearly // to core axis. Again - strong
						alteration overprint - fact that altered metabasite on either
						side of bed suggests that it is likely not significant.
						928.5 most broken
						929.2 rubble + incipient gorge } Very O.K
						EOI in broken
	191312 0	19144 0 287 7		162	11C1D14	
						Pale cream - most soft muscovite, musc + gtz schist.
						S ₂ surfaces are silver-cream, within schistose musc matrix
						there are white lenses typically of dm. musc +
						locally in lesser dip + andal. that classifies this
						unit as a highly altered pelite. No bright green
						"Fuchsinite" spots noted. Lower contact gradational. Upper
						contact marked by disappearance of bright green +
						appearance of thin + andal. cherts.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24 26 28 30 34 35				<p>TOI - 933.0 Intact</p> <p>933.0 - 937.0 ✓ broken → rubble & occasionally swags + hard esp 1/2 vein material along steep fractures.</p> <p>937.0 - EOT most broken</p> <p>Very good for mining intervals.</p>
	19144 0	191814 1 300 0		1613	11K1D16 4	<p>Similar to #58 (858.7 → 903.5) Most soft, P_{S2} foliated pale cream musc + chl schist. Contains numerous thin bands + irregular clots of bio + andal. Locally contains medium green chl clots which sometimes appear to be earlier than bio + andalusite + sometimes appear to be retrograde bio + andalusite. Proportion of bio ranges from 10% to 40% through the interval. Locally some bio occurs in m_{tr} S₂ surfaces and silvery-cream in locally developed patches, brown biotite.</p> <p>Cone is intact. Recovery is good.</p> <p>1' of sand/mud at 977, was removed as cave</p>
	191814 1	191916 0 303 6		1614	11K1D0 → 1C0	<p>Upper contact gradational. Noncalcareous, most hard, P_{S2} foliated bio + musc + qtz + andal schist. M_{tr} consists of bio + musc. Richly banded between dark brown bio rich & brownish grey, musc-rich intervals. Bio + andalusite tends to form bands instead clots because of extensive growth. S₂ surfaces silver-brown. Biotite ↑ musc, dense intervals. Contains minor thin peg qtz veins.</p> <p>Cone intact. Recovery GOOD. — EOH —</p>

PROJECT 88FX-01 SERIAL NO. _____ COORDINATES: N _____ DATE _____
 LOCATION: _____ HOLE SIZE _____ E _____ PACE _____ of _____
 LOGS: _____ INCLINATION _____ ELEVATION Oct 20 88

PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY
GEOTECHNICAL CORE LOG

DEPTH (10)	LENGTH OF RUN	CORE RECOVERY		RQD		HARDNESS	DEGREE OF BREAKAGE CATEGORY NO.		DEGREE OF WEATHERING	ROCK TYPE	BENDING DIP		BENDING JOINTS		CRACK JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		DEPTH	ANGLE			NO.	FREQ.	NO.	FREQ.			
16.5	7.8		0							204	11.1	1.9					Depth Rec RQD
22	5.5		0							214	10.7	2.7					447 9.9 9.0
26	8.0		0							224	10.8	7.1					455 8.2 2.1
32.5	4.4		0							235	10.3	3.7					463 7.8 3.9
37	5.5		0							245 1/2	11.1	4.7					467 4.1 .8
42	5.5		0							255	11.2	4.7					477 10.3 7.5
47	2.6		0							266	10.4	4.0					487 10.3 7.8
57	9.2		1.6							276 1/2	11.5	4.5					495 9.0 4.2
59	1.7									286 1/2	10.6	7.4					505 10.3 8.7
69	8.0		1.8							296 1/2	11.0	5.4					516 10.9 7.2
77	10.3		5.6							307	11.0	3.9					526 10.5 8.2
87	10.5		4.0							317	10.9	6.3					537 10.9 7.2
88	.9									327	11.3	3.9					547 10.8 9.0
97	9.5		5.6							337	10.1	5.2					557 10.4 8.3
99	2.4		1.1							347	10.7	7.4					567 10.5 6.6
107	8.5		1.1							357	10.3	1.7					577 10.2 3.8
117	11.3		2.2							367	10.7	4.8					586 10.5 3.5
127	10.6		5.4							377	10.3	9.0					596 9.0 .8
137	10.9		7.0							387	10.3	6.5					602 6.0
147	10.5		6.8							394	7.1	2.1					612 11.1 3.7
157	10.4		7.3							403	8.5	6.5					617 6.2 1.6
167	10.8		8.7							407	4.9	3.8					624 5.2 .8
177	6.8		3.4							417	10.5	9.2					627 2.8 1.8
187	11.7		4.5							427	10.2	9.5					637 10.5 3.8
193 1/2	7.0		.7							437	10.2	8.6					647 10.7 5.6

Fig. 1. Typical rock mechanics core log.

CONT. ON pg 2

PROJECT 88 FX-01 DRILLHOLE NO. _____ COORDINATES: N _____ DATE _____
 LOCATION: _____ HOLE SIZE _____ E _____ PAGE 2 of 2
 LOGGED _____ INCLINATION _____ ELEVATION Oct 20 88

P PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY
GEOTECHNICAL CORE LOG

DEPTH (10)	LEVEL OF RUN	CORE RECOVERY		RQD		HARDNESS	DEGREE OF BREAKAGE CATEGORY NO.	DEGREE OF WEATHERING	ROCK TYPE	DIPPING DIP		DIPPING JOINTS		CRACK JOINTS		COMMENTS
		LENGTH	S	LENGTH	S					DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
657		9.9		8.9					887	10.4		8.0				
664		7.1		2.1					897	10.1		8.8				
671		7.7		2.0					907	10.5		7.1				
677		6.1		4.8					917	10.1		9.0				
687		10.4		9.6					927	10.3		7.1				
697		10.3		8.1					935	10.5		2.5				
707		10.4		7.0					947	11.4		4.8				
717		10.3		9.2					957	10.3		3.6				
727		10.4		8.1					967	11.1		7.0				
737		11.1		7.0					977	10.1		7.7				
747		9.5		8.3					986	10.5		6.8				
757		10.3		9.2					986	10.4		10.4				
767		11.0		6.0												
775		8.9		3.2												
778		2.9		0												
787		9.4		5.0												
797		10.4		8.5												
807		10.7		7.4												
817		10.0		8.2												
837		10.3		8.5												
847		10.5		4.9												
850.5		3.3		0												
857		6.6		2.8												
867		10.5		8.3												
877		10.3		7.1												

EOH

Fig. 1. Typical rock mechanics core log.

Code	From			To			Feature	SYM	S ₀		S ₁		S ₂		Description
	10	14	16	20	22	24			26	28	32	34	38	40	
S				6.2 1210			P1S12							810	micaceous foliation
S				12.3 1410			P1S12							718	micaceous foliation
S				19.1 1612			P1S12							612	biotite foliation
S				23.8 1718			P1S12							710	micaceous foliation
S				29.6 1917			P1S12							619	micaceous foliation
S				36.3 1119			P1S12							618	micaceous foliation
S				40.1 1131			P1S12							71	carbonaceous foliation
S				46.0 1151			P1S12							613	carbonaceous folia
S				53.5 11812			P1S12							712	micaceous foliation
S				59.4 11915			P1S12							712	chlorite banding
S				64.0 12110			P1S12							717	salonite banding
S				69.8 121219			P1S12							713	micaceous foliation
S				75.3 121417			P1S12							710	micaceous foliation
S				81.4 121617			P1S12							716	chlorite banding
S				86.9 121815			P1S12							715	micaceous foliation
S				92.4 131013			P1S12							513	biotite folia
S				98.8 131214			P1S12							714	micaceous foliation
S				103.3 131319			P1S12							714	biotite folia
S				109.4 131519			P1S12							810	micaceous foliation
S				114.6 131716			P1S12							710	biotite banding
S				120.5 131915			P1S12							810	micaceous foliation
S				126.8 141116			P1S12							710	micaceous foliation
S				132.6 141315			P1S12							619	biotite banding in IF
S				138.1 141513			P1S12							716	micaceous foliation
S				144.3 141713			P1S12							618	micaceous foliation
S				151.2 141916			P1S12							618	micaceous foliation
S				155.4 151110			P1S12							712	micaceous foliation
S				162.2 151312			P1S12							616	biotite folia
S				167.0 151418			P1S12							715	micaceous foliation
S				175.6 151617			P1S12							613	micaceous foliation
S				178.6 151816			P1S12							710	micaceous foliation
S				185.0 161017			P1S12							615	micaceous foliation
S				190.8 161216			P1S12							510	micaceous foliation
S				192.6 161312			P1S12		310	0100					late fracture cleavage
S				197.2 161417			P1S12							710	micaceous foliation
S														618	Approaching S2 chl foliation

Code	From			To			Feature	SYM	S ₀		S ₁		S ₂		Description
	10	14	16	20	22	24			26	28	32	34	38	40	
S				201.8 16 16 12	0	P 15 R							7 10		chl foliation
S				208.8 16 18 15	0	P 15 R							7 B		approaching 122 / chl laminae
S				215.5 17 10 17	0	P 15 R							7 B		chl laminae
S				214.8 17 12 11	0	P 15 R							5 5		micaceous foliation
S				224.6 17 13 17	0	P 15 R		3 18	0 10 0				6 5		micaceous foliation
S				226.2 17 11 2	0	C 15 R				7 15	0 19 10		7 B		chl laminae in matrix
S				236.5 17 17 16	0	P 15 R							6 B		micaceous foliation
S				241.7 17 19 8	0	P 15 R							8 10		micaceous foliation
S				249.0 18 11 17	0	P 15 R							6 5		micaceous foliation
S				255.0 18 13 16	0	P 15 R							6 5		micaceous foliation
S				259.4 18 15 11	0	P 15 R							7 10		micaceous foliation
S									2 10	0 10 10					Plates incipient fracture change.
S				265.8 18 17 12	0	P 15 R							7 P		micaceous foliation
S				271.9 18 19 12	0	P 15 R							7 15		micaceous foliation
S									5 15	0 10 10					incipient metamorphism change
S				278.0 19 11 12	0	P 15 R							6 5		micaceous foliation
S				281.0 19 12 12	0	P 15 R							5 15		micaceous foliation
S				282.5 19 12 17		P 15 R							2 15		micaceous foliation
S				286.8 19 14 11	0	P 15 R							5 10		micaceous foliation
S				288.6 19 14 17		P 15 R							6 5		micaceous foliation
S				292.9 19 16 11		P 15 R M							6 10		fold nose - P22 micaceous foliation
S				299.4 19 18 4	0	P 15 R							6 5		micaceous foliation
S				303.3 19 19 15	0	P 15 R				2 10	0 10 10		6 10		S2 micaceous foliation - S1 compositional banding

~~EOH~~

Oct 8/1988

Proposed drill hole 88FX-01

Collared in 3D calc-silicates just above the 1CD schists.
location chosen because

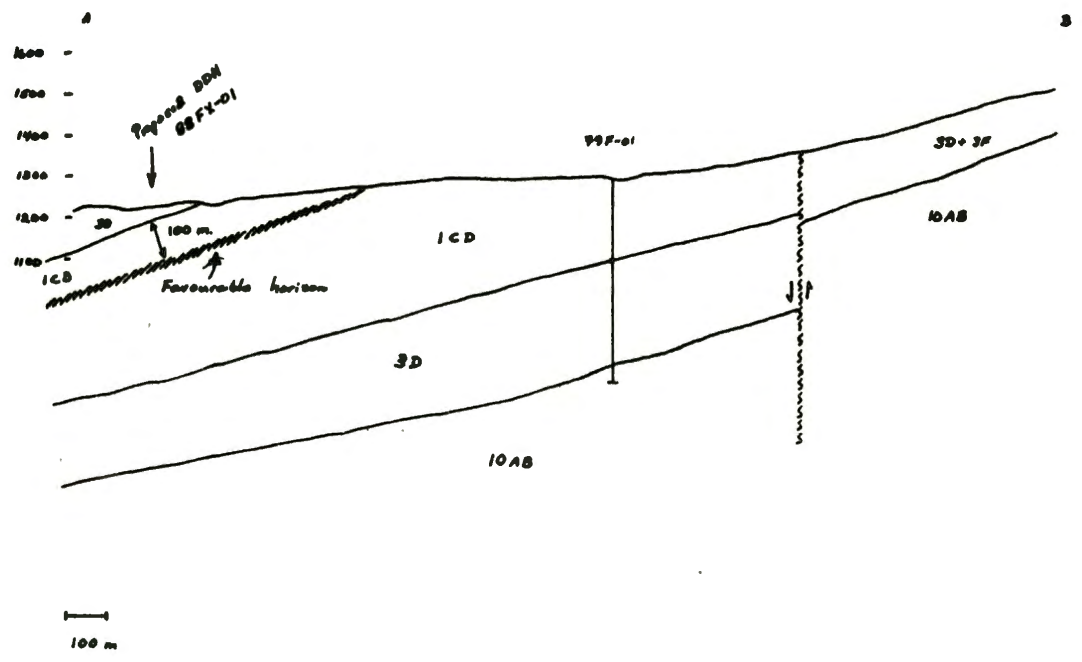
- 1.- contact between 1CD and 3D is exposed
- 2.- This contact includes 3A transitional lithologies indicating it is a conformable contact.
- 3.- from this location assessment work can be applied to HECK and TSS claims which are due in March, 1989.

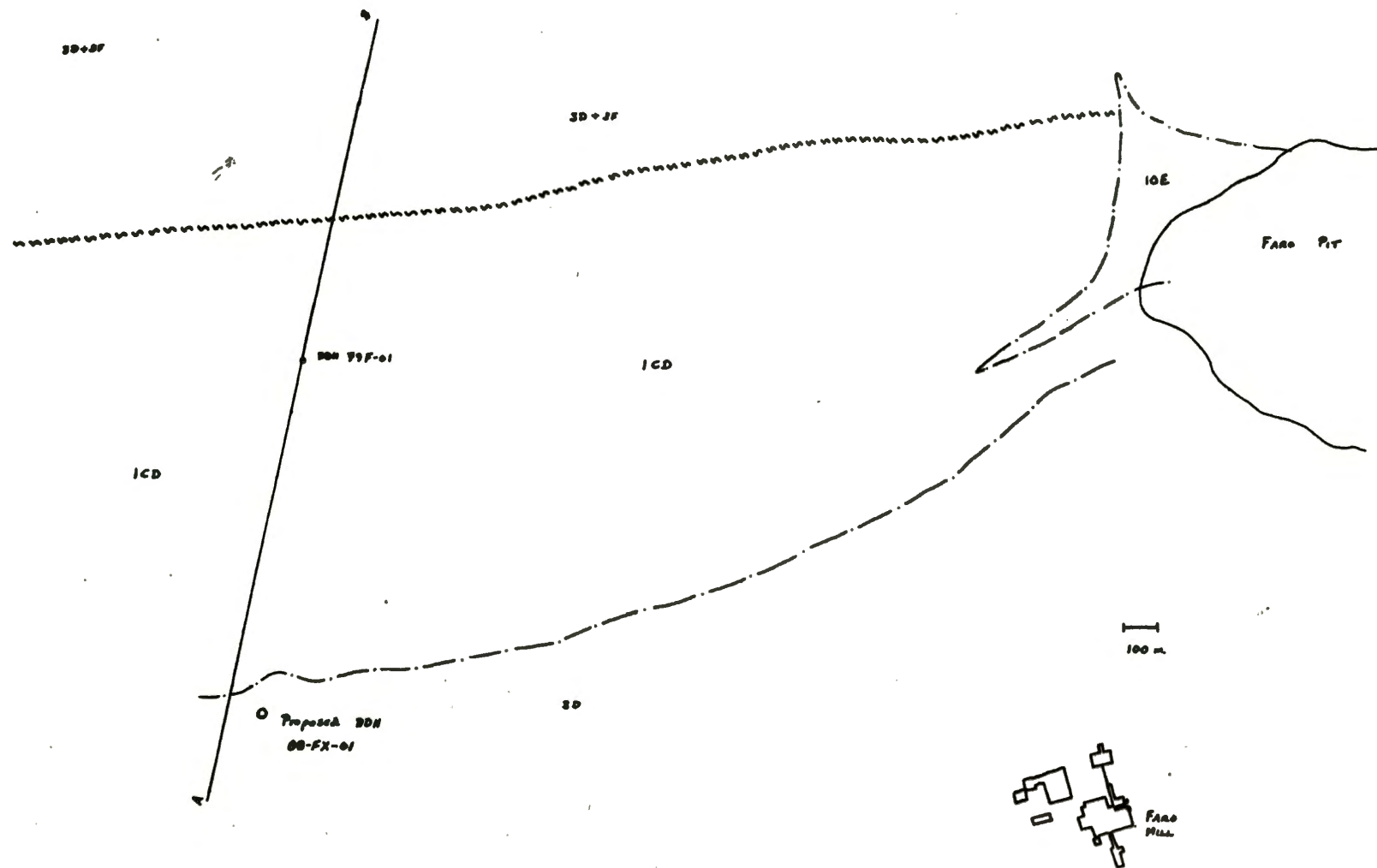
Target is the first 150 feet meters of 1CD schist beneath the 3D Calc-Silicate. This corresponds to the Faro Mine site mineralizations. Results from DDH 79F-01 indicates granite (10AB) should not be a problem.

Major mitigating concerns

- 1.- Collar location is SW of favourable curvilinear trend of deposits
- 2.- No strong soil geochemical anomalies.







DIAMOND DRILL CORE LOG

Date: _____

Hole Number: 89FX-01A

Reference Fabric Orientation Diagram:

Project: FARO NORTHWEST - 1989

Location: _____

Claim: _____

~~Terr. Plane~~
UTM Co-ords.: 6,915,610.1 N

581,350.9 E

Grid Co-ords: _____

Elevation: 1259m

All symmetry determinations looking

Total Depth: 2007 feet

_____ with _____ dipping

Inclination: -90° VERTICAL

_____ with dip azimuth _____.

Purpose: Deepen 88FX-01 for structure + geophysics

Reason hole Terminated: Drilled to target depth in 10E

Logged by: LCP

Date(s) Logged: SEPT 17-23, 1989

Drilling Contractor: ARCTIC

Size	CORE From	To	Collar Cased and Capped: <u>yes</u>
<u>NA</u>	<u>994</u>	<u>2007 feet</u>	

Hole Cemented: No Steel down Hole: No

Assay Lab: _____

Certificate No's: _____

Started: Aug 10/89 Completed: Aug 19/89

White pipe down hole for geophysics

Code	From		To		Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28		
	10	0	1919	14	0			11	#1	Drilled in 1988 @ 88FX-01 Interval 991-994.0 consists of grey mud and goo from the bottom of the DDH
	1919	14	0	1101	03	6		12	11C1D101	Moderately hard, noncalcareous, P52-foliated, medium brown, biotite-andalusite-quartz-garnet-staurolite-muscovite schist. Matrix colour is fine medium brown. Staurolite occurs as long honey brown grains. Contains compositional bands and lenses of dark brown biotite-frothy white andalusite aggregates. Aggregates and bands are parallel S2. Garnet occurs only very locally. S2 surfaces are shiny dark brown. Weak S3 circulation slugs marked by discontinuous pale tan muscovite streaks and laminae. These are paper thin and commonly less than 1cm in length. Locally late scuttling fractures are discontinuously infilled w/ fine pyrite. Fine thin alteration halo adjacent to fracture contains muscovite, chlorite, hornblende(?) Some D3 chevron-shaped minor folds are present in core. Core slightly broken w/ good recovery. Down to 997 feet shows some redilling as have re-encased all hole w/ attendant problems.
	1101	03	6	1101	31	0		13	11C1D164	(1C1D0) 60:40 Interbanding of moderately altered and unaltered biotite-andalusite-muscovite-quartz schist on a scale of 10's of cm to meters. Variations are gradational. Altered schist (1C1D64) consists of pale tan muscovite-quartz-schist w/ dark brown biotite-andalusite compositional bands and lenses. S2 surfaces are silvery white again with the dark brown spots. Dark brown lenses are elongate in S2. Moderately soft, noncalcareous. 11. Unaltered schist identical to schist described above for Unit # 2 (994-1003.6) S2 surfaces are silvery brown to dark brown. Major difference from altered schist is

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
						that matrix is medium brown from abundant fine disseminated biotite. Fine scuffing fractures have thin chlorite sludge locally these fractures are discontinuously infilled by fine quartz.
						Some pegmatitic white quartz vein. Qtz vein has micron coarse, pale pink andalusite.
						Core slightly broken w/ excellent recovery.
	1101310	³¹⁴ 1101311	² 0	14	11F131	
						Moderately hard, slightly kyanitic, PS2-foliated, medium pale green, chloritic schist. Minor thin discontinuous striping of dark green stripes parallel S2. Unit extensively altered adjacent to scuffing fracture - vesicled. Lower 2/3's of unit may actually be very chloritic, retrograded metapelite looks to have banded texture more typical of fresh andalusite-biotite bands.
						Core intact w/ good recovery.
	1101311	³⁴³ 111215	³ 3	15	11C1D101	± 4
						Moderately hard, medium dark brown, noncalcareous schist. Biotite-muscovite-andalusite-quartz ± garnet ± staurolite. Thickly banded w/ interbanding of coarse grained micaceous intervals and fine-grained gneiss intervals. Micaceous intervals characterized by thin gneiss bands and laminae. Also characterized by dark brown lenses and bands of fresh biotite-andalusite aggregates/clots. S2 surfaces are dark purplish brown. Locally schists also have bluish green chlorite clots as well as fresh biotite-andalusite clots - suggests an earlier retrograded metamorphic prograde growth.
						Very locally schist is slightly altered. One type is by appearance of abundant muscovite in matrix and dark brown biotite-andalusite aggregates. Another type is

Code	From		To		Recov.		No.		Unit	Description
	10	14 16	20 22 24	26 28 30	34 36					
										<p>by retrograding of metamorphic assemblage to green chlorite. Results in an overall green hue to the schist.</p> <p>Core slightly broken w/ good recovery</p> <p>Lower contact to next unit is gradational.</p>
	111215	³⁴⁴ 111219					16		11C1D101	<p>4 MINOR</p> <p>Moderately soft, non-calcareous, dark brown to greenish brown, biotite-andalusite-quartz muscovite schist. SZ surfaces are purplish brown. Distinguished from previous unit largely by lack of compositional banding - i.e. lacks the thin mica glass bands. Instead have uniform biotite brown w/ some andalusite clumps. Near EOE have some muscovite-rich matrix which is pale tan containing dark brown biotite-andalusite aggregates. Also have thin chlorite-muscovite selvages around thin, late, scuttling calcite-pyrite fractures.</p> <p>Upper contact gradational lower contact sharp.</p>
	111219	³⁴⁴ 111310					17		11F131	<p>B10</p> <p>Moderately soft to soft, PS2-foliated, slightly calcareous, bluish green and brown striped unit. Bluish green consists of amphibolite - fine-grained lamellae. Contains irregular streaks and bands of brown biotite. For bottom 1/2 of unit biotite is essentially 100% of unit. Calcite disseminated in matrix as thin, diffuse, compositional bands parallel SZ. Extensive biotite development possibly/probably related to extensive fluids moving through breccia of next unit.</p> <p>Core slightly broken w/ excellent recovery</p>

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28 30	34 35	
	111310	³⁴⁵ 5 111313	6	18	11K113	8x4 Hard, P2- foliated, brown to greenish brown, slightly calcareous gtaite. Qtzite thinly banded w/ thin biotite laminae. Interval fractured and brecciated w/ abundant quartz and minor calcite infilling fractures. Clasts have S2 fabric and are uniformly oriented within the bra. As go down DDH, bra changes to thin late xcutting fractures w/ chlorite schrage. Some displacement has occurred on the fractures. Core slightly broken to intact w/ excellent recovery.
	111313	³⁴⁷ 6 111319	9	19	11C101	Moderately hard to hard, noncalcareous, thinly banded gtaite to gtaese schist. Biotite-quartz-garnet ± andalusite ± muscovite. S2 surfaces are micaceous pale cream and purplish brown. Garnet as thin pale pink lenses up to 3mm elongate in S2. Coarse pink andalusite present in pegmatitic gta veins. Minor small biotite-andalusite aggregates in micaceous portions of schist. Bandings between gtaese and biotitic portions of schist on a scale of 1-5mm. Core slightly broken w/ excellent recovery.
	111319	³⁴⁹ 9 111415	1	110	11C1D1614	"CALC-SILICATE" Moderately soft, noncalcareous, P2- foliated, muscovite-quartz-biotite-andalusite-garnet schist. Matrix contains abundant muscovite - ranges from pale beige to pale brown. S2 surfaces are silvery white w/ dark brown biotite spots and streaks. Biotite- andalusite forms dark brown compositional bands and lenses within beige muscovite-rich matrix. Contains 10cm intervals which are hard, pale green to dark green, fine-grained, hornblende-gta-garnet gtaite. Marginal contacts of calc-silicate bearing intervals are

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
						gradational / diffuse over a short interval Core intact to slightly broken w/ excellent recovery
	111415	111613 ³⁵⁴		111	11C1D10	"CALC-SILICATE" Moderately soft to moderately hard, noncalcareous, thickly banded, P52-foliated, medium dark brown schist. S2 surfaces are mottled purplish brown. Metamorphic assemblage is biotite-andalusite-muscovite-quartz-garnet-staurolite. Biotite-andalusite forms compositionally banded and lenses elongate within S2. S1 delineated by alternating quartz and muscovite intervals on a scale up to 1cm in thickness. Contains minor thin, dark green qtz-hornblende-garnet intervals. Finer-grained locally slightly calcareous. These thin calc-silicate intervals are up to 10cm thick and constitute less than 5% of the interval Core slightly broken w/ excellent recovery
	111613	111619 ³⁵⁶		112	11F10	± B10 Hard, noncalcareous, P52-foliated, dark green amphibolite. S2 surfaces are medium dark green, w/ fine fibrous aspect. Contains minor thin biotite streaks parallel S2 locally, especially near top of interval. Overall a very homogeneous unit w/ sharp marginal contacts. Minor fine quartz infilling late cutting features.
	111619	111717 ³⁵⁹		113	11C10	[11C10] Moderately soft, noncalcareous, brown, thickly banded, biotite-muscovite-quartz-andalusite-garnet schist. Banding between quartz and muscovite intervals on a scale up to 3cm. S2 surfaces are muscovite brown. Andalusite disseminated through biotite/muscovite areas. Upper 1/2 of unit also has small dark green chlorite lenses - rehydrated pyrophyllite?

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
											Marginal contacts w/ adjacent units are sharp, parallel S2. Core slightly broken with excellent recovery.
	111717	8	111816	1			1114		11F101	BIO	Hard, dark green, P52-foliated, noncalcareous amphibolite. Homogeneous Biotite occurs as thin streaks parallel S2. Biotite also forms selvages to locally slightly calcareous, late scintung fractures. Fractures infilled w/ chlorite-pyrrhotite core and thin pyrite rim. S2 surfaces are dark green. Core slightly broken w/ excellent recovery.
	111816	1	112112	4			1115		11C101		Moderately hard, P52-foliated, thinly banded, noncalcareous, biotite-muscovite-quartz-andalusite-garnet schist. Andalusite evenly disseminated throughout as fine grains in micaceous bands. Banding on scale of < 3cm between pale grey quartz and brown biotite-muscovite. Only minor scattered garnet. Core intact to slightly broken w/ excellent recovery.
	112112	4	112117	0			1116		11F101	BIO (1C0) MINOR	Hard, P52-foliated, noncalcareous, dark green amphibolite. S2 surfaces are fibrous dark green. Biotite occurs as thin streaks parallel S2 foliation. Minor thin scintung fractures infilled w/ chlorite-pyrite. Contains 1 thin interband of 1C0 (about 10cm) near top of unit. Core slightly broken w/ excellent recovery. Marginal contacts are sharp parallel S2.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
	112117	0 112166	3	117	11C101	"CMC-SILICATEY (MINOR) Moderately hard, PS2-foliated, noncalcareous, brown biotite-muscovite-quartz-andalusite-garnet schist. S2 surfaces are wadded, micaceous brown and silvery white. Andalusite evenly disseminated w/ biotite in aggregates throughout the micaceous bands. Thinly banded on a 1cm scale between micaceous and quartz intervals. Interval 1232-1236 contains 5-10 cm calc-silicate bands. Hard, slightly calcareous, qtz-kornblende-garnet-calcite. Colour is pale green. Similar to calc-silicate bands noted in phyllite/schist on Firebreak Road. Core slightly broken - recovery excellent. Pegmatitic white qtz pods/veins contain coarse pink andalusite.
	112166	3 112197	0	118	11F101	±3 MINOR BIO Dark green, homogeneous, moderately hard amphibolite. S2 surfaces are fibrous dark green. Contains thin, discontinuous biotite streaks. Biotite best developed as schlage around pegmatitic white quartz veins, which cuts through unit. Unit locally slightly calcareous near TOI. Major foliation is at shallow angle to core axis. Biotite streaks parallel to this foliation. Orientation suggests it is PS1 rather than PS2. Marginal contacts are sharp.
	112197	0 113164	9	119	11C101	Noncalcareous, moderately hard, poorly CS2-foliated, dark brown, thinly banded biotite-muscovite-quartz-andalusite-garnet schist. S2 surfaces are micaceous silvery white and dark brown. Andalusite associated with biotite in small clusters and aggregates. Thin banding on 1cm scale between grey qtzose bands and dark brown micaceous bands.

Code	From			To			Recov.	No.	Unit	Description	
	10	14	16	20	22	24					26
											have fine-grained, frothy aspect typical for highly strained, mylonitic rocks.
	114114	3	114117	⁴³¹ 9				1212	11F101	B10	Moderately hard, dark green, noncalcareous, homogeneous amphibolite. Contains thin dark brown, discontinuous biotite streaks. Striking and schistosity define D2 fold - therefore they are S1. Marginal contacts sharp parallel S1. Core slightly broken w/ good recovery.
	114117	1	114216	⁴³⁴ 6				1213	11C101		Thinly banded, dark brown, poorly CS2-foliated, noncalcareous schist. Biotite-andalusite-muscovite-quartz-garnet. S2 surfaces are micaceous biotite brown. Banding between pelite and quartz on scale 1cm or less. Discontinuous grey gneiss bands define D2 microfolds which have planar limbs and sharp angular hinges. S2 axial planes to the folds. Core slightly broken with excellent recovery.
	114216	0	114218	⁴³⁵ 3				1214	11C1D1614		Noncalcareous, pale beige, P52-to poorly CS2-foliated muscovite-quartz-garnet-biotite-andalusite schist. Matrix pale beige muscovite-quartz with dark brown aggregates and bands of biotite-andalusite. S2 surface pale beige w/ dark brown streaks. Moderately soft. Attend schist - no apparent reason for alteration - slantness of interval suggests may be related to off-hole feature. Core slightly broken with excellent recovery.

Lithologic Log

Date: Sept 22/91 Logged By: KCP

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
	1141218	2	1141512	9		1215	11C101	<p>Modestly hard, PS2-foliated, noncalcareous, thinly banded biotite-muscovite-andalusite-garnet-quartz schist. S2 surfaces are dark micaceous brown. Banding between quartzite and gabbro on a scale of 1cm or less. Andalusite as small subrounded grains associated with biotite. Compositional banding generally parallel S2 although locally it defines small D2 folds.</p> <p>Core slightly broken with excellent recovery.</p>		
	1141512	9	1141515	3		1216	11C101614	<p>Noncalcareous, PS2-foliated, thinly banded, pale beige, muscovite-quartz-biotite-H_2SiO_5 schist. S2 surfaces are silvery cream with local dark brown biotitic aggregates. Biotite associated with pale H_2SiO_5 which may be fibrolite.</p> <p>Altered schist apparently related to Jam, S2 parallel gabbro at 1454.6 feet. Margins of unit gradational with decrease in matrix muscovite. Core well broken w/ good recovery.</p>		
	1141515	3	1141816	9		1217	11C101	<p>I 4 MINOR</p> <p>Noncalcareous, poorly CS2-foliated to PS2-foliated, dark brown, modestly hard, thinly banded schist. Banding on scale < 1cm of grey gabbro and brown gabbro. S2 surfaces are silvery grey to silvery brown. Metamorphic assemblage biotite-muscovite-garnet-quartz-andalusite(?) / fibrolite(?). Compositional banding generally parallel S2 although locally it defines tight, angular-hinged, chevron style folds. Locally muscovite in matrix becomes more abundant as schist is slightly altered.</p> <p>Core slightly broken with excellent recovery.</p>		

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
	11418	16	11419	10		1218	11C1D1614	<p>Moderately soft, PS2-foliated, noncalcareous, pale beige muscovite-biotite-garnet-andalusite-fibrolite-quartz schist. Biotite-andalusite-fibrolite as dark brown aggregates with pale beige muscovite-quartz matrix. Aggregates form lenses and bands parallel S2. Locally minor pyrite and pyrrhotite along thin fractures.</p> <p>No obvious reasons for alterations in schist.</p> <p>S2 surfaces silvery cream. Core slightly broken with good recovery. Marginal contacts gradational over short distance with mica in muscovite.</p>		
	11419	10	115116	0		1219	11C101	<p>Noncalcareous, brown, thinly banded, moderately hard, PS2-foliated schist. Banding defined by alternating grey quartz and brown pelite on a scale of 1cm or less. S2 surfaces are micaceous biotite brown. Fibrolite associated with biotite in lensoid aggregates. Muscovite-biotite-quartz-fibrolite is metamorphic assemblage. Pink andalusite associated with coarse pegmatitic white quartz veins.</p> <p>Core slightly broken with excellent recovery. Thin banding defines small chevron folds with straight limbs and angular fold hinges.</p>		
	115116	0	115117	9		1310	11C1D1614	<p>Moderately soft, PS2-foliated, noncalcareous schist. Muscovite-biotite-quartz-andalusite schist. S2 surfaces are silvery cream. Pegmatitic pink andalusite and fine-andalusite associated with biotite in aggregates elongate parallel S2. Alterations associated with extensive fracturing at 1517 feet. Marginal contacts gradational. Core slightly broken with good recovery.</p>		

Code	From		To		Recov.	No.		Unit	Description	
	10	14	16	20		22	24			26
	15117	9	151312	8			1311	11C10	Moderately hard, P52-foliated, dark brown biotite-muscovite-Al ₂ SiO ₅ (fibrolite?)-quartz schist. SZ surfaces are micaceous brown. Thinly banded with gray gneiss and dark brown pelite. Marginal contacts with altered schist is gradational near short interval. Core slightly broken with excellent recovery. Qtzite bands are thin, discontinuous. Noncalcareous.	
	151312	8	151315	2			1312	11C1D1614	Moderately soft, P52-foliated, noncalcareous, muscovite-biotite-Al ₂ SiO ₅ -quartz schist. Not certain of andalusite or fibrolite in aggregates associated with biotite. SZ surfaces are silvery cream. Late cutting fractures contain white calcite. Proportion of biotite aggregates ranges from 0 to 60%. Alteration appears associated with the late fractures. Core slightly broken with excellent recovery.	
	151315	2	151615	8			1313	11C101	Moderately soft, P52-foliated, dark brown, noncalcareous, biotite-muscovite-quartz-fibrolite-garnet schist. Fibrolite as small white aggregates intergrown with biotite - possibly pseudomorphing andalusite. Generally compositional banding parallel SZ although locally it defines small folds with SZ being axial planes. Banding defined by <1 cm thick interbedded gray gneiss and brown pelite. Pegmatitic veins contain coarse pink andalusite. Core slightly broken with excellent recovery.	

Code	From			To			Recov.	No.	Unit	Description
	10	14	16	20	22	24				
	1151615	0	1151618	9				1314	11C1418	Same schist as described for unit # 33 (1535.2 - 1565.8). Contains irregular steep fractures at shallow angle to core axis. Fractures are infilled with quartz and lesser calcite. Adjacent to fractures have extensive retrograde alteration of schist to green chlorite. Core slightly broken with excellent recovery.
	1151618	9	1151713	2				1315	11C1D1614	Noncalcic, moderately soft, S2-foliated, pale beige muscovite-biotite-andalusite(?) / fibrolite(?) - garnet-quartz schist. Matrix dominantly muscovite-quartz and is pale beige. Contains compositional bands and lenses of dark brown biotite- M_2SiO_5 . Cannot tell if M_2SiO_5 is andalusite or fibrolite. S2 surfaces are silvery cream with dark brown streaks and spots. Proportion of biotite aggregates progressively decreases as go down DDH. Core slightly broken w/ excellent recovery. Lower one foot of interval pegmatitic white bulk quartz with creamy white interstitial clay - clay was probably former feldspar. Calcite only present along narrow, late fractures.
	1151713	2	1151812	5				1316	11O1E191	"ALTERED" Soft, pale creamy, highly altered intrusive dyke. Massive, homogeneous, equigranular quartz and clays. No mafic minerals are left. Late scuttling fractures are infilled with quartz and lesser pyrite. One exposed fracture has horizontal growth stripes / slickensides on surface - i.e. parallel to margins of vein. Upper contact sharp parallel S2. Core slightly broken w/ good recovery.

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
	1151812	5 1151912		1317	1101E10	9 ± 6 "SLIGHTLY ALTERED" "POTASSIC" Hard, very slightly calcareous, equigranular, biotite quartz diorite. Cut surface is medium grey when wet. Dominant mafic appears to be fine biotite forming about 10-15% of unit. Mafics are not present in thin alteration selvages adjacent to scuttling fractures. These selvages are lighter colored and locally become off-white for distance up to 5 cm away from fractures. Interval 1587-1590 is bright pink from abundant K-feldspar flooding the matrix. Cannot relate this potassic alteration to any particular fracture set. Core intact w/ excellent recovery.
	1151912	7 1161017		1318	1101E1	Hard, massive, medium-grained, equigranular biotite-hornblende quartz diorite. Large hornblende consists of grain aggregates which appear to be reacting to form biotite. Randomly oriented biotite phenocrysts are up to 5 mm across. Additional fine biotite also disseminated in matrix. Mafics constitute 30-40% of unit. Minor retrograde chlorite alteration adjacent to calcite infilled fractures. Core intact to slightly broken with excellent recovery.
	1161017	1 1161018		1319	1101E	96 "POTASSIC" Moderately hard, pale pink, biotitic, altered 10E. Total matrix flooded by pale pink K-feldspar. Interval also slightly calcareous appears to be associated with calcite-infilled fractures. Marginal contacts are gradational. New, fine biotite growth along fractures. Mafics 10%. Core intact with excellent recovery.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
	1161018	⁵²⁸ 1171314	0	1410	1101E1	Hard, massive, homogeneous, medium xline, equigranular biotite-hornblende quartz diorite. Randomly oriented hornblende and biotite phenocrysts in medium grey qtz-feldspar matrix. Fine biotite also disseminated throughout. Hornblende has reaction rim selvage of biotite. Core locally slightly altered adjacent to calcite infilled fractures. Alteration dominantly a greening with development of chlorite and development of opaque white colour in feldspars. Mafics 30%. Core slightly broken with excellent recovery.
	1171314	⁵³¹ 1171412	5	1411	1101E1019	T6 "POTASSIC" Same medium xline, biotite-hornblende quartz diorite. Equigranular. For much of interval feldspars altered to opaque creamy white, soft, noncalcineous clay(?). Interval 1739.5-1741.5 biotite and hornblende phenocrysts are gone - possibly altered to chlorite. Matrix is pale pink from abundant K-feldspar. Locally have green associated with chlorite. Alteration appears to be associated with calcite infilled fractures which are at a shallow angle to the core axis. Core intact w/ excellent recovery.
	1171412	⁵³⁴ 1171514	6	1412	1101E1	Hard, homogeneous, medium xline, medium grey, biotite-hornblende quartz diorite. Hornblende partially to completely rimmed by fine-grained biotite. Mafics 20% with biotite > hornblende. Minor chlorite alteration and opaque white clay alteration adjacent to calcite-filled fractures. Core slightly to moderately broken w/ excellent recovery.

Code	From			To			Recov.	No.	Unit	Description	
	10	14	16	20	22	24					26
	1171514	6	1171611	536	9			1413	1101E10	9	Same hornblende-biotite quartz diorite. More extensively altered with green chlorite development and feldspars → opaque white clays. Clays are slightly swelling as core breaks up and expands. Entire 10E is slightly calcareous. Also calcite-filled fractures. Alteration appears to be associated with fractures. Core slightly broken w/ excellent recovery.
	1171611	4	1171719	542	5			1414	1101E11		Hard, homogeneous, massive, medium x-line, equigranular, medium grey biotite-hornblende quartz diorite. Magics 30-40%. Minor chlorite and opaque white clays in feldspars adjacent to thin fractures. Biotite > hornblende. Core slightly broken w/ excellent recovery.
	1171719	5	1171914	547	0			1415	1101E191	= 6	More extensively altered hornblende-biotite quartz diorite. Feldspars are opaque white to pale green - extensively altered to clays(?). Magics are partly to completely altered. Where partly altered they are light brown - where completely altered they are a pale tan. (possibly altered to muscovite?). Locally have flooding of feldspars matrix with pink K-feldspars. Alteration appears to be associated with calcite-filled fractures. Locally K-feldspars forms pink selvage to thin fractures. Core slightly broken w/ excellent recovery.
	1171914	5	1181312	558	7			1416	1101E1	= 9 = 6	Similar to last unit # 45 (1779.5-1794.5) only alteration less extensively developed. Tubebanded with unaltered 10E biotite-hornblende quartz diorite on a scale of tens of cm to meters. Alteration denoted by opaque white to pale green colour with feldspars and

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
		1181312	9	1416		locally developed pink K-feldspar. Pink K-feldspar typically forms thin selvages adjacent to fine fractures. Proportion fresh to altered 10E is about 60 (fresh) : 40 (altered). Core slightly broken w/ excellent recovery.
	1181312	9 1191011	579 4 0	1417	1101E1	Hard, massive, equigranular, medium grey, medium xline biotite-hornblende quartz diorite. Randomly orientated hornblende prisms partly to completely rimmed by dark brown biotite. Biotite disseminated in matrix as fine grains as well as forming coarser phenocrysts. Feldspars are generally translucent grey. With slight alteration they become opaque white to very pale green. Alteration in thin selvages only - associated with late veining fractures. Core slightly broken w/ excellent recovery.
	1191011	0 1191013	580 0	1418	1101E1019	# Moderately soft, calcareous, massive, equigranular, altered biotite-hornblende quartz diorite. Biotite retrograded to green chlorite locally. Biotite also altered to pale tan mineral. Hornblende altered to orange brown mineral. Feldspars altered to opaque white, moderate soft minerals. Mafics 20%. Mafics still present but highly altered. Rock starting to be slightly crumbly. Core intact with excellent recovery.
	1191013	0 1191115	583 5	1419	1101E191	Moderately soft to soft, noncalcareous, highly altered biotite-hornblende qt diorite. Mafics present only as very pale tan globs - totally altered to acid mineral. Feldspars are pale yellow clogs (?). Only mineral not extensively altered in the interstitial primary quartz. Begins

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
			1191	1155				1419			to see scumming features w/ translucent gray quartz infilling. Qtz veins contain irregular fine pyrite stringers and aggregates. Got open space voids along margins of fractures & within the fractures.
											Interval 1910 - EOI begin to see shearing textures. Fine granular texture being very disrupted. Abundant thin qtz filled fractures. Core breaks up very easily along fractures / shear planes. Locally core very friable because of combination of fracture / shear planes and extensively altered feldspars.
											TOI - 1910 core slightly broken w/ good recovery // 1910 - EOI core only slightly to moderately broken - yet core incipiently breaking up along extensive shear fractures at small angle to core axis - 10° wrt core axis - recovery OK.
	1191	1155	⁵⁸⁷ 1191	1217			1510	1101Q191	(10E9) 70:30 BXA		Translucent blue gray quartz vein. Contains abundant irregular fragments / clasts of quartz and 10E altered dyke material. Very fine grained, sheared texture. Fractures within qtz vein are locally infilled with coarse white calcite. Contains minor void spaces. Contains fine grained pyrite bands and streaks up to 5cm thick.
											Below 1924 feet consists dominantly of highly altered dyke as in Unit # 49 (1903.0 - 1915.5) Feldspars are pale yellow. Rock soft. Breaking up on fractures and shear planes.
											TOI - 1920 BXA + VEIN Core slightly broken w/ good recovery
											1920 - 1923 Very broken & rubble with incipient gouge. Rock is dominantly very altered 10E9 Recovery OK
											1923 - EOI Moderately broken w/ minor incipient gouges on fractures. Mainly 10E9 - altered intrusive ± BXA Recovery OK.
											At 1917.5 shearing fabric 8° wrt core axis

Code	From			To			Recov.			No.			Unit			Description
	10	14	16	20	22	24	26	28	30	34	35					
	11912	17	7	11914	15	5				151	1101E191	I #	<p>Soft, pale yellow, highly altered intrusive. Mafic minerals are totally altered to pale tan mineral. Feldspars are creamy white to pale yellow. Contains thin quartz veins. locally calcareous with calcite infilling small fractures. Minor shearing and disruption of equigranular texture on anastomosing fracture network. Typically rock friable and incipiently gneiss on this fracture network. Very similar to Unit # 49 (1903.0 - 1915.5).</p> <p>TOI - 1939 - core slightly broken w/ good recovery 1939 - EOI - core mod broken to rubble w/ good recovery. Abundant incipient gneiss in rubble intervals</p>			
	11914	15	5	11918	14	2				152	1101E1019	± 6	<p>Moderately soft, slightly calcareous, altered IOE biotite-hornblende quartz diorite. Mafic minerals locally altered to lighter brown minerals. Extent of mafic alteration decreases as go down DDH. Feldspars altered to creamy white to very pale green. In many cases feldspars are now swelling slightly and breaking up into small friable grains in the box - suggestive of swelling clays. Abundant calcite-filled fractures. Locally feldspar matrix has a faint pink colour - presumably from X-feldspar.</p> <p>TOI - 1967 Core slightly broken w/ good recovery 1967 - EOI Core moderately broken to very broken & rubble. In most cases it is disintegrating in the box as it swells slightly. Recovery OK Unit similar to Unit # 48 (1906.0 - 1903.0)</p>			

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
	1191814	2100170		1513	1101E1	<p>⁶¹¹ = 6 M100R</p> <p>Hard, massive, unfoliated, equigranular, medium x-line biotite-hornblende quartz diorite. Biotite is dark black. Hornblende is dark green. Minor calcite on thin scuffing fractures. Locally contains pink K-feldspar as thin selvages in scuffing fractures - fracture appears to contain stc-chlorite. Feldspars have faint greenish tinge on wet cut surface.</p> <p>Hornblende partly to completely rimmed by fine biotite. Matrix about 30% Biotite > hornblende.</p> <p>Core slightly broken with excellent recovery</p> <p style="text-align: center;">EDH</p>

Code	From		To		Feature	SYE	S ₀		S ₁		S ₂		Description
	10	14	16	20			Dip	Direct.	Dip	Direct.	Dip	Direct.	
			304										
			1919	0	PIS2						618		micaceous foliation + compositional banding
			311										
			1012	5	PIS2						710		micaceous foliation + compositional banding
			316										
			1101	0	PIS2						612		micaceous foliation + compositional banding
			321										
			1101	0	PIS2						712		micaceous foliation + compositional banding
			327										
			1101	0	PIS2			910	01010		717		micaceous foliation = S2 compositional banding = S1
			333										
			1101	0	PIS2			810	01010		710		S2 = micaceous foliation S1 = compositional banding
			339										
			1111	0	PIS2						618		S2 = micaceous foliation
			343										
			1111	0	PIS2						518		S2 = micaceous foliation
			347										
			1111	0	PIS2						710		S1 = S2 = compositional banding + foliation
			350										
			1111	0	CIS2S						712		micaceous foliation = S2 S1 = banding
			358										
			1111	0	CIS2S			317	01010		612		S2 = micaceous foliation S1 = compositional banding
			361										
			1111	0	PIS2						518		S2 = micaceous fltn + comp. banding
			367										
			1121	0	PIS2						618		S1 = S2 = fltn + comp. banding
			375										
			1121	0	PIS2						612		S1 = S2 = fltn + comp. banding
			379										
			1121	0	PIS2						710		S1 = S2 = fltn + comp. banding
			385										
			1121	0	PIS2						717		S1 = S2 = fltn + comp. banding
			389										
			1121	0	PIS2						210		S1? = S2? = fltn. banding in metabasite - may be S1
			392										
			1121	0	PIS2						115		S1? = S2? = banding in metabasite - may be S1
			395										
			1121	0	PIS2						510		banding in metabasite
			398										
			1131	0	CIS2			718	01010		710		S2 = micaceous fltn S1 = comp. banding
			403										
			1131	0	PIS2						715		S1 = S2 = fltn + comp. banding
			406										
			1131	0	PIS2						610		S1 = S2 = fltn + comp. banding
			415										
			1131	0	PIS2						710		S2 = fltn / S1 = comp. banding
			422										
			1131	0	PIS2						515		S2 = micaceous foliation
			425										
			1131	0	PIS2						712		S1 = S2 = compositional banding + micaceous foliation
			431										
			1141	0	PIS1			010	01010				S2 fold nose
			433										
			1141	0	PIS2						710		S2 = micaceous fltn / S1 = comp. banding
			438										
			1141	0	PIS2						617		S2 = micaceous fltn
			442										
			1141	0	PIS2						710		S2 = micaceous fltn
			450										
			1141	0	PIS2						515		S2 = micaceous fltn.
			456										
			1141	0	PIS2						618		S2 = micaceous fltn.
			461										
			1151	0	PIS2						615		S1 = S2 = comp. banding + micaceous fltn.
			467										
			1151	0	PIS2						617		S1 = S2 = fltn + comp. banding
			473										
			1151	0	PIS2						610		" " " "
			477										
			1151	0	PIS2						613		" " " "

CODE	FROM		TO		SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION			
	10	14	16	20						22	26	28
	116107	8	116108	9	372710	18	18	110E1916	Potassic altered 10E			
	1161910	1	1161919	5	372711	94	94	110E11	fresh			
	1181912	7	1191011	0	372712	90	90	110E11	fresh			
	1191011	0	1191013	0	372713	120	20	110E1019	* slightly altered			
	1191013	0	1191017	0	372714	40	40	110E191	} possible Au analyses			
	1191017	0	1191112	8	372715	50	50	110E191				
	1191112	0	1191115	5	372716	35	35	110E191				
	1191115	5	1191210	0	372717	45	45	110I011		BXA (10E9)		
	1191210	0	1191213	8	372718	38	1	110I011		BXA (10E9)		
	1191213	8	1191217	7	372719	37	1	110E191				
	1191217	7	1191312	7	37280	50	1	110E191				
	1191312	7	1191317	0	372811	43	1	110E191				
	1191317	0	1191411	0	372812	40	1	110E191				
	1191411	0	1191415	5	372813	45	1	110E191				

PROJECT FARO NW DRILLHOLE NO. B9FX-01A COORDINATES: N _____ DATE Sept 17 1989
 LOCATION _____ HOLE SIZE NO E _____ PAGE 1 of 4
 LOGGER KLP INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

FEET

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
994									F								DDH B8FX-01
997		2.2		2.0			13		F						2		
1005		8.4		8.2			13		F						4		
1015		10.1		9.5			14		F						3		
1025		10.2		9.8			14		F						2		
1035		10.3		9.6			13		F						3		
1045		10.2		9.5			15		F						1		
1055		10.3		9.4			13		F						1		
1065		10.3		9.0			13		F						5		
1075		10.2		8.5			14		F						5		
1085		10.3		9.9			14		F						2		
1095.5		10.4		8.4			14		F						3		
1105.5		10.5		9.3			14		F						7		
1116		10.6		7.4			14		F						3		
1126		10.5		8.1			12		F						5		
1136		10.4		9.4			13		F						4		
1146		10.4		9.5			14		F						2		
1156		10.4		9.6			15		F						1		
1166.5		10.4		9.0			14		F						5		
1177		10.7		9.5			14		F						2		
1187		10.2		9.2			14		F						1		
1197		10.1		10.0			15		F						1		
1207		10.3		10.0			14		F						1		
1210		2.8		2.7			13		F						1		
1220		10.4		7.6			13		F						2		
1230		10.5		10.0			14		F						3		
1237		6.9		4.7			12		F						1		
1247		10.3		9.3			14		F						0		

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. 89FX-01A COORDINATES: N _____ DATE Sept 23 1989
 LOCATION _____ HOLE SIZE NQ E _____ PAGE 2 of 4
 LOGGER KCP INCLINATION -90° ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
1257		10.5		9.4			14		F							4	
1267		10.2		9.6			14		F							3	
1277		10.2		8.2			13		F							4	
1287		10.3		9.1			14		F							3	
1297		10.3		10.0			14		F							2	
1307		10.3		9.7			14		F							1	
1317		10.1		9.5			15		F							0	
1327		10.4		8.2			14		F							3	
1337		10.2		9.7			14		F							1	
1347		10.2		9.2			14		F							3	
1357		10.4		9.4			14		F							3	
1367		10.3		8.5			14		F							2	
1377		10.2		6.8			13		F							4	
1381.5		3.3		0.4			9		F							3	
1387		6.0		2.4			10		F							3	
1397		9.5		8.2			13		F							2	
1406		10.3		7.7			13		F							0	
1416		10.4		9.5			14		F							2	
1426		10.5		10.0			14		F							4	
1435.5		9.1		8.9			14		F							3	
1437		1.7		1.0			10		F							1	
1447		10.3		9.6			14		F							2	
1457		10.3		8.0			12		F							1	
1467		10.6		7.9			12		F							5	
1477		9.7		8.7			13		F							2	
1487		10.5		9.8			14		F							2	
1497		10.4		8.6			14		F							4	
1507		10.6		9.4			14		F							4	

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. B9FX-01A COORDINATES: N _____ DATE Sept 23 1989
 LOCATION _____ HOLE SIZE NO E _____ PAGE 3 of 4
 LOGGER _____ INCLINATION -90° ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
1517		10.6		8.6			13		F							3	
1527		7.5		6.9			13		F							3	
1537		10.1		8.6			14		F							4	
1545		8.3		8.0			14		F							1	
1555		10.5		9.8			14		F							0	
1565		10.3		9.4			14		F							2	
1575		10.5		8.8			13		F							3	
1585		10.9		7.8			13		F							10	
1591		6.2		5.6			14		F							5	
1601		9.4		9.1			14		F							5	
1611		10.6		8.4			13		F							7	
1620		8.8		7.2			14		F							4	
1630		10.5		9.0			14		F							5	
1640		10.3		8.8			14		F							9	
1647		6.8		7.0			14		F							3	
1657		10.5		9.6			14		F							4	
1667		10.0		8.8			14		F							8	
1677		10.7		5.1			12		F							9	
1687		10.4		9.6			14		F							8	
1697		10.2		9.6			14		F							9	
1707		10.5		8.9			14		F							7	
1717		10.0		8.3			13		F							5	
1727		10.5		9.7			14		F							11	
1737		10.4		9.9			14		F							5	
1747		10.2		9.6			14		F							4	
1757		10.4		8.5			13		F							7	
1767		10.3		8.8			13		F							6	
1777		10.5		9.1			14		F							7	

*1519 2.7 2.4 14 F 1

Fig. 1. Typical rock mechanics core log.

DIAMOND DRILL CORE LOG

Date: _____

Hole Number: 89FX-02

Reference Fabric Orientation Diagram:

Project: 1989 FARONW

Location: _____

Claim: _____

^{UTM}
~~Terr.~~Plane
Co-ords.: 6,915,709.9 N

583,351.7 E

Grid
Co-ords: _____

Elevation: 1333.0 *from map*

All symmetry determinations looking

Total Depth: 384 feet (117.0m)

_____ with _____ dipping

Inclination: -90° vertical

_____ with dip azimuth _____.

Purpose: Test ICD northwest of pit

Reason hole Terminated: IOE for entire depth

Logged by: LCP

Date(s) Logged: SEPT 17, 1989

Drilling Contractor: ARCTIC

Hole Cemented: No Steel down Hole: No

Size	CORE From	To	Collar Cased and Capped: <u>yes</u>
<u>NW</u>	<u>0</u>	<u>82 feet</u>	
<u>NO</u>	<u>72</u>	<u>384 feet</u>	

Assay Lab: _____

Certificate No's: _____

Started: Aug 21/89 Completed: Aug 23/89

White pipe down hole for geophysics

DDH B.G.F.X. - 0.2
 2 8
 (FEET)

CURRAGH RESOURCES INC.
 Lithologic Log

Date: Sept 17/87 Logged By: LCP

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28 30	34 35	
	10 0	17 2 ²¹ 0 ⁹		11	#1	TRICONED - NO RECOVERY
	17 2 0	17 2 5 ²²		12	#1	TILL Rusty brown, atoxic sand with rounded gravel clasts up to 3cm across. Clasts are a variety of rock types, including IOAB and meta sediment. Matrix sand consists of weathered quartz and feldspar. Recovery assumed reasonable.
	17 2 5	17 8 5 ²³ 9		13	1101E1	VERY WEATHERED Soft, massive, very weathered, IOE dyke material. Equigranular texture. All surfaces have moderate to strong orange-brown weathering discoloration. All mafic minerals have been weathered out. Feldspars have an orange tinge and may be weathered to clays. Rock tends to be friable and breaks into sandy, moderately friable grains. Unit could be mistaken for IOF because of absence of mafics due to weathering. Core very broken to rubble. Good strong weathering coat on all surfaces. Recovery seems to be OK.
	17 8 5	11 12 0 ³⁴ 1		14	1101E1	MODERATELY WEATHERED Medium grained, equigranular, massive, unfoliated, biotite-hornblende quartz diorite. Fresh colour is medium grey to light grey. Biotite phenocrysts are up to 0.5cm across. Also have fine biotite scattered in feldspar-quartz matrix. Hornblende phenocrysts are similar size to biotite phenocrysts. Hornblende partly to completely enclosed by biotite aggregates. Typically hornblende is more extensively weathered than biotite. Biotite phenocrysts constitute about 5% of dyke. Unaltered dyke rock is relatively fresh. May have some minor orange-brown weathering coat on fracture surfaces. Altered zones adjacent to calcite-filled

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
		111120		14		fractures, however, are extensively weathered. Most mafics are leached - not certain whether having alterations or weathering. Dyke is moderately soft - can be readily scratched with nails. Both cut and broken surfaces have pervasive orange-brown weathering stain. Rock more friable - breaks with some difficulty into pts - feldspar "sand" Calcite infilling the fractures has a pale tan to pale orange discoloration. Core slightly broken to intact in areas where fresh. In weathered/altared intervals core very broken, rubbly, locally sandy Recovery seems OK throughout.
	111120	1114190 ⁴⁵		15	1101E1	SLIGHTLY WEATHERED Hard, medium grained, equigranular, fresh, biotite-hornblende quartz diorite. Massive, homogeneous. Biotite phenocrysts up to 0.5 cm across constitute about 5% of dyke. Hornblende phenocrysts are less common. Hornblende is about same size and is typically partly to completely enclosed by biotite aggregates. Fine biotite also occurs in matrix. Fresh colour is medium grey when wet and pale grey when dry. Contains white, calcite-filled fractures up to 2 cm thick. Adjacent to these fractures feldspars are altered and have a frosted white appearance. Alteration generally extends for less than 5 cm away from fractures. No string layering noted within fractures (in the calcite). Interval slightly weathered because broken fracture surfaces have a orange-brown weathering coating. Otherwise, the interval is fresh. Core moderately broken with good recovery. More broken and rubbly in areas of alteration adjacent to fractures.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24 26 28 30 34 35				
	11419 0	12419 3		16	1101E	<p>Hard, medium grey, equigranular, medium xline, biotite-hornblende quartz diorite. Biotite phenocrysts up to 0.5 cm across constitute 5% of unit. Hornblende phenocryst up to 0.5 cm constitutes 1-2% of unit. Hornblende typically partly to completely enclosed by biotite aggregates. Biotite also disseminated in matrix as finer grains. No foliations visible. Rock homogeneous, massive.</p> <p>Fine late xcutting fractures are infilled with calcite. Typically these are less than 1 cm thick. Adjacent to fractures feldspars are altered to an opaque white (possibly altered to clays?). Many fractures tend to be along core axis.</p> <p>No weathering discoloration is noted on broken surfaces.</p> <p>Core slightly to moderately broken. More broken in areas with greater concentration of fractures. Recovery OK.</p>
	12419 3	12511 5		17	1101E	<p>9 ALTERED</p> <p>More extensively altered variant of 10E dyke. Calcite disseminated in matrix as well as in fractures. Biotite phenocrysts altered to muscovite(?) Feldspars all in an opaque white with faint greenish tinge. About 90% of matrix altered. Cannot correlate alteration with any extensive fracture system.</p> <p>Core moderately broken. Recovery OK.</p>
	12511 5	13184 0		18	1101E	<p>Exactly the same as Unit # 6 (149-249.3) Unfoliated, medium xline, equigranular, biotite-hornblende quartz diorite. Massive, homogeneous. Minor alterations of feldspars to opaque white adjacent to calcite infilled fractures.</p> <p>Core moderately broken to slightly broken w/ good recovery.</p> <p style="text-align: center;"><u>EOH</u></p>

DIAMOND DRILL CORE LOG

Date: _____

Hole Number: 89FX-03

Reference Fabric Orientation Diagram:

Project: 1989 FARONW

Location: NW of Faro pit

Claim: _____

~~UTM~~ ~~Tenn Plane~~
Co-ords.: 6,916,012.2 N

582,661.9 E

Grid
Co-ords: _____

Elevation: 1378.0 m

All symmetry determinations looking

Total Depth: 1054 feet (321.3m)

NW with S2 dipping

Inclination: -90° VERTICAL

SW with dip azimuth _____.

Purpose: TEST 1SD northwest of Faro pit

Reason hole Terminated: Drilled into thick 10E dyke

Logged by: LCP

Date(s) Logged: SEPT 24-26, 1989

Drilling Contractor: ARCTIC

Hole Cemented: No Steel down Hole: No

Size	CORE From	To	Collar Cased and Capped:
<u>NW</u>	<u>0</u>	<u>31 feet</u>	<u>No</u>
<u>NA</u>	<u>31</u>	<u>1054 feet</u>	

Assay Lab: _____

Certificate No's: _____

Started: Aug 24/89 Completed: Aug 29/89

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28 30	34 35	
	1811	1817 ²⁶ ₀		14	11C1D1416	WEATHERED (10Q BXA) Moderately soft, PS2-foliated, noncalcaneous, pale tan muscovite-biotite-andalusite-quartz schist. Dominantly muscovite schist with 5% dark brown biotite-andalusite clots generally less than 5 cm across. SZ surfaces and fracture surfaces have strongly developed orange-brown weathering surface coating. Alterations and weathering both associated with quartz vein bxa for interval 82-83.5. Angular clots of quartz, phyllite, feldspar in qtz vein matrix. SZ in phyllite is randomly oriented. Top contact 30 w/ core axis and bottom contact 35 w/ core axis. Lower contact of unit gradational w/ increase in biotite content. T&E - 84.5 very broken w/ local rubble. Recovery OK note of mismatch at 81 84.5-80E slightly to moderately broken w/ good recovery.
	1817	11111 ³³ ₀		15	11C1D161	B MINOR ± 4 MINOR Moderately soft, PS2-foliated, noncalcaneous, clotted schist. Matrix is pale grey green. Contains dark brown clots/aggregates of biotite-andalusite. SZ surfaces are generally silvery cream. Metamorphic assemblage muscovite-chlorite-biotite-andalusite-quartz. Biotite aggregates 20-30%. Unit differs from schist higher in DDH because of chlorite presence as indicated by pale greenish tinge on wet cut surface. Last 2 feet before next unit is more altered - matrix is pale beige without greenish hue. Core slightly broken with good recovery. SZ surfaces are typically fresh. Some steep fractures have patchy orange weathering coat.
	11111	11116 ³⁵ ₃		16	11O1Q1\$1	BXA (1CD46) 80:20 Clots of phyllite, vein quartz, totally altered feldspar (now soft clays) in a fine orange-brown matrix. Look like fractured and biotized qtz-feldspar pegmatitic veins. Strong orange brown

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
			11116	5		16		<p>indicates probable conduit/channel for some groundwater flow.</p> <p>Contains some 1SD intervals near bottom of unit. Pale beige, PS2-foliated, muscovite-quartz-biotite-andalusite schist. S2 surfaces are silvery cream</p> <p>TOI-115 very broken and rubble with good recovery // 115-EOI moderately broken with good recovery Interval 110-130 has only 9 feet core - suggest 1 foot loss somewhere in this interval.</p>		
	11116	5	11812	55 25		17	11CID1614 B	<p>→ (1CD64) Minor</p> <p>Moderately soft, noncalcareous, PS2-foliated, silvery grey schist. Muscovite-biotite-andalusite-chlorite-quartz ± garnet. S2 surfaces are silvery grey to white. Matrix consists of muscovite-quartz-chlorite and has faint greenish tinge on wet cut surface. Biotite-andalusite forms irregular clots/aggregates elongate in S2 foliation. Proportion biotite-andalusite 10-40% As approach next unit proportion biotite-andalusite decreases to 0%. Rock becomes pale beige with loss of chlorite. Last 1 foot would be more suitable as 1D4.</p> <p>Core slightly broken with good recovery. Minor patchy orange weathering coat only on 2 fractures near TOI - otherwise unit looks fresh</p>		
	11812	2	11911	58 2		18	110IE91	<p>ALTERED MARGINAL PHASE</p> <p>Creamy white to pale grey, finely x-line, moderately hard, massive, homogeneous, noncalcareous altered Qtz diorite. Matrix almost totally altered to pale minerals. Typically crowded with off-white feldspar microphenocrysts. Some quartz microphenocrysts present. Some irregular intervals aphanitic. Fracture surfaces have strong orange-brown weathering coat. Appearance of very altered marginal phase of IOE dyke. Upper contact w/ schist irregular and xerts S2. Core moderately broken with short rubble intervals. Recovery good.</p>		

Code	From		To		Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28		
	11911	0	11919	⁶⁰ 7					1101E1	MARGINAL PHASE Hard, dark brown, finely x-line, noncalcareous, biotite-feldspar porphyry. Crowded with small angular white feldspar microphenocrysts. Contains lesser dark brown to black biotite phenocrysts. Typical marginal phase of 10E dykes. Locally pale gray green from retrograde chlorite near fractures. Some fractures are infilled with calcite. Massive, homogeneous, no foliation noted. Bottom contact against pegmatitic white bull quartz vein. Core slightly broken to moderately broken with good recovery
	11919	1	12121	⁶⁷ 5 6					110 11C1D1618	Similar to Unit # 7 (116.5-182.2) Moderately soft, PS2-foliated, pale grey, noncalcareous schist. Muscovite-chlorite-biotite-andalusite-quartz. S2 surfaces are silvery cream. Matrix is muscovite-chlorite. Biotite-andalusite forms irregular aggregates/clots/bands within the pale silvery green matrix. Locally the dark brown biotite-andalusite clots are partly to completely replaced by pale green chlorite-muscovite. Pegmatitic white qtz veins contain off white feldspar and pink andalusite. Lower contact gradational with decrease in chlorite and increase in muscovite. This represents a retrograded sequence (?). Core slightly broken w/ good recovery
	12121	6	12149	⁷⁶ 0 2					111 11C1D1614 ± BXA	Moderately soft, PS2-foliated, pale beige, noncalcareous, muscovite-quartz-biotite-andalusite-garnet schist. S2 surfaces are pale silvery cream. Contains irregular dark brown biotite-andalusite clots in pale cream muscovite-quartz matrix. Biotite-andalusite aggregates constitute 12-10% of unit. Both upper and lower contacts gradational with increase in biotite content and appearance of chlorite with muscovite. Alteration associated with post D2 bre located from 231.8-233.4. Rotated clots of 104 in hand qtz-muscovite fine matrix. Minor white qtz vein clots.

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
			121419	2		111		Two cm thick white gtz veins pass through bxa undisturbed. Bottom contact 10° wrt core axis. Top contact hidden in rubble. Minor fine pyrite aggregates in fine-grained bxa matrix. Cohesive fault/fracture. Locally fractures have orange-brown weathering surface coating. TOI-243 slightly broken to moderately broken with good recovery //243- EOT moderately broken with good recovery.		
	121419	2	¹⁰⁴ 131413	⁶ 3		112	1C1D1618	-> (100) 60:40 Moderately soft, P52-foliated, noncalcareous, brownish grey schist. S2 surfaces are silvery white to brown. Matrix is pale muscovite-chlorite with clots/aggregates of dark brown biotite-andalusite. Proportion of biotite-andalusite aggregates and bands generally 30-50%. As go down DDH begin to pick up disseminated biotite in matrix. Becomes more typical of thinly banded biotite-muscovite-gtz-andalusite ± chlorite schist. Core slightly broken with good recovery. Locally chlorite partly to completely replaces biotite-andalusite aggregates.		
	131413	3	¹⁰⁵ 131415	⁴ 9		113	1D141	6 minor Moderately hard, P52-foliated, pale beige muscovite-quartz-biotite-andalusite-schist. S2 surfaces are silvery cream. Contains minor relict biotite-andalusite irregular clots within a pale beige muscovite-quartz matrix. Clots are generally less than 1cm across. Upper and lower contacts are gradational with increase in biotite-andalusite clots and appearance of chlorite with muscovite. Alterations associated with 10cm thick fracture zone. Schist disrupted with quartz and dolomite infilling fracture. Minor fine pyrite aggregates parallel margin of fracture. Orientation of top of fracture 37/100 wrt S2. Bottom contact 15/000 wrt S2. Core intact to mod broken w/ excellent recovery.		

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	36			
	1314	15	9	1317	17	5				114			11C1D161B	± 4 Moderately soft, P52-foliated, noncalcareous, brownish grey schist. Biotite-muscovite-chlorite-andalusite-quartz. SZ surfaces are micaceous grey-brown. Andalusite associated with biotite in irregular clots and clusters. Matrix is fine biotite with chlorite and muscovite. Locally muscovite becomes major matrix mica - especially near bottom of interval. Unit slightly retrograded but overall not as severely altered as 1C04. Minor pegmatites, white quartz veins. Small biotite content about 60-70%. Lower contact gradational to next unit. Core slightly broken with good recovery.
	1317	14	5	1410	12	2				115			11D141	± 6 MINOR Pale beige, noncalcareous, P52-foliated, muscovite-quartz schist. SZ surfaces are silvery cream. Locally contains minor small, relict dark brown biotite-andalusite clots and clusters. Interval contains abundant xcutting fractures, locally infilled with quartz. Fractures are locally porous with crystal free sandpaper into the voids. Albitization appears associated with the more extensive fracturing. Core moderately to very broken with good recovery. More fractured areas tend to be rubble. // 385-EOI slightly broken with good recovery. Minor streaky pyrite present, both along fractures and gravel SZ. Both upper and lower contacts are gradational.
	1410	12	2	1410	17	8				116			11C1D161	Moderately soft, P52-foliated, brown biotite-muscovite-andalusite-quartz ± chlorite schist. SZ surfaces are micaceous brown. Andalusite associated with biotite in irregular clots/aggregates elongate along SZ. Contains thin compositional bands of muscovite-chlorite within the dark brown biotite-rich pelite. Both upper and lower contacts are

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
				141017.8		1116		gradational with increase in matrix muscovite and decrease in matrix biotite. Core intact with excellent recovery.		
	141017.8		141312.5 ¹³¹			1117	11KID164	9 muscov Moderately soft to moderately hard, P52-foliated, noncalcareous, pale beige, muscovite-quartz-biotite-andalusite + chlorite schist. Biotite andalusite forms irregular relict clots elongate S2 within muscovite-quartz matrix. When retrograde alteration is very strong biotite-andalusite clots are replaced by chlorite-muscovite aggregates. Biotite-andalusite clots form bands ranging from 1cm - 5cm in thickness. S2 surfaces are silvery cream. Biotite-andalusite aggregates constitute 5-20% of unit. Alteration associated with extensive fracturing. Fractures infilled with quartz. Commonly fractures have coherent bxa texture with randomly oriented schist clots (angular) within a fine-grained, pale tan matrix. Qtz veins within bxa zones are partly broken up. Bxa + alteration appears to be post metamorphism because locally biotite-andalusite clots are retrograded to muscovite chlorite. Minor streaky pyrite parallel S2 and interstitial within quartz veins. Core moderately broken with good recovery. Bxa + disrupted vein zones at 415-415.8, 416.5-417.3, 420.0-421.1		
	141312.5		141413.1 ¹³⁵			1118	11ID141	9 muscov ± BXA Moderately soft, pale beige, P52-foliated, muscovite-quartz + pyrite schist. Pyrite forms irregular bands and streaks parallel S2. Pyrite more prevalent in bixiated areas. S2 surfaces are silvery cream. Alteration associated with extensive bxa developed in association with fracture. Randomly oriented, angular schist and vein quartz clots in fine-grained pale beige to white matrix. Internal fractures within bxa and qtz veins oriented 20° west core axis. Bxa developed 434.5-437.5. Core mod. broken w/ good recovery.		

Code	From			To			Recov.	No.			Unit	Description
	10	14	16	20	22	24		26	28	30		
	1414	13	1	1416	18	5		119			11C1D1416	
												<p>Moderately soft to moderately hard, pale beige, noncalcareous, P52-foliated muscovite-quartz-biotite-andalusite schist. Minor thin dark brown biotite-andalusite clefts/aggregates elongate parallel S2. Aggregates generally less than 2cm thick. S2 surfaces are silvery cream. Biotite-andal. aggregates constitute 10% or less of unit.</p> <p>Minor kras developed in association with steep scuttling fractures. Fractures commonly infilled with soft, opaque white mineral - non reactive to HCl. Locally pegmatitic white pts veins have coarse pink andalusite.</p> <p>Upper and lower contacts are gradual.</p> <p>Core slightly broken with good recovery.</p>
	1416	18	5	1510	11	8		120			11C1D161	±3 ±4
												<p>Moderately soft, P52-foliated, noncalcareous, biotite-muscovite-andalusite-chlorite-quartz schist. Biotite associated with andalusite in irregular, dark brown aggregates. Aggregates up to 3cm thick - elongate parallel S2. Matrix consists of pale tan to pale green muscovite ± chlorite. Biotite aggregate proportions ranges from 5-70%.</p> <p>More intensely altered schist associated with fractures running parallel core axis. Fractures are infilled by quartz. This is slightly to moderately altered/regraded schist.</p> <p>Core slightly broken with good recovery.</p>
	1510	11	8	1511	12	1		121			11C1D1018	
												<p>Moderately soft, noncalcareous, P52-foliated, dark brown biotite-chlorite-muscovite-andalusite-quartz schist. Andalusite associated with biotite in dark brown, irregular, irregular bands parallel S2 foliation. S2 surfaces are dark, micaceous brown. Near bottom of</p>

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
		15112		121		interval extensive chlorite and lesser muscovite replace biotite in matrix and in the biotite-andalusite clots. Schist becomes greenish rather than dark brown. Retrograde alteration associated with intrusions of IOE dykes. Core slightly broken with good recovery.
	15112	¹⁵⁶ 15114 ⁸		122	1101E1	Hard, medium x-line, equigranular, unfoliated, biotite-hornblende quartz diorite. Hornblende and biotite partly to completely altered to chlorite. Very minor calcite in thin fractures. Upper contact along fracture with orientation 15° wrt core axis. Lower contact irregular but crudely parallel core axis.
	15114	¹⁸⁰ 15193 ⁷		123	11C1D101B ± 4	Moderately soft, P52-foliated, dark brown, noncalciferous biotite-muscovite-andalusite-quartz-garnet-chlorite schist. Andalusite associated with biotite in dark brown clots/aggregates forming compositional bands up to 3cm thick. Biotite also disseminated in matrix. S2 surfaces are mottled micaceous brown, green, pale beige. Matrix biotite locally retrograded to pale green chlorite. See development of biotite-andalusite aggregates in a green pelitic matrix. Very locally alteration becomes more extensive and has biotite-andalusite aggregates in a pale tan muscovite-quartz matrix. Pegmatites which qtz veins contain coarse pink andalusite. Core slightly broken with excellent recovery.
	15193	¹⁸³ 16103 ⁹		124	11D141 ± 6 minor ± BXA	Pale tan, P52-foliated, noncalciferous muscovite-quartz schist. Locally contains relict biotite-andalusite clots and compositional bands these aggregates are typically partly to completely rimmed by medium green chlorite. Locally schist also contains minor

Code	From			To			Recov.	No.	Unit	Description	
	10	14	16	20	22	24					26
			161013	5				1214			<p>pale pink gneiss. Muscovite-quartz schist is typically thinly banded with ≤ 1 cm, discontinuous interbands of quartz.</p> <p>Interval 597.6 - 600.5 is brecciated along irregular fracture surface. Angular rotated clasts of ID4 and gts veins in fine grained, noncalcareous, pale beige matrix. Fracture system anastomosing with pinch and swell texture also - with locally extends up to entire core length. Fracture is going straight down the core axis.</p> <p>Pyroclastic white gts veins contains coarse pink andalusite.</p> <p>Core slightly broken with good recovery.</p> <p>Alterations and fracturing both probably related to next unit.</p>
			161013	5	161015	7		1215	1101E19	ALTERED	<p>Moderately hard to moderately soft, pale gray to off-white gts-feldspar intrusive. Former mafics are totally altered to pale chlorite. Abundant white feldspar phenocrysts now altered to clays. Upper and lower contacts parallel S2. Medium-finely x-line.</p> <p>Top 1/3 of unit is massive, unfoliated. Lower 2/3 of unit has readily visible foliation with quartz ribbon texture. Foliation appears parallel S2. Gradational change from unfoliated to foliated intrusive. Small rock looks like altered, marginal phase of 10E dyke.</p> <p>Core moderately broken with good recovery.</p>
			161015	7	161414	0		1216	11D141	9 minor (1CD64) 60'40	<p>Moderately soft, P2A-foliated, noncalcareous, thinly banded, pale beige muscovite-quartz schist. S2 surfaces are pale silvery cream. Banding characterized by thin, discontinuous quartz streaks less than 1 cm thick. Locally contains minor pyrite in thin streaks parallel S2.</p> <p>Intervals of schist up to 1.5 m thick contain irregular clots-aggregates-bands</p>

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
			161414	0				1216			<p>of dark brown biotite-andalusite. Aggregates range up to 5cm in thickness. Aggregates are locally being partly to completely retrograded to muscovite.</p> <p>Alteration to muscovite appears to be associated with steep fractures which have irregularly breasted the schist. Fractures have orientation 0-20° wrt core axis. Form anastomosing network with aligned 104 and 15064 cleats in a fine grained, noncalcaneous, pale tan matrix.</p> <p>Lower contact gradational with increase in biotite and appearance of chlorite.</p>
	161414	0	171016	²¹⁵ 3 5				1217	11C1D1618	4	<p>Moderately soft, PS2-foliated, medium brown, noncalcaneous biotite-muscovite-chlorite-garnet-Al_2SiO_5-quartz schist. S2 surfaces are mottled micaceous dark brown, silvery cream, and pale green. Al_2SiO_5 associated with biotite in large irregular aggregates/clots/bands. These bands and clots occur in a pale beige muscovite or more commonly pale green muscovite-chlorite matrix. Al_2SiO_5 appears to be mainly andalusite but locally I suspect some fibrolite. Proportion of biotite aggregates ranges 10-80% although generally they are 30-50%.</p> <p>Core slightly broken to intact with excellent recovery</p>
	171016	5	171018	²¹⁵ 9 2				1218	1101E191		<p>ALTERED</p> <p>Noncalcaneous, homogeneous, unfoliated, equigranular biotite quartz diorite. Medium-finely silty. Moderately hard to hard. Disseminated fine black biotite is almost totally altered - only relict patches with biotite remain. Upper contact is fine bra parallel S2. Lower contact is sharply discordant with orientation 30/205 wrt S2. Feldspars locally altered to opaque white.</p> <p>Core intact w/ excellent recovery.</p>

Code	From	To	Recov.	No.	Unit	Description					
1	10	14	16	20	22	24	26	28	30	34	35
	171018	2	17119	3	219	1101Q101	# Minor (1CDB X 1CDO X 1F3' B10) 40:20:30:10				
							Very heterogeneous unit with rapid changes between rock types.				
							TOE - 710 is dark brown, biotite-muscovite-andalusite-quartz schist. Very soft, extremely biotite rich. Locally finely banded with intermixed <1cm thick gneiss bands.				
							710-715 is dominantly 1000. Contains thin interbands of biotite-rich schist in upper part and greenish calcareous interbands in lower part (1F3?). Calcite infills steep fractures.				
							715-717 Soft, P2-foliated, moderately calcareous, medium green chloritic schist. Contains thin discontinuous biotite streaks parallel S2. Represents thin metamorphosed metabasite.				
							717-EOE Moderately soft, P2-foliated, greenish brown biotite-chlorite-quartz-Al2SiO5 schist (1CDB). Banding poorly preserved because of extensive chlorite retrograding of biotite. Core moderately broken with good recovery.				
	171119	3	171311	9	223	1101E1	# 9				
							Unfoliated, pale grey, medium finely x-line, equigranular biotite quartz diorite. Biotite constitutes about 15%. Locally minor biotite partly retrograded to pale green chlorite.				
							Below 725 feet biotite is totally altered - no mafics remain. At base it changes from hard to moderately soft. Feldspars altered to opaque white clays. Rock takes on a chalky white, pitted appearance with feldspars forming the pits.				
							Upper contact intrusive, cuts S2 with orientation 50/035 wrt S2. Lower contact is fracture breccia with extensive ID4 type alteration. Orientation of contact 10° wrt core axis.				
							Core slightly to moderately broken with good recovery.				

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28	30		34
	171311	9	171314	7				1311	11D141	± 3XA ± 6	
										Moderately soft to moderately hard, P2- <i>foliated</i> , pale tan, noncalcareous, muscovite-quartz schist. Thinly banded with thin grey <i>glaucous</i> bands alternating with muscovite-rich bands.	
										Uppermost 1 foot of unit existed along steep fracture. Labeled 1D4 and <i>gtr</i> near clasts up to 3cm across in pale tan, fine-grained matrix. Alteration probably associated with hydrothermal movement along fracture/fault system.	
										As go down DDH begin to get medium brown andalusite-biotite clasts and bands elongate within S2 foliation. Mark transition to next unit as alteration becomes less intense. Lower contact gradual.	
										Core intact with excellent recovery.	
	171314	7	171317	6				1312	11C1D1	± 6 ± 3 ± 4 (1F43) minor	
										Moderately soft, P2- <i>foliated</i> , noncalcareous, dark brown biotite-garnet-Al ₂ SiO ₅ -quartz ± muscovite ± chlorite schist. S2 surfaces are dark micaceous brown. Al ₂ SiO ₅ (andalusite/fibrolite) associated with biotite to form elongate dark brown bands and aggregates parallel S2 foliations. Thinly banded with biotite-Al ₂ SiO ₅ bands alternating with medium green chlorite-muscovite or pale tan muscovite bands. Banding on a scale of about 1cm.	
										At 767 feet have 15cm of pale grey-green, calcareous, P2- <i>foliated</i> , altered chlorite-muscovite schist. Tonalal insignificantly cumbled related to rock type.	
										Muscovite alteration with matrix increases near bottom of interval. Both upper and lower contacts are gradual.	
										Core slightly broken with good recovery.	

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 35		
	1718170	²⁴² 1719153		1313	11D141	±6 Moderately soft, PS2-foliated, pale tan, noncalcareous, thinly banded, muscovite-quartz schist. S2 surfaces are pale silvery cream. Banding marked by totally altered biotite-andalusite aggregates and bands. Locally, especially near top of interval have white biotite-andalusite aggregates which are only partly retrograded. Alteration is to chlorite-muscovite and ultimately muscovite assemblage. Core slightly broken with good recovery. Note of loss of cohesion at 79.3 feet. Minor fine streaky pyrite present in muscovite schist in very minor amounts.
	1719156	²⁴³ 1719181		1314	1101E119	ALTERED Moderately hard, equigranular, chalky white, medium x-lime feldspar-quartz intrusive. Former mafics (biotite) are totally altered. Feldspars are chalky white to very pale yellow. Upper contact irregular but cuts S2. Lower contact irregular with thin breccia zone. Lower contact of breccia 55/270 w/ S2. Core moderately broken with good recovery.
	1719181	²⁵⁴ 1813138		1315	11C1D1614	±8 (1D4 ± 6) 60:40 Symmetrical intersections w/ 1D4 being at top and bottom of interval. 1D4 is soft, B2-foliated, pale tan, noncalcareous gte-muscovite schist. S2 surfaces are silvery cream. Can see white biotite-MgSiO3 clots which are totally altered to muscovite-quartz. As go towards center begin to get only partly altered biotite-fibrolite aggregates/plats. Proportion of biotite increases until it constitutes 50-60% of rock (1CD). Thinly banded w/ biotite-fibrolite bands alternating with pale beige muscovite or pale green muscovite-chlorite bands. Banding is on a scale of 1-5 cm. Core slightly to moderately broken with good recovery.

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
	181313	181410 ²⁵⁶	0	1316	1101E191	ALTERED (10D4) MINOR Moderately soft, unfoliated, equigranular, medium x-line altered intrusive. Biotite is totally altered to pale tan mineral. Feldspars are altered to chalky white or very pale yellow, soft clays(?) Contains inclusions of muscovite-rich schist with coarse pink andalusite. Inclusions are generally less than 5 cm across. Core moderately broken with good recovery. Upper contact irregular, about 90° wrt core axis - xcuts S2. Lower contact approx. parallel S2. Lower contact offset on steep fractures w/ orientations 10/000 wrt S2
	181410	181416 ²⁵⁷	0	1317	11D141	6 MINOR (10E9) 80:20 ± BXA Major rock type is pale grey, noncalcareous, P52-foliated muscovite-quartz schist. Texturally can see relict biotite-Al ₂ SiO ₅ aggregates now totally altered to muscovite. Locally can see a few relict biotite-andalusite clots which are only partly altered. In lowermost 3 feet of unit have bxa developed. Large clots of 10D4 schist. Matrix consists partly of fine grained, pale tan fault rock. Locally matrix fine schist clots consists of thin anastomosing network of altered, fine-grained 10E intrusive. Core moderately broken with good recovery
	181416	181716 ²⁶⁷	0	1318	1101E19	ALTERED Medium x-line, equigranular, unfoliated, altered Qtz-feldspar-mafics intrusive. Mafics (biotite-hornblende) are almost totally altered to pale tan mineral. Locally fabric of mafics is preserved. Feldspars altered to chalky white or very pale yellow clays. Unit is noncalcareous. Contains numerous Qtz-filled steep fractures w/ orientations 20-25° wrt core axis. Qtz/fractures up to 2-3 cm thick. Core slightly broken with good recovery.

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
	181716	²⁶⁸ 181810		1319	1101E4	Unfoliated, equigranular, medium xline, hard, medium grey biotite-quartz diorite. Upper and lower contacts into more altered intrusive are gradational. Minor chlorite alteration on thin selvages on fractures. Minor calcite infilling thin fractures. Biotite 15%. Core slightly broken with good recovery.
	181810	²⁷⁶ 191015		1410	1101E191	(1020) 40:60 Altered 10E similar to Unit # 3B (846.0 - 876.4) Unfoliated, equigranular, Qtz-feldspar-mafics altered intrusive. Medium xline. Mafics totally altered to pale tan mineral (formerly biotite). Feldspar generally altered to very pale yellow clays. Altered 10E contains abundant pegmatitic white bull Qtz veins. Locally looks like 10E forms inclusions in veins. In one spot Qtz is wiggly with tiny crystals growing inward into the vein. Core moderately broken with good recovery.
	191015	²⁷⁹ 191116		1411	1101E1	±6 ±9 Medium grey, medium xline, unfoliated, hard, equigranular biotite quartz diorite. Biotite about 5-10%. Along thin fractures have pale pink K-feldspar selvage up to 2cm wide. Also get retrograding of biotite to chlorite in these zones. Adjacent to Qtz-filled fractures get alteration of biotite to pale tan mineral and alteration of feldspar to pale yellow to creamy white. Alteration becomes more extensive as you down DDH lower contact gradational and marked where biotite disappears. Core moderately broken with good recovery.

From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28	30 34 35	
191116	191314		1412	1101E9	± 6 Moderately hard, medium x-line, creamy white, equigranular, altered quartz diorite. Matrix are totally altered to pale tan mineral. Feldspars altered to pale creamy white, opaque white. Locally feldspars altered to pale pink K-feldspars. Abundant quartz calcite infilling fractures/veins. Fracture orientations ranges 10-25° to core axis. Upper and lower contacts are gradational. Contacts placed at where biotite appears and disappears. Core moderately broken with good recovery.
191314	1101010		1413	1101E1	± 6 MINOR ± CHLORITE MINOR Hard, medium dark grey, medium x-line, noncalcareous, equigranular, unfoliated, biotite-hornblende quartz diorite. Hornblende forms randomly oriented elongate prisms which tend to weather pale tan - hornblende partly to completely surrounded by fine biotite. locally has steep fractures infilled by calcite-quartz. Fractures typically have chlorite alteration selenge. Some fractures also have pink K-feldspar selenge inside the chlorite selenge against the wall of the fracture. With more extensive alteration the rock becomes crumbly, feldspars have a chalky white to greenish colour, and often the core is slightly to moderately swollen. Matrix content of intrusive about 5-15%. Core slightly to moderately broken with good recovery. Fractures are 5-20% wt. core axis.
1101010	1101116		1414	1101E1	6 "CHLORITIC" Drilling right down fracture/fault within 10E. Fracture fault system up to 3cm wide. Multiple opening of system so get green fine quartz and white calcite forming separate bands. Locally some bxa developed with small clasts within the fracture.

Lithologic Log

Date: Sept 26/09 Logged By: LCP

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28 30	34 35		
		1101160		1414		<p>infilling Margins of IOE away from fracture have extensive alterations of biotite to chlorite. Feldspars are also green. Immediately adjacent to fracture have thin selvage in IOE of pale pink K-feldspar. Minor pyrite on margins of fracture and within fracture.</p> <p>Growth on movement "ridges" within fracture suggest horizontal movement/slip along the fracture.</p> <p>Upper and lower contacts gradational as drill hole slowly moves away from this particular fracture system.</p> <p>Core slightly to moderately broken with good recovery.</p>
	1101160	³¹⁸ 1101413		1415	1101E1	<p>±6 = "CHLORITIC"</p> <p>Exactly the same as Unit # 43 (934.0 - 1000.1) Medium x-line, nonfoliated, medium grey, equigranular, biotite-hornblende quartz diorite. Biotite = hornblende. Matrix about 10-15%. Hornblende has partial to complete rim of fine-grained biotite.</p> <p>Thin calcite infilled fractures have narrow selvages of chlorite alterations. Locally inner margins of these selvages contain pink K-feldspar. Selvage thickness ranges up to 3 cm (one side) K-feldspar thickness generally 1cm or less.</p> <p>Core slightly broken with good recovery.</p>
	1101413	³²¹ 1101514		1416	1101E1019	<p>(IOE APLITE) 80:20</p> <p>Biotite-hornblende quartz diorite slightly altered by thin calcite-quartz infilled fractures/faults. Biotite retrograded to chlorite. Feldspars altered to yellowish green colour (possible epidote). Locally fractures have thin K-feldspar margin less than 1cm thick.</p> <p>Subparallel to the fractures have a fine-grained, medium grey, biotite aplite (?).</p>

Code	From		To		Feature	SYE	S ₀		S ₁		S ₂		Description
	10	14	16	20			Dip	Direct.	Dip	Direct.	Dip	Direct.	
1	32	34	38	40	44								
			11	13	P.S.2	-					5	13	S2 = micaceous schistosity/foliation
			20	16	P.S.2						4	15	S2 = micaceous schistosity/fol.
			28	17	P.S.2						5	14	"
			29	19	P.S.2	S		2	15	3	1	15	S2 = micaceous foliation S1 = compositional banding
			46	15	P.S.2						5	12	S2 = micaceous foliation
			41	13	P.S.2	S			1	7		10	S2 = micaceous foliation S1 = composite banding
			51	16	P.S.2						5	11	S2 = micaceous foliation
			54	17	P.S.2						5	13	S2 = micaceous foliation
			62	20	P.S.2	S			2	3	3	15	S2 = micaceous foliation S1 = compositional banding
			65	21	P.S.2						4	14	S2 = micaceous foliation
			73	24	P.S.2						5	11	S2 = micaceous foliation
			78	25	P.S.2						5	12	S2 = micaceous foliation
			83	27	P.S.2						4	14	S2 = micaceous foliation
			85	27	P.S.2						4	19	S2 = micaceous foliation
			92	30	P.S.2	S			2	0	3	10	S2 = micaceous foliation S1 = compositional banding
			101	33	P.S.2						5	11	S2 = micaceous foliation
			106	34	P.S.2						5	18	S2 = micaceous foliation
			110	36	P.S.2						5	16	S2 = micaceous foliation
			117	38	P.S.2	M			1	0	3	0	S2 = micaceous foliation S1 = compositional banding
			121	39	P.S.2	S			4	15	3	2	S2 = micaceous foliation S1 = compositional banding
			127	41	P.S.2						5	11	S2 = micaceous foliation
			135	44	P.S.2						7	11	S2 = micaceous foliation
			140	46	P.S.2						5	12	S2 = micaceous foliation
			145	47	P.S.2	S			3	16		10	S2 = micaceous foliation S1 = compositional banding
			152	50	P.S.2						5	15	S2 = micaceous foliation
			157	51	P.S.2						5	18	S2 = micaceous foliation
			164	53	P.S.2						4	17	"
			168	55	P.S.2	S			4	15	3	2	S2 = micaceous foliation S1 = compositional banding
			172	56	P.S.2	S			3	15		10	"
			181	59	P.S.2	S			3	16		10	"
			185	61	P.S.2	M			0		1	10	"
			198	62	P.S.2						5	16	S2 = micaceous foliation
			199	65	P.S.2	M			1	0		10	S2 = micaceous foliation S1 = compositional banding
			201	66	P.S.2	S			5	7		10	"
			209	68	P.S.2	S			4	15		10	"
			214	70	P.S.2						5	19	S2 = micaceous foliation

ASSAY LOG (SAMPLER'S COPY) Date Sept 25/89 Sampled by _____

CODE	FROM	TO	SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION						
1	10	14	16	20	22	26	28	30	32	34	36	40	42
	141312 ¹³¹	141317 ¹³³	37257	45	145	11D41	19	MINOR					
	141317 ¹³³	141413 ¹³⁵	37258	161	161	11D41	19	MINOR					
	141413 ¹³⁵	141417 ¹³⁶	37259	139	140	11C1D1416							
	141417 ¹³⁶	141511 ¹³⁷	37260	45	145	11C1D1416							
	141511 ¹³⁷	141515 ¹³⁸	37261	41	141	11C1D1416							
	141515 ¹³⁸	141610 ¹⁴⁰	37262	47	147	11C1D1416							
	141610 ¹⁴⁰	141614 ¹⁴¹	37263	44	144	11C1D1416							
	141614 ¹⁴¹	141618 ¹⁴²	37264	38	38	11C1D1416							
	191116 ²⁷⁹	191211 ²⁸⁰	37265	47	147	1101E191							
	191211 ²⁸⁰	191215 ²⁸²	37266	41	141	1101E191							
	191215 ²⁸³	191310 ²⁸⁴	37267	44	144	1101E191							
	191310 ²⁸⁴	191314 ²⁸⁷	37268	40	140	1101E191							
	191314 ²⁸⁷	191413 ²⁸⁷	37269	95	95	1101E1							fresh

PROJECT _____ DRILLHOLE NO. B9EX-03 COORDINATES: N _____ DATE Sept 24 1989
 LOCATION _____ HOLE SIZE NQ E _____ PAGE 1 of _____
 LOGGER LCP INCLINATION -90 ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS	
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.		
31	6	5.2																CARING - TAILORING
37		5.2		3.2			12		D							2		
47		10.0		6.7			11		C							3		
54.5		7.0		2.5			11		C							2		
63		8.0		6.4			12		D							0		
71.5		8.3		5.9			12		E							1		
81		3.6		1.9			6		D							1		MISLATCH
90		9.0		5.0			10		D							4		
100		10.0		9.5			13		F							0		
110		10.3		10.0			13		F							1		
120		8.3		6.3			10		D							1		
127		7.3		7.3			13		F							0		
137		10.2		9.4			15		F							0		
147		10.5		10.2			15		F							0		
157		10.1		10.1			15		F							0		
167		10.0		9.7			12		F							0		
177		10.0		10.0			13		F							0		
187		10.2		8.5			12		E							6		
197		10.0		7.7			12		E							5		
207		9.9		9.1			13		F							0		
217		10.3		10.0			14		F							3		
227		10.2		9.2			12		F							2		
237		9.8		7.8			12		F							2		
247		10.5		6.3			13		E							5		
257		9.8		7.6			11		F							5		
267		10.1		8.8			14		F							1		
277		10.0		8.7			12		E							0		
287		10.5		8.3			13		F							1		

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. B9FX-03 COORDINATES: N _____ DATE Sept 24 1989
 LOCATION _____ HOLE SIZE _____ E _____ PAGE 2 of _____
 LOGGER LCP INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS	
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.		
297		10.3		8.8			12		F							0		
307		10.2		9.8			14		F							0		
317		10.1		10.0			14		F							1		
327		10.1		10.2			13		F							2		
337		10.2		8.5			12		F							8		
347		10.2		8.9			12		F							5		
357		10.0		8.6			12		F							4		
361		4.0		3.4			12		F							0		
367		6.0		5.5			13		F							1		
377		10.1		9.1			13		F							5		
387		10.4		5.2			10		F							9		
397		9.9		8.6			13		F							2		
407		10.0		9.6			14		F							2		
417		10.1		8.8			12		F							2		
427		9.9		8.7			11		F							2		
437		10.0		8.6			11		F							3		
447		10.0		7.5			11		F							4		
457		9.9		8.0			12		F							4		
467		10.0		9.3			14		F							4		
477		10.0		9.1			14		F							2		
487		10.1		9.8			14		F							0		
497		9.9		9.0			14		F							4		
507		10.1		9.6			13		F							4		
517		10.2		9.1			13		F							1		
527		10.0		9.2			12		F							2		
537		10.4		9.8			12		F							0		
547		10.4		9.4			13		F							1		
557		10.0		9.2			12		F							1		

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. 87-FX-03 COORDINATES: N _____ DATE Sept 25 1987
 LOCATION _____ HOLE SIZE _____ E _____ PAGE 3 of _____
 LOGGER LCP INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS		
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.			
567		10.0		8.6			13		F							0			
577		10.2		10.2			14		F								1		
587		10.0		9.8			13		F								0		
597		10.2		9.7			14		F								1		
607		10.3		9.2			12		F								1		
615		8.1		6.4			11		F								2		
617		1.8		1.7			11		F								0		
627		10.5		9.6			12		F								2		
637		9.7		6.0			11		F								7		
647		10.4		10.2			13		F								0		
657		10.0		9.6			15		F								0		
667		10.0		9.9			15		F								0		
677		10.2		10.2			15		F								0		
687		9.9		9.5			15		F								0		
697		10.2		10.2			14		F								1		
707		10.2		10.0			14		F								1		
717		10.0		7.6			11		F								0		
727		10.4		10.0			14		F								3		
737		10.0		8.4			13		F								7		
747		10.1		9.8			15		F								0		
757		10.1		9.9			14		F								0		
767		10.1		9.7			15		F								0		
777		10.2		10.0			14		F								0		
787		10.2		10.2			15		F								0		
797		10.1		9.0			13		F								9		
807		10.0		8.9			12		F								1		
817		10.0		9.7			13		F								1		
827		10.0		9.5			13		F								1		

Fig. 1. Typical rock mechanics core log.

PROJECT _____
 LOCATION _____
 LOGGER LCP

DRILLHOLE NO. 89-FY-03 COORDINATES: N _____
 HOLE SIZE _____ E _____
 INCLINATION _____ ELEVATION _____

DATE Sept 25 1989
 PAGE 4 of 4



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
857		10.0		10.0			13		F							2	
847		9.9		9.6			13		F							5	
857		9.9		9.8			14		F							3	
867		10.0		10.0			13		F							2	
877		10.0		8.8			13		F							2	
887		10.1		9.9			13		F							1	
896		9.0		7.7			12		F							6	
906		10.0		8.2			12		F							5	
916.5		10.3		9.3			13		F							4	
926.5		10.0		9.8			13		F							7	
937		10.2		9.3			12		F							4	
947		10.5		9.5			12		F							7	
957		10.2		9.6			12		F							8	
967		9.8		6.7			11		F							10	
977		10.1		9.6			13		F							4	
987		9.9		9.5			12		F							8	
997		10.2		10.0			14		F							4	
1007		10.2		9.6			12		F							4	
1017		10.2		9.9			13		F							5	
1027		10.0		9.5			13		F							4	
1037		10.1		10.0			14		F							1	
1047		10.2		9.7			14		F							3	
1054		9.3		7.0			13		F							1	

Fig. 1. Typical rock mechanics core log.

DIAMOND DRILL CORE LOG

Date: _____

Hole Number: 89EX-04

Reference Fabric Orientation Diagram:

Project: FARO NORTHWEST

lost circulation @ 1100 feet

Location: NW of FARO PIT

Claim: _____

UTM Terr. Plane
Co-ords.:

6,915,740.5 N

583,655.8 E

Grid
Co-ords: _____

Elevation: 1367.0 m.

All symmetry determinations looking

Total Depth: ²1036 feet (376.7m)

_____ with _____ dipping

Inclination: -90° (Vertical)

_____ with dip azimuth _____.

Purpose: Test for floor to 10E dyke

Reason hole Terminated: Budget reached

Logged by: LCP

Date(s) Logged: SEPT 26-27, 1989

Drilling Contractor: ARCTIC

Hole Cemented: No Steel down Hole: No

Size	CORE From	To	Collar Cased and Capped:
<u>NW</u>	<u>0</u>	<u>55 feet</u>	<u>No</u>
<u>NQ</u>	<u>55</u>	<u>1036² feet</u>	

Assay Lab: _____

Certificate No's: _____

Started: Aug 30/89 Completed: Sept 5/89

Code	From				To				Recov.	No.	Unit	Description
	10	14	16	20	22	24	26	28				
		10	0	15	5	0				11	#	TRICONED - NO RECOVERY
		15	5	0	16	3	1			12	1101E1	<p>VERY WEATHERED</p> <p>Medium xline, equigranular, unfoliated, biotite-hornblende quartz diorite. All surfaces have weak to strong orange-brown weathering coat. When weathering colour is bright orange rock is very friable - breaks into "arkosic" sand along grain boundaries. Intervals of sand extend for up to 70cm. Natural fractures/joints have stronger orange iron oxide weathering stain. Feldspars are orange. Hornblende is pale brown. Core moderately broken. TOI-59. //59-EOT very broken, rubblely, sandy. Recovery OK for entire interval.</p>
		16	13	1	11	0	7	1		13	1101E1	<p>± 9 SLIGHTLY WEATHERED</p> <p>Medium xline, unfoliated, equigranular biotite-hornblende quartz diorite. Generally medium to pale grey. Natural fracture surfaces have orange brown surface weathering coat. Locally feldspars are altered to a soft chalky white clays and mafics are partly to completely destroyed. Locally have 10cm intervals where quartz diorite consists of chalky white sand where rock has totally "disintegrated". Core very broken with rubblely and sandy intervals. Recovery seems OK. Weathering is more localized - can begin to see alterations through the weathering coat.</p>
		11	0	7	1	11	3	7	0	14	11101E19	<p>ALTERED</p> <p>Chalky white, unfoliated, equigranular, medium xline quartz diorite. Only very minor relic biotite remains in local intervals. In most of intervals mafics are totally altered & not present. Feldspars altered to soft, chalky white, or very pale yellow clays. Upper and lower contacts gradational - placed where biotite disappears and feldspars</p>

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28 30	34 35	
		11317	0	14		become very altered. Natural fractures locally have orange-brown weathering stain locally some fractures have bra textures developed. Also very locally rubble and sandy for 5-10 cm intervals. TOI-129.5 mod. broken with short rubble intervals. Recovery OK. // 129.5-EOE. Slightly broken with excellent recovery
	11317	11416	0	15	1101E1	09 SLIGHTLY ALTERED Medium grey, medium xline, nonfoliated biotite-hornblende quartz diorite. Matrix 1-10% with biotite > hornblende. Locally mafics almost totally altered so only a small amount of white biotite remains. Alteration decreases as go down DDH. Feldspars start out chalky white and gradually change to opaque white and then a moderately translucent grey. Thin fractures are infilled with calcite. Core slightly broken with excellent recovery
	11416	11618	0	16	1101E1	FINE GRAINED [INCLUSION]? Finely xline, dark grey, unfoliated, biotite quartz diorite. Marginal contacts with 10E are reasonably sharp. Contains scattered biotite and feldspar phenocrysts up to 0.5 cm across. Locally slightly altered in narrow selvage adjacent to thin calcite infilled fractures. Selvage is pale greenish grey and typically less than 1 cm thick. Also have zones of more extensive alteration above entire core slightly altered. Phenocrysts <5%. Matrix 20-30%. Unit reminds me strongly of inclusions / xenoliths. Core moderately broken with good recovery.

Code	From			To			Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28	30	34		
	11618	4		12119	⁶⁶ 8 ⁶ 6				17		110 E	±69 meters Medium xline, nonfoliated, medium grey biotite-hornblende quartz diorite. Mafics 5-10% with biotite >> hornblende. Hornblende grains partly to completely enclosed by fine-grained biotite. Narrow fractures are locally infilled with calcite. Locally affected with retrograding of biotite to chlorite and development of pink K-feldspar. Alteration dominantly along narrow fractures, although in some instances it seems more pervasive. TOI-192.5 core slightly broken with good recovery // 192.5-195 core very broken and rubble due to alteration and steep fracture - recovery OK // 195-EOI core slightly broken with good recovery.
	12119	0		121610	⁷⁹ 3 ¹ 1				18		110 E	(10E FINE GRAINED) 65.35 Medium xline, unfoliated, medium grey biotite-hornblende quartz diorite. Mafics 5-15% with biotite >> hornblende. Biotite is dark black. Hornblende is medium to pale brownish green. Hornblende typically is partly to completely surrounded by biotite. Minor potassic alteration - chlorite + K-feldspar locally associated with thin fractures. Contains interbeds of Unit # 6 (146.0-168.4) Fine xline, biotite quartz diorite. Scattered phenocrysts of biotite and feldspar constitute <5% of unit. Fine, unfoliated biotite in matrix constitutes 80% and helps give unit a dark grey color. Definitely more mafic than more coarsely xline 10E. Marginal contacts are steep - smooth - straight or slightly convexly curved. Greatest length is 3 feet - some intervals are less than 1 foot. Possibly going through interval with numerous xenoliths / inclusions? Core moderately broken with good recovery.

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
	121610		121617							119			110IE19	±6 ALTERED "CHLORITIC"
														Altered biotite-hornblende quartz diorite. Biotite and hornblende retrograded to chlorite and then "removed" through alteration. Extensive green chlorite in matrix. Locally extensive pink K-feldspar as 1-3cm selvage to fractures.
														Alterations associated with steep fractures. One fracture 3cm wide and filled with calcite. Calcite locally waxy with crystals growing inward into cavity. Calcite filled fracture has 2cm thick bxa zone on one side. Angular clots of altered IOE in fine, pale tan matrix. Looks like clots have not moved free.
														Calcite fracture has orientation 10° wrt core axis.
														TOI - 263.5 Moderately broken with good recovery // 263.5-EOI Very broken and rubble with good recovery.
	121617		131911							110			110IE1	±9 MINOR (IOE FINE GRAINED) TRACE
														Medium xline, medium grey to medium dark grey, unfoliated, biotite-hornblende quartz diorite. Hornblende grains partly to completely rimmed by fine biotite. Biotite >> hornblende. Matrix 10-15%
														Fresh rock is dark grey. Especially in upper 1/2 of unit have faint alteration overprint associated with steep fractures running down the core axis. Biotite retrograded to chlorite. Feldspars have pale green colour and are much softer. Some bxa development and minor displacement occurs along the fractures.
														IOE contains ovaloid inclusions of fine grained, dark grey, biotite gte-diorite - exactly same as unit #6. Most inclusions are 5cm or less in size although one is 15cm.
														TOI - 286.5 slightly broken with good recovery // 286.5-288 very broken - recovery good // 288-306 mod broken - recovery good // 306-318.5 mod broken to very broken - recovery good // 318.5-EOI slightly broken with good recovery.

Lithologic Log

Date: Sept 27/89 Logged By: KCP

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
	131911	9		141017	0					111		11101E1	(10E 6.9) 70:30 Medium grey, medium xline, unfoliated biotite-hornblende quartz diorite. Mafics about 5% with biotite >> hornblende. Feldspars overall have faint greenish, slightly altered tinge. Contains intervals of extensively altered, sheared quartz diorite. Intervals with best developed shear zones are 391.9-392.9 and 403.5-404.5. Mafics totally altered to chlorite. Extensive development of pale pink K-feldspar. Shear margins 30-35° wrt core axis. Locally bra texture w/ altered 10E clasts in a 10E mud matrix. Probably not major faults. Shear zones are calcareous. Minor development of K-feldspar selvages along narrow fractures locally. Total width of selva and fracture 3-4cm. Core slightly broken with good recovery.	
	141017	0		141215	5					112		11101E1	Medium xline, unfoliated, medium dark grey, hard, noncalcareous biotite-hornblende quartz diorite. Hornblende pale green to yellowish with dark biotite rim - probably partially altered. Biotite very dark brown. Mafics 5-10%. Coarse biotite (up to 0.5cm) as well as fine biotite (1-3mm). Minor thin fractures infilled by calcite. Core slightly broken with good recovery.	
	141215	5		141217	5					113		11101E1	(10E FINE - "MARGINAL") Same 10E as described above for Unit # 12 (407-425.5) Contains 1cm thick lute of dark brown ophanitic biotite intensive. Scattered phenocrysts of biotite and pale grey feldspar. Irregular, sharp margins - sends small gophyses into 10E - also contains a few 10E inclusions. Dark brown, ophanitic matrix is very similar to	

Code	From	To	Recov.	No.	Unit	Description
I	10	14 16	20 22 24	26 28 30	34 35	
	141515	7 141517	139 139	116	BIXIAI	Bottom contact of previous unit is tectonic brex. Clasts include IOE, foliated IC, foliated IF - i.e. some clasts look like green metabasite and brown biotitic schist. SZ foliations randomly oriented. Clasts are rounded. Maximum clast size up to 3-4 cm across. Possibly clasts dragged up along margin of IOE FINE-MARGINAL during intrusion. Or possibly major fault? Doesn't look like major fault. Core moderately broken with good recovery.
	141517	9 161913	211 211	117	110IE	± 9 microns Medium x-line, medium grey, nonfoliated biotite-komblende quartz diorite. Biotite > komblende. Komblende grains rimmed by fine biotite. Mafics 5-10%. Locally small, round, fine-grained biotite-rich inclusions. locally slightly altered with loss of mafics and conversion of feldspars to clays along narrow fractures. Some fractures infilled with calcite. Core slightly broken to moderately broken with good recovery.
	161913	9 161917	212 212	118	110IEI	6 9 "CHLORITIC" Extensive alteration associated with thin fracture running down the core axis. Zoned alteration pattern away from fracture. Farthest away, biotite altered to medium green to pale green chlorite. Feldspars have a faint greenish tinge. Slightly closer in feldspars are bright pink - K-feldspar. Biotite still retrograded/alterred to medium green chlorite. Adjacent to fracture extensive growth of fine grained, very dark green chlorite. Zoning irregular with innermost zone not always present. K-feldspar + dark green chlorite zones may extend across entire width of core. Fracture contains green chlorite + calcite. Core slightly broken with good recovery.

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
	16	19	17	17	16	16				119		110IE1		<p>Medium xline, medium grey, nonfoliated biotite-hornblende quartz diorite. Biotite very dark brown. Biotite \Rightarrow hornblende. Mafics 5% - 10%. Hornblende now totally retrograded, margins consist of fine biotite and cores contain calcite.</p> <p>Minor alteration of feldspars to chalky white clays immediately adjacent to very thin calcite-filled fractures. Fractures tend to be steep - proceed down core axis with very shallow angle.</p> <p>Core slightly broken with good recovery.</p>
	17	16	16	18	11	14				120		110IE1		<p>(10E 9 \approx 6 SHEARED) 70:30</p> <p>Major rock type is same as described above in Unit # 19 (697.5 - 766.9).</p> <p>Contains zones up to 1m thick of extensive alteration associated with fracturing and incipient shearing. Biotite first goes to chlorite and then "disappears" as altered to pale tan mineral (muscovite?). Feldspars first become chalky white and then become faint pink and lime/lemon yellow. Feldspars probably altering to epidote minerals.</p> <p>Irregular fractures are infilled with white calcite. Extensive fine fracture. Locally see some movement so tend to get pt eyes in sheared matrix. Slickensides on parts of calcite-filled fractures have angle of 70° wrt core axis - indicates significant strike slip component to movement. Fracture/shear zones are 10° - 20° wrt core axis.</p> <p>Core slightly to moderately broken with good recovery. Not a major fault zone.</p>
	18	11	14	18	11	19				121		110IE1		<p>MEDIUM FINE</p> <p>Medium fine xline, hard, dark grey, nonfoliated biotite-hornblende quartz diorite. Distinguished from regular 10E by slightly finer grain size, more abundant fine biotite in matrix, which leads to darker grey colour. Scattered biotite plagioclase up to 2mm across in fines, more biotite-rich matrix. Hornblende still present and still calcic in core. Mafic content</p>

Code	From	To	Recov.	No.	Unit	Description
	10 14 16	20 22 24	26 28	30 34 35		
		18119 7		121		30-40%. Contains fine calcite-filled fractures. Marginal contacts with medium xlline "regular" 10E are sharp. Plagioclase only 1-3%. Core slightly broken with good recovery. Not as fine grained nor as mafic as inclusions/xenoliths at top of DDH.
	18119 7	²⁵⁰ 18123 2		122	1101E1	Medium xlline, medium gray, unfoliated, biotite-hornblende quartz diorite. Mafics 5% with biotite > hornblende. This is what has been logged as normal 10E. Core moderately broken with good recovery.
	18123 2	²⁶⁶ 18172 9		123	1101E1	MEDIUM FINE Medium finely xlline, dark gray, unfoliated, hard, biotite-hornblende quartz diorite. Same as Unit # 21 (814.3 - 819.7). Scattered biotite plagioclase only 1-2%. Much more abundant biotite as finer grains in matrix - 30%. Very minor hornblende present - cores of hornblende grains are slightly calcareous. Marginal contacts are sharp. Thin fractures are infilled with calcite. Interval 848-858 is medium green as biotite retrograded to chlorite and feldspars altered in association with abundant calcite infilled fractures. Core slightly broken with good recovery.
	18172 9	²⁷¹ 18192 0		124	1101E1	Medium xlline, medium gray, unfoliated biotite quartz diorite. Mafics 5%-10% "Normal" 10E as logged. Minor thin calcite infilled fractures. Core slightly to moderately broken with good recovery.

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
	1819	12	0	1912	12	0				1215	1101E1		MEDIUM FINE Similar to Units # 21 (814.3-819.7) and # 23 (823.2-872.9). Medium dark grey, medium finely xline, unfoliated biotite quartz diorite. Only 1% scattered biotite phenocrysts. Biotite in matrix 30-35%. Definite mottled appearance as matrix biotite poorly outlines grey feldspar grains. Minor fine fractures infilled with calcite. Not altered. Core slightly broken with good recovery.	
	1912	12	0	1101314	14	0				1216	1101E1		± 9 mmol Medium xline, unfoliated, medium grey, biotite - hornblende quartz diorite. Mafics are biotite >> hornblende. Mafics 5% or so. Locally plagioclase feldspar altered to soft, opaque white clays. Alteration associated with small calcite ± quartz fractures. Core slightly broken with good recovery.	
	1912	15	7							1217			Below 945.7 unit is slightly more mafic with slightly greater amount of biotite. Mafics 10-15%. Not as mafic as 10E Medium Fine. Transitional between what has been logged as 10E and 10F Medium Fine in this DDH.	
	1101314	0	1101417	17	5					1217	1101E19		"CHLORITIC" Both upper and lower contacts are gradational. Same 10E biotite quartz diorite only now altered. Uniform colour is greenish grey. Biotite altered to medium green chlorite. Feldspar altered to mixed assemblage including calcite, epidote, opaque white clays. Calcite infill fractures. Feldspar alteration varies from dominantly clays to dominantly epidote minerals. This unit is transitional between more intensely altered next unit and reasonably fresh previous units. Core slightly to moderately broken with good recovery.	

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
	11014	17	5	11016	14	2			1218	1101E19	ALTERED
											Moderately soft to moderately hard, unfoliated, creamy yellowish white, highly altered IOE intrusive. Entire unit slightly to moderately calcareous. Biotite altered to pale tan, soft mineral (?). Feldspars altered to calcite, epidote (?), clays (?). Feldspar soft chalky white to pale lemon yellow.
											Minor calcite veins and fractures associated with alteration. Some minor shearing and breccia developed in association with the fractures. Fractures are steep - nearly parallel core axis.
											Minor thin intervals where relict biotite is preserved although feldspars are still altered.
											Core slightly broken with good recovery.
	11016	14	2	11017	11	2			1219	1101E10	9 SLIGHTLY ALTERED
											Less altered biotite quartz-biotite. Biotite and feldspars overall look reasonably fresh. Medium siliceous, pale grey mafics 15%. Extensive alteration adjacent to thin calcite infilled fractures.
											Can see shear bands developed in this unit. Thin zones where begin to get a foliation. Dominantly quartz ribbons with some biotite alignment. These bands are about 0.5 cm thick. These form an anastomosing network. Dominantly oriented about 50° west core axis.
											Core slightly broken with good recovery. Not good shear bands because irregular - not planar. Suggest more fracturing - dilatational.
	11017	11	2	11019	10	4			1310	1101E19	PyRITE MINOR SILICA
											Highly altered, equigranular IOE dyke. Biotite totally removed. Locally see relict pale tan grains. Feldspars totally altered to soft, chalky white clays. Initially have some calcite development but with increasing alteration the material becomes noncalcareous.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28	30 34 36		
						<p>Begin to have an anastomosing network of fine-grained, pale grey silica infilled fractures. Irregular out lines. Commonly silica brecciated so have fine, angular silica clasts in silica matrix. Locally fractures contain thin streaks of fine pyrite as well as silica. Silica starts to constitute up to 30-40% of unit. Extensive irregular silica flooding. Irregular pattern and extensive microbrecciation combined give suggestion of continued mainly dilatational fracturing and precipitation. Core moderately broken with good recovery.</p>
	1101910 4	111110 ³³⁸ 2		1311	1101E1019 ± FLUORITE (10E9) 90:10	<p>Cored right down fracture system infilled with fine-grained (= chalcocenic) grey silica. Finely banded/laminated parallel fracture walls. Abundant bxa texture with small angular clasts of highly altered 10E and silica in the silica matrix. Locally muggy with small x-tals growing into the voids.</p> <p>Near 1102 contains faint pink/purple fluorite infilling fractures later than grey silica fractures. Fluorite is matrix for grey silica and altered 10E angular clasts with bxa texture.</p> <p>Pink forms irregular thin stringers and aggregates in all of the rock layers. Forms irregular stringers cutting across 10E, silica fractures, fluorite fractures.</p> <p>Core moderately to very broken with good recovery.</p> <p>Drill has fracture system going down core axis. Voids, irregular fracture network, lack of shearing planes & textures indicates mainly dilatational stress regime.</p>
	111110 2	111131 ³⁴⁵ 0		1312	1101E191	<p>Extremely altered, creamy white, soft, noncalcareous, equigranular intrusive. Matrix is totally desugared - left with equigranular quartz and soft white clays. Locally have small thin, very irregular, light grey, silica-infilled fractures.</p>

Code	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28	30 34 35	
		111313	0	1312		T0I-1129. Very broken and rubble. Core disintegrates readily because of extreme alteration. Recovery OK 1129-E0I moderately broken with good recovery. Core holds together better because of more extensive thin, irregular silica infilled fractures.
	111313	111412	0	1313	1101Q1019	(10E9) 70:30 Similar to Unit # 31 (1090.4-1115.1) Drilling shows fine grained grey quartz/silica infilled fracture system in highly altered 10E dyke. Fine colour laminations in shades of grey in silica parallel margins of fracture. Silica typically has bra texture with angular clasts of silica and highly altered 10E dyke. Minor vuggy aspect to silica in fractures with some voids being preserved. Pyrite locally disseminated as aggregates and stringers in quartz and altered 10E matrix. No fluorite noted. 10E is highly altered, cream white, equigranular quartz and soft chalky white clays. Contains anastomosing, irregular network of fine, irregular, pale grey quartz infilled fractures. Pyrite stringers cut both 10E and qtz-infilled fractures. Core moderately broken with good recovery
	111412	111612	0	1314	1101E19	SILICEOUS Same as Unit # 32 (1115.1-1133.0) Highly altered, non-aluminous, soft to hard, intrusive. All matrix minerals destroyed. Equigranular quartz and chalky white clays after feldspar. Abundant irregular, fine, anastomosing fractures infilled with pale grey silica. Gives incipient bra texture with 10E angular clasts within a fracture network. Minor thin late pyrite stringers. Core slightly broken with good recovery.

Code	From			To			Recov.			No.			Unit			Description
	10	14	16	20	22	24	26	28	30	34	35					
	1111612	5	1111819	5					1315	1101E1019					(10E9) 60:40	
															Transitional unit between #33 () and #34 ().	
															Contains intervals of gang, silica infilled fractures. Compositional banding parallel margins of fracture. Similar to Unit # 33	
															Most of unit, however, corresponds to highly altered 10E dyke with abundant, fine, anastomosing network of pale grey, quartz-infilled fractures. Incipient bxa texture.	
															Anastomosing fractures commonly have internal bxa texture with clasts of 10E and grey silica within a fine, pale grey silica matrix. Some mgs in the fracture network.	
															locally have a few shaly textures - Development of foliation with some shear bands - C-S fabric. But these fabrics are very localized and very minor.	
															TOI-1170 core moderately broken with good recovery // 1170-1173 very broken or steep fractures with good recovery // 1173-EOT slightly broken with good recovery.	
															Incipient gänge developed at 1187 for 1 foot interval - related to zone of shear fabric development.	
	1111819	5	1111917	6					1316	1101E191					± *	
															Moderately soft, locally slightly calcareous, creamy white, highly altered 10E dyke. Unfoliated.	
															Mafic minerals are totally destroyed. Left with equigranular pale grey quartz and soft, chalky white clays. Upper contact reasonably sharp with disappearance of fine anastomosing network of quartz-infilled fractures. Lower contact gradational with appearance of biotite.	
															white feldspars still altered to chalky white clays.	
															Core slightly broken with good recovery.	

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
	111917	6	1236	6			1317		1101E		<p>"MEDIUM FINE"</p> <p>Hard, medium-fine grained, dark gray, unfoliated biotite quartz diorite. Mafic content 20-30% Minor (like 1-2%) biotite phenocrysts disseminated in matrix with more abundant fine biotite.</p> <p>Minor chlorite alterations as selvages to calcite infilled fractures.</p> <p>Core slightly broken with good recovery</p>
											EOH
											<p>Fracture system near EOH is mainly dilatational. Precipitation of silica, feldspar and pyrite within the system. IOE extensively altered with destruction of mafic minerals and alteration of feldspar to clays. Abundant dilatational breccia development in IOE</p>

ASSAY LOG (SAMPLER'S COPY)

Date Sept 27/89 Sampled by _____

CODE	FROM	TO	SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION						
10	14	16	20	22	26	28	30	32	34	36	40	42	
	109	112	373	11	197	197	110	E1					fresh
	211	212		12	36	136	10	E1	69				"CHARITIC"
	212	215		13	95	195	110	E1					FRESH
	263	266		14	95	95	110	E1					Medium Fine fresh
	266	268		15	166	166	110	E1					FRESH
	317	319		16	55	155	110	E1	91				"CHARITIC"
	320			17	43	143	110	E1	91				
	321			18	43	143	110	E1	91				
	323			19	36	136	110	E1	91				
	324			20	45	145	110	E1	91				
	326			21	70	170	110	E1	109				
	328			22	49	149	110	E1	91				
	329			23	47	147	110	E1	91				
	330			24	49	149	110	E1	91				
	332			25	47	147	110	E1	91				
	333			26	44	144	110	E1	91				
	334			27	35	135	110	E1	91				
	335			28	37	137	110	E1	91				
	336			29	33	133	110	E1	91				
	338			30	49	149	110	E1	91				
	345	346		31	44	144	110	E1	91				
	348			32	50	150	110	E1	91				
	354	355		33	45	145	116	E1	91				
	357			34	41	141	110	E1	91				
	358			35	46	146	110	E1	91				
	359			36	45	145	110	E1	91				
	362			37	93	193	110	E1	91				
	363			38	33	133	110	E1	91				
	365			39	48	148	110	E1	91				*

}

Au only

PROJECT _____ SERIAL NO. 89-FX-04 COORDINATES: N _____ E _____
 LOCATION _____ HOLE CODE _____ C _____
 LOGS _____ INCLINATION _____ ELEVATION _____

DATE 26/Sept/89
 PAGE 1 of 5



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (10)	LENGTH OF RUN	CORE RECOVERY		DIP		DIRECTION	DEGREE OF BREAKAGE CATEGORY NO.	DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CRACK JOINTS		COMMENTS
		LENGTH	%	LENGTH	%					DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
55																
66		10.9		4.0			5	B						3.1		
76		10.7		5.4			6	C						34		
86.5		10.7		4.0			6	C						42		
96.5		10.7		2.1			10	D						45		
101		4.2		0			6	D						26		
107		7.2		2.7			10	D						27		
117		10.4		4.7			10	D						38		
127		10.5		2.8			10	D						35		
137		10.0		9.0			12	E						14		
147		10.0		10.0			13	F						10		
157		10.2		8.9			12	F						20		
167		10.4		8.5			12	F						15		
177		10.0		9.1			13	F						13		
187		9.8		8.8			13	F						11		
197		10.0		7.2			12	E						23		
207		10.2		9.4			12	F						12		
217		9.9		9.3			12	F						13		
227		10.3		7.8			11	F						26		
237		10.0		8.5			12	F						18		
247		10.1		7.6			11	F						20		
257		10.2		9.3			12	F						14		
267		10.5		4.2			9	E						35		
277		10.0		9.7			13	F						10		
287		10.4		8.7			12	F						16		
297		10.4		5.4			11	E						24		

Fig. 1. Typical rock mechanics core log.

PROJECT _____ ORIGINALE NO. 89-FX-04 COORDINATES: N _____ DATE Sept 26/89
 LOCATION _____ HOLE SIZE _____ E _____ PAGE 2 of 5
 LOGGED _____ INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (10)	LENGTH OF RUN	CORE RECOVERY		RQD		HARDNESS	DEGREE OF BREAKAGE CATEGORY NO.		DEGREE OF WEAKENING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		NO.	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
307		10.0		8.6			11		F					18			
317		10.1		2.9			8		F					37			
327		10.2		8.7			12		F					15			
337		10.1		9.9			13		F					10			
347		10.0		10.0			14		F					6			
357		10.1		9.6			13		F					12			
367		10.0		8.9			12		F					14			
377		10.0		9.6			14		F					10			
387		10.1		9.6			13		F					10			
497		10.0		9.6			13		F					9			
407		10.5		9.9			13		F					12			
417		10.2		9.3			12		F					14			
427		10.0		9.1			12		F					16			
435		8.1		5.0			10		F					27			
441		6.0		1.0			7		F					30			
447		6.0		3.1			10		F					18			
457		10.3		7.3			11		F					27			
467		10.2		8.2			12		F					20			
477		10.4		6.7			11		F					24			
487		10.0		9.4			12		F					14			
495		7.5		6.9			12		F					9			
499		4.4		3.8			12		F					7			
507		8.6		7.6			12		F					12			
517		10.1		10.1			13		F					8			
527		10.0		10.0			13		F					7			
537		10.2		10.0			13		F					9			

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. 89-FX-04 COORDINATES: N _____ DATE Sept 27 1989
 LOCATION _____ HOLE SIZE _____ E _____ PAGE 3 of 5
 LOGGER _____ INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		ROD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS	
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.		
547		10.2		9.4			12		F							14		
557		10.2		9.5			11		F							17		
567		10.1		9.3			11		F							17		
577		10.5		9.5			11		F							18		
587		10.3		10.3			13		F							7		
597		10.0		9.7			14		F							5		
607		10.1		10.1			14		F							6		
617		10.0		10.0			13		F							10		
627		10.4		10.4			13		F							10		
637		10.0		9.6			13		F							10		
647		10.3		10.0			13		F							10		
657		10.1		9.8			12		F							10		
667		10.2		8.0			11		F							20		
677		10.1		9.1			11		F							16		
687		10.1		9.6			14		F							7		
697		10.0		9.4			13		F							10		
707		10.0		9.4			13		F							10		
717		10.3		10.3			14		F							8		
727		10.0		9.0			12		F							14		
737		10.0		9.5			13		F							10		
747		10.0		9.5			13		F							11		
757		10.3		9.5			12		F							19		
767		10.4		10.4			14		F							11		
777		10.3		8.5			12		F							19		
787		10.0		10.0			12		F							9		
797		10.0		9.3			12		F							10		
807		10.3		9.3			12		F							15		
817		10.0		10.0			12		F							10		

Fig. 1. Typical rock mechanics core log.

PROJECT _____ DRILLHOLE NO. 89-FX-04 COORDINATES: N _____
 LOCATION _____ HOLE SIZE _____ E _____
 LOGGER _____ INCLINATION _____ ELEVATION _____

DATE Sept. 27 1989
 PAGE 4 of 5



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		RQD		HARDNESS	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CROSS JOINTS		COMMENTS
		LENGTH	%	LENGTH	%		CATEGORY	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.	
827		10.0		9.8			13		F							12	
837		10.2		8.9			13		F							16	
847		10.2		10.2			14		F							8	
857		10.3		9.9			13		F							12	
867		10.0		8.2			12		F							18	
877		10.0		9.1			13		F							9	
887		10.2		9.3			12		F							15	
897		10.0		8.7			12		F							15	
907		10.1		9.9			12		F							9	
917		10.1		8.7			12		F							13	
927		10.1		9.0			11		F							18	
937		10.4		9.8			13		F							12	
947		10.2		9.8			14		F							9	
957		10.0		9.8			13		F							10	
967		10.2		10.2			13		F							12	
977		10.1		9.8			14		F							11	
987		10.0		10.0			12		F							15	
997		10.2		10.2			13		F							13	
1007		10.1		9.6			13		F							13	
1017		10.3		10.3			14		F							8	
1027		10.2		9.6			14		F							8	
1037		10.2		10.2			14		F							10	
1047		10.1		9.4			14		F							10	
1057		10.2		10.2			15		F							6	
1067		10.2		10.2			15		F							6	
1077		10.0		9.1			13		F							12	
1087		10.0		10.0			14		F							8	
1097		10.1		9.6			12		F							14	

Fig. 1. Typical rock mechanics core log.

PROJECT _____ BOREHOLE NO. 89-FX-04 COORDINATES: N Sy. 1.27/809 DATE _____
 LOCATION _____ HOLE SIZE _____ E _____ PAGE 5 of 5
 LOG NO. _____ INCLINATION _____ ELEVATION _____



PITEAU & ASSOCIATES
 GEOTECHNICAL CONSULTANTS
 VANCOUVER CALGARY

GEOTECHNICAL CORE LOG

DEPTH (TO)	LENGTH OF RUN	CORE RECOVERY		DIP		SPHERICITY	DEGREE OF BREAKAGE		DEGREE OF WEATHERING	ROCK TYPE	BEDDING DIP		BEDDING JOINTS		CRACK JOINTS		COMMENTS	
		LENGTH	%	LENGTH	%		CAUGHT	NO.			DEPTH	ANGLE	NO.	FREQ.	NO.	FREQ.		
1167		10.8		5.0			10		E							30		
1117		10.0		4.0			10		D							30		
1124		7.7		2.5			9		C							24		
1134		10.4		5.5			10		D							28		
1144		10.4		7.9			11		E							25		
1154		10.2		9.5			13		E							12		
1164		10.3		9.9			13		E							10		
1174		10.3		9.6			13		F							14		
1184		10.3		10.1			13		E							9		
1194		10.0		7.9			13		E							17		
1204		10.4		10.4			14		F							7		
1214		10.0		10.0			14		F							5		
1224		9.9		9.9			15		F							3		
1234		10.0		9.4			14		F							7		
1236		2.2		2.2			11		F							4		

Fig. 1. Typical rock mechanics core log.