890040

DRILL HOLE LOG

LOCATION: 1296.6N 1163.5E

HOLE NO.: CA89-71 PAGE NO.: 1

AZIM.: 150° ELEV.: 82.3m
DIP: -45° LENGTH: 258.5m
CORE SIZE: NQ

PROPERTY: Eskay Creek

CLAIM NO.:
SECTION:
LOGGED BY: Christine Swanson
DATE LOGGED: June 18, 1989
DRILLING CO.: Falcon Drilling
ASSAYED BY: TSL

STARTED: June 15, 1989
COMPLETED: June 19, 1989
PURPOSE: To test northerly strike length of the zone

DIP TEST

Meterage	Dip	Azimuth
136.5m	44°	159°
258.5m	46°	161°

CORE RECOVERY: Good

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
0	3.0	OVERBURDEN AND CASING												
3.0	115.1	HANGING WALL ANDESITE UNIT Occasional white calcite filled fractures at 20 to 40° to CA (from 0.5 to 2cm wide, frequency of 1 per 3m) 3.0-6.0 Pillow Flow With Minor Hyaloclastite (Rubble Zone) - maroon cores (aphanitic) grading to pale green aphanitic, occasionally vesicular selvages up to 2m wide - 20% hyaloclastite - 20% matrix in HAHY - of pale grey calcite, trace pyrrhotite, trace chlorite, trace pyrobitumen - oxidized fractures 6.0-9.9 Weakly Brecciated Andesite Flow (Rubbly) - olive green aphanitic to weakly porphyritic												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- minor matrix of grey calcite etc. (as above) - oxidized fractures												
		9.9-11.6 Laminated Mudstone - layering at 40° to CA denoted by coarser grained, lighter, pyrite rich layers (3-5% pyrite) - up to 1cm wide, frequency of 1 per 2cm - upper contact at 70° to CA - lower contact is brecciated - unit is very rubbly with intensely oxidized fractures	43301	9.9	11.6	1.7	<0.001	<0.05						
		11.6-15.2 Weakly Brecciated Andesite Flow - olive green - sub porphyritic with aphanitic, vesicular chill margins - 5% breccia matrix of grey calcite, trace pyrrhotite, trace chlorite, 1% pyrobitumen - minor oxidized fractures	43302	11.6	13.0	1.4	<0.001	<0.05						
		15.2-16.7 Carbonate-Rich Mudstone - medium grey - laminated at 55° to CA 3% pyrite in layers - uneven contacts - minor oxidation of fractures	43303	15.2	16.7	1.5	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	ASSAYS Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		16.7-22.3 Pillow Flow - as in 3.0-6.0 - no hyaloclastite - 5% matrix of grey carbonate, trace pyrite, trace pyrrhotite, trace chlorite, 1% pyrobitumen - no oxidized fractures	43304	21.3	22.3	1.0	0.001	<0.05						
		22.3-26.5 Weakly Brecciated Andesite Flows - as in 11.6-15.2 - no oxidized fractures												
		26.5-29.2 Laminated Mudstone - black - 3-5% pyrite concentrated in lighter, coarser grained layers at 65 to 80° to CA - up to 1cm thick, frequency of 1 per 2cm - rubbly, with minor oxidation of fractures	43305 43306	27.0 28.0	28.0 29.0	1.0 1.0	0.001 <0.001	<0.05 <0.05						
		29.2-39.5 Weakly Brecciated Andesite Flows - as in 11.6-15.2 - minor crackle breccia	43307	32.0	33.0	1.0	<0.001	<0.05						
		39.5-40.6 Calcareous Mudstone - grey - massive - 1% pyrite as disseminations	43308	39.0	40.0	1.0	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		40.6-52.4 Crackle Breccia - 30% matr4ix of grey calcite, trace pyrrhotite, trace pyrite, trace chlorite, 1-3% pyrobitumen	43309	40.0	41.0	1.0	<0.001	<0.05						
		44.2-45.1 Weakly Laminated Calcareous Black Mudstone - layering at 75° to CA denoted by lighter, coarser grained, pyrite-rich layers, 3-5% pyrite - up to 1cm wide, frequency of 1 per 3cm	43310	44.3	45.3	1.0	0.001	0.08						
			43311	49.0	50.0	1.0	<0.001	<0.05						
			43312	50.0	51.0	1.0	<0.001	<0.05						
		52.4-58.8 Andesite Flows - weakly brecciated (5% matrix as in crackle breccia) - olive green - sub porphyritic with aphanitic, vesicular chill margins	43313	54.0	55.0	1.0	<0.001	<0.05						
		58.8-60.0 Laminated Mudstone - black - calcareous - layering at 75° to CA denoted by, lighter, coarser grained, calcareous or pyrite-rich layers (1-3% pyrite) - frequency of 1 per 2cm, up to 1.5cm wide - 59.0-59.4 oxidized rubble zone	43314	58.9	60.0	1.1	<0.001	<0.05						
		60.0-71.9 Andesite Flows - olive green	43315	60.0	61.0	1.0	<0.001	<0.05						
		- sub porphyritic with aphanitic, vesicular chill margins	43316	66.0	67.0	1.0	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- occasional crackle breccia zones - occasional pillows or dykes - trace pyrite - oxidized zone 70.4-70.6												
		71.9-74.3 Laminated Mudstone - calcareous - dark grey - layers at 70 to 85° to CA denoted by lighter, coarser grained, calcareous or pyrite rich layers (1-3% pyrite) - finely laminated - average width of 1mm up to 1cm	43317 43318	72.0 73.0	73.0 74.0	1.0 1.0	<0.001 <0.001	<0.05 <0.05						
		74.3-80.8 Andesite Crackle Breccia - 20% matrix - trace pyrite - 76.2-76.4, 77.0-77.3 oxidized fractures zones	43319 43320	74.0 76.5	75.0 77.6	1.0 1.1	<0.001 <0.001	<0.05 <0.05						
		80.8-90.8 Laminated Mudstone - black - occasional grey calcareous layers - layers at 65° to CA, denoted by lighter, coarser grained pyrite rich layers (3-5% pyrite) - frequency of 1 per 2cm, from 0.1 to 1.2cm wide, average of 0.5cm - occasional fossils-belimnites	43321 43322 43323 43324 43325	80.7 84.0 86.0 89.0 90.0	81.7 85.0 87.0 90.0 91.0	1.0 1.0 1.0 1.0 1.0	<0.001 <0.001 0.002 <0.001 0.001	<0.05 <0.05 <0.05 0.13 <0.05						
		90.8-96.8 Andesite Flow - weakly brecciated - sub porphyritic to aphanitic, vesicular chill margins	43326	96.0	96.8	0.8	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	ASSAYS Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 5% matrix - trace pyrite - 92.8-93.1, 94.2-94.5, 95.0-95.2 zones of oxidized fractures												
		96.8-104.2 Laminated Mudstone - black - occasional grey calcareous layers - 1-3% pyrite as layers at 75 to 85° to CA - occasional vesicular andesite fragments throughout	43327 43328 43329	96.8 101.0 102.0	98.0 102.0 103.0	1.2 1.0 1.0	0.001 <0.001 <0.001	<0.05 0.06 0.07						
		104.2-111.9 Andesite Flows - olive green - sub porphyritic with aphanitic, lighter, occasionally vesicular, chill margins - weakly brecciated - filling of grey calcite, trace chlorite, trace pyrite - 107.3-109.3 - broken ground - slickensides along calcite filled fractures, 10% calcite	43330 43331 43332 43333	104.0 105.0 108.0 111.0	105.0 106.0 109.0 112.0	1.0 1.0 1.0 1.0	<0.001 0.001 0.001 <0.001	<0.05 <0.05 0.05 <0.05						
		111.9-113.7 Laminated Mudstone - black - layering at 70° to CA, denoted by lighter, coarser grained, pyrite rich layers (3-5% pyrite) up to 0.5cm thick, frequency of 1 per 3cm - occasional aphanitic, vesicular andesite fragments (1%)	43334 43335	112.0 113.0	113.0 114.0	1.0 1.0	<0.001 <0.001	<0.05 0.07						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	ASSAYS Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		113.7-115.1 Andesite Flow	43336	114.0	115.0	1.0	<0.001	0.05						
		- trace pyrite												
		- olive green												
		- sub porphyritic to aphanitic, vesicular chill margins												
		- 114.3-114.5 "feathery" black alteration - evasive throughout interval												
115.1	134.2	CONTACT ZONE ARGILLITE												
		- black	43337	115.0	116.0	1.0	<0.001	0.06						
		- graphite along shear planes from	43338	116.0	117.0	1.0	<0.001	0.06						
		127.0-134.2	43339	117.0	118.0	1.0	<0.001	<0.05						
		- layering at 75 to 80° to CA denoted	43340	118.0	119.0	1.0	<0.001	0.05						
		by lighter, coarser grained, pyrite	43341	119.0	120.0	1.0	0.002	<0.05						
		rich layers (and occasional grey,	43342	120.0	121.0	1.0	<0.001	<0.05						
		calcareous layers 5%)	43343	121.0	122.0	1.0	<0.001	<0.05						
		- 3-5% pyrite	43344	122.0	123.0	1.0	<0.001	0.06						
		- 117.8-119.1 andesite flow as in	43345	123.0	124.0	1.0	0.001	0.11						
		113.7-115.1	43346	124.0	125.0	1.0	0.001	0.15						
		- 123.0-123.1 trace stibnite needles	43347	125.0	126.0	1.0	0.001	0.06						
		- 128.6-129.9 trace stibnite needles	43348	126.0	127.0	1.0	<0.001	<0.05						
		- 129.9-132.6 70% grey to white	43349	127.0	128.0	1.0	0.004	<0.05						
		calcite with 5% sphalerite, 3-5%	43350	128.0	129.0	1.0	0.008	0.06	0.25	0.54	0.18	0.09	<0.1	0.43
		galena, 3% pyrite	43351	129.0	130.0	1.0	0.173	40.70	<0.01	0.12	0.01	0.06	<0.1	0.01
		- angular argillite clasts (30%)	43352	130.0	131.0	1.0	0.162	53.10	0.33	1.00	0.30	0.02	<0.1	0.35
		average size + 0.7cm (angular)	43353	131.0	132.0	1.0	0.258	39.50	0.40	0.90	0.22	<0.01	<0.1	0.28
			43354	132.0	133.0	1.0	0.463	17.10	0.28	0.70	0.11	0.06	<0.1	0.15
			43355	133.0	134.0	1.0	0.104	3.50	0.07	0.15	0.02	0.03	<0.1	0.04
134.2	142.4	TRANSITION ZONE												
		- argillite and rhyolite clasts in	43356	134.0	135.0	1.0	0.021	0.80	0.02	0.30	<0.01	<0.01	<0.1	0.02
		an altered ash matrix	43357	135.0	136.0	1.0	0.046	0.31	<0.01	0.02	<0.01	<0.01	<0.1	<0.01
		- 40% matrix (intense talc -	43358	136.0	137.0	1.0	0.024	0.26	<0.01	0.02	<0.01	0.02	<0.1	<0.01
		sericite)	43359	137.0	138.0	1.0	0.034	0.35	<0.01	0.02	<0.01	0.02	<0.1	<0.01

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
								ASSAYS						
		- 40% argillite fragments	43360	138.0	139.0	1.0	0.035	0.23	<0.01	0.01	<0.01	<0.01	<0.1	<0.01
		- 20% rhyolite fragments	43361	139.0	140.0	1.0	0.060	0.34	0.01	<0.01	<0.01	0.02	<0.1	<0.01
		- 15-20% fine grained feltic pyrite concentrated in matrix	43362	140.0	141.0	1.0	0.017	0.21	<0.01	<0.01	<0.01	0.02	<0.1	<0.01
			43363	141.0	142.0	1.0	0.006	0.09						
		- 138.5-142.4 well foliated												
		- folliations at 85° to CA												
		- clay + sericite + talc alteration (absorbs water)												
		- 129.6-138.5 moderately foliated at 80° to CA												
		- 138.5-138.7 trace realgar along shears planes												
		- occasional quartz flooded fractures throughout												
142.4	236.0	RHYOLITE UNIT												
		- moderately foliated throughout												
		- foliations at 70° to CA												
		142.4-148.0 Rhyolite Lapilli Tuff	43364	141.0	143.0	2.0	0.010	0.05						
		- 15-20% matrix - "talc" alteration intense	43365	143.0	144.0	1.0	0.040	<0.05						
			43366	144.0	145.0	1.0	0.030	0.07						
		- 10% pyrite concentrated as feltic blebs in the matrix and as fine grained disseminations throughout	43367	145.0	146.0	1.0	0.018	<0.05						
			43368	146.0	147.0	1.0	0.013	<0.05						
			43369	147.0	148.0	1.0	0.011	<0.05						
		- clasts from 0.5 to 6cm across - average being 1.2cm												
		- subangular to subrounded												
		- occasional banded fragments												
		- 148.0-164.4 10% of fragments are intensely altered to chlorite +/- gypsum +/- talc (pale emerald green) and flattened in foliation direction	43370	148.0	149.0	1.0	0.010	<0.05						
			43371	149.0	150.0	1.0	0.010	<0.05						
			43372	150.0	151.0	1.0	0.012	0.06						
			43373	151.0	152.0	1.0	0.011	0.06						
			43374	152.0	153.0	1.0	0.019	0.06						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 153.6-154.2 zone of 20% feltic pyrite	43375	153.0	154.0	1.0	0.039	0.11						
			43376	154.0	155.0	1.0	0.156	0.10						
		- 145.2-155.0 intense gypsum alteration (70%)	43377	155.0	156.0	1.0	0.027	0.06						
			43378	156.0	157.0	1.0	0.005	0.15						
		- occasional flow banded fragments	43379	157.0	158.0	1.0	0.069	0.12						
		- fragments oriented in direction of foliation	43380	158.0	159.0	1.0	0.022	0.11						
			43381	159.0	160.0	1.0	0.014	0.10						
			43382	160.0	161.0	1.0	0.019	0.10						
			43383	161.0	162.0	1.0	0.029	0.24						
			43384	162.0	163.0	1.0	0.016	0.13						
			43385	163.0	164.0	1.0	0.016	0.12						
			43386	164.0	165.0	1.0	0.008	<0.05						
			43387	165.0	166.0	1.0	0.014	<0.05						
			43388	166.0	167.0	1.0	0.018	0.11						
			43389	167.0	168.0	1.0	0.040	0.16						
			43390	168.0	169.0	1.0	0.029	0.11						
			43391	169.0	170.0	1.0	0.083	0.34						
			43392	170.0	171.0	1.0	0.024	0.12						
			43393	171.0	172.0	1.0	0.006	<0.05						
			43394	172.0	173.0	1.0	0.004	<0.05						
			43395	173.0	174.0	1.0	0.006	<0.05						
			43396	174.0	175.0	1.0	0.004	<0.05						
			43397	175.0	176.0	1.0	0.007	<0.05						
			43398	176.0	177.0	1.0	0.006	<0.05						
			43399	177.0	178.0	1.0	0.006	0.05						
			43400	178.0	179.0	1.0	0.002	0.06						
		- 180.6-180.9 70% quartz flooding	43401	179.0	180.0	1.0	0.006	0.05						
		- 181.0 foliating at 50° to CA	43402	180.0	181.0	1.0	0.002	<0.05						
		181.5-183.2 Fine Ash Tuff	43403	181.0	182.0	1.0	0.002	<0.05						
		- occasional lapilli fragments	43404	182.0	183.0	1.0	0.007	0.10						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	ASSAYS Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
			43405	183.0	184.0	1.0	0.006	0.15						
			43406	184.0	185.0	1.0	0.018	0.09						
		182.1, 182.2, 182.5, 183.3, 183.7, zones of shearing (mud zones from 1 to 3cm wide - shearing direction 60 to 70° to CA												
		185.2-185.3 3-5% sphalerite, 3% galena, as disseminations	43407	185.0	186.0	1.0	0.019	<0.05						
			43408	186.0	187.0	1.0	0.007	<0.05						
			43409	187.0	188.0	1.0	0.005	<0.05						
			43410	188.0	189.0	1.0	0.013	<0.05						
		189.7-191.8 Contorted Rhythmite	43411	189.0	190.0	1.0	0.013	<0.05						
		- weakly brecciated	43412	190.0	191.0	1.0	0.003	<0.05						
			43413	191.0	192.0	1.0	0.002	<0.05						
		192.9-193.5 1% sphalerite, 1% galena												
			43414	192.0	193.0	1.0	0.005	<0.05						
		192.9-213.8 decrease in matrix to 5%	43415	193.0	194.0	1.0	0.007	<0.05						
		- decrease in pyrite to 1-3%	43416	194.0	195.0	1.0	0.015	<0.05						
		- 212.8-212.9, 213.7-213.8 gouge zones	43417	195.0	196.0	1.0	0.033	0.06						
			43418	196.0	197.0	1.0	0.014	<0.05						
			43419	197.0	198.0	1.0	0.003	<0.05						
			43420	198.0	199.0	1.0	0.004	0.07						
			43421	199.0	200.0	1.0	0.004	0.07						
			43422	200.0	201.0	1.0	0.006	<0.05						
			43423	201.0	202.0	1.0	0.008	0.07						
			43424	202.0	203.0	1.0	0.003	<0.05						
			43425	203.0	204.0	1.0	0.008	<0.05						
			43426	204.0	205.0	1.0	0.010	0.06						
			43427	205.0	206.0	1.0	0.024	0.06						
			43428	206.0	207.0	1.0	0.003	<0.05						
			43429	207.0	208.0	1.0	0.003	<0.05						
			43430	208.0	209.0	1.0	0.002	<0.05						
			43431	209.0	210.0	1.0	<0.001	<0.05						
			43432	210.0	211.0	1.0	0.004	<0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
			43433	211.0	212.0	1.0	<0.001	<0.05						
			43434	212.0	213.0	1.0	<0.001	<0.05						
		213.8-214.0 Pale Green Aphanitic, Vesicular Volcanic - vesicles are filled with realgar and pyrite - 3% realgar, 1% pyrite - realgar also occurs as films along slickenslide surfaces	43435	213.0	214.0	1.0	0.001	<0.05						
		214.0-236.0 Ash Tuff - coarse ash tuff - dark grey - 5-10% very fine grained pyrite - finely laminated - locally convoluted - pyrite occurs as feltic blebs and as fracture fulling along lamination planes - weakly foliated - laminations from 50 to 70° to CA - occasional quartz filled fractures at 30° to CA - unit becomes a lapilli tuff by 229.9 with 20% matrix - clasts subrounded to subangular - average of 1.5cm, across - moderately foliated at 60° to CA - 226.5-229.9, trace sphalerite	43436	214.0	215.0	1.0	0.004	<0.05						
			43437	215.0	216.0	1.0	0.003	<0.05						
			43438	216.0	217.0	1.0	0.004	<0.05						
			43439	217.0	218.0	1.0	0.007	<0.05						
			43440	218.0	219.0	1.0	0.012	<0.05						
			43441	219.0	220.0	1.0	0.007	<0.05						
			43442	220.0	221.0	1.0	0.006	<0.05						
			43443	221.0	222.0	1.0	<0.001	<0.05						
			43444	222.0	223.0	1.0	0.008	.0.06						
			43445	223.0	224.0	1.0	0.003	<0.05						
			43446	224.0	225.0	1.0	0.003	<0.05						
			43447	225.0	226.0	1.0	0.003	0.07						
			43448	226.0	227.0	1.0	0.002	<0.05						
			43449	227.0	228.0	1.0	0.001	<0.05						
			43450	228.0	229.0	1.0	<0.001	<0.05						
			43451	229.0	230.0	1.0	0.001	0.08						
			43452	230.0	231.0	1.0	<0.001	<0.05						
			43453	231.0	232.0	1.0	0.001	<0.05						
			43454	232.0	233.0	1.0	0.005	<0.05						
			43455	233.0	234.0	1.0	0.004	<0.05						
			43456	234.0	235.0	1.0	0.002	<0.05						
			43457	235.0	236.0	1.0	0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
236.0	238.7	LAMINATED MUDSTONE												
		- black	43458	236.0	237.0	1.0	0.008	0.14						
		- lighter, coarser-grained, pyrite rich layers at 70° to CA	43459	237.0	238.0	1.0	0.014	0.29						
			43460	238.0	239.0	1.0	0.012	0.68						
		- 5-8% pyrite												
		- frequency of 1 per 2cm												
		- average width of layers is 0.5cm												
		- 237.4-238.7 2% galena, 1-3% sphalerite, trace chalcopyrite												
		- 237.7-238.7 sheared, muddy rubble zones 50% clay/mud												
		- shears at 30 to 70° to CA												
		- minor graphite along shear planes												
		- pyrite rich layers are occasionally convoluted (indicating penecontemporaneous deformation).												
238.7	249.4	DACITE DATUM												
		- pale grey-brown, vesicular, aphanitic tuff (10% vesicles up to 0.3cm wide)	43461	239.0	240.0	1.0	0.012	0.86						
			43462	240.0	241.0	1.0	0.045	0.32						
			43463	241.0	242.0	1.0	0.080	0.78						
		- brecciated	43464	242.0	243.0	1.0	0.031	0.24						
		- 5% drusy quartz + 15-20% pyrite as vesicle filling and matrix	43465	243.0	244.0	1.0	0.031	0.21						
			43466	244.0	245.0	1.0	0.029	0.25						
		- pyrite is fine grained and frequently crustiform	43467	245.0	246.0	1.0	0.017	0.22						
			43468	246.0	247.0	1.0	0.019	0.20						
		- 238.7-240.0 2% galena, 1-3% sphalerite, trace chalcopyrite	43469	247.0	248.0	1.0	0.015	0.12						
			43470	248.0	249.0	1.0	0.017	0.24						
		- sphalerite occurs as honey coloured or deep red-brown euhedral crystals - rarely intermixed, possibly indicating two episodes of sphalerite growth (galena +/- chalcopyrite occurs with both)												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 238.7 contact at 40° to CA sheared (muddy - mineralized with 5% galena, trace sphalerite)												
		- 3cm wide												
		- 239.1-239.4 muddy rubble zone 50% mud												
		- 239.4-240.0 rubble												
		- 241.4-241.5 sand sized rubble zone												
		- 241.5-249.4 angular rubble up to 8cm across												
		- 246.2-249.4 subangular rubble up to 2cm across												
		249.4-251.1 Dacite Ash Tuff	43471	249.0	250.0	1.0	0.010	0.10						
		- competent, weakly brecciated, weakly vesicular	43472	250.0	251.0	1.0	0.011	0.12						
		- pale grey brown												
		- 5-8% feltic pyrite												
		- vesicular bare (20cm)												
251.1	258.5	LAMINATED MUDSTONE	43473	251.0	252.0	1.0	0.010	0.15						
		- black	43474	252.0	253.0	1.0	0.013	0.36						
		- layering at 65 to 70° to CA denoted by lighter, coarser grained pyrite rich layers	43475	253.0	254.0	1.0	0.013	0.16						
			43476	254.0	255.0	1.0								
			43477	255.0	256.0	1.0	0.011	0.17						
		- 3-5% pyrite	43478	256.0	258.5	2.5	0.012	0.15						
		- layers average 0.5cm wide												
		- frequency of 1 per 2cm												
		- felsic fragments at 256.5m												
258.5	EOH													

DRILL HOLE LOG

LOCATION: 1297.3N 1163.0E

HOLE NO.: CA89-72 PAGE NO.: 1

AZIM.: 150° ELEV.: 82.3m
DIP: -68° LENGTH: 248.7m
CORE SIZE: NQ

PROPERTY: Eskay Creek

CLAIM NO.:
SECTION:

DIP TEST		
Meterage	Dip	Azimuth
120.7m	-69°	161°
245.7m	-68°	140°

STARTED: June 19, 1989
COMPLETED: June 22, 1989
PURPOSE: Test of strike length of zone

LOGGED BY: Christine Swanson
DATE LOGGED: June 21, 1989
DRILLING CO.: Falcon Drilling
ASSAYED BY: TSL

CORE RECOVERY:

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
0	2.1	CASING												
2.1	122.3	HANGINGWALL ANDESITES												
		2.1-8.3 Andesite Crackle Breccia - 2.1-5.2 rubble - pale grey green aphanitic andesite fragments in 20% matrix - matrix of grey calcite + chlorite + pyrrhotite (1%) + pyrobitumen (5%) and white quartz as infilling in larger "vugs"	43479	5.0	6.0	1.0	<0.001	<0.05						
		8.3-9.1 Laminated Mudstone - rubbly - dark grey black - layers at 60° to CA denoted by lighter, coarser grained, pyrite rich layers - 3-5% pyrite - cc veining throughout HWA at 40° to CA - occasional	43480	8.0	9.1	1.1	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		9.1-26.0 Andesite Flows	43481	12.0	13.0	1.0	<0.001	<0.05						
		- olive green	43482	17.0	18.0	1.0	<0.001	<0.05						
		- sub porphyritic to aphanitic, occasionally vesicular, chill margins	43483	18.0	19.0	1.0	<0.001	<0.05						
			43484	24.0	25.0	1.0	<0.001	<0.05						
			43485	25.0	26.0	1.0	<0.001	<0.05						
		- local crackle breccia, matrix of grey calcite, trace chlorite, trace pyrrhotite, trace pyrite, trace white calcite at core, trace pyrobitumen												
		26.0-29.4 Laminated Mudstone	43486	26.0	27.0	1.0	<0.001	<0.05						
		- dark grey-black	43487	28.0	29.4	1.4	<0.001	<0.05						
		- layers denoted by lighter grey calcareous or beige pyrite-rich, coarser grained layers at 60° to CA												
		- occasional crystallites (crystal clusters)												
		- layers up to 1cm thick (calcareous layers up to 5cm thick)												
		- frequency of 1 per 2cm												
		- rubble to 26.8												
		- 1-~~2~~3% pyrite												
		29.4-38.8 Andesite Crackle Breccia	43488	29.4	31.0	1.6	<0.001	<0.05						
		- autobrecciated flows	43489	33.5	34.6	1.1	<0.001	<0.05						
		- 15% matrix of grey calcite + trace chlorite + trace pyrite + trace pyrrhotite + trace pyrobitumen												
		33.3-34.6 rubble zone - oxidized (fault?)												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	ASSAYS Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		38.8-41.9 Pillowed Andesites/	43490	38.8	40.0	1.2	<0.001	<0.05						
		Hyaloclastite Debris Flow	43491	40.0	41.0	1.0	0.003	<0.05						
		- 38.8-39.6, 41.7-41.9 andesite pillows												
		- aphanitic, vesicular rinds (selvages)												
		- maroon cores grading to pale green rinds (up to 1.5cm thick)												
		- weakly brecciated												
		39.6-41.7 Hyaloclastite/Greywacke	43492	41.0	42.0	1.0	0.004	<0.05						
		- 1% pyrrhotite (bladed)												
		- mafic clasts in a calcareous, ash matrix												
		- occasional ash layers up to 50cm wide (50%)												
		41.9-46.2 Andesite Flows												
		- olive green												
		- sub porphyritic to aphanitic chill margins												
		- trace pyrite, trace pyrrhotite												
		- weakly brecciated												
		46.2-49.3 Hyaloclastite/Greywacke	43493	46.0	47.0	1.0	0.004	<0.05						
		Debris Flow	43494	47.0	48.0	1.0	0.002	<0.05						
		- 46.2-46.7 coarse grained dark grey greywacke grading into hyaloclastite at 46.7	43495	48.0	49.0	1.0	<0.001	<0.05						
		- 46.7-47.4 hyaloclastite												
		- mafic clasts in calcareous matrix												
		- 47.4-48.8 medium grained calcareous greywacke												
		- weakly calcareous												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 48.0-48.8 medium grained calcareous greywacke - 48.8-49.3 medium grained siliceous greywacke grading into laminated mudstone at 49.3 - greywackes are dark grey, weakly layered - 1-3% pyrite overall												
		49.3-50.6 Laminated Mudstone - dark grey black - layers of 55° to CA denoted by light grey calcareous layers (20%) or light beige, coarser grained pyrite rich layers - 5-8% pyrite - layers have a frequency of 2 per cm - average of 0.2cm wide	43496	49.0	50.0	1.0	0.001	<0.05						
		50.6-61.9 Andesite Flows - olive green - sub porphyritic to aphanitic vesicular chill margins - minor zones of crackle brecciation - trace pyrite, trace pyrrhotite - breccia matrix as in previous "breccia matrix" description	43497 43498	50.0 55.0	51.0 56.0	1.0 1.0	0.001 <0.001	<0.05 <0.05						
		61.9-62.3 Coarse Grained Massive Greywacke - medium grey - calcareous matrix - grain supported - 10% matrix	43499	61.9	63.0	1.1	0.002	<0.05						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		62.3-65.2 Laminated Mudstone - black - layers at 70° to CA denoted by lighter beige, pyrite rich layers, lighter grey calcareous (10%) or siliceous (10%) layers and layers of crystallites (10% crystallites) - 3-5% pyrite - layers up to 1cm thick, average of 0.3cm												
		65.2-70.6 Andesite Flows - olive green - sub porphyritic to aphanitic, vesicular chill margins - chill margins are brecciated - trace pyrite	43500 43501 43502	65.0 66.0 69.0	66.0 67.0 70.0	1.0 1.0 1.0	0.002 <0.001 <0.001	<0.05 <0.05 <0.05						
		70.6-74.0 Laminated Mudstone - dark grey black - occasional lighter grey calcareous layers (40%) - layers at 75° to CA denoted by lighter grey calcareous layers of lighter beige, coarser grained pyrite rich layers - 1-3% pyrite - layers average thickness is 0.8cm	43503 43504 43505 43506	70.0 71.0 72.0 73.0	71.0 72.0 73.0 74.0	1.0 1.0 1.0 1.0	<0.001 0.002 <0.001 <0.001	<0.05 <0.05 <0.05 <0.05						
		74.0-77.3 Andesite Crackle Breccia - autobrecciated flow - 20% matrix of grey calcite, chlorite, trace pyrite												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		77.3-81.2 Laminated Mudstone	43507	77.0	78.0	1.0	0.001	<0.05						
		- black	43508	78.0	79.0	1.0	<0.001	<0.05						
		- layers at 75° to CA denoted by lighter coarser grained pyrite rich layers	43509	80.0	81.0	1.0	<0.001	<0.05						
		- 3-5% pyrite												
		- average thickness 0.2cm												
		- weakly brecciated with 20% white calcite as matrix												
		- andesite crackle breccia from 80.1-80.5												
		81.2-90.4 Andesite Flows	43510	82.0	83.0	1.0	<0.001	<0.05						
		- olive green	43511	83.0	84.0	1.0	<0.001	<0.05						
		- sub porphyritic with aphanitic, vesicular chill margins	43512	86.0	87.0	1.0	<0.001	<0.05						
			43513	87.0	88.0	1.0	<0.001	<0.05						
		- trace pyrite	43514	90.0	91.0	1.0	<0.001	<0.05						
		- minor crackle breccia												
		90.4-91.3 Laminated Mudstone	43515	91.0	92.0	1.0	<0.001	<0.05						
		- layers at 75° to CA												
		- 3-5% pyrite												
		- layers up to 0.5cm thick												
		91.3-97.2 Andesite Flows	43516	92.0	93.0	1.0	<0.001	<0.05						
		- weakly brecciated with minor zones of intense crackle brecciation												
		- generally olive green, sub porphyritic grading to pale green beige, aphanitic vesicular chill margins												
		- 1% pyrite in matrix												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		97.2-103.0 Laminated Mudstone	43517	97.0	98.0	1.0	<0.001	<0.05						
		- black	43518	98.0	99.0	1.0	<0.001	<0.05						
		- layering at 85° to CA	43519	99.0	100.0	1.0	<0.001	<0.05						
		- 0.1 to 3.0cm wide	43520	102.0	103.0	1.0	0.001	<0.05						
		- weakly brecciated												
		- 3.5% pyrite												
		- 60% andesite crackle breccia zones from 97.2-94.6												
		103.0-107.5 Andesite Flows	43521	103.0	104.0	1.0	0.001	<0.05						
		- weakly brecciated as in 91.3-94.2	43522	104.0	105.0	1.0	<0.001	<0.05						
		- 104.7-105.4 zone of thick calcite fracture filling	43523	105.0	106.0	1.0	<0.001	<0.05						
		- 3 "veins" up to 3cm thick at 30° to CA	43524	107.0	108.0	1.0	<0.001	<0.05						
		- trace pyrite												
		107.5-108.0 Laminated Mudstone												
		- dark grey black												
		- layers at 65° to CA												
		- from 0.1 to 2.0cm wide, average of 0.5												
		- 1-3% pyrite												
		- 10% calcareous (limy) layers												
		108.0-117.5 Basaltic Andesite Sill	43525	108.0	109.0	1.0	<0.001	<0.05						
		- pseudo ophitic texture	43526	112.0	113.0	1.0	<0.001	<0.05						
		- dark olive green	43527	117.0	118.0	1.0	<0.001	<0.05						
		- shears with slickensides along fracture planes (brecciated)												
		- calcite + chlorite fracture filling (15%)												
		- average angle of fractures in 30° to CA												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		117.5-119.8 Laminated Mudstone - grey to black - layers at 65° to CA - 3-5% pyrite - 3% crystallites (crystal clusters) - 117.5-118.1 80% siliceous layers - medium grey, finely laminated	43528	118.0	119.0	1.0	<0.001	<0.05						
		119.8-122.3 Weakly Brecciated Andesite Flow - trace pyrite - as in 91.3-97.2	43529	119.0	120.0	1.0	<0.001	<0.05						
			43530	120.0	121.0	1.0	<0.001	<0.05						
			43531	121.0	122.0	1.0	<0.001	<0.05						
122.3	133.5	CONTACT ZONE												
		122.3-133.5 Laminated Argillite - laminated mudstone grading to a laminated graphitic argillite at 132.5 - 3-5% pyrite - layers at 75° to CA - 10% calcareous (limy) layers - 5% siliceous layers - 127.7 ripple structure in silty mud - 128.5-128.9 10% calcite as fracture filling with no preferred orientation - 130.3-133.5 trace stibnite needles - occasional radiating clusters - 132.6-133.5 shear zone - graphite along shear planes - also a very fine pyritic coating - shears at 60° to CA	43532	122.0	123.0	1.0	<0.001	<0.05						
			43533	123.0	124.0	1.0	<0.001	<0.05						
			43534	124.0	125.0	1.0	<0.001	<0.05						
			43535	125.0	126.0	1.0	0.006	<0.05						
			43536	126.0	127.0	1.0	<0.001	<0.05						
			43537	127.0	128.0	1.0	<0.001	<0.05						
			43538	128.0	129.0	1.0	0.001	<0.05						
			43539	129.0	130.0	1.0	<0.001	<0.05						
			43540	130.0	131.0	1.0	0.004	<0.05						
			43541	131.0	132.0	1.0	0.001	<0.05	<0.01	0.06	<0.01	0.31	<0.1	0.01
			43542	132.0	133.0	1.0	0.065	0.12	<0.01	0.10	<0.01	0.51	<0.1	0.03

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
133.5	136.4	TRANSITION ZONE												
		- intensely sheared and altered	43543	133.0	134.0	1.0	0.069	0.36	<0.01	0.08	<0.01	0.56	<0.1	0.03
		- dark grey "matrix" with pale grey	43544	134.0	135.0	1.0	0.113	<0.05	<0.01	0.04	<0.01	0.79	<0.1	0.02
		ghosted fragments	43545	135.0	136.0	1.0	0.124	0.09	0.01	0.04	<0.01	0.23	<0.1	0.03
		- 20 to 30% fragments												
		- friable												
		- shearing at 40° to CA												
		- 15% very fine grained feltic pyrite, occasional euhedral crystals (1mm)												
		- trace sphalerite												
		- alteration to muscovite + chlorite + gypsum + clay												
		- 136.3 pink carbonate vein (3cm wide)												
		- carbonate twinning evident												
136.4	218.3	RHYOLITE UNIT												
		- occasional quartz veining (fracture filling) throughout rhyolite units from 30 to 50° to CA												
		- up to 4cm wide/average of 0.8cm												
		136.4-157.0 Rhyolite Lapilli Tuff	43546	136.0	137.0	1.0	0.027	4.11	0.57	4.31	0.02	0.09	<0.1	0.26
		- matrix runs from 5-20%	43547	137.0	138.0	1.0	0.034	2.19	0.42	0.86	0.01	0.02	<0.1	0.18
		- clasts are subangular to	43548	138.0	139.0	1.0	0.013	0.17	0.03	0.03	<0.01	<0.01	<0.1	0.01
		subrounded with average size	43549	139.0	140.0	1.0	0.024	0.14	0.01	0.03	<0.01	<0.01	<0.1	<0.01
		1.5cm diameter	43550	140.0	141.0	1.0	0.014	0.26	0.01	0.02	<0.01	<0.01	<0.1	<0.01
		- occasional ghosted perimeters	43551	141.0	142.0	1.0	0.026	0.17	0.01	0.01	<0.01	<0.01	<0.1	<0.01
		- 136.4-139.7 10% feltic pyrite in	43552	142.0	143.0	1.0	0.044	0.13	<0.01	0.02	<0.01	<0.01	<0.1	<0.01
		matrix	43553	143.0	144.0	1.0	0.029	0.10	<0.01	0.02	<0.01	0.02	<0.1	0.01
		- 136.4-137.5 5% sphalerite, 2%	43554	144.0	145.0	1.0	0.006	0.12	<0.01	0.01	<0.01	0.02	<0.1	<0.01
		galena	43555	145.0	146.0	1.0	0.005	0.07	<0.01	0.02	<0.01	<0.01	<0.1	<0.01

To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
	- intensely foliated and altered	43556	146.0	147.0	1.0	0.007	0.09	<0.01	0.01	<0.01	0.02	<0.1	0.01
	- foliation at 80° to CA	43557	147.0	148.0	1.0	0.012	0.09	<0.01	0.02	<0.01	0.02	<0.1	<0.01
	- 139.7-157.0 15% black fine blotchy	43558	148.0	149.0	1.0	0.012	0.08	<0.01	0.01	<0.01	0.02	<0.1	<0.01
	alteration	43559	149.0	150.0	1.0	0.014	0.14	<0.01	0.01	<0.01	0.02	<0.1	<0.01
	- weakly foliated at 75° to CA	43560	150.0	151.0	1.0	0.026	0.19	0.02	0.04	<0.01	<0.01	<0.1	<0.01
	- stylolitic fractures throughout,	43561	151.0	152.0	1.0	0.015	0.38	0.02	0.08	0.02	<0.01	<0.1	<0.01
	lined with very fine grained black	43562	152.0	153.0	1.0	0.013	0.80	0.35	0.66	0.03	<0.01	<0.1	<0.01
	powdery "alteration" possibly	43563	153.0	154.0	1.0	0.029	0.35	0.18	0.19	0.01	<0.01	<0.1	<0.01
	wurtzite + galena + pyrite, and	43564	154.0	155.0	1.0	0.034	0.14	0.01	0.03	<0.01	<0.01	<0.1	<0.01
	traces of galena and sphalerite	43565	155.0	156.0	1.0	0.014	0.08	<0.01	0.01	<0.01	<0.01	<0.1	<0.01
	are evident throughout the section	43566	156.0	157.0	1.0	0.016	0.08	<0.01	<0.01	<0.01	0.02	<0.1	<0.01
	as visible blebs (under binoculars												
	we have metallic red mineral)												
	- 5% fragments are pale olive green												
	mg-chlorite altered (+/- sericite)												
	- 149.0-157.0 fragments are												
	siliceous												
	157.0-164.4 50% fragments are	43567	157.0	158.0	1.0	0.026	0.09	0.02	0.01	<0.01	0.02	<0.1	<0.01
	altered to a pale olive green (mg	43568	158.0	159.0	1.0	0.012	0.10	0.01	0.04	<0.01	<0.01	<0.1	<0.01
	chlorite +/- muscovite	43569	159.0	160.0	1.0	0.009	<0.05	0.02	0.04	<0.01	<0.01	<0.1	<0.01
	[sericite?]) and perimeters appear	43570	160.0	161.0	1.0	0.009	0.12	0.02	0.04	<0.01	<0.01	<0.1	<0.01
	weakly ghosted	43571	161.0	162.0	1.0	0.029	0.15	0.02	0.04	<0.01	<0.01	<0.1	0.01
	- shearing at 45° to CA	43572	162.0	163.0	1.0	0.023	0.07	0.02	0.04	<0.01	0.02	<0.1	<0.01
	- weak to moderate	43573	163.0	164.0	1.0	0.018	0.09	0.03	<0.01	<0.01	<0.01	<0.1	<0.01
	- trace fine grained pyrite	43574	164.0	165.0	1.0	0.028	0.27	0.32	0.77	<0.01	<0.01	<0.1	<0.01
	- 161.9-164.4 trace galena												
	164.4-166.1 3% sphalerite, 1% galena	43575	165.0	166.0	1.0	0.013	0.27	0.09	0.56	0.01	0.02	<0.1	0.01
	- trace chalcopyrite at 166.0												
	- mineralization as blebs and												
	blotches throughout												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		166.1-170.6	43576	166.0	167.0	1.0	0.053	0.10	0.03	0.05	<0.01	<0.01	<0.1	<0.01
		- sheared zone (weakly)	43577	167.0	168.0	1.0	0.045	0.07	0.03	0.02	<0.01	<0.01	<0.1	<0.01
		- rubble large angular fragments	43578	168.0	169.0	1.0	0.025	0.14	0.02	0.01	<0.01	<0.01	<0.1	0.01
		- 45° to CA	43579	169.0	170.0	1.0	0.029	0.54	0.07	0.16	0.02	<0.01	<0.1	0.01
		- trace galena, trace sphalerite												
		- 3% fine grained feltic pyrite												
		- intense alteration of matrix												
		- 10% matrix												
		170.6-172.4	43580	170.0	171.0	1.0	0.033	0.11	0.02	0.02	<0.01	0.05	<0.1	<0.01
		- alteration increases	43581	171.0	172.0	1.0	0.040	0.17	0.01	0.02	<0.01	0.04	<0.1	<0.01
		- well foliated at 60° to CA	43582	172.0	173.0	1.0	0.024	0.22	0.01	0.02	<0.01	0.04	<0.1	<0.01
		- 1% feltic pyrite												
		172.4-176.6 Intensely Altered Ash	43583	173.0	174.0	1.0	0.096	0.33	<0.01	0.02	<0.01	0.03	<0.1	0.01
		Tuff	43584	174.0	175.0	1.0	0.145	0.57	0.01	0.01	<0.01	0.06	<0.1	0.01
		- well foliated	43585	175.0	176.0	1.0	0.334	1.37	0.24	0.46	0.04	0.08	<0.1	0.01
		- foliations at 55 to 60° to CA	43586	176.0	177.0	1.0	0.043	2.37	0.34	0.45	0.03	0.03	<0.1	0.02
		- 172.3-172.5 15% "blotchy" alteration as siliceous spherulites up to 0.8cm in diameter												
		- following foliation orientation												
		- 175.0-175.14 1% wispy blotches of light rusty red mineral, possibly fine grained sphalerite												
		- feltic wispy pyrite throughout (10%)												
		- 172.4-174.0 20% intensely altered ghosted felsic fragments												
		176.6-179.0 Relict Lapilli Unit	43587	177.0	178.0	1.0	0.069	1.27	0.51	1.14	0.07	0.02	<0.1	0.02
		- fragments oriented in foliation direction	43588	178.0	179.0	1.0	0.046	0.27	0.12	0.22	<0.01	0.04	<0.1	0.02
		- 3% feltic pyrite												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		179.0-185.0 Ash Tuff	43589	179.0	180.0	1.0	0.075	0.69	0.03	0.09	<0.01	0.06	<0.1	0.01
		- intensely altered (muscovite +	43590	180.0	181.0	1.0	0.039	0.33	0.05	0.14	0.02	0.03	<0.1	0.01
		gypsum + chlorite alteration)	43591	181.0	182.0	1.0	0.108	0.61	0.20	0.40	0.02	0.02	<0.1	<0.01
		- intensely foliated	43592	182.0	183.0	1.0	0.032	0.38	<0.01	0.06	<0.01	0.10	<0.1	<0.01
		- foliations at 60° to CA	43593	183.0	184.0	1.0	0.015	1.06	0.01	0.05	<0.01	0.09	<0.1	<0.01
		- 5-8% pyrite	43594	184.0	185.0	1.0	0.015	0.30						
		- 182.1-183.0 5% sphalerite, 3-5% galena												
		- as fine grained disseminations and wispy blebs												
		- 182.6-182.8 50% siliceous blotches imparting a mottled texture to unit												
		185.0-198.8 Lapilli Tuff	43595	185.0	186.0	1.0	0.010	0.16						
		- moderately foliated at 60° to CA	43596	186.0	187.0	1.0	0.011	0.27						
		- intensely altered matrix	43597	187.0	188.0	1.0	0.022	0.47						
		- 185.0-188.9 1% sphalerite, 1%	43598	188.0	189.0	1.0	0.052	0.33						
		galena as blotches throughout	43599	189.0	190.0	1.0	0.051	0.25						
		- 5-8% feltic pyrite throughout	43600	190.0	191.0	1.0	0.020	0.09						
		matrix (10% matrix)	43601	191.0	192.0	1.0	0.003	0.10						
			43602	192.0	193.0	1.0	0.004	0.06						
			43603	193.0	194.0	1.0	0.007	0.08						
			43604	194.0	195.0	1.0	0.063	0.17						
			43605	195.0	196.0	1.0	0.026	0.60						
			43606	196.0	197.0	1.0	0.029	0.20						
			43607	197.0	198.0	1.0	0.012	0.10						
		198.8-205.1 Massive Laminated Rhyolite	43608	198.0	199.0	1.0	0.019	0.10						
		- rhythmic layering	43609	199.0	200.0	1.0	0.016	0.11						
		- layers up to 0.8cm at 65° to CA	43610	200.0	201.0	1.0	0.009	<0.05						
		- brittle, well fractures, siliceous	43611	201.0	202.0	1.0	0.011	<0.05						
		- 203.0-203.8 sheared zone	43612	202.0	203.0	1.0	0.008	<0.05						
		- shear at 25° to CA	43613	203.0	204.0	1.0	0.011	<0.05						
		- rubbly gouge	43614	204.0	205.0	1.0	0.011	0.10						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 1-3% pyrite in darker layers (felted)												
		205.1-218.3 Lapilli Tuff	43615	205.0	206.0	1.0	0.006	0.09						
		- 5.10% matrix	43616	206.0	207.0	1.0	0.012	0.11						
		- 1-3% very fine grained felted	43617	207.0	208.0	1.0	0.006	0.09						
		pyrite	43618	208.0	209.0	1.0	0.006	0.10						
		- 209.8-218.3 moderately well	43619	209.0	210.0	1.0	0.006	0.12						
		foliated at 50° to CA	43620	210.0	211.0	1.0	<0.001	0.08						
		- clasts are weakly sericitized with	43621	211.0	212.0	1.0	<0.001	<0.05						
		yellowish white flecks throughout	43622	212.0	213.0	1.0	<0.001	<0.05						
		and along shear planes	43623	213.0	214.0	1.0	<0.001	<0.05						
		- 213.3-214.7 quartz flooded zone	43624	214.0	215.0	1.0	<0.001	<0.05						
		with 25% quartz as fracture	43625	215.0	216.0	1.0	<0.001	<0.05						
		filling at 40 to 50° to CA	43626	216.0	217.0	1.0	<0.001	<0.05						
		- fracture filling from 1mm to 4cm	43627	217.0	218.0	1.0	<0.001	<0.05						
		wide												
		- 215.8-219.3 fault												
		- rubble to 218.3 angular to rounded												
218.3	248.5	DACITE												
		218.3-219.3 Fault Gouge	43628	218.0	219.0	1.0	3.813	1.96						
		- pyrite rich (20-25%) trace galena												
		- crushed dacite unit (Dacite Datum)												
		- relict film of argillite at 218.3												
		219.3-226.9 Dacite Ash Tuff	43629	219.0	220.0	1.0	0.005	0.07						
		- dark grey fine grained	43630	220.0	221.0	1.0	<0.001	0.06						
		- 10% very fine grained pyrite	43631	221.0	222.0	1.0	<0.001	0.08						
		- 2% coarse ash fragments	43632	222.0	223.0	1.0	<0.001	0.07						
		- brittle - sheared at 50° to CA	43633	223.0	224.0	1.0	0.006	0.13						
		- 223.6-225.4 fault gouge	43634	224.0	225.0	1.0	0.014	0.44						
		- sheared at 20 to 50° to CA	43635	225.0	226.0	1.0	0.027	0.33						
		- zones of consolidated gouge												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 224.6-225.4 20% pyrite as matrix - 225.4-226.5 intensely sheared, consolidated rubble zone - 15% pyrite in matrix												
		226.9-248.5 Lithic Tuff - pale green dacitic ash matrix with zones up to 50cm wide of 15-40% rounded to subrounded lithic fragments - 20% of this unit composed of these zones - 5-8% pyrite as medium grained disseminations - 5% glass shards throughout - moderately foliated with foliations at 35° to CA - shear zones at 228.9-229.1 - 231.1-231.3, 238.9-239.2 - shears at 40 to 50° to CA	43636	226.0	227.0	1.0	0.015	0.07						
			43637	227.0	228.0	1.0	0.011	<0.05						
			43638	228.0	229.0	1.0	0.006	<0.05						
			43639	229.0	230.0	1.0	0.024	<0.05						
			43640	230.0	231.0	1.0	0.008	<0.05						
			43641	231.0	232.0	1.0	0.006	<0.05						
			43642	232.0	233.0	1.0	0.010	<0.05						
			43643	233.0	234.0	1.0	0.006	<0.05						
			43644	234.0	235.0	1.0	0.007	<0.05						
			43645	235.0	236.0	1.0	0.005	<0.05						
			43646	236.0	237.0	1.0	0.002	<0.05						
			43647	237.0	238.0	1.0	0.010	<0.05						
			43648	238.0	239.0	1.0	0.007	<0.05						
			43649	239.0	240.0	1.0	0.007	<0.05						
			43650	240.0	241.0	1.0	0.001	<0.05						
			43651	241.0	242.0	1.0	0.001	<0.05						
			43652	242.0	243.0	1.0	0.003	<0.05						
			43653	243.0	244.0	1.0	0.003	<0.05						
			43654	244.0	245.0	1.0	<0.001	0.05						
			43655	245.0	246.0	1.0	<0.001	0.09						
			43656	246.0	247.0	1.0	0.009	0.09						
			43657	247.0	248.0	1.0	0.007	0.06						
			43658	248.0	248.7	0.7	0.022	0.05						
248.5	EOH													

DRILL HOLE LOG

LOCATION: 1297.7N 1162.8E

HOLE NO.: CA89-73 PAGE NO.: 1

AZIM.: 150° ELEV.: 82.1m
DIP: -87° LENGTH: 132.0m
CORE SIZE: NQ

PROPERTY: Eskay Creek

CLAIM NO.:
SECTION: 3+00N
LOGGED BY: Christine Swanson
DATE LOGGED: June 23, 1989
DRILLING CO.: Falcon Drilling
ASSAYED BY: TSL

STARTED: June 22, 1989
COMPLETED: June 24, 1989
PURPOSE: Test extent of zone downdip

DIP TEST Meterage	Reading	Correct
85.3	86°	157°
163.7	87°	159°

CORE RECOVERY: Good

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
0	3.0	CASING												
3.0	148.0	HANGINGWALL ANDESITES												
→ 3.0	7.0	PILLOWED ANDESITE FLOWS → small HWA occasional calcite fracture filling throughout unit at 25 to 40° to CA												
		- maroon cores to pale green vesicular, weakly brecciated selvages	43659	5.0	6.0	1.0	<0.001	<0.05						
			43660	6.0	7.0	1.0	<0.001	<0.05						
		- occasional zones of crackle brecciation												
		- 10% grey calcareous matrix with minor chlorite, trace pyrite, trace pyrrhotite, 1-2% white calcite												
→ 7.0	29.0	ANDESITE FLOWS → "												
		- gradational with overlying pillowed flows	43661	9.1	10.7	1.6	<0.001	<0.05						
			43662	16.0	17.0	1.0	<0.001	<0.05						
		- olive green sub porphyritic with aphanitic, frequently vesicular paler green chill margins	43663	17.0	18.0	1.0	<0.001	<0.05						
			43664	23.0	24.0	1.0	<0.001	<0.05						
			43665	24.0	25.0	1.0	<0.001	<0.05						
		- weakly brecciated	43666	28.0	29.0	1.0	<0.001	0.06						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- occasional zones of crackle brecciation - trace pyrite - oxidized fractures throughout												
→29.0	31.1	LAMINATED MUDSTONE → - 1-3% pyrite in layers at 50° to CA - 20% limy calcareous layers - 5% silty layers - trace pyrrhotite	43667	29.0	30.0	1.0	0.005	<0.05						
			43668	30.0	31.0	1.0	<0.001	<0.05						
→31.1	51.5	PILLOWED ANDESITES → - andesite flow to 34.8 - weakly brecciated - 34.8-51.5 pillowed andesites as in 3.0-7.0 - 40% xxxxx breccia in zones up to 2m wide - trace pyrite, trace pyrrhotite	43669	34.5	35.5	1.0	<0.001	<0.05						
			43670	38.7	40.0	1.3	<0.001	<0.05						
			43671	40.0	41.0	1.0	0.003	<0.05						
			43672	44.0	45.0	1.0	0.003	<0.05						
			43673	48.7	50.0	1.3	<0.001	<0.05						
			43674	51.0	52.0	1.0	<0.001	<0.05						
→51.5	54.3	DEBRIS FLOW → - andesite clasts in calcareous matrix - 15% matrix - clasts size from 0.1mm to 12.0mm - average of 0.3cm across - subrounded to subangular - occasional mud clasts (?rip up clasts?) - trace pyrite	43675	52.0	53.0	1.0	0.005	<0.05						
→54.3	56.4	LAMINATED MUDSTONE → - 5% crystallites - contact with debris flow is at 20° to CA	43676	54.0	55.0	1.0	0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 1-3% pyrite - 20% silty layers - occasional coarse grained greywacke layers												
→ 56.4	56.9	BRECCIATED ANDESITE - 10% mudstone matrix - subangular breccia fragments - 1% pyrite in mudstone matrix												
→ 56.9	57.3	MUDSTONE - black - weakly brecciated - weakly sheared at 40° to CA - graphite along shear planes - 5-8% pyrite as blebs and relict layers, 10% crystallites												
→ 57.3	58.5	ANDESITE BRECCIA - 20% mudstone matrix concentrated from 57.3-57.9, minor brecciation from 57.9-58.5 - clasts subangular - andesite - aphanitic, vesicular - unit is cut by calcite fractures filling at 40° to CA - 5% calcite - 1% pyrite in matrix	43677	57.0	58.0	1.0	<0.001	<0.05						
			43678	58.0	59.0	1.0	<0.001	<0.05						
→ 58.5	62.6	BRECCIATED MUDSTONE (ARGILLITE) - clasts up to 6cm across - average of 2.5cm - angular to subangular - 10% ash matrix	43679	59.0	60.0	1.0	0.001	<0.05						
			43680	60.0	61.0	1.0	<0.001	<0.05						
			43681	61.0	62.0	1.0	<0.001	<0.05						
			43682	62.0	63.0	1.0	<0.001	<0.05						

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 3% pyrrhotite blades in matrix associated with minor calcite - secondary mineralization - 1% fine grained pyrite in layers in clasts												
→62.6	67.7	ANDESITE FLOW - weakly brecciated - olive green - sub porphyritic to aphanitic chill margins - trace pyrite, trace pyrrhotite	43683 43684	63.0 67.0	64.0 68.0	1.0 1.0	<0.001 <0.001	<0.05 <0.05						
		62.6-63.6 Intensely Brecciated - 40% andesite fragments - 40% argillite/mudstone fragments - 20% calcite as fracture filling at 40° to CA and as breccia matrix												
→67.7	71.2	LAMINATED MUDSTONE/ARGILLITE - dark grey - 5% crystallites (crystal clusters) - 3-5% pyrite in layers at 60° to CA - 5% coarse grained greywacke layers - 15% calcareous (limy) layers - 68.8-70.1, 69.1-69.3 rubble zones - oxidized fractures throughout	43685 43686 43687	68.0 69.0 70.0	69.0 70.0 71.0	1.0 1.0 1.0	0.001 <0.001 <0.001	<0.05 <0.05 <0.05						
→71.2	77.5	ANDESITE FLOWS - weakly brecciated - olive green - sub porphyritic to aphanitic, vesicular chill margins - calcite vesicle filling - trace pyrite, trace pyrrhotite	43688 43689 43690	71.0 74.0 77.0	72.0 75.0 78.0	1.0 1.0 1.0	<0.001 <0.001 <0.001	<0.05 <0.05 <0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
							ASSAYS							
77.5	82.0	LAMINATED MUDSTONE/ARGILLITE												
		- layering at 50° to CA	43691	78.0	79.0	1.0	0.001	<0.05						
		- 3-5% pyrite concentrated in lighter coarser grained pyrite - rich layers	43692	81.0	82.0	1.0	0.002	<0.05						
		- 10% light grey calcareous (limy) layers												
		- 30% light grey silty layers												
82.0	86.0	ANDESITE FLOW												
		- as in 71.2-77.5	43693	85.0	86.0	1.0	0.009	<0.05						
		82.0-83.0 Rubble Zone												
86.0	87.0	LAMINATED MUDSTONE												
		- layers at 40° to CA	43694	86.0	87.0	1.0	<0.001	0.09						
		- 3-5% pyrite in lighter, coarser grained, pyrite rich layers	43695	87.0	88.0	1.0	0.007	0.19						
			43696	88.0	89.0	1.0	<0.001	<0.05						
		- 87.8 fossil fragment selimactinan parasmilia (?)												
		86.0-87.7 Rubble Zone												
		87.8-88.7 5% calcite veined at 15 to 30° to CA												
88.7	90.9	BRECCIATED ANDESITE												
		- as well as 93.6-94.3	43697	90.0	91.0	1.0	<0.001	<0.05						
		- 20-30% mudstone matrix												
		- aphanitic bleached andesite clasts												
		- occasionally vesicular												
		- 10% grey calcite also as breccias matrix												
		- 1% pyrite, trace pyrrhotite												

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		- 5% white calcite as fracture filling at 55 to 60° to CA - 90.1 shear at 25° to CA graphite along shear plane												
90.9	95.0	LAMINATED MUDSTONE - INTERLAYERED SILTSTONE - 10% pyrite in layers at 65° to CA - 40% grey siltstone layers up to 4cm in width (pyrite-rich)	43698	91.0	92.0	1.0	<0.001	<0.05						
95.0	101.1	ANDESITE CRACKLE BRECCIA - 20% matrix of grey calcite, trace chlorite, trace pyrite, trace pyrrhotite - andesite is olive green sub porphyritic to pale green aphanitic, vesicular chill margins 98.8-99.3 Rubble Zone - white calcite fracture filling throughout	43699 43700 43701	95.0 99.0 100.0	96.0 100.0 101.0	1.0 1.0 1.0	0.001 <0.001 <0.001	<0.05 <0.05 <0.05						
101.1	113.7	LAMINATED LIMESTONE MUD - end at oxidized fractures at 113.7 - black lime mud - occasional light grey limestone layers (5%) - 3-5% pyrite in pyrite rich layers up to 0.5cm wide at 55° to CA 106.6-106.9 Aphanitic, Bleached Vesicular Andesite Flow or Sill - trace pyrite	43702 43703 43704 43705 43706 43707	101.0 102.0 106.0 109.0 110.0 111.0	102.0 103.0 107.0 110.0 111.0 112.0	1.0 1.0 1.0 1.0 1.0 1.0	<0.001 0.003 <0.001 <0.001 <0.001 <0.001	0.05 0.14 0.05 0.07 <0.05 <0.05						

From	To	Description	Sample No.	From	To	Length	Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
			43708	112.0	113.0	1.0	<0.001	<0.05						
			43709	113.0	114.0	1.0	0.002	<0.05						
→ 113.7	135.6	ANDESITE FLOWS												
		- olive green	43710	114.0	115.0	1.0	<0.001	<0.05						
		- sub porphyritic, to aphanitic,	43711	120.0	121.0	1.0	<0.001	<0.05						
		bleached vesicular chill margins	43712	125.0	126.0	1.0	<0.001	<0.05						
		- occasional slickensided fractures	43713	126.0	127.0	1.0	<0.001	<0.05						
		at 25° to CA	43714	132.0	133.0	1.0	0.002	<0.05						
		- calcite + chlorite as fractures	43715	133.0	134.0	1.0	<0.001	<0.05						
		filling	43716	134.0	135.0	1.0	<0.001	<0.05						
		- slickensides perpendicular to	43717	135.0	136.0	1.0	<0.001	<0.05						
		right of fracture along the plane of fracture												
		- pseudo ophitic texture from 126.0-133.3												
→ 135.6	139.9	LAMINATED MUDSTONE												
		- 20% limestone mud layers	43718	136.0	137.0	1.0	<0.001	<0.05						
		- 5% silty layers	43719	137.0	138.0	1.0	0.001	<0.05						
		- 1-3% pyrite in lighter, pyrite	43720	138.0	139.0	1.0	<0.001	<0.05						
		rich layers at 55° to CA	43721	139.0	140.0	1.0	<0.001	<0.05						
→ 139.9	142.5	ANDESITE FLOWS												
		- as in 71.2-77.5	43722	140.0	141.0	1.0	<0.001	<0.05						
		- trace pyrite, no pyrrhotite	43723	141.0	142.0	1.0	<0.001	<0.05						
			43724	142.0	143.0	1.0	0.002	0.17						
→ 142.5	148.0	LAMINATED MUDSTONE/ARGILLITE												
		- black with lighter grey silty	43725	143.0	144.0	1.0	0.021	0.66	0.02	0.04	<0.01	0.06	<0.1	0.01
		layers at 40° to CA												
		- 1-3% pyrite												
		144.5-148.0 Rubble Zone	43726	144.0	145.0	1.0	0.037	0.34	0.01	0.06	<0.01	0.11	<0.1	0.01
			43727	145.0	146.0	1.0	0.042	<0.05	<0.01	0.04	<0.01	0.55	<0.1	0.01
		146.6-148.0 Trace Stibnite	43728	146.0	147.0	1.0	0.067	0.06	0.01	0.09	<0.01	0.29	<0.1	0.01

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
			43729	147.0	148.0	1.0	0.160	1.44	<0.01	0.13	0.02	0.06	<0.1	0.01
148.0	149.8	CONTACT ZONE - intensely broken to re-consolidated argillite - sheared, altered matrix (gypsum and muscovite) - 20-30% matrix - shears at 45° to CA 148.5-149.4 3-5% sphalerite (honey coloured) 2% stibnite (bleb at 149.03 generally is rimming around sphalerite and as vesicle filling 149.4-149.8 ghosted, wispy felsic fragments - sheared (45°) and intensely altered - 5% feltic pyrite throughout	43730	148.0	149.0	1.0	0.889	11.66	0.17	0.39	0.07	0.02	<0.1	0.04
			43731	149.0	150.0	1.0	1.23	5.70	0.04	0.17	0.04	0.02	<0.1	0.01
149.8	182.0	RHYOLITE UNIT - lapilli tuff - clasts from 0.5 to 4.0cm across - average of 1.5cm - subrounded to subangular - 10-20% matrix 149.8-150.1 "blotchy" alteration spherulitic siliceous blebs up to 0.5cm diameter - 5% - 150.6-150.9 1% realgar as opaque blotches associated with 1-3% stibnite and minor calcite - shearing at 25° to CA													

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		149.8-155.0 5-8% feltic pyrite												
		150.9-153.1 10% ghosted fragments preferred orientation of 60° to CA	43732	150.0	151.0	1.0	0.958	11.53	0.04	0.18	0.02	0.05	<0.1	0.01
			43733	151.0	152.0	1.0	0.720	19.30	0.18	0.40	0.07	0.08	<0.1	0.03
			43734	152.0	153.0	1.0	0.450	8.50	0.09	0.18	0.04	0.03	<0.1	0.01
		153.1-155.0 5% sphalerite (honey coloured 1-3% chalcopyrite, 5% pyrite, 3-5% fine grained galena or tennantite (all very fine grained feltic) galena? tennantite? form the "black alteration	43735	153.0	154.0	1.0	0.288	10.24	0.32	0.94	0.14	0.02	<0.1	0.04
			43736	154.0	155.0	1.0	0.062	2.12	0.05	0.30	0.02	0.02	<0.1	0.01
		155.0-158.3 5% "Black Alteration" of clasts and matrix	43737	155.0	156.0	1.0	0.039	0.23	<0.01	0.06	<0.01	0.04	<0.1	<0.01
			43738	156.0	157.0	1.0	0.023	0.11	<0.01	0.02	<0.01	0.03	<0.1	<0.01
			43739	157.0	158.0	1.0	0.032	0.26	0.02	0.05	0.02	0.05	<0.1	<0.01
			43740	158.0	159.0	1.0	0.035	0.10	<0.01	0.02	<0.01	0.03	<0.1	<0.01
		159.2-160.0 Occasional Stylolitic Fractures - intensely altered pale grey (muscovite)	43741	159.0	160.0	1.0	0.110	1.09	0.02	0.08	0.02	0.03	<0.1	<0.01
		160.2-164.2	43742	160.0	161.0	1.0	0.201	0.70	<0.01	0.04	<0.01	0.02	<0.1	<0.01
		- foliations at 40° to CA	43743	161.0	162.0	1.0	0.115	0.90	<0.01	0.04	<0.01	0.06	<0.1	<0.01
		- intensely altered matrix and ghosted wispy fragments	43744	162.0	163.0	1.0	0.081	0.69	<0.01	0.05	<0.01	0.02	<0.1	<0.01
		- 10% feltic pyrite - fragments become less wispy by 163.2												
		163.2-164.2 Rhyolite Breccia	43745	163.0	164.0	1.0	0.030	0.47	<0.01	0.05	<0.01	0.02	<0.1	<0.01
		- 5% matrix - autobreccia relatively little movement of fragments - 2% pyrite												

From	To	Description	Sample No.	From	To	Length	ASSAYS Au oz/t	Ag oz/t	Pb ppm	Zn ppm	Cu ppm	As ppm	Hg ppm	Sb ppm
		164.2-165.5 Weakly Altered Lapilli Tuff	43746	164.0	165.0	1.0	0.044	0.34	<0.01	0.04	<0.01	<0.01	<0.1	<0.01
			43747	165.0	166.0	1.0	0.037	0.25	0.01	0.01	<0.01	0.02	<0.1	<0.01
		- 5% feltic pyrite in matrix												
		- clasts relatively unaltered												
		165.5-170.3 as in 160.0-163.2	43748	166.0	167.0	1.0	0.020	0.11	0.02	0.01	<0.01	<0.01	<0.1	<0.01
		- foliations at 36° to CA	43749	167.0	168.0	1.0	0.011	0.07	0.01	0.01	<0.01	0.02	<0.1	<0.01
		- 10% feltic pyrite	43750	168.0	169.0	1.0	0.009	0.07	0.02	<0.01	<0.01	<0.01	<0.1	<0.01
			43751	169.0	170.0	1.0	0.014	0.05	<0.01	<0.01	<0.01	<0.01	<0.1	<0.01
		170.3-173.6 10% of fragments are	43752	170.0	171.0	1.0	0.106	0.13	<0.01	0.04	<0.01	0.05	<0.1	<0.01
		"sericite" or chlorite altered	43753	171.0	172.0	1.0	0.047	0.05	<0.01	0.09	<0.01	<0.01	<0.1	<0.01
		(pale olive green)	43754	172.0	173.0	1.0	0.099	0.13	<0.01	0.02	<0.01	0.02	<0.1	<0.01
		- 2% calcite alteration of fragments												
		173.6-174.6 as in 160.0-163.2	43755	173.0	174.0	1.0	0.348	0.23	0.01	0.08	0.01	0.02	<0.1	<0.01
		- foliation at 70° to CA	43756	174.0	175.0	1.0	0.029	0.07	<0.01	<0.01	<0.01	0.02	<0.1	<0.01
		- 5-8% feltic pyrite												
		174.2-179.7	43757	175.0	176.0	1.0	0.009	<0.05	0.01	<0.01	<0.01	<0.01	<0.1	<0.01
		- weakly altered	43758	176.0	177.0	1.0	0.005	0.05						
		- 5-8% feltic pyrite in matrix	43759	177.0	178.0	1.0	0.007	<0.05						
		- foliations at 50° to CA	43760	178.0	179.0	1.0	0.009	<0.05						
		179.7-181.3 as in 165.2-164.2	43761	179.0	180.0	1.0	0.037	<0.05						
		- autobrecciated rhyolite	43762	180.0	181.0	1.0	0.018	<0.05						
		- 2% pyrite												
		181.3-182.0 as in 174.2-174.7	43763	181.0	182.0	1.0	0.003	<0.05						
182.0	EOH													

DRILL HOLE LOG

LOCATION:

HOLE NO. CA 89-127 1 | PAGE NO. 1

AZIM: 115°
DIP: -70
STARTED: Dec. 29/89
COMPLETED: Sept. 1/89
PURPOSE:
CORE RECOVERY:

ELEV:
LENGTH: 272.8
CORE SIZE: NQ

DIP TEST — AZIMUTH

METREAGE	READING	CORRECT	METREAGE	READING	CORRECT
83.8		-70°		113°	
175.3		-71°		113°	
266.8		-70°		113°	

PROPERTY: CALPINE Eskay Creek
CLAIM NO.:
SECTION: 9+50N
LOGGED BY: DON PENNER
DATE LOGGED: Sept 2
DRILLING CO: FALCON
ASSAYED BY: TSL

METREAGE FROM	METREAGE TO	DESCRIPTION	SAMPLE NO.	METREAGE FROM	METREAGE TO	LENGTH	ASSAYS
		Summary Log					
0	6.7	Casing					
6.7	7.1	Till					
7.1	130.7	HANGING WALL ANDESITE ± interbedded sed.					
130.7	132.0	CONTACT ARGILLITE					
132.0	133.0	TRANSITION ZONE					
133.0	271.1	Rhyolite Breccia - chl./seric. alt'n strong → moderate - not that well mlzd.					
271.1	272.8	Footwall Argillite					
		T.D. 272.8m.					

Vancouver Office Copy

assay interval faxed Sept. 3/89

ESKAY CREEK PROJECT

DRILL HOLE # 12
PAGE 1 OF 6

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??
	0	6.7		Casing																			
	6.7	7.1		Till.																			
	7.1	33		ANDESITE - brx'd, v. rubbly core heavy limonite staining. Arg. frags ± gouge 10-10.4 Angular brx frags. tuff matrix																			
	33	35.6		Argillite - v. rubbly core, laminated 50°C, soft sed. slumping																			
	35.6	41.0		ANDESITE - v. rubbly core. strong ox'dn, local solution cavities																			
	41.0	41.3		Argillite - v. rubbly core, brx'd lower contact.																			
	41.3	61.0		Andesite/Arg Mix-ox'd'n ends, core v. rubbly + broken - mix'd arg. + andesite, brx'd, local [ ]'n py. dissolution cavities common. 1 cm qtz veins 45°C at 54.3-55																			
	61.0	74.7		ANDESITE Tuff locally vesicular, gritty tuffaceous calc. veinlets + gash fract over print various ∆ C. trace py, ox'd stain from 72.8 - 74.7																			
	74.7	76.4		ARGILLITE - laminated, 60°C dissol'n cavities; tr. py.																			

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??
	76.4	79.9		Andesite Tuff - calcareous, brx'd, py assoc. ī calc. veins																			
	79.9	80.7		Argillite - rubble																			
	80.7	83.0		Andesite - tuffaceous, slightly brx'd, dissol'n cavities, locally vesiculated, py along irregular fract. assoc. ī calc. rubbly core																			
	83.0	86.9		Argillite - dissln cavities dense f.gr. local crystallites																			
	86.9	91.7		ANDESITE - strong dissolution textures, quite calcareous. Py brx frags at lower contact.																			
	91.7	95.5		ARGILLITE - strong crystallite v. calcareous bedding 50°C. some dissol'n of crystallite leaving holes - calc's crystallites																			
	95.5	103.0		ANDESITE - strong dissol'n v. calc's tuff. locally py assoc. ī brx + fract. - v. broken + rubbly large cavities resulting in loss of water return																			
	103	105.5		ARGILLITE - dissol'n cavities laminations vary from ⊥ ¢ near upper contact to 70°¢ at lower cont.																			
	105.5	106.7		ANDESITE BRECCIA - brx'd avg frag at 106.1. Brx frags have zoned alt'n rims lined ī f.gr. py, qtz + calc. Exhibits bleached envelope for 1-2 mm from fract.																			
	106.7	107.8		Argillite - 35°¢ lower contact, f gr. py along fract., dissol'n cavities																			

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??	??
	107.8	118.7		ANDESITE - Brx at upper cont., arg. frag at 108.2																				
				grainy pitted andesite resulting from groundwater																				
				dissol'n fract. ± 1mm veins of py. Strong diss'n																				
				at 117.3 - 117.6 - calc. gash fract. fill ± large cavities																				
	118.7	123.0		ARGILLITE - v. broken core, qtz veins + gash fract. soft sed																				
				deformation, dissolution cavities.																				
	123.0	130.7		ANDESITE - brx'd gritty looking, strong dissol'n																				
				of calc. resistive qtz remaining, alt'n runs on																				
				brx frags, some calc. filled vescicles.																				
	130.7	132.0		CONTACT ARGILLITE - v. broken core																				
				moderately well bedded to massive, bdg 60°¢																				
				local graphitic sticks; Strong dissol'n cavities																				
				thru out. quite silic's																				
				131.1 - 1cm thick vein of SL + GN 20°¢																				
				134.6 - 1cm thick vein of SL, GN, Cpy ≅ 10°¢.																				
				Qtz veinlets + gash fract. overprint. local qtz																				
				brx zones at 136.5 - 137.7 with 1% py, tr. Cpy,																				
				tr. GN.																				
				135.7 - 7 cm mass granular sulfides, dominantly																				
				Cpy + GN																				
				136.3 - 3 cm band 50°¢ mainly py, tr GN, tr. SL, tr Cpy																				
				139.6 - 10 cm of SL, GN, Cpy 5% sulf. bluish																				
				hydrous coating on some fract. in the area.																				
				143-144 - Arg. brx'n, Carbon coated stylolitic frag																				
				boundaries. Qtz overprint < 1% diss SL, py.																				

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??
				local small scale offsets in qtz veins. Increase in hydrous bluish coating on fract toward lower cont. Strong fabric 30 cm before lower contact 55°¢. Soft sheared abund. slicks. 2% f.gr. py as disseminated and f.gr. bands.																			
	132.0 – 133.0			TRANSITION Sharp upper + lower contacts, both 55°¢. Strong seric. gouge upper cont. c̄ wavy seric. bands. Strong assoc. chlorite alt'n as well.																			
	133.0 – 271.1			Rhyolite – Lapilli Breccia – Upper 10 m of interval has quite a lot of carbon alt'n in matrix + rimming frags + carbon stylolitic features. 2% py from 157–165 m Strong silica overprint to 166 m 154. – 2 cm thick GN + SL 80°¢ – py occurs as f.gr. diss. + irregular blebs + f.gr. stringers in brx matrix – some soln cavities – slight greenish color → some chl. + seric. alt'n 166.5 – 186 – strong seric. + lesser chl. alt'n c̄ strong silic'n overprint flt. 170 – 171.6 – v. strong shear fabric c̄ abund. gouge 60°¢ strong seric alt'n. 170.6 – 174.0 – v. alt. brx with variously oriented foliations of sericite																			

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??
				Flt - strong flt gouge at 175.5																			
				177.8-180.6 - qtz brx, seric. alt. frags.																			
				- trace-py thru out interval.																			
				- seric. foliations wrap around lapilli frag.																			
				qtz veins at 183.7 c 1cm stringer ∥ SC, tr. CN																			
				qtz vein at 186.6, 187.5, 190.1																			
				186-187 - dark carbon contamination in matrix																			
				Core becomes darker going down hole.																			
				Flt - gouge at 192.4 + 193.7 m.																			
				Flt - gouge at 196.0																			
				- overprint qtz vein 50°C at 198 m																			
				205.7-214 - rock more felsic, sericite alt'n																			
				increasing. Trace SL + ttg																			
				tr. SL at 215 m																			
				- strong sericite alt'n downhole.																			
				227.7 - tr. SL, py																			
				Flt - 226 - shear rubble - seric. alt'n																			
				222-244 - strongly foliated 70°C strong chl.																			
				seric. alt'n. Some lapilli totally replaced by chl.																			
				250 - flow banding 40°C																			
				Flt 250.5 - flt gouge 5 cm																			
				local isolated qtz - veining + brx																			
				230.7 - tr. SL CN in brx matrix																			
			RHFB	254-259 - strong flow banding, strong alt'n																			
				seric. + chl. Flow band 60°C																			
				lot of shearing along seric. alt'd flow planes.																			
				abund. hairline sericite bands (wavy)																			

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??
				259 - 262.7 - Lapilli brx tr. diss blebs of																			
				sulfosalts, tr. SL as f.gr. blebs + stringers																			
				slick planes at 259 50°C ī gauge																			
				FIT at 262.9																			
				262.7 - 271.1 - flow banded alt'd dark gray																			
				rhyolite → carbon contamination ??																			
				Flow band 50°C soft sed. deformation																			
				small offsets. Anastamosing textures ī frag																			
				rotation																			
	271.1	- 272.8		ARGILLITE																			
				- Footwall argillite, angular arg. brx frags																			
				at contact. Massive. Shear at 272.4																			
				1 cm thick band of f.gr. py 60°C																			
				TOTAL DEPTH																			

LOCATION:

DRILL HOLE LOG

HOLE NO. 84-89-136 | PAGE NO. 1

AZIM: 115°
DIP: -45°
ELEV:
LENGTH: 248.1
CORE SIZE: NQ.

STARTED: Sept 5/89
COMPLETED: Sept 9/89
PURPOSE: STEP OUT DRILLING

CORE RECOVERY:

DIP TEST

METREAGE	READING	CORRECT	METREAGE	READING	CORRECT
92.7	-46°	108°			
168.9	-46°	107°			
245.1	-45°	108°			

PROPERTY: ESKAY CREEK
CLAIM NO.:
SECTION: L9100N, 1+12W
LOGGED BY: TWB
DATE LOGGED: Sept 11/89
DRILLING CO: Falcon
ASSAYED BY: TSL

METREAGE FROM	METREAGE TO	DESCRIPTION	SAMPLE NO.	METREAGE FROM	METREAGE TO	LENGTH	ASSAYS
0	5.2	CASING					
5.2	81	HANGING WALL ANDESITE 35.8 - 41.5 Argillite 51.6 - 54.5 Argillite 57.6 - 76.3 Argillite					51.6 - 54.5 Mass. sulf. horizon. 107.8m - 161.5m Sulfide zone, semi-mass py ± base metals
81	87.3	CONTACT ARGILLITE					
87.3	175	RHYOLITE					
175	182.1	UPPER ARGILLITE					
182.1	189	QUARTZ FELDSPAR VEIN					
189	193.2	DACITE					
193.2	232.3	LITHIC TUFF 231.6 - 232.3 Argillite					
232.3	248.1	DATUM DACITE					
	248.1	EOH. CASING, SPERRY SUN					

X	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION.	TX1	C	ST1	DIP	SI	CB	CY	??	PY	QV	QC	FROM	TO	%	MIN Z	GL	SL	CF
					TX2	F	ST2	DIP	CL	MS	EP	??	PR	CV	QF			M		ST	RE	AP
	0	5.2	CASE	CASING																		
	5.2	35.8	HAMS	ANDESITE (MASSIVE) - broken, blocky core throughout. Strongly oxidized broken surfaces. Locally brecciated. Occ. interbedded andstone, cm scale. Lower ct. broken. 24.9 - 30.5 argillite. 33.7 - 34.5 argillite																		
	35.8	41.5	HMLM	ARGILLITE (LAMINATED) - bedding at 70-90° CA. Slump structures common. Wkly to mod. oxidized to 38m. 1% primary Py, ll'd to bedding. Lower ct. broken.																		
	41.5	51.6	HMD/HM	ANDESITE / ARGILLITE - dom. modisitic ± minor interbedded argillites, + breccias. Dom. py, min'n interstitial to clasts, minor sphalerite (red Fe rich var.) ± sulfosalts, 25%. Gen. higher sulfides in argillites, breccias. 47-47.6 broken core, gouge. Fault zone.												41.5	51.6	25%	PY.			
		51.6		Lower ct; sharp; 90° CA.																		
	51.6	54.5	HMPy	ARGILLITE (PYRITIC) "massive sulfide horizon". Massive PY > SL / sulfosalts >50%. Foliation, defined by layering in sulfides, at 65° CA. Py dom with												51.6	54.5	>50%	PY > SL/TT			

ESKAY CREEK PROJECT

CA89-136
DRILL HOLE #
PAGE 2 OF 6

X	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	CV / CV	CC / CF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??	??
			HMPY sen't	SL increasing from 53.2m to lower ct. SL red, Fe-rich var. Relic primary bedding, defined by fg. diss banded py at 15° CA near upper ct.																				
			54.5	- lower ct, sharp 50° CA																				
	54.5	57.6	HAMS	ANDESITE - massive, f.g., vesicular. Local min, rare, veined py. Brecciated at lower ct. Interbedded argillite at 56.9, 10cm, 25% sulfides, py dom. Lower ct sharp, 25° CA																				
	57.6	76.3	HM	ARGILLITE - massive. Semi-mass sulfides up to 60.6m Interflows, cm scale, andesite. Broken core common. Carbonate veining generally at 50° CA, secondary carb veining + cutting oriented ll'l to CA.																				
				57.6 - 58.6 diss py, sph; sulfosalts, f to m.g. Amber sph commonly rimmed by Fe-rich var. Bedding at 70° CA 10% sulfides.												57.6	58.6	10%	PY > SL/TT					
				58.6 - 60.6m increase [illegible] sulfides, semi-mass. f.g. commonly in bands, 45° CA 30% overall.												58.6	60.6	30%	PY >> SL/TT.					
				60.6 - 60.9 Andesite, 70° CA.																				
				61.8 - 62.2 Andesitic breccia.																				

X	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP	TT / ??	??
			HM con't	63.6 - 76.3 up to m intervals of broken core.																				
				76.3 - Lower ct, faulted.																				
	76.3	81	HAms	ANDESITE (MASSIVE) - lower 2 m brecciated. Lower ct 65° CA																				
	81	87.3	CA.	CONTACT ARGILLITE - commonly silicified c̄ numerous cm scale quartz veins, generally 60-70° CA. Xcuts qv's along C.A. Building 70° CA. Brecciation / crackle breccia common. Pockets of sulfide min'l'zn. gen. near upper ct.																				
				81 - 81.1 10-15% SL (amber rimmed c̄ red var.) Py, Pb sulfosalts, banded, 65° CA.																				
				81.1 - 81.3 5% SL, Py, Pb sulfosalts, breccia, matrix hosted																				
				86.6 - 87.3 Fault Zone.																				
	87.3	175	RHBR	RHYOLITE (BRECCIA) - perv. chloritic alt, m lengths. Black alt (carbon?) to 96m, chloritic alt dom from ≈ 95m onwards downhole. Local Cn amber SL, galena, sulfosalts gen. cm scale. M section of semi-mass py min.																				

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP
			RHBR con't.	86 - 89 1% SL, galena, sulfosalts. Tr cpy f. to m.g. diss. aggregates.																		
				92.6 5cm band SL.																		
				93.4 - 93.7 10-15% SL >>> TT > GL, veined, 30-45°C.D																		
				95.3 - 102.7 perv. chlorite alt. shear fabric 70°CA																		
				97.7 - 98.2 3-5% f.g. diss SL, TT.																		
				~~[illegible]~~ 99.5 - 100.7 1-2% f.g. diss SL, TT, locally [ ]n																		
				103.2 - 10cm [ ]n SL/TT. Tr-1% cpy.																		
				107 - 107.8 5-10% diss. SL, GL, sulfosalts.												107.8	161.5	25-50	PY.			
				SULFIDE MINERALIZED ZONE.																		
	107.8	161.5		→ semi to mass. py mineralization, matrix replacement. Local [ ]n precious/base metals, gen. on cm scale. SL first appears at 119.7m. Perv. silicification throughout. Py less abundant 126.5-136m, 1-2%.																		
				119.7 - 125.7 1% SL, GL, TT. amber var. SL.																		
				125.7 - 129 5-10% SL, sulfosalts, ± gal locally [ ]n as veins + diss. aggregates. Dom red SL, amber SL where present is rimmed.																		
				129 - 136 tr-1% SL, Pb sulfosalts																		
				142.5 - 142.8 mud seam, possible fault																		
				148.5 - 154.6 tr-1% SL, GL, Pb sulfosalts																		
				154.6 - 156 2-3% SL, GL + Pb sulfosalts, locally [ ]n,																		

K	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% / M	MIN Z	GL / ST	SL / RE	CP / AP
			RHBR cont.	161.5 - 175 perv. chlorite alt. Fault zone from 174 - 175.5.																		
	175	182.1	FDAR	UPPER ARGILLITE. 1-2% SL, > Pb sulfosalts, gl. diss aggregates, locally Zn. Broken core common.																		
				180 - 182.1 Fault zone.																		
	182.1	189		QUARTZ FELDSPAR VEIN - massive, bleached white, tr f.g. sulfides. Lower ct broken.																		
	189	193.2	FDTU?	DACITIC TUFF? - resembles RHLA. Strongly sheared from 189 → 191m, 35° CA.																		
	193.2	236.6	FDLT	LITHIC TUFF - variable clast size / composition. Mod chloritic alt, locally int. chlorite/sericite alt. Commonly sheared c̄ increase shearing towards lower ct. Occ. carbonate veining, gen along CA or at low C.A. angles. Tr sulfides.																		
				Fault/shear zone 223.5 - 227, 25° CA. Shear zone 228 - 230, 25° CA.																		
			231.6	Lower ct, sharp at 55° CA																		

ESKAY CREEK PROJECT

GT87-C3

DRILL HOLE

X	FROM	TO	ROCK	DESCRIPTION/INTERPRETATION	TX1 / TX2	C / F	ST1 / ST2	DIP / DIP	SI / CL	CB / MS	CY / EP	?? / ??	PY / PR	QV / CV	QC / QF	FROM	TO	% M	MIN Z	GL / ST	SL / RE	CP / AP
	231.6	232.3		ARGILLITE - massive, bedded at Co. ca lower ct 60° CA.																		
	2323	242.8	FDDD	DATHEN DACITE - massive, vesicular → up to cm scale locally sheared from 238.5 - 240m, 25-45° CA																		
	242.8	248.1	FDm	ARGILLITE (MIDDLE) - massive, gen broken in cm segments, all to bedding. Bedding 45-65 ct. TF PY																		
		248.1	EOH.	CASING, SPERRY SUN COMPLETE.																		