

DIAMOND DRILL CORE LOG

Date: Jan 25/91

Hole Number: 90DY-07

Reference Fabric Orientation Diagram:

Project: DY PROJECT

Location: DY DECLINE

Claim:

Terr. Plane Co-ords.: 900768.60 N

597774.60 E

Grid Co-ords:

Elevation: 1034.20

All symmetry determinations looking

Total Depth: 686.71

with dipping

Inclination: VERTICAL

with dip azimuth

Purpose: TO TEST ROCK QUALITY ALONG TRACE OF DY DECLINE

Reason hole Terminated: HOLE REACHED DESIRED DEPTH

Logged by: D. R. HALLIWELL / J. Zbock Date(s) Logged:

Drilling Contractor: CARON DIAMOND DRILLING

Hole Cemented: NO Steel down Hole: NO

Size CORE From To Collar Cased and Capped: BQ 8.4 686.71

Assay Lab: N. A. L.

Certificate No's: N. A.

Started: Completed:

SPERRY-SUN DRILLING SERVICES

CURRAGH RESOURCES INC.
90DY-071990 12 01
CX-LB-00690

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE FEET	DEPARTURE FEET	VERTICAL SECTION	DOG LEG
0.00	0.42	42.86	0.00	0.00	0.00	0.00	0.00
50.00	0.25	9.72	50.00	0.24 N	0.14 E	0.08	0.50
100.00	0.33	319.66	100.00	0.46 N	0.07 E	0.29	0.52
150.00	0.52	314.59	150.00	0.73 N	0.19 W	0.66	0.38
200.00	0.62	307.49	199.99	1.05 N	0.56 W	1.15	0.24
250.00	1.00	301.18	249.99	1.44 N	1.15 W	1.84	0.79
300.00	1.35	295.10	299.98	1.92 N	2.06 W	2.80	0.74
350.00	1.58	298.01	349.96	2.49 N	3.20 W	4.00	0.49
400.00	1.75	300.93	399.94	3.21 N	4.46 W	5.38	0.37
450.00	1.97	297.84	449.92	4.00 N	5.88 W	6.92	0.48
500.00	2.25	297.75	499.88	4.86 N	7.50 W	8.66	0.57
550.00	2.78	304.65	549.83	6.00 N	9.37 W	10.76	1.22
600.00	3.23	308.57	599.76	7.57 N	11.47 W	13.34	0.99
650.00	3.73	310.24	649.67	9.50 N	13.82 W	16.35	1.02
700.00	4.02	310.16	699.56	11.69 N	16.40 W	19.70	0.57
750.00	4.27	310.08	749.43	14.01 N	19.16 W	23.29	0.50
800.00	4.25	308.00	799.29	16.35 N	22.04 W	26.96	0.31
850.00	4.50	309.93	849.14	18.75 N	25.01 W	30.73	0.58
900.00	4.52	309.85	898.99	21.27 N	28.02 W	34.63	0.04
950.00	4.88	310.79	948.82	23.92 N	31.15 W	38.69	0.75
1000.00	5.12	315.73	998.63	26.91 N	34.31 W	43.04	0.98
1050.00	5.52	317.68	1048.41	30.28 N	37.49 W	47.67	0.88
1100.00	5.72	317.64	1098.17	33.90 N	40.78 W	52.56	0.40
1150.00	5.87	317.43	1147.92	37.62 N	44.19 W	57.61	0.30
1200.00	6.00	313.39	1197.65	41.30 N	47.82 W	62.77	0.88
1250.00	6.17	309.36	1247.37	44.80 N	51.79 W	68.04	0.92
1300.00	6.50	309.33	1297.07	48.30 N	56.06 W	73.50	0.67
1350.00	6.75	310.30	1346.73	51.99 N	60.49 W	79.22	0.55
1400.00	6.67	310.26	1396.39	55.77 N	64.95 W	85.01	0.17
1450.00	6.67	310.23	1446.05	59.52 N	69.38 W	90.77	0.01
1500.00	6.67	312.20	1495.71	63.34 N	73.74 W	96.54	0.46
1550.00	6.47	312.09	1545.38	67.18 N	77.98 W	102.24	0.40
1600.00	6.25	310.04	1595.08	70.82 N	82.16 W	107.74	0.63
1650.00	6.25	313.00	1644.78	74.42 N	86.23 W	113.15	0.64
1700.00	5.52	312.92	1694.52	77.92 N	89.98 W	118.26	1.47
1750.00	4.75	311.84	1744.32	80.93 N	93.28 W	122.72	1.55
1800.00	4.62	320.78	1794.15	83.87 N	96.10 W	126.79	1.48
1850.00	4.53	330.71	1843.99	87.16 N	98.34 W	130.72	1.59
1900.00	4.47	340.65	1893.84	90.72 N	99.95 W	134.43	1.56
1950.00	4.28	341.43	1943.69	94.32 N	101.19 W	137.93	0.39

SPERRY-SUN DRILLING SERVICES

CURRAGH RESOURCES INC.
90DY-07

1990 12 01
CX-LB-00690

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE FEET	DEPARTURE FEET	VERTICAL SECTION	DOG LEG
2000.00	4.38	346.36	1993.55	97.95 N	102.24 W	141.30	0.77
2050.00	4.48	351.27	2043.40	101.74 N	102.98 W	144.60	0.78
2100.00	4.27	351.20	2093.25	105.51 N	103.56 W	147.77	0.43
2150.00	4.25	355.11	2143.12	109.19 N	104.01 W	150.78	0.58
2200.00	4.53	4.98	2192.97	113.01 N	103.99 W	153.57	1.61

THE DOGLEG SEVERITY IS IN DEGREES PER 100.00 FEET
THE VERTICAL SECTION WAS COMPUTED ALONG 317.38° (TRUE)

BASED UPON MINIMUM CURVATURE TYPE CALCULATIONS. THE BOTTOM HOLE
DISPLACEMENT IS 153.57 FEET, IN THE DIRECTION OF 317.38° (TRUE)

Core No.	From		To		Recov.		No.		Unit	Description
	10	14	18	20	22	24	26	28		
L	ØØ		84						ØØ 11,1A	CASING: GLACIAL OVERBURDEN. Contains boulders, cobbles of pebbles of SBØ, 1ØØ; often limonitized
L	84		1Ø2						ØØ2 SBØ (1ØØ#) 9Ø:1Ø	LIMONITIZED, BROKEN CORE. Light to medium gray with buff-white-ochre carbonate-quartz-limonite laminae/bands following S ₁ /S ₂ , CS ₂ and PS ₂ foliated. Silvery grey and ochre (limonite) fracture surfaces. Moderately calcareous. Limonite may be after pyrite. Poor core recovery, R&D. Gradational upper and lower contacts parallel S ₂ . Soft to moderately soft. White-buff-ochre quartz-calcite-limonite bands or concordant veins subparallel S ₂ . Moderately calcareous. Calcite has limonite stain. Hard. Sharp contacts with SBØ subparallel S ₂ .
L	1Ø2		144						ØØ3 SBØ	LIMONITIZED. Light to medium gray with buff-white-ochre carbonate-quartz-limonite laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery grey and ochre (limonite) fracture surfaces. Moderately soft to soft. Trace disseminated fresh (not limonitized) pyrite as euhedral cubes. Very good core recovery. Fair R&D. Gradational upper and lower contacts parallel S ₂ .
L	144		17Ø						ØØ4 SBØ2	LIMONITIZED. Medium to dark gray with buff-white-ochre carbonate-quartz-limonite laminae/bands following S ₁ /S ₂ . Strongly calcareous (quickly etched by 10% HCl acid). CS ₂ and PS ₂ foliated. Silvery dark grey and ochre (limonite) fracture surfaces. Soft to moderately soft. Trace disseminated pyrite.

Code	From		To		Recov.		No.		Unit	Description	
	10	14	18	20	22	24	26	28			30
											Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 .
L	1.70	2.10					005		5B0	(5B02) 80:20 LIMONITIZED. Light to medium grey with buff-white oolite carbonate-quartz limonite laminae/bands following S_1/S_2 . Strongly calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey and oolite (limonite) fracture surfaces. Soft to moderately soft. Intensely limonitized fracture at low α angle at 19.0-19.3. No sulphides. Very good core recovery. Good to fair R&D. Gradational upper and lower contacts parallel S_2 . Medium to dark grey slightly more carbonaceous subunit is less calcareous, softer and has gradational contacts with 5B0.	
L	2.10	2.97					006		5B6	(100#) 90:10 WEAKLY LIMONITIZED. Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous matrix with calcareous bands, laminae. CS_2 and PS_2 foliated. Silvery grey and oolite (limonite) fracture surfaces. Moderately soft to soft. Trace disseminated pyrite. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contain wisps of olive green-grey Mg-actinolite and black Fe-chlorite and have sharp contacts with 5B6.	
L	2.97	3.42					007		5B0	(100#; 5B20) 95:04:01 NON-LIMONITIZED Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces.	

Core	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28			30
											Moderately soft. Trace disseminated pyrite as euhedral cubes and deformed cubes. Good core recovery (small core loss at 32.3-35.4). Good R&D. Gradational upper and lower contacts. White-buff quartz-calcite bands or concordant veins subparallel to S_2 are moderately calcareous, hard, contain wisps of Mg-chlorite and have sharp contacts with SB0.
L	342		388						008	SB6	(100#) 95:05 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes (5mm). Very good core recovery. Fair R&D. Gradational upper and lower contacts parallel to S_2 . White-buff quartz-calcite bands or concordant veins subparallel to S_2 are moderately calcareous, hard, contain trace disseminated pyrite and black Fe-chlorite, and have sharp contacts with SB6.
L	388		434						009	SB0	(100#) 85:15 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and (trace) pyrrhotite. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel to S_2 . White-buff quartz-calcite bands or concordant veins are weakly calcareous, hard, contain wisps of olive-green grey Mg-chlorite, and has sharp contacts with SB0.
L	434		452						010	SB02	(100#) 95:05

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
														<p>Med. to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 moderately to weakly calcareous (outside matrix). PS_2 and CS_2 foliated. Silvery to dark grey fracture surfaces. Moderately soft to soft. Trace disseminated pyrite as euhedral cubes ($\leq 6\mu m$). Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2. White-buff quartz-calcite bands or concordant veins subparallel S_2 are calcareous hard contain olive-grey Mg-chlorite wisps and have sharp contacts with 5B62.</p>
L	4.52		4.67									Q1.1	5B.6	<p>(100#) 80:20 Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. CS_2 and PS_2 foliated. ^{Non-calcareous matrix.} Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Very good core recovery. Good R&D. Gradational upper contact. Sharp lower contact at CA 55°. White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard contain wisps of black Fe-chlorite and have sharp contacts with 5B6 subparallel S_2.</p>
L	4.67		4.73									Q1.2	5B.0	<p>BROKEN CORE. Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. CS_2 foliated. Weakly calcareous. Silvery grey and (rare) ochre (limonite) fracture surfaces. Grey clayey gouge near lower contact. Poor core recovery, R&D. Friable to blocky broken core throughout. Sharp upper contact at CA 55°. Sharp lower contact at CA 85°.</p>
L	4.73		5.23									Q1.3	5B.0	<p>(100# 5B.02) 75:20:05 Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2.</p>

Code	From		To		Recov.		No.		Unit	Description	
	10	14	16	20	22	24	26	28	30		34
											<p>Strongly calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and (rare) pyrrhotite as euhedral cubes. Very good core recovery, R&D. Sharp upper contact at CA 85°. Fairly sharp lower contact at CA 70°.</p> <p>Medium to dark gray more carbonaceous unit is less calcareous, softer and has gradational contacts with SB0.</p> <p>White to buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contain olive green gray Mg-chlorite and have sharp contacts with SB0, SB02. Some black Fe-chlorite contained with olive green Mg-chlorite.</p>
L	523		544				014		SB02		<p>Medium to dark gray with buff-white carbonate-quartz laminar/bands following S_1/S_2. Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Very good to good core recovery. Fair to poor R&D. Blocky core at 51.9-52.5 with limonitic fractures. Fairly sharp upper contact at CA 70°. Sharp lower contact with 100 at CA 80°.</p>
L	544		571				015		100#		<p>(SB02) 80:20 White-buff ^{quartz-calcite limonite} ochre bands or concordant veins subparallel S_2. Moderately calcareous. PS_2 foliated. Silvery gray and ochre (limonite) fracture surfaces. Hard. No sulphides. Good core recovery. Poor to fair R&D. Sharp upper contact at CA 80°. Sharp lower contact at CA 75°.</p> <p>Dark gray carbonaceous phyllite sub-unit is weakly calcareous, PS_2 foliated, moderately soft to soft and has sharp contacts with 100#. Dark gray fracture surfaces.</p>

Core	From			To			Recov.	No.	Unit	Description
	10	14	16	20	22	24				
L	571			587				016	SB0	BROKEN FRIABLE TO BLOCKY CORE. Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery gray and (rare) ochre (limonite) fracture surfaces. Friable to blocky broken core. Fair core recovery. Poor R&D. Sharp upper and lower contacts parallel S ₂ .
L	587			598				017	SB02	Medium to dark gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately to strongly calcareous. CS ₂ and PS ₂ foliated. Silvery gray fracture surfaces. Moderately soft to soft. No sulphides. Good core recovery. Fair R&D. Sharp upper contact parallel S ₂ . Gradational lower contact.
L	598			622				018	SB02	(100#) 80:20 Medium to dark gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery gray fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. R&D. Gradational upper and lower contacts parallel S ₂ .
L	622			968				019	SB02	(SB02:100#:SB20) 80:10:08:02 Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery gray and (rare) ochre (limonite) fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes (≤4mm). Very good core recovery. Good R&D. Blocky core at 80.9-81.1. Gradational lower contact.

Core	From		To		Recov.			No.			Unit	Description	
	10	14	16	20	22	24	26	28	30	34			36
												<p>tional upper contact parallel S_2, sharp lower contact at $CA 90^\circ$.</p> <p>Dark grey SB02 and SB20 sub-units have buff-white carbonate-quartz laminae/bands following S_1/S_2, are calcareous, CS_2 and PS_2 foliated, moderately soft and have gradational contacts with SB0 parallel S_2.</p> <p>White-buff quartz-calcite \pm dolomite bands or concretion veins are moderately calcareous, hard, contain wisps of olive-green grey Mn-chlorite and lesser black Fe-chlorite, and have sharp contacts with SB0, SB02 and SB20.</p>	
L	9.68	9.73									020	SB0	<p>BLOCKY TO FRIABLE BROKEN CORE.</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Moderately calcareous, CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft to soft. No sulphides. Fair core recovery. Poor RQD. Blocky to friable broken core with grey clayey gouge near upper contact. Sharp upper and lower contacts at $CA 80^\circ$ parallel S_2.</p>
L	9.73	1.03									021	SB6	<p>(SB62) 90:10</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Non-calcareous matrix. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Good core recovery, RQD. Gradational upper and lower contacts.</p> <p>Medium to dark grey more calcareous sub-unit is calcareous, softer and has gradational contacts with SB6.</p>

Code	From	To	Recov.	No.	Unit	Description
	10 14 16 20 22 24 26 28 30 34 36					
L	1030	1085		022	5B0	(100#) 95:05 ^{carbonate-quartz} Light to medium gray with buff-white laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft to soft. Trace disseminated pyrite as euhedral cubes (≤ 1 mm). Very good core recovery, R&D. Gradational upper and lower contacts parallel S_2 . Grey clayey fault gouge at 105.05-105.15. at $\alpha = 45^\circ$. White-buff quartz-calcite bands or concordant veins subparallel S_2 are calcareous hard and have sharp contacts with 5B0.
L	1085	1096		023	5B6	(100#) 80:20 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous matrix. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Very good core recovery. Good R&D. Gradational contacts parallel S_2 . White-buff quartz-calcite bands and concordant veins subparallel S_2 are calcareous, hard, pyritiferous, Mg-chlorite-bearing and have sharp contacts with 5B6.
L	1096	1212		024	5B0	(100# : 5B02) 98:02:02 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes (≤ 3 mm). Very good core recovery. Good R&D. Gradational upper contact and lower contact. White-buff quartz-calcite bands or concordant veins subparallel S_2 are calcareous hard and have sharp contacts with 5B0.

Core	From	To	Recov.	No.	Unit	Description
1	10	14 16	20 22 24	26 28 30	34 35	
						Medium to dark grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Dark and silver grey fracture surfaces. Moderately soft to soft. Trace disseminated pyrite. Gradational contacts with 58D.
L	1215	1242		Q25	586	(100#) 90:10 Light to medium grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Non-calcareous. CS ₂ and PS ₂ foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Very good core recovery, R&D. Gradational upper and lower contacts parallel S ₂ . White-buff quartz-calcite bands or concordant veins subparallel to S ₂ is calcareous hard, contains wisps of olive green grey Mg-chlorite and has sharp contacts with 586
L	1242	1300		Q26	586	Light to medium grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Very good core recovery, R&D. Gradational upper and lower contacts parallel S ₂ .
L	1300	1329		Q27	5862	(100#s) 70:30 Medium to dark grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Non-calcareous. CS ₂ and PS ₂ foliated. Silvery to dark grey fracture surfaces. Moderately soft to soft. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S ₂ . Some carbonaceous material (organic "trash", not graphite). No sulphides.

Core	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
											White-buff/cream quartz-calcite-dolomite bands or concordant veins subparallel S_2 . Weakly calcareous. Hard. Contains wisps of olive-green-grey Mg-chlorite. Sharp contacts with SB62.
L	1329	1379					028		SB6	(SB62:100#) 90:06:04	Light to medium gray with buff/white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous matrix. C_2 and P_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Good core recovery (some core loss at 1343-1359). Fair to poor R.O.D. Gradational upper contact. Sharp lower contact at 1359. Broken core at 135.5-135.9. Medium to dark grey with buff/white carbonate-quartz laminae/bands following S_1/S_2 . Subunit is non-calcareous, carbonaceous, softer and has gradational contacts with SB6. White-buff quartz-calcite bands or concordant veins are moderately calcareous, hard, contain wisps of olive-green-grey Mg-chlorite, and have sharp contacts with SB6, SB62.
L	1379	1453					029		SB6	(100#) 98:02	Light to medium gray with buff/white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. C_2 and P_2 foliated. Silvery gray. Moderately soft. Trace disseminated pyrite. Very good core recovery. Good R.O.D. Sharp upper contact at CA 80°. Sharp lower contact marked by quartz-calcite band or concordant vein at CA 70°. White-buff quartz-calcite bands or concordant veins are moderately calcareous, hard and have sharp contacts with SB6.
L	1453	1493					030		SB6	(SB62:100#) 70:20:10	

Code	From		To		Recov.	No.	Unit	Description		
	10	14	18	20					22	24
1								<p>Medium to light grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Non-calcareous matrix. CS_2 and PS_2 foliated. Silvery to dark grey fractures. Moderately soft to soft. Trace disseminated pyrite. Good core recovery. Fair to poor RRD. Sharp upper and lower contacts marked by quartz-carbonate bands or concordant veins subparallel S_2. Broken core through</p> <p>Medium to dark grey more carbonaceous sub-unit has carbonate-quartz laminae/bands following S_2, has dark grey fracture surfaces, is softer and has gradational contacts with 5B6. Non-calcareous.</p> <p>White-cream^{buff} quartz-dolomite-calcite bands or concordant veins are weakly calcareous hard, contain wisps of olive green Mg-chlorite \pm fuchsite(?), contain trace disseminated pyrite and have sharp contacts with 5B6, 5B62.</p>		
L	1493	1506				031	5B02	<p>(100#) 60:40</p> <p>Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Moderately calcareous PS_2 foliated. Silvery to dark grey fracture surfaces. Moderately soft to soft. Trace disseminated pyrite as euhedral cubes (< 10mm). Good core recovery. Fair to poor RRD. Blocky to friable broken core at 149.4-149.9. Sharp upper contact subparallel S_2 marked by quartz-dolomite band or concordant vein. Gradational lower contact parallel S_2.</p> <p>White-cream^{buff} quartz-dolomite^{± calcite} bands or concordant veins are weakly calcareous, hard, contain wisps of olive green-grey Mg-chlorite and make sharp contacts with 5B02.</p>		
L	1506	1524				032	5B02	<p>(100#) 98:02</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Moderately calcareous. PS_2 foliated. Silvery grey fracture surfaces. Moderately soft.</p>		

Lithologic Log

Date: Jan 27/91 Logged By: D. Halliwell

From	To	Recov.	No.	Unit	Description	
10	14	16	20	22 24	26 28	30 34 35
						Good core recovery. Fair to poor R&D. Blocky to friable broken core at 152.2-152.4, 152.6-153.3. Gradational upper and lower contacts parallel S_2 . White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contain wisps of olive green-gray Mg-chlorite and black Fe-chlorite and have sharp contacts with S_2 .
1524	1528		032	5B02	Medium to dark gray with carbonate-quartz laminae and bands following S_2 . Calcareous and weakly carbonaceous (with no graphite). PS_2 foliated. Soft to moderately soft. Good core recovery. Fair R&D. Gradational upper and lower contacts parallel S_2 .	
1528	1550		033	5B60	(100#) 90:10 Light to medium gray with buff-white ^{to chert} carbonate-quartz ^{limonite} laminae/bands following S_1/S_2 . Non-calcareous matrix. CS_2 and PS_2 foliated. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . Broken core at 152.8-153.3. White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contain wisps of olive green-gray Mg-chlorite and black Fe-chlorite.	
1550	1592		034	5B00	WEAKLY LIMONITIZED. Light to medium gray with buff-white-chert carbonate-quartz-limonite laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Moderately soft to soft. Vuggy at 158.7. Limonitized (after pyrite?). Good core recovery. Poor R&D. Blocky to friable broken core at 156.6-159.2.	

From	To	Recov.	No.	Unit	Description
10 14 16 20 22 24 26 28 30 34 35					
1592	1607		035	5B02	LIMONITIZED. Medium to dark gray with buff-white laminae/bands following S_1/S_2 and ochre (limonite) fractures. Weakly calcareous and carbonaceous. CS_2 and PS_2 foliated. Moderately soft to soft. Limonitized (after pyrite?). Silvery gray, dark gray and ochre (limonite) fracture surfaces. Good core recovery. Fair RQD. Gradational upper and lower contacts parallel S_2 . Blocky core throughout. Oxidizing waters moved through unit.
1607	1641		036	5B0	WEAKLY LIMONITIZED. Light to medium gray with buff-white laminae/bands following S_1/S_2 and ochre (limonite) fractures subparallel S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray and ochre (limonite) fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes ($\leq 4\mu m$). Very good core recovery. Fair RQD. Gradational upper and lower contacts parallel S_2 .
1641	1652		037	5B02	(100#) 70:30. WEAKLY LIMONITIZED. Medium to dark gray with buff-white ochre calcite-quartz \pm limonite laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery to dark gray and ochre (limonite) fracture surfaces. Moderately soft and soft. No sulphides, but ^{in quartz} tabular vugs and limonite suggest limonite is likely after pyrite. Good core recovery. Fair RQD. Blocky core at 164.1 - 164.5. Gradational upper and lower contacts parallel S_2 . White-buff-ochre quartz-calcite-limonite bands or concordant veins subparallel S_2 are calcareous, hard, vuggy (limonite after pyrite), contain wisps of olive-green Mg chlorite, and have sharp contacts with 5B02.

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
L	165	2	173	5		038	5B,6F	(5B0) 95:05 WEAKLY LIMONITIZED. Light to medium gray with buff-white-ochre ^{carbonate-quartz-limonite} laminae/bands following S ₁ /S ₂ . Non-calcareous for the most part. CS ₂ and PS ₂ foliated. Silvery gray and ochre (limonite) fracture surfaces. Moderately soft. Trace disseminated pyrite. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S ₂ . Non-calcareous sub-unit is similar to the above.		
L	173	5	175	5		039	5B,0	(5B02) 98:02 WEAKLY LIMONITIZED. Light to medium gray with buff-white-ochre carbonate-quartz-limonite laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery gray and ochre (limonite) fracture surfaces. Moderately soft. Trace disseminated pyrite and (trace) pyrrhotite (first occurrence in hole), pyrrhotite rim-replaces pyrite in euhedral cubes. Very good core recovery, R&D. Gradational upper and lower contacts parallel S ₂ . More carbonaceous sub-unit is dark gray, softer and has gradational contacts with 5B0.		
L	175	5	176	4		040	5B,02	VERY WEAKLY LIMONITIZED. Medium to dark gray with buff-white carbonate-quartz following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery gray and occasional ochre (limonite) fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery, R&D. Gradational upper and lower contacts parallel S ₂ .		
L	176	4	176	7		041	5B,20	VERY WEAKLY LIMONITIZED. Dark gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately		

From	To	Recov.	No.	Unit	Description	
10	14	16	20	22 24	26 28	30 34 35
						calcareous. Fairly carbonaceous with weak graphite (stained fingers). CS_2 and PS_2 foliated. Silvery dark gray and ochre (limonite) fracture surfaces. Soft. No sulphides. Fair core recovery. Fair to poor RQD. Gradational upper and lower contacts parallel S_2 .
1767	2014		042	SB.0	(100# & \$) 90:10 NON-LIMONITIZED. Light to medium gray with buffwhite carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite euhedral cubes (≤ 4 mm) and (rare) pyrrhotite subhedral (pyrite) pseudomorphs (≤ 5 mm). Very good core recovery, RQD. Gradational upper contact parallel S_2 . Sharp lower contact at $\sim 80^\circ$, marked by quartz-calcite band or concordant vein. White-buff \pm cream quartz-calcite \pm dolomite bands or concordant veins subparallel to S_2 are moderately to weakly calcareous, hard, contain wisps of olive-green-gray Mg-chlorite and lesser black Fe-chlorite and have sharp contacts with SB.0.	
2014	2082		043	SB.6\$	(100\$) 97:03 Light to medium gray with cream-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous matrix. PS_2 and (lesser) CS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes. Very good core recovery. RQD. Gradational upper and lower contacts parallel S_2 . White-cream quartz-dolomite bands or concordant veins subparallel to S_2 are weakly calcareous, hard, contain wisps of olive-green-gray Mg-chlorite and have sharp contacts with SB.6.	

From	To	Recov.	No.	Unit	Description
2082	2099		044	5B02	25B0.
					Medium to dark gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and pyrrhotite. Very good core recovery, R&D Gradational upper and lower contacts parallel S_2 . Some less carbonaceous material.
2099	2120		045	5B62	(100%) 60:40
					Medium to dark gray with cream-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous. PS_2 foliated. Dark gray fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery, Good R&D. Gradational upper and lower contacts parallel S_2 . White-cream quartz-dolomite bands or concordant veins subparallel to S_2 are weakly calcareous, hard, contain olive green Mg-chlorite, and have sharp contacts with 5B62.
2120	2153		046	5B65	(100%) 70:30
					Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . White-cream ^{to} quartz-dolomite ^{and} limonite bands or concordant veins subparallel to S_2 are weakly calcareous, hard, contain ^{and} wisps of olive green-gray Mg-chlorite. Possible ankerite (weakly calcareous, yellowish-off colour carbonate). Sharp contacts with 5B6.

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	35	
21.53	21.84		047	5B6\$	(100#) 95:05 BLOCKY TO FRIABLE BROKEN CORE Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Non-calcareous. PS ₂ foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Fair to poor core recovery. Poor RQD. Blocky core at 215.3-215.7, 218.2-218.4. Friable core at 215.7-218.2. Gradational upper contact parallel S ₂ . Sharp lower contact at Ct 80°. Mismatch at 217.7 (approx), resulting in a loss of 3' of core. White buff quartz-calcite boulders or veins are hard, calcareous and have sharp contacts.						
21.84	22.24		048	5B6\$	(500#) 99:01:TRACE Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately to weakly calcareous. PS ₂ foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite as cubical cubes (<5mm). Good core recovery. Fair RQD. Sharp upper contact at Ct 80°. Gradational lower contact. Darker gray, softer more carbonaceous units have gradational contacts with 5B6\$.						
22.24	22.33		049	5B6\$	BLOCKY BROKEN CORE. Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. PS ₂ foliated. Soft to moderately soft. No V sulphides. Fair core recovery. Poor RQD. Sharp upper and lower contacts parallel S ₂ .						
22.33	22.77		050	5B6\$	(100#) 95:05 Light to medium gray with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ .						

From	To	Recov.	No.	Unit	Description
10	14	16	20	22 24 26 28 30	34 35
					<p>Non-calcareous, CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes ($\leq 4mm$), sometimes following bands. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2.</p> <p>White-cream quartz-dolomite bands or concordant veins subparallel S_2 are weakly calcareous, hard, contain wisps of olive green-grey Mg-chlorite and have sharp contacts with SB6.</p>
2277	2295		051	SB6	<p>(100#) 96:04</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Moderately calcareous CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Good core recovery. Fair R&D. Gradational upper and lower contacts parallel S_2.</p> <p>White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contain wisps of black Fe-chlorite and have sharp contacts with SB6.</p>
2295	2329		052	SB6	<p>(100: SB26) 90:09:01</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2. Non-calcareous matrix. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Good core recovery, Fair to poor R&D. Gradational contact parallel S_2. Sharp lower contact parallel S_2 marked by quartz band or concordant vein. White, hard quartz bands or concordant veins have olive Mg-chlorite and sharp contacts. More carbonaceous sub-unit is darker, softer and has gradational contacts with SB6.</p>

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From	To	Recov.	No.	Unit	Description
2329	2358		053	5B0	(100%) 90:10 FRIABLE TO BLOCKY BROKEN CORE. Light to medium gray with buff-white carbonate (calcite?) - quartz laminae/bands following S_1/S_2 . Weakly calcareous. PS_2 foliated. Silvery gray fracture surfaces. Moderately soft to soft. Poor core recovery (core loss at 233.5-235.0), RQD. Friable to blocky broken core at 232.9-237.2. Sharp upper and lower contacts parallel S_2 with upper contact marked by quartz-dolomite band or concordant vein. White-cream quartz-dolomite band or concordant veins subparallel S_2 are weakly calcareous, hard and have sharp contacts with 5B6.
2358	2377		054	5B6	Light to medium gray with cream-white carbonate (dolomite?) - quartz laminae/bands following S_1/S_2 . Non-calcareous. PS_2 and CS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Good core recovery. Fair RQD. Sharp upper and lower contacts parallel S_2 .
2377	2391		055	5B6	FRIABLE TO BLOCKY BROKEN CORE. Light to medium gray with cream-white carbonate - quartz laminae/bands following S_1/S_2 . Non-calcareous. PS_2 and CS_2 foliated. Silvery gray fracture surfaces. Moderately soft to soft. Poor core recovery (core loss at 237.1-238.7). Poor RQD. Sharp upper and lower contacts parallel S_2 .
2391	2439		056	5B6	Light to medium gray with cream-white carbonate - quartz laminae/bands following S_1/S_2 . Non-calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft

From		To		Recov.		No.		Unit		Description
10	14	16	20	22	24	26	28	30	34	35
										to soft. Very good core recovery. Good RQD. Sharp upper contact parallel S_2 . Gradational lower contact.
2439	2447							Ø57	SB6.2	(100) 9Ø:1Ø Medium to dark grey with cream-white carbonate (dolomite?) - quartz laminae/bands following S_1/S_2 . Non-calcareous. Silvery grey fracture surfaces. Moderately soft to soft. Very good core recovery. Good RQD. Gradational upper and lower contacts parallel S_2 . Weakly carbonaceous. White-cream quartz-carbonate (dolomite?) band or concordant vein subparallel S_2 is weakly calcareous, hard and has sharp contacts with SB6.2.
2447	2491							Ø58	SB6	(100%) 7Ø:3Ø Light to medium grey with cream-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous. Silvery grey fracture surfaces. Moderately soft to soft. Good to fair core recovery (core loss at 245.1-246.3 or 246.3-248.4). Good to poor RQD. Friable to blocky broken core at 245.1-246.3. Gradational upper and lower contacts parallel S_2 . White-cream quartz-dolomite bands or concordant veins are weakly calcareous, hard, contain wisps of olive-green-grey Mn-chlorite, and have sharp contacts with SB6.
2491	2520							Ø59	SBØ	Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. P_{S_2} and C_{S_2} foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes (≤ 6 mm) in quartzose

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From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28	30 34 35	
					poDS elongate parallel S_2 . Quarts-carbonate veins crosscutting S_1, S_2 also present. Very good core recovery, RQD. Gradational upper and lower contacts parallel S_2 .
2520	2541		060	5B6	& \$
					Light to medium grey with buff-cream-white carbonated (calcite \pm dolomite)-quartz laminae/bands following S_1/S_2 . Weakly to non-calcareous. PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Gradational upper and lower contacts parallel S_2 .
2541	2651		061	5B6	(100#) 99:01
					Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite and (rare) pyrrhotite as cubical cubes and dolomitic cubes with quartz lenses elongate/parallel S_2 . Very good core recovery. Good RQD. Gradational upper and lower contacts parallel S_2 . White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard, contains olive-green grey Mg-chlorite and have sharp contacts with 5B6.
2651	2656		062	5B6	& \$
					Light to medium grey with cream-white laminae/bands following S_1/S_2 . Non-calcareous. PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Gradational contacts parallel S_2 .

From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28 30	34 35	
2656	2663		063	100#	White-cream quartz-dolomite band or concordant vein subparallel S_2 is very weakly calcareous, hard, contains black Fe-chlorite (265.8-265.9) and has sharp upper (at 60°) and lower (at 70°) contacts with phyllitic units.
2663	2753		064	5B6	<p>100# : 5B62 : 100#) 80 : 10 : 08 : 02</p> <p>Light to medium grey with cream-white dolomite-quartz laminae/bands following S_1/S_2. Non-calcareous. PS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite. Sharp upper contact at 60°. Gradational lower contact.</p> <p>White-cream ± buff quartz-dolomite = calcite bands or concordant veins subparallel S_2 are weakly to moderate calcareous, hard, contain olive-green grey Mg-chlorite and black Fe-chlorite and have sharp contacts with 5B6, 5B62</p> <p>Medium to dark grey more carbonaceous subunits are non-calcareous, softer and have gradational contacts parallel S_2 with 5B6, (sharp contacts with 100#, 100#)</p>
2753	2765		065	5B0	Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Weakly calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite and pyrochroite. Very good core recovery. Good to fair RQD. Gradational upper and lower contacts parallel S_2 .
2765	2863		066	5B6	100# (100# : 5B62 : 100#) 80 : 10 : 08 : 02

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From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28	30 34 35	
					Light to medium gray with cream-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets crosscutting S_1, S_2 . Non-calcareous matrix. CS_2 and PS_2 foliated. Moderately soft. Trace disseminated pyrite as euhedral cubes. Very good core recovery. Good R&D. Gradational upper contact parallel S_2 . Sharp curvilinear lower contact with 5C6.
					White-cream \pm buff quartz-dolomite \pm calcite bands or concordant veins subparallel to S_2 are weakly to moderately calcareous, hard, contain wisps of fine grey Mn-chlorite and black Fe-chlorite, and have sharp contacts with 5B6, 5B62.
					Dark to medium gray slightly carbonaceous sub-unit is non-calcareous, softer and has gradational contacts with 5B6 (sharp contacts with 100\$, 100#).
2863	2868		067	5C6	(5B66) 65:35 Medium to light gray f.g. aphanitic, ^{non-calcareous} groundmass supports white mg subhedral (encaesone?) phenocrysts and black mg subhedral (amphibole or pyroxene?) phenocrysts with relict porphyritic igneous texture at 286.3-286.4 and 286.6-286.8. Black chloritic phyllite occurs at 286.4-286.6. Fine-grained chill margins with fine-grained phenocrysts occur near contacts (286.3, 286.6). Moderately hard. Dark gray to black chloritic phyllite sub-unit is non-calcareous, CS_2 and PS_2 foliated, soft and has sharp curvilinear contacts with 5C6.
2868	2901		068	5B6	(5B62) 95:05 Light to medium gray with buff-white laminae/bands following S_1/S_2 . Non-calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft to soft. Fair core recovery. Fair to poor R&D. Blocky core at 287.4-287.7, 288.0-288.2. Sharp upper contact

Core	From			To			Recov.			No.			Unit			Description
	10	14	16	20	22	24	26	28	30	34	35					
																at A80°. Sharp lower contact at A90°. Dark grey more carbonaceous subunit is non-calcareous, softer and has gradational contacts with 5B6.
	29.01	29.04										069	5B6			BLOCKY BROKEN CORE. CLAYEY GOUGE. Light grey to aphanitic clayey gouge is non-calcareous, soft and has sharp upper (A90°) and lower (A60°) contacts. Fair to poor core recovery. Poor RQD. Blocky broken core with clayey gouge.
	29.04	29.95										070	5B6			(100# \$: 5B62) 85:14:01 Light to medium grey with cream-white laminae/bands following S ₁ /S ₂ and veinlets cross-cutting S ₁ /S ₂ at low Ct angle (A0°-10°). Non-calcareous. C ₂ and P ₂ foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and (rare) pyrrhotite as euhedral cubes (pyrite) and pseudomorphic cubes (pyrrhotite). Very good core recovery. Good to fair RQD. Sharp upper contact at A60°. Gradational lower contact. Blocky core at 296.0-296.2, 297.8-298.0 White-buff-cream quartz-calcite-dolomite bands or concordant veins sub-parallel to S ₂ are weakly to moderately calcareous, hard, contain olive-gray Mg-chlorite and black Fe-chlorite weeps and have sharp contacts with 5B6. Dark grey more carbonaceous subunit is non-calcareous, softer and has gradational contacts with 5B6 (sharp contacts with 100#\$).
	29.95	30.59										071	5B6			(100#) 95:05

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	35	
											Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets crosscutting S_1, S_2 at low CA angle. Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and pyrrhotite as subhedral cubes (pyrite) and pseudomorphs (pyrrhotite). Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . White-buff quartz-calcite bands or concordant veins subparallel S_2 are moderately calcareous, hard and have sharp contacts with 5B0.
3059	3089		072	5B6	(5B62) 90:10						Light to medium gray with cream-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets crosscutting S_1, S_2 . Non-calcareous matrix. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubes within quartzose lenses elongate parallel S_2 . Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . Darker gray carbonaceous subunit is non-calcareous, softer and has gradational contacts with 5B6.
3089	3113		073	5B0	(900#) 96:04						Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2 at low CA angle. Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrite and pyrrhotite as euhedral cubes and cubic pseudomorphs. Very good core recovery. Good R&D. Gradational upper contact parallel S_2 . Sharp lower contact at CA 75°. White-buff quartz-calcite bands or concordant veins subparallel S_2 are calcareous, hard and have sharp contacts

From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28 30	34 35	
3113	3126		074	5B02	<p>BLOCKY BROKEN CORE. WEAKLY LIMONITIZED.</p> <p>Dark to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2. Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray and ochre (limonite) fracture surfaces. Moderately soft to soft. Weakly carbonaceous. Fair core recovery. Poor R&D. Sharp upper ($CA 80^\circ$) and lower ($CA 90^\circ$) contacts. Weakly limonitized blocky broken core.</p>
3126	3353		075	5B0	<p>(10Q#: 5B02) 80:10:10</p> <p>Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2 at low CA angles ($CA 0^\circ - 30^\circ$). Moderately calcareous. CS_2 and PS_2 foliated. Moderately soft. Traces disseminated pyrite and pyrrhotite as euhedral cubes and rhombs. Very good core recovery. Good R&D. Sharp upper and lower contacts at $CA 90^\circ$.</p> <p>White-buff quartz-calcite bands or concordant veins subparallel S_2 are calcareous hard, contain rare wisps of black Fe-chlorite and have sharp contacts with 5B0.</p> <p>Darker gray more carbonaceous sub-unit is calcareous, softer and have gradational contacts with 5B0 (sharp contacts with 5B0).</p>
3353	3357		076	5B0	<p>BLOCKY BROKEN CORE.</p> <p>Light to medium gray blocky broken unit. Calcareous. Soft to moderately soft. No gouge. Sharp upper ($CA 90^\circ$) and lower ($CA 60^\circ$) contacts.</p>
3357	3465		077	5B0	<p>(5B02) 85:15</p>

From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28 30	34 35	
					Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite and pyrrhotite as euhedral cubes and rhombs. Very good core recovery. Good R&D. Gradational upper contact parallel S_2 . Darker grey more carbonaceous sub-unit is softer and has gradational contacts with SBØ.
3465	3642		Ø78	5BØ	(SBØ2: 100#) 98: Ø2: TRACE Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately to strongly calcareous (locally etched quickly by 10% HCl acid). CS_2 and PS_2 foliated. Moderately soft. Trace disseminated ^(rare) pyrite (euhedral cubes and deformed cubes = rhombs $\leq 3mm$) and pyrrhotite (euhedral pseudomorphs of pyrite); pyrrhotite rim replacement of pyrite occurs. Very good core recovery. Good R&D. Gradational contacts parallel S_2 . Silvery grey fracture surfaces. Medium to dark grey more carbonaceous sub-unit is calcareous, softer and has gradational contacts with SBØ. White-buff quartz-calcite band or concordant vein subparallel to S_2 is moderately calcareous, hard and has sharp contacts with SBØ.
3642	3673		Ø79	5BØ	→ 5FØ (100#) 9Ø: 1Ø Light to medium grey with olive greenish tinted bands with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. PS_2 and CS_2 foliated. Silvery to olive green grey fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . White-buff quartz-carbonate bands (veins?) are calcareous, hard and have sharp contacts

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From	To	Recov.	No.	Unit	Description					
						10	14	16	20	22
3673	3721		080	5B0	→ 5F0 (5B02) 70:30 Light to medium grey with olive greenish tint (bands) and buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey and olive-greenish grey fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. Good to fair R&D. Gradational upper and lower contacts parallel S_2 . Medium to dark grey more carbonaceous subunit is calcareous, softer and has gradational contacts with 5B0.					
3721	3748		081	5B02	(100#) 95:05 Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft to soft. Trace disseminated pyrochloite. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . White-buff quartz-calcite bands or concordant veins subparallel to S_2 are moderately calcareous, hard, contain wisps of olive-green grey Mg-chlorite and black Fe-chlorite, and have sharp contacts with 5B02.					
3748	3775		082	5B6	(5B62) 90:10 Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Non-calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . No sulphides. Medium to dark grey more carbonaceous subunit is non-calcareous, softer and has gradational contacts with 5B6.					

From	To	Recov.	No.	Unit	Description	
10	14	16	20	22 24	26 28 30 34 35	
377.	379.		083	5B, 62S	Shear <p>Medium to medium dark gray, moderately to weakly dolomitic phyllite contains a very well healed, moderately strong shear fabric. Fabric orientation is generally 75° to core axis and also appears parallel to subparallel S_2. Shear fabric hosts 5-7% dolomite and quartz fragments 2-4mm wide, within a moderate P_2 foliation. Unit is weakly carbonaceous. Rock is slightly soft, core is slightly broken with 100% recovery. Upper contact is sharp and parallel S_2. Lower contact is also sharp and defined by a second shear fabric orientation. Second shear fabric crosscuts the fabric within this unit. Second fabric is related to fault zones below (380.4-385.9). Lower contact is oriented at 235°/40° relative shear fabric (P_2) of this unit. Second shear fabric occurs in a 10cm band.</p>	
379.	380.		084	5A*	(?) <p>Very dark gray to black, moderately to weakly dolomitic phyllite is moderately to strongly carbonaceous. Fracture surfaces moderately tarnish fingers very dark gray to black. Unit contains a strong shear fabric which is well healed, somewhat irregular in orientation (strike and dip) but generally is oriented 75° to core axis. Shear fabric is defined by 20-25% .75 x 3-4 cm quartz</p>	

From	To	Recov.	No.	Unit	Description
10	14 16	20	22 24	26 28	30 34 36
381.	384.		0816	A4Q	\$ 4 ± FAULT Slips. (10Q\$04) 90:10 Butt to slightly greenish yellow unit is weakly dolomitic, generally PS_2 foliated rarely CS_2 . Unit hosts 10% 15-30 cm quartz-ankerite-dolomite(?) quartz veins; vein orientation is highly irregular varying from subparallel to subperpendicular core axis. Veins commonly have an association with mineralized carbonate clots 1x2cm up to 5x2cm in diameter. Carbonate clots are highly irregular, white, hard (ankerite?) and are composed of same material as lower unit. Mineralized within 4LQ and carbonate clots are pyrite dominated, very fine grained and occur in wisps of contorted stringers that as a whole are variable but do locally define some sort of fabric? Rock varies from very soft to rarely moderately hard. Core is generally strongly to very strongly broken, quartz veins are intact to slightly broken. Upper and lower contacts are sharp and broken. Sporadic fault slip planes are highly variable and consist of 1-2cm of crushed rock and gouge.
384.7	385.1		087	A0\$ 4	Carbonate band is white slightly soft to slightly hard, very weakly reactive when ground and introduced to 20% HCl (ankerite). Unit hosts 10% very fine grained pyrite dominated sulfide stringers. Stringers are moderately

From	To	Recov.	No.	Unit	Description				
10	14	16	20	22 24	26 28	30	34	35	
									Fragments - blocks of 4EO. Mineralization is variable in occurrence from stringers to disseminated spots with crude, irregular banding. Shear planes are common and generally trend subparallel core axis. Shear planes are generally 0.5-2.5 cm wide. Rock varies from soft to very slightly hard. Core is strongly broken with good recovery. Upper contact is oriented 090/10 relative PS ₂ of upper unit. Lower contact is broken. ESTIMATED GRADE is <5% Pb+Zn.
388	390		090	4E10B	(4LO\$) 90:10				Brassy yellow weakly dolomitic unit hosts 10% bands and stringers of 4LO which do not exceed 10cm in width. 4LO when occurs as stringers are 1.0cm wide and oriented slightly oblique to core axis. Interval also contains a fracture pattern that is slightly oblique to core axis. 4EO consists of 60-70% pyrite and Pb-Zn mineralization is exceptionally difficult to see within fine grained Py. Rock is hard, moderately locally very strongly broken. Recovery is good. Upper contact is broken, lower contact is sharp, partially broken and parallel crude banding.

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	35	
390.	393.		09.1	AEO	Brassy yellow very fine grained unit is crudely banded (75-80° TCA). Bands are cm-scale intervals which host less pyrite (30%) within massive pyritic unit. Interbed is commonly fractured with found slightly oblique to core axis. Rock is hard moderately to strongly broken. Upper and lower contacts are sharp and parallel banding. Grade is very difficult to estimate and could vary from <5% up to 15%?						
393.	407.		09.2	ADP*	(4L0) 98:02 Well banded quartzite is medium gray and brassy yellow, generally waxy to moderately calcareous and banded on the 1.0-2.0 cm scale. 4L0 occurs in 0.5-1.0 cm bands in localized clusters 10's of cm wide. 4L0 concentrations occur at: 396.7-397.0, 398.6-398.8, 403.9-404.2, 404.8-405.1, 405.1-405.2, 405.4-405.8. Unit hosts a 8 cm crushed and gaged zone at 405.7. (4L0). FAULT is oriented parallel banding. Rock is hard, generally strongly broken, parallel, moderately broken. Recovery is good. Upper and lower contacts are parallel banding. Banding is consistently oriented 75-80° to core axis. Est grade is 5-8%						

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	35	
A07	A09		093	AL14	(5B61), 80:20. Medium to light gray rock is non-calcareous and well banded on the cm scale. Unit hosts 0-7% pyrite and sporadic cm scale bands of strong Sph. mineralization. Interval also contains 4L0# which is moderately to weakly calcareous, yellow-green, soft and occurs most commonly on the cm scale bands, rarely in bands up to 30cm. 4B04 is hard, interval is moderately to slightly broken with good recovery. Upper and lower contacts are sharp and parallel banding is consistently 80-75 to core axis.						
A09	410		094	5A69	Black non-calcareous phyllite is locally soft, generally hard and hosts 7-10% highly siliceous 3-5mm bands which contain disseminated Pb, Zn and Fe sulphides. Unit contains a 12-15cm extremely siliceous band/vein which is weakly calcareous and non-mineralized. Rock is moderately to locally strongly broken. Upper and lower contacts are sharp and parallel S ₂ . Unit is PS ₂ ⇒ CS ₂ foliated. Estimated grade is <2% Pb+Zn.						

From	To	Recov.	No.	Unit	Description					
10	14	16	20	22	24	26	28	30	34	36
A10	A12		095	5A1H	(5A1) 50:50 Carbonaceous interval is highly siliceous throughout. 2-5mm bands of mineralization define a CS ₂ fabric. Occasionally mineralized bands host subrounded pyrite grains which mimic buckshot facies ore of FARD DEPOSIT. Mineralized bands contain less than 15% sulphides and are strongly Fe dominant. 4B1 occurs only over lowest half of interval. Also contains weakly mineralized bands defining a CS ₂ fabric. Unit is highly siliceous throughout and also has a ghostly appearance as does upper graphitic subunit. Unit is medium light gray. All rocks are very hard and slightly broken. All contacts are sharp and parallel S ₂ . Estimated grade for interval is <2% Pb+Zn.					
A10	A13		096	5A1A	Very dark gray to black graphitic quartzite is moderately siliceous CS ₂ foliated and weakly mineralized. Mineralization is limited to 2-5mm bands of very siliceous quartzite. Mineralization is sphalerite dominant. Unit contains 1-2% dolomite stringers and clotts which are 2-3mm wide and highly randomly oriented. Rock is hard, moderately broken and recovery is good. Upper and lower contacts are sharp and parallel S ₂ . Estimated grade is 3-5%.					

From	To	Recov.	No.	Unit	Description							
10	14	16	20	22	24	26	28	30	34	35		
A13.	A14.		Q97	5A10	4 → 5B61 (5B61) 97:03							
					Medium dark gray unit is highly siliceous PS_2 foliated, rarely CS_2 foliated. Unit is weakly, rarely moderately carbonaceous and very weakly to non-calcareous. Moderately carbonaceous portions are limited to 2-3mm wispes parallel S_2 . Minor bands 3-4% (1-2mm) of phyllite are soft medium gray and only occur oriented parallel S_2 planes. Mineralization is very weak and disseminated in narrow bands commonly parallel S_2 . Upper and lower contacts are sharp and parallel S_2 . Rock is generally hard with minor wisps of soft rock oriented parallel S_2 .							
A14.	A16.		Q98	5B6	2							
					Medium slightly medium dark gray phyllite is non-calcareous and very slightly carbonaceous. Unit contains 2% quartz dolomite veins and veinlets of irregular orientation. Phyllite and veins host 1% Pb grains and clots which do not exceed 3mm in diameter. Rock is moderately soft, strongly broken with good recovery. Upper and lower contacts are sharp and parallel S_2 . Trace quartz-vein-related pyrrhotite-sphalerite-chalcopyrite. Phyllite hosts no $Pb+Zn$ mineralization. Veins rarely contain upto a trace of $Pb+Zn$ mineralization.							

From	To	Recov.	No.	Unit	Description					
10	14	16	20	22	24	26	28	30	34	35
A16.	A17.	3	099	5.B.61	4 (5D0) 98:02.					
					Medium gray intensely siliceous interval is non-calcareous ps. foliated and host 1-2% gray Py and slightly darker gray wisps (0.5-3mm) which are suspected to contain extremely fine grained Pb+Zn mineralization. Unit hosts 2% 5D0 bands and wisps (0.2-1.5 cm) which are in sharp contact with siliceous host. Contacts are parallel S ₂ . Interval contains 5% cm scale clotty quartz-ankerite or dolomite veins roughly oriented parallel S ₂ . Rock is very hard, strongly broken with good recovery. Upper and lower contacts are parallel S ₂ . ESTIMATED GRADE is $\leq 3\%$ Pb+Zn					
A17.	A18.		100	A14	(4H4:4L0) 96:03:01					
					Medium gray locally slightly brassy yellow-purple non-calcareous quartzite hosts 2-3% quartz \pm Fe Mg carbonates, and minor 4H4 and 4L0. Interval is moderately well banded at a moderately consistent angle of 80° to core axis. 4H4 occurs in 5-7 cm bands at the top and bottom of interval. 4L0 occurs sporadically in 0.75-1.25 cm bands. Rock is hard, moderately broken with good recovery. Upper and lower contacts are sharp and parallel S ₂ .					

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	36	
418	419.0		101	5B6	24						Light to medium gray intensely siliceous PS ₂ foliated unit host 5-10% wisps of carbonaceous material oriented parallel S ₁ . Unit contains 7-10% irregular quartz-dolomite(?) ankerite(?) veins 1.0-1.75 cm wide. Slight darker bands with gradational contacts are interpreted to contain very fine grained Pb+Zn mineralization. Rock is very hard, slightly broken with 100% recovery. Upper and lower contacts are sharp and parallel S ₁ . ESTIMATED GRADE IS NOT EXPECTED TO EXCEED 5-7% Pb+Zn.
419.0	421.9		102	5B6	24						± 1 ± FAULT (418:1000) 90:04:06 Light to medium gray with cream-white carbonate (dolomite?) - quartz laminae/bands following S ₁ /S ₂ . Non-calcareous matrix. CS ₂ and PS ₂ foliated. Silvery gray fracture surfaces. Moderately hard. Trace disseminated pyrrhotite. Sharp upper contact at CA 90° marked by quartz-calcite band (concordant vein?). Gradational lower contact parallel S ₂ . Very weakly silicified (non-carbonatic, hard, smooth). Greenish-white talcose fracture zone at 420.0-420.1 is very soft and powdery. Fracture is at CA 50°. White ± cream quartz ± dolomite band or concordant vein at 419.0-419.4 is weakly calcareous, hard, contains squarish inclusions (weathered out pyrite?) and has sharp contacts with 5B6 and 418.

Code	From		To		Recov.		No.		Unit	Description
	10	14	16	20	22	24	26	28	30	
L	4219	4344					103		5B0	80:10:08:02
										Light to medium grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Gradational upper and lower contacts parallel S ₂ .
										Light grey, harder, smoother (silicified) sub-unit occurs at 421.9-427.0.
										Dark grey weakly carbonaceous sub-unit is softer and has gradational contacts.
										Olive greenish grey banded chloritic sub-unit is softer and has gradational contacts.
L	4344	4353					104		5B0	→ 5F0
										Light to medium grey with olive greenish tint and buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery grey to olive greenish grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Gradational upper contact parallel S ₂ . Sharp lower contact at CA 75°.
L	4353	4354					105		5F0	28
										Olive greenish grey mfg. aphanitic groundmass and fig. white anhedral (leucosene?) phenocrysts within relict porphyritic igneous texture. Whole unit is "chill-margin" (i.e. there is no coarser-grained core). Very calcareous. PS ₂ foliated. Moderately hard. Olive greenish grey fracture surfaces. No sulphides. Very good core recovery. Good RQD. Sharp upper (CA 75°) and lower (CA 80°)

Lithologic Log

Date: Jan. 30/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
L	4354	4356		106	5F0	Olive greenish gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. PS_2 foliated. Olive greenish-gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Fair RRD. Sharp upper contact at 4356^0 . Sharp lower fault contact at 4360^0 .
L	4356	4394		107	5B0	(5E0 100#) 90:05:05 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrrhotite as subhedral cubic pseudomorphs. Very good core recovery. Good RRD. Silvery gray laminated very calcareous marble sub-unit at 436.8-436.9 is moderately hard and have sharp contacts parallel S_2 . White-buff quartz-calcite band subparallel S_2 occurs at 439.3-439.4 (lower contact). Contains olive-green-gray Mg-chlorite and black Fe-chlorite wisps.
L	4394	4407		108	5B0	(5B02) 90:10 Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. Trace disseminated pyrrhotite. Very good core recovery. Good RRD. Sharp upper and lower contacts, both at 4407^0 . Medium to dark grey more carbonaceous subunits are calcareous, softer and has gradational contacts with 5B0.
L	4407	4411		109	5F0	(5C0) 60:40

Code	From	To	Recov.	No.	Unit	Description
	10 14 16	20 22 24	26 28	30 34 35		
						Olive greenish grey with buff-white carbonate-quartz laminae/bands following S_2 . Moderately calcareous. PS_2 foliated. Olive green-grey fracture surfaces. Moderately soft. No sulphides. Sharp upper and lower contacts, both at $0 \pm 80^\circ$. Metabasite (5C ϕ) occurs as olive-greenish grey v.f.g. groundmass and whitish anhedral f.g. (leucosome?) phenocrysts within a relict porphyritic igneous texture. Moderately calcareous. Moderately hard. No sulphides. SF ϕ -5C ϕ -SF ϕ -5C ϕ -SF ϕ alternation top to bottom in hole. 5C ϕ sub-unit has sharp contacts with SF ϕ .
L	4471	4460		110	5B ϕ	(5B ϕ 2) 8 ϕ :2 ϕ Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately to strongly calcareous (locally etched quickly by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Sharp upper contact at $St 80^\circ$. Gradational lower contact parallel S_2 . Medium to dark grey more calcareous sub-unit is softer and has gradational contacts with 5B ϕ .
L	4460	4496		111	5B ϕ	\rightarrow 5F ϕ (5B ϕ) 6 ϕ :4 ϕ Light to medium grey with olive greenish tint and buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. PS_2 and CS_2 foliated. Silvery to olive greenish-grey fracture surfaces. Moderately soft. No sulphides. Good core recovery. Fair RQD. Gradational upper and lower contacts parallel S_2 . Blocky core at 446.2-446.5, 449.1-449.6
L	4496	4538		112	5B ϕ	\rightarrow 5F ϕ

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
											Light to medium gray with olive green tint. Strongly calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery to olive greenish gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 .
L	4538	4582					113		5BØ		Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 .
L	4582	4658					114		5BØ	(5BØ2:5EØ) 7Ø:25:Ø5	Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately to very calcareous (locally etched quickly by 10% HCl acid). CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Very good to good core recovery. Good to fair R&D. Blacky core at 464.4-464.6. Gradational upper contact. Sharp lower contact at CA9Ø. Darker gray, softer, more carbonaceous sub-unit has gradational contacts with 5BØ. Bluish gray, very calcareous, moderately hard sub-unit occurs at 464.8-464.85.
L	4658	4697					115		5BØ	(5BØ2:5EØ) 7Ø:15:15	Light to medium gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). PS_2 and CS_2 foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Sharp upper contact parallel S_1 . Gradational lower contact parallel S_2 .

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
														Dark grey more carbonaceous sub-unit is calcareous, softer and has gradational contacts with SBØ.
														Bluish grey laminated, very calcareous, markedly sub-units occur at 465.8-466.1, 467.15-467.2 and 467.7-468.0, 468.05-468.06, 468.1-468.15, 468.2-468.3. These are quickly etched by 10% HCl acid, moderately hard and have sharp contacts parallel S ₂ with SBØ.
L	4697		4711							116		SBØ	→ SFØ (1ØQ#) 95:Ø5.	Light to medium olive greenish grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Very calcareous (quickly etched by 10% HCl acid). PS ₂ foliated. Olive to silvery grey fracture surfaces. Moderately soft. No sulphides. Sharp upper and lower contacts parallel S ₂ .
														White-buff quartz-calcite bands or concordant veins subparallel S ₂ are moderately calcareous, hard, contain black Fe-chlorite wisps and have sharp contacts with SBØ.
L	4711		4716							117		SEØ	(1ØQ#) 8Ø:2Ø	Bluish grey, very calcareous, moderately hard unit is PS ₂ foliated (laminated), moderately hard, has blue grey fracture surfaces and has sharp contacts parallel S ₂ .
														White-buff quartz-calcite bands (concordant veins?) subparallel S ₂ are moderately calcareous and hard, and make sharp contacts with SBØ.
L	4716		4728							118		SBØ.2	(SB2Ø) 9Ø:1Ø	

Code	From	To	Recov.	No.	Unit	Description
1	10	14	16	20	22 24 26 28 30 34 35	Dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Weakly carbonaceous. Moderately calcareous. CS_2 and PS_2 foliated. Dark grey fracture surfaces. Moderately soft to soft. No sulphides. Good core recovery. Fair R&D. Sharp upper-contact parallel S_2 . Gradational lower-contact. Carbonaceous darker grey sub-unit is softer and has some graphitic fracture surfaces. Calcareous. Gradational contacts with SBØ.
L	472.8	507.4		1.1.9	SBØ	(SBØ 2:100#) 85:10:05 Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately to strongly calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrite as euhedral cubic pseudomorphs of pyrite. Very good core recovery. Good R&D. Blocky core at 486.5-486.6, 492.6-492.7. Darker grey more carbonaceous sub-unit is softer, calcareous and has gradational contacts with SBØ. White-buff quartz-calcite bands or concords & veins subparallel S_2 are moderately calcareous, hard, contain also green Mg-chlorite and black Fe-chlorite and has sharp contacts with SBØ, SBØ 2 subparallel S_2 .
L	507.4	508.2		1.20	SBØ 2	(SBØ) 80:20 Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Weakly carbonaceous. Very good core recovery, R&D. Gradational contacts. Light to medium grey less carbonaceous sub-unit is calcareous, harder and has gradational contacts with SBØ 2.

Code	From	To	Recov.	No.	Unit	Description
1	10 14 16	20 22 24	26 28 30	34 35		
						Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery to dark grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. R&D. Gradational upper and lower contacts parallel S_2 .
L	52.92	53.10		128	5B0	Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Fair R&D. Blocky to friable core at 525.2-525.6, 525.7-525.8, 526.0-526.8. Gradational upper and lower contacts parallel S_2 .
L	53.10	53.41		129	5F0	(5B02: 5F0 → 5D0) 90:08:02 Olive greenish grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. PS_2 foliated. Olive greenish grey fracture surfaces. Moderately soft. Trace disseminated pyrrhotite. Good core recovery (some core loss at 531.6-531.9). Poor R&D. Blocky core at 531.1-532.2, 533.0-533.7. Gradational upper contact parallel S_2 . Sharp lower fault contact ^{at CA 750} . Locally more chloritic (olive green), as 5F0 → 5D0. Dark grey weakly carbonaceous sub-unit is calcareous, moderately soft and have gradational contacts with 5F0.
L	53.41	53.58		130	5C05	Olive greenish grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 .

Code	From	To	Recov.	No.	Unit	Description
	10 14 16 20 22 24 26 28 30 34 35					
L	5082	5083		121	5E0	Blue-grey with buff-white carbonate quartz laminae following S ₂ . Very calcareous. P ₂ foliated. Blue-grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Fairly sharp contacts parallel S ₂ .
L	5083	5212		122	5B0	(5B02:100#:5E0) 90:07:03:TRACE Light to moderate grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Very calcareous (quickly etched by 10% HCl acid). C ₂ and P ₂ foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good to fair R&D. Gradational upper and lower contacts parallel S ₂ . Bloody core at 318.7-319.1. Moderate to dark grey more carbonaceous subunit is calcareous, softer and has gradational contacts with 5B0. White-buff quartz-calcite bands or concordant veins are moderately calcareous, hard and have sharp contacts with 5B0, 5B02 subparallel S ₂ . Blue-grey (with buff-white laminae parallel S ₂) marble subunit is very calcareous, moderately soft and has fairly sharp contacts with 5B0, 5B02 parallel S ₂ .
L	5212	5215		123	5B0	→ 5F0 Olive greenish-grey with buff-white laminae/bands following S ₁ /S ₂ . Moderately calcareous. C ₂ and P ₂ foliated. Olive green to silvery grey fracture surfaces. Moderately soft to soft. Very good core recovery. Good R&D. Gradational upper contact parallel S ₂ . Sharp lower contact at Cl 80°.

Code	From	To	Recov.	No.	Unit	Description
	10 14 16	20 22 24	26 28 30	34 35		
L	5215	5218		124	5C8	Olive greenish gray f.g. aphanitic groundmass, white f.g. anhedral (lencorn?) phenocrysts and dark gray f.g. subhedral (amphibole or pyroxene) phenocrysts. Relict porphyritic matrix texture is overprinted by carbonate-quartz and chlorite bands parallel S_2 . Moderately calcareous. PS_2 foliated. Moderately hard. Olive greenish gray. Very good core recovery, R&D. Sharp contacts parallel S_2 .
L	5218	5220		125	5F0	Olive greenish gray with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. PS_2 foliated. Olive greenish gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery, R&D. Sharp upper contact at CA 70. Gradational lower contact.
L	5220	5240		126	5B0 (5E0) 90:10	Light to medium gray with buff-white carbonate-quartz laminae/bands parallel S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 . Blue-gray with buff-white carbonate-quartz laminae parallel S_2 . Very calcareous. PS_2 foliated. Bluish gray fracture surfaces. Moderately soft. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 .
L	5240	5242		127	5B0 2	

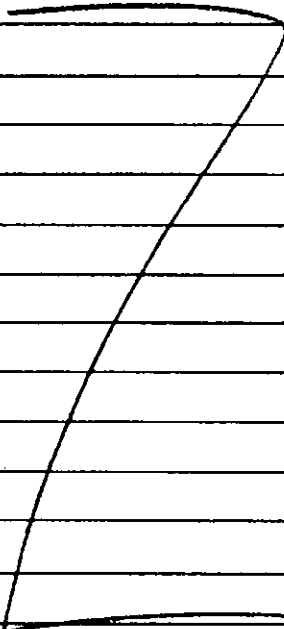
Code	From		To		Recov.		No.		Unit		Description
	10	14 15	20	22 24	26 28	30	34	35			
											Moderately calcareous, PS_2 and CS_2 foliated. Olive greenish grey fracture surfaces. Moderately hard. No sulphides. Banding/laminations overprint relict porphyritic igneous texture including white fgy anhedral (leucosome?) phenocrysts and dark grey fgy subhedral (amphiboles, pyroxenes?) phenocrysts set in a green grey vfg aphanitic groundmass. Good core recovery. Fair to poor RQD. Blocky core at 535.8-536.2. Sharp upper fault contact at CA 75° with clayey fault gouge (2mm wide). Sharp lower contact at CA 70°.
L	5368	5370				131				SF0	Olive greenish grey with buff white laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Olive greenish grey fracture surfaces. Moderately soft to soft. No sulphides. Good core recovery. Fair to poor RQD. Sharp upper contact at CA 70°. Gradational lower contact parallel S_2 .
L	5370	5394				132				SB0	(SB0 → SF0) 90:10. Light to medium grey with buff white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Good core recovery. Good RQD. Gradational upper and lower contacts. Locally, olive-greenish grey subunit is softer, chloritic, calcareous and has gradational contacts with SB0.
L	5394	5400				133				SG0	Light to medium grey with buff white carbonate-quartz laminae/bands following

Code	From	To	Recov.	No.	Unit	Description
	10 14 16	20 22 24	26 28 30	34 35		S ₁ /S ₂ . Moderately calcareous. PS ₂ foliated. Grey fracture surfaces. Moderately hard. No sulphides. Bedding/lamination overprints relict porphyritic igneous texture including white and dark grey phenocrysts set within a v. fine aphanitic groundmass. Very good core recovery. Good R&D. Sharp upper contact at CA 70°. Sharp lower contact at CA 80°.
L	5408	5435		133	5B0	(5B0 → 5F0: 100#) 90:08:02 Light to medium grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately to very calcareous (locally etched quickly by 10% HCl acid). CS ₂ and PS ₂ foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper contact. Sharp lower contact. Locally ^{olive} _{coloured} White-buff quartz-calcite bands or concordant veins subparallel to S ₂ are moderately calcareous, hard and have sharp contacts with 5B0.
L	5435	5449		134	5B0	(100#) 97:03 BLOCKY BROKEN CORE Light to medium grey with buff-white carbonate-quartz laminae/bands following S ₁ /S ₂ . Moderately calcareous. CS ₂ and PS ₂ foliated. Silvery grey fracture surfaces. Moderately soft to soft. No sulphides. Fair core recovery. Poor R&D. Blocky core throughout. White-buff quartz-calcite bands or concordant veins subparallel to S ₂ are calcareous, hard, contain olive green Mn-chlorite and black Fe-chlorite, and have sharp contacts with 5B0.
L	5449	5559		135	5B0	(5B02: 5B0 → 5F0: 5E0) 60:30:05:05

Loc#	From		To		Recov.			No.			Unit	Description	
	10	14	16	20	22	24	26	28	30	34	35		
												Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery fracture surfaces. Moderately soft. Trace disseminated pyrrhotite. Very good core recovery. Good to fair RQD. Blocky core at 550.5-551.4, 552.3-552.4 and 553.4-553.9. Gradational upper and lower contacts parallel S_2 . Locally, unit becomes more carbonaceous (5B02) or chloritic (5E0). Calcareous. Occasional bluish grey bands < 3mm wide occur (548.45-548.6). Calcareous.	
	5559		5570					13.6			5B02	→ 5B20	Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Dark grey and black (graphite) fracture surfaces. Soft and moderately soft. Trace disseminated pyrrhotite. Fair core recovery. Poor RQD. Blocky core at 555.9-556.75. Gradational upper and lower contacts parallel S_2 .
	5570		5585					13.7			5B02	(5E0) 95:05	Light to medium grey with buff-white laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrrhotite. Very good core recovery. Good RQD. Gradational upper and lower contacts parallel S_2 . Bluish grey hardy subunit at 557.1-557.6 is calcareous, moderately soft and has gradational contacts with 5B02 parallel S_2 .

Code	From			To			Recov.			No.			Unit	Description
	10	14	16	20	22	24	26	28	30	34	35			
L	5,585	5,595					1,38					5BØ2	Medium to dark grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft to soft. No sulphides. Weakly carbonaceous (no graphite seen). Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2 .	
L	5,595	5,605					1,39					5BØ	Light to medium grey with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery, R&D. Gradational upper contact. Sharp lower contact at CA 70°.	
L	5,605	5,609					1,40					5EØ (5BØ) 7Ø:3Ø	Bluish grey with dark grey laminae following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). CS_2 and PS_2 foliated. Bluish grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery, R&D. Sharp upper contact at CA 70°. Sharp lower contact at CA 60°. Open folds seen. Light to medium grey calcareous phyllite, as above.	
L	5,609	5,637					1,41					5BØ (5EØ) 8Ø:2Ø	Light to medium grey with buff-white laminae/bands following S_1/S_2 . Very calcareous (quickly etched by 10% HCl acid). PS_2 and CS_2 foliated.	

From	To	Recov.	No.	Unit	Description					
						10	14	16	20	22
					<p>Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Sharp upper contact at CA 60°. Fairly sharp lower contact parallel S₂ marked by SEØ band.</p> <p>Bluish grey bands ≤ 0.1m wide are calcareous, moderately soft and have fairly sharp contacts parallel S₂ with SBØ.</p>					
56.37	56.42		142	SBØ2	<p>Medium to dark grey with buff-white carbonate-quartz laminae/bands following S₁/S₂. Very calcareous. CS₂ and PS₂ foliated. Silvery to dark grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good to fair RQD. Gradational upper contact. Sharp lower contact at CA 20°.</p>					
56.42	56.55		143	SBØ2	<p>BLOCKY TO FRIABLE BROKEN CORE. GRAPHITIC FRACTURES.</p> <p>Dark grey with buff-white carbonate-quartz laminae/bands following S₁/S₂. Moderately calcareous. CS₂ and PS₂ foliated. Dark grey to black (graphitic) fracture surfaces. 1-3% graphite. No sulphides. Fair core recovery. Poor RQD. Blocky to friable core throughout. Graphitic fractures at low CA angle (CA 0°-30°). Sharp upper contact at CA 20°. Sharp lower (fault) contact at CA 50°. Contact is graphitic. Graphitic fault gouge at SBØ. Graphitic shear at 364.9 is slickensided, slickensides at CA 60°. C-fractures at CA 8° S-fractures at CA 50°.</p>					
56.55	58.09		144	SBØ	<p>(SBØ2:SEØ:SBØ) 75:20:Ø3:Ø2</p> <p>Light to medium grey with buff-white carbonate-quartz laminae/bands following</p>					

L 1	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
											<p>S₁/S₂ . Very calcareous (quickly etched by 10% HCl acid). CS₂ and PS₂ foliated. Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good RQD. Sharp upper (fault) contact at CA 50°. Sharp lower contact at CA 70°.</p> <p>More carbonaceous SB02 and SB2 subunits are calcareous, are CS₂ and PS₂ foliated, have dark grey to black (graphitic) fracture surfaces, soft and have gradational contacts with SB01.</p> <p>Bluish grey marbly bands are 2-5cm. wide, calcareous, moderately soft and have fairly sharp contacts with SB01, SB02 and SB2.</p>
											<p>CONTINUED ON NEXT PAGE</p> 

From	To	Recov.	No.	Unit	Description					
10	14	18	20	22	24	26	28	30	34	35
580.	583.		1,45	5B64	→4L0 (5D0:5B2) 95:03:02					
					Medium-light gray slightly greenish non-calcareous to very weakly calcareous phyllite moderately locally strongly altered to muscovite / sericite which gives a 4L0 texture locally. Alteration occurs in varying degrees throughout, where most string occurs in 2-6mm bands and wipps parallel S_2 . Unit is very slightly porous PS_2 foliated and hosts minor 5D0 and 5B2. 5D0 is localized in a 20cm band at the base of the interval. 5B2 occurs throughout as wipps and bands (.3-1.5cm). All contacts are parallel S_2 and are sharp. Rock is moderately soft, strongly broken with good recovery. Upper and lower contacts of interval are sharp and parallel S_2 .					
583.	584.		1,46	5B2	(5B2) 60:40					
					Unit grades from a medium to medium-dark gray 5B2 to a dark gray 5B2 from top of interval to the base. All units are non-calcareous, PS_2 foliated and grades from moderately broken to strongly broken down hole. 5B2 very slightly tarnishes finger medium-gray. Interval contains 1-2% quartz stringers of variable orientation with trace P. associated. Rock is moderately soft throughout, recovery is good throughout. Upper contact is sharp and parallel S_2 . Lower contact is broken and crushed.					

From	To	Recov.	No.	Unit	Description
10	14 16	20 22 24	26 28 30	34 36	
584.	584.6		147	5B6P	FAULT Medium to medium dark gray is very strongly crushed and hosts 20% gouge. Interval is waddy calcareous. Upper and lower contacts are crushed - no orientation is available. Recovery is 80%
584.	587.		148	5B402	# → 4L0 (4L0-) 51:49 Medium dark gray often approaching greenish-buff, weakly calcareous phyllite is weakly carbonaceous where → 4L0 alteration is weak. Alteration to 4L0 is highly variable throughout with local clasts of very strong 4L0 alteration common. Interval is generally P_2 foliated with a moderate to weak brecciated texture. 4L0 is often in sharp contact with 5B402 → 4L0 by breccia texture. All units are slightly porous, soft and strongly broken. Interval is crushed at 585.4 - 586.1. Recovery is good. Upper contact is crushed, lower contact is sharp and oriented parallel S_2 .
587.	587.9		149	AAA	Very dark gray to black iron-calcareous graphitic quartzite is moderately mineralized, P_2 foliated and hosts 3-5% ≤ 1 mm dolomite stringers of highly variable orientation. Mineralization is Sph dominant and most common occurs disseminated within clasts, bands and wisps roughly oriented parallel S_2 . Rock is very hard, slightly broken with

From	To	Recov.	No.	Unit	Description						
10	14	16	20	22	24	26	28	30	34	35	
											good recovery. Upper and lower contacts are sharp and parallel S_2 . ESTIMATED Grade is 10-12%.
587.	589.		1,510	5B6	4						Medium locally light gray non-calcareous phyllite is PS_2 foliated and generally weakly bleached, sporadically and rarely moderately bleached. Bleached portions are light to medium light gray. Interval hosts 1-2% clots and disseminated P_2 . P_2 occurs as 1mm clots and rarely as thin parallel S_2 planes. P_2 does not constitute more than trace of interval. Rock is soft, moderate break with good recovery. Upper and lower contacts are sharp and parallel S_2 .
589.	592.		1,511	AAA							Very dark gray to black non-calcareous graphitic quartzite is moderately to strongly mineralized, PS_2 foliated and hosts trace-1% dolomite wisps and stringers of highly variable orientation. Pyrite is sporadic fine grained and most commonly disseminated in wispy bands oriented parallel S_2 and associated with Sph mineralization. Less commonly pyrite occurs as clots and as a disseminated matrix within rare very siliceous bands.

From	To	Recov.	No.	Unit	Description						
0	14	16	20	22	24	26	28	30	34	35	
											(1.5-2.0cm) oriented parallel S_2 and often lacking in S_2 . Rock is very hard, slightly locally moderately broken with good recovery. Upper and lower contacts are sharp and parallel S_2 . Lower contact is fault bound. ESTIMATE GRAN: is 12-15%.
592	594		1,5,2	4A0	4 ±# ±1 → 5A0 (5100#) 85:15 Very dark gray to black non-calcareous to top at 5100, moderately to strongly calcareous within and below 5100. Unit is generally very weak to non siliceous locally moderately siliceous. Mineralization is rare and very weak at best. Interval contains a single band of calcareous 5100 at 593.35- 593.65, with sharp contacts parallel S_2 . Upper contact of 5100 contains a 2-3mm band of strong S_2 mineralization within 4A0, lower contact at 5100 is barren. Pyrite is sporadic within 4A0 → 5A0 but slightly more common above 5100. All units vary from slightly soft to sporadically moderately hard moderately broken with good recovery. Upper and lower contacts are sharp and parallel S_2 . Upper contact hosts a 40cm interval of crushed, strongly broken and gouge bearing fault zone. No orientation possible other than parallel to subparallel S_2 .						

Core	From		To		Recov.	No.	Unit	Description
	10	14	18	22				
	599.4	600.0			1.53	AAA	(500 : 400) 98:01:01	
							Very dark gray to black non-calcareous graphitic quartzite is variably mineralized ranging from moderately strong to locally very strong. Unit is P_2 foliated with highly siliceous bands common and hosting the majority of the moderately strong mineralization. Siliceous bands are common 0.5-1.5 cm wide. Strongly mineralized intervals are commonly on dm scale highly siliceous and has sph mineralization disseminated throughout with only a very crude banding parallel S_2 (?). Unit hosts 5-7% clotted and stringy quartz-dolomite veins and wisps and bands at 500 and 400 which do not exceed 3cm in width. From 599.4-600.0 AAA is C_2 foliated with 0.2-0.5 cm bands with high A_1 content and moderate sph content defining a C_2 fabric. Rock is hard, slightly brittle, rarely moderately broken with good recovery throughout. Upper and lower contacts are sharp and parallel S_2 . Internal contacts also parallel S_2 . ESTIMATED grade 12-15%.	
	600.0	603.0			1.54	AK11	→ 5361	
							Light-medium gray slightly buff unit is non-calcareous variably siliceous, P_2 foliated and hosts 10% stringy clotted networks of quartz dolomite veins which crosscut S_2 at variable relationships. Silicification is generally moderately, locally very strong to intense and locally weak. Unit	

Code	From		To		Recov.		No.		Unit	Description	
	10	14	18	20	22	24	26	28	30		34
											hosts 1-2% stringy and clotty networks at P ₁ and P ₂ which crosscut S ₂ . Rock varies from moderately hard to locally very hard and slightly salt. Silicification controls hardness and generally is not controlled by S ₂ . Upper and lower contacts are sharp and parallel S ₂ .
	603.		603					155	AAA	(4E0:4H0) 70:20:10	Very dark gray to black graphitic quartzite is locally intensely silicified to a medium dark gray. Unit is moderately mineralized with sporadic bands and clots of very stringy sph. mineralized. P ₂ is sporadic and occurs most common as clots which cross cut banding / S ₂ . Locally unit contains thin P ₁ clots within a dense fine grained sph matrix - similar texture to backshot facies at Fairbairn Deposit.
										At 403.6 - 403.8 unit hosts massive dy with unknown sph - Pb contact ⇒ 4E0. Below 4E0 unit hosts 4H0 at 403.8 to EOI.	Rock is hard throughout and slightly broken. Upper and lower contacts are parallel S ₂ .
	603.										

Code	From	To	Recov.	No.	Unit	Description					
1	10	14	16	20	22	24	26	28	30	34	35
	6039	6053		156	5B6	HEALED POLYMICT BRECCIA, CLAST-SUPPORTED. Angular elongate clasts of 5B62, 100\$, 5B6 (≤ 0.1 m dia.) supporting light to medium grey ^{non} calcareous 5B6 matrix. Well-healed. No vugs. Brecciated texture. Some S_2 and PS_2 foliation in lower section (below 604.2). Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Fair RQD. Sharp upper contact subperpendicular CA, marked by last occurrence of sphalerite. Gradational contact parallel S_2 . Quartz-dolomite clasts are white-cream, weakly calcareous, hard, contain olive-grey wisps of Mg-chlorite and black wisps of Fe-chlorite and are angular-elongate.					
L	6053	6063		157	5B62	(100\$) 80:20 Medium to dark grey with cream-white carbonate (dolomite?) - quartz laminae/bands following S_1/S_2 a Non-calcareous (Vergada-Ht. Mye Transition Zone?). CS_2 and PS_2 foliated. Silvery to dark grey fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. Fair RQD. Gradational upper contact parallel S_2 . Sharp lower contact at CA 50°. White-cream quartz-dolomite band or concordant vein subparallel S_2 is weakly calcareous, hard, contains wisps of black Fe-chlorite and has sharp contacts with 5B62.					
L	6063	6068		158	10G	MAGNETITE PYROXENITE. Dark greenish grey. Strongly magnetic. Non-calcareous. Weakly PS_2 foliated to massive. Dark grey fracture surfaces. Moderately hard. No sulphides. Relict porphyritic (core) to phaneritic (chill margins) igneous texture with zonation. Core has white to amber phenocrysts and black mg subhedral (magnetite?)					

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
								phenocryst with 90° cleavages and high mag. susceptibility. V. fig. aphanitic groundmass (of plagioclase, pyroxenes, amphiboles). Very good core recovery, R&D. Sharp upper contact at CA 50° . Sharp lower contact at CA 40° .		
L	6068	6083			1.59	5.862	(100%) 96:04	HEALED OLIGOMICT CLAST-SUPPORTED BRECCIA. Dark grey with cream-white dolomite-quartz laminae/bands following S_1/S_2 . Healed clast-supported brecciated texture. Non-calcareous (Vergara-III. Mye Transition Zone) Dark grey to silvery grey fracture surfaces. Moderately soft. No sulphides. Good core recovery, Fair R&D. Sharp upper contact at CA 40° . Sharp lower contact at CA 70° . White-cream quartz-dolomite band or concordant vein subparallel S_2 is weakly calcareous, hard, contains wisps of black Fe-chlorite and has sharp contacts with SB02.		
L	6085	6085			1.60	10.58	CHILL MARGIN, MOSTLY ^{v. fig. aphanitic} Dark olive greenish grey groundmass supporting (v. white subhedral) feldspar phenocrysts and black mg subhedral non-magnetic pyroxene (90° cleavage) and amphibole (88° , 126° cleavage) phenocrysts. Moderately calcareous and hard. Olive grey fracture surfaces. No sulphides. Very good core recovery, R&D. Sharp upper and lower contacts at CA 70° .			
L	6085	6106			1.61	5A	BLOCKY TO FRIABLE BROKEN CORE. GRAPHITIC FRACTURES Dark grey to black with buff-white carbonate-quartz laminae/bands following S_1/S_2 . Moderately calcareous. CS_2 and PS_2 foliated. Black graphitic fracture surfaces (1-3% graphite). Soft. No sulphides. Blocky to friable core throughout. Fair			

Code	From	To	Recov.	No.	Unit	Description
	10 14 16	20 22 24	26 28 30	34 35		
L	6174	6208	165	5862	(5B6) 95:05	<p>Medium to dark gray and cream-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2 at $CA \phi^0-30^0$, $CA 60^0-90^0$. Non-calcareous. CS_2 and PS_2 foliated. Dark gray fracture surfaces. Moderately soft to soft. No sulphides. Good core recovery, R&D. Gradational upper and lower contacts parallel S_2. Weakly carbonaceous.</p> <p>Light to medium gray less carbonaceous sub-unit has gradational contacts with 5862. Brecciated. Occurs at 620.0-620.4.</p>
L	6208	6227	166	586	(100% 24) 85:15	<p>Light to medium gray with cream-white carbonate-quartz laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2. Non-calcareous. CS_2 and PS_2 foliated. Silvery gray fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2.</p> <p>White-cream ± buff quartz-dolomite ± calcite bands or concordant veins subparallel S_2 are weakly to moderately calcareous, hard, contain black wisps of Fe-chlorite and have sharp contacts with 586.</p>
L	6227	6242	167	5862	(Carbonaceous)	<p>Medium to dark gray with cream-white dolomite-quartz laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2. Non-calcareous. CS_2 and PS_2 foliated. Dark gray fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. Good R&D. Gradational upper and lower contacts parallel S_2.</p>

Code	From		To		Recov.		No.		Unit		Description
	10	14	16	20	22	24	26	28	30	34	
L	6242		6256				168			5B26	Dark grey with cream-white laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2 . Non-calcareous. (Vergara-Mt. Mye Transition Zone) CS_2 and PS_2 foliated. Dark grey fracture surfaces. No sulphides. Very good core recovery. Good R&D. Gradational upper contact parallel S_2 . Sharp lower contact at CA $30^{\circ}-70^{\circ}$ (convolute).
L	6256		6270				169			10E2	LEUCOCRATIC PHASE. Apple-green grey mg. aphanitic to phaneritic groundmass with white subhedral size mg. feldspar phenocrysts. Non-calcareous. Possibly bleached (quartz-sericite?) Apple-green fracture surfaces. Massive. Hard. Good core recovery. Fair R&D. Sharp upper contact at CA $30^{\circ}-75^{\circ}$ (convolute). Sharp lower contact at CA 65° .
L	6270		6273				170			5B26	Dark grey with cream-white laminae/bands following S_1/S_2 and veinlets cross-cutting S_1, S_2 . Non-calcareous. Carbonaceous. Dark grey fracture surfaces (no graphite). Soft. No sulphides. Good core recovery. Fair R&D. Sharp upper (CA 65°) and lower (CA 20°) contacts.
CONTINUED ON NEXT PAGE											

Core	From				To				Recov.	No.	Unit	Description
	1	10	14	16	20	22	24	26				
L	627	3	627	9						17.1	10E2	MELANOCRATIC PHASE. Light to medium gray v.f.g. aphanitic groundmass supporting white feldspar mg.-c.g. subhedral phenocrysts in a porphyritic igneous texture. Non-calcareous. Gray fracture surfaces. Moderately soft to soft. No sulphides. Very good core recovery. Good RQD. Sharp lower contact at CA 70°. Sharp upper contact at 0° Chill margin at lower 2m and upper 4m.
L	627	9	629	6						17.2	10E4	LEUCOCRATIC PHASE. Apple green-grey mg.-fg. aphanitic to phenocritic groundmass with white subhedral c.g.-mg. feldspar phenocrysts and transparent-smoky mg. anhedral quartz phenocryst. Weakly calcareous. Possibly bleached (quartz-sericite?). Apple green fracture surfaces. Massive. Hard. Good core recovery. Sharp upper contact at CA 70°. Sharp lower contact at CA 50°. Cut by rare calcite-quartz veinlets at CA 30°-60°. Blocky core at 628.4-628.8.
L	629	6	634	2						17.3	10E8A → 10A84, 10D84 & 5	Blue-grey fg.-v.f.g. groundmass with smoky-transparent mg. anhedral quartz "eye" phenocrysts and black fg. subhedral amphibole phenocrysts. Non-calcareous, except for rare calcite-quartz veinlets at CA 30°-60°. Massive. Contains trace disseminated pyrite as euhedral cubes (≤ 2mm). Good core recovery. Fair to poor RQD. Blocky core at 631.8-632.3, 633.2-633.6 and 633.9-634.2. Sharp upper contact at CA 50°. Sharp lower contact at CA 35°.
L	634	2	637	9						17.4	5A*	VANGORDA - MT. MYE TRANSITION ZONE. Black to dark grey with buff-white calcite-quartz veinlets at all CA angles. Chaotic in appearance with clast-supported oligomict brecciated appearance.

Code	From	To	Recov.	No.	Unit	Description
	10	14 16	20 22 24	26 28 30	34 35	
						locally (angular black clasts ≤ 10 mm dia. separated by medium grey clay-carbonate matrix) and mylonitic gneiss appearance elsewhere, with flexion structure ^(structures) at CA 70°. Non-calcareous. Dark grey to black (graphitic) fracture surfaces. Soft. No sulphides. Good core recovery. Fair RQD. Fairly blocky, especially at 637.4-637.9. Sharp upper contact at CA 35°. Sharp lower contact at CA 40° is graphitic.
L	6379	6380		175	1.0 EB	Apple-green porphyritic unit, as above. Very good core recovery, RQD. Sharp graphitic upper contact at CA 40°. Sharp lower contact at CA 60°.
L	6380	6390		176	5A*	VANGORDA-MT. MYE TRANSITION ZONE. Black to dark grey chaotic unit with elongate mylonitic appearance and cream-white MnO ₂ and pods subparallel S ₂ . Non-calcareous. Weak PS ₂ and CS ₂ foliation. Black (graphitic) fracture surfaces soft. No sulphides. C-fractures at CA 45°. Good core recovery. Fair RQD. Sharp upper contact at CA 60°. Sharp lower contact at CA 70°.
L	6390	6399		177	1.0 EB (5A*) 95:05	Apple green porphyritic unit, as above. Good core recovery. Fair RQD. Sharp upper contact at CA 70°. Sharp contact at CA 40°. Contains band of 5A* at 639.65-639.7.

Code	From	To	Recov.	No.	Unit	Description
	10 14 16 20 22 24 26 28 30 34 35					
L	6399	6405		178	5A*	VANGORDA-MT. MYE TRANSITION ZONE Black chloritic mylonitic gneissic unit. Non-calcareous. ^{Weak} Mylonitic texture subparallel S_1 , with cream-white carbonate (dolomite) - quartz bands and pods elongate subparallel S_2 . Black (graphitic) fracture surfaces. Soft. Good core recovery, R&D. Sharp upper (CA 40°) and lower (CA 70°) contacts.
L	6405	6416		179	10E8 (5A*)	90:10 Apple-green non-calcareous, porphyritic, moderately soft intrusive unit with sharp upper (CA 70°) and lower (CA 80°) contacts. Good core recovery, R&D. Contains 3 bands of 5A* at CA 60°-80° at 641.0-641.2.
L	6416	6440		180	3G9	5A? (3G8) VANGORDA-MT. MYE TRANSITION ZONE. 99:01 Dark grey to black with cream-white laminae/bands following S_1/S_2 . Non-calcareous. P_S foliated. Moderately soft to soft. Vuggy. With brownish green micas (phlogopite or Mg-chlorite?). Rare metallic pyrrhotite on fracture surfaces as hexagonal (?) plate (cubic crystal form of pyrrhotite with basal cleavage) at 643.1. Fair core recovery. Poor R&D. Blocky core throughout. Sharp upper contact at CA 80°. Sharp lower contact at CA 85°. Local greenish (chloritic) bands have gradational contacts with major unit.
L	6440	6467		181	3G9	5A? FRIABLE TO BLOCKY BROKEN. VANGORDA-MT. MYE TRANSITION ZONE. As above, but graphitic fractures occur with friable to blocky broken core throughout. C-fractures at CA 40°. Sharp upper contact at CA 85°. Sharp graphitic fault zone lower contact at CA 40°.

Core	From	To	Recov.	No.	Unit	Description
L	6467	6511	1	182	3G9.1	→ 5AK1 VANGORDA-MT. MYE TRANSITION ZONE, Black to dark grey with cream-white carbonate (dolomite)-quartz laminae/bands following S_2/S_3 . Non-calcareous. CS_2 and PS_2 foliated. Black (non-graphitic) fracture surfaces. Soft to hard (lower section), where weakly silicified. Trace pyrrhotite as fracture filling. Chaotic (mylonitic gneiss) appearance in lower section. Very good core recovery. Good R&D. Sharp upper contact at CA 40°. Sharp lower contact at CA 85°. Blocky core at 648.7-649.1, 650.9-651.1. Last occurrence of 5AK in hole. Possible Vangorda-Mt. Mye Contact at 651.1.
L	6511	6735	5	183	3G0	(3G9:100%) 80:15:05; MT. MYE? Light to medium grey with cream-white dolomite-quartz laminae, bands parallel S_2 . Non-calcareous. PS_2 foliated. Silvery grey fracture surfaces. Moderately soft. Rare trace disseminated pyrrhotite. Very good core recovery. Good R&D. Blocky core at 651.1-651.6 (upper contact), 667.7-667.8, 670.8-670.9. Sharp upper contact at CA 85°. Sharp lower contact at CA 70°. Medium to dark grey more carbonaceous sub-units are non-calcareous, soft and have gradual contacts with 3G0. White-cream quartz-dolomite ± calcite bands or concordant veins are weakly calcareous, hard, contain wisps of olive-green-grey Mg-chlorite and black Fe-chlorite and have sharp contacts with 3G0 subparallel S_2 .
L	6735	6738		184	700	White-grey-blue, non-calcareous; hard quartz band or concordant vein has black Fe-chlorite wisps and have sharp contacts at CA 70°-80°. Very good core recovery. R&D

Code	From		To		Recov.	No.	Unit	Description		
	10	14	16	20					22	24
L	6738		6784			185	3GØ	(3GØ9:100\$) 8Ø:1Ø:1Ø MT. MYE Light to medium grey with cream-white dolomite-quartz bands and carbonaceous black laminae, bands parallel S ₂ . Non-calcareous. PS ₂ foliated (weakly). Silvery grey fracture surfaces. Moderately soft. Trace disseminated pyrrhotite. Very good core recovery, R&D. Sharp upper contact at Ct 80°. Sharp lower contact at Ct 45°.		
L	6784		68Ø3			186	1ØQØ\$	Blue-grey-white quartz-dolomite bands or concordant veins subparallel S ₂ . Very weakly calcareous. Blue-grey fracture surfaces. Hard. Trace disseminated pyrrhotite. Contains wisps of olive-grey Mg-chlorite and black Fe-chlorite. Very good core recovery, R&D. Sharp upper contact at Ct 45°. Sharp lower contact at Ct 85°.		
L	68Ø3		6867			187	3GØ (1ØQØ\$) 9Ø:1Ø	Light to medium grey with cream-white dolomite-quartz laminae, bands following S ₂ . Silvery grey fracture surfaces. Moderately soft. No sulphides. Very good core recovery. Good R&D. Sharp upper contact at Ct 85°. White-cream quartz-dolomite bands or concordant veins subparallel S ₂ . Weakly calcareous. Hard. Contains olive-grey Mg-chlorite and black Fe-chlorite. Sharp contacts with 3GØ. 686.7 = EOH		

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

DDH# 90DY-07

Units: Feet / Metres

Date: Jan. 25 1991

Logged By: D. Halliwell

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Run (Length)	TCR (Length)	ROD (Length)	Strength	Degree Breakage	Weathering Alteration	FRACTURES <small>W.r.t. CA</small>																Core Size	Comments
						0-30				30- 65				65-90				65-90					
						No	Rough	AR	Type	No	Rough	AR	Type	No	Rough	AR	Type	No	Rough	AR	Type		
7.9	—	—	R1	4	2	1	16	6.0	J	1	14	6.0	J					23	14	3.0	S	BQ	O/B
9.5	1.1	0.0	R2	5	3	2	18	6.0	J	3	18	6.0	J					40	13	2.0	S		
11.0	1.0	0.1	R2	5	2	2	18	6.0	J	0	—	—	—					34	13	3.0	S		
14.0	2.85	0.5	R2	10	2	1	15	10.0	J	3	14	10.0	J					53	13	3.0	S		
17.1	2.85	0.6	R2	11	2	2	17	10.0	J	1	15	10.0	J					45	12	3.0	S		
20.1	2.8	0.9	R2	9	3	2	18	6.0	J	1	15	10.0	J					52	12	3.0	S		
22.6	2.9	0.9	R2	11	3	2	16	9.0	J	2	17	9.0	J					55	12	3.0	S		
25.3	2.4	1.2	R2	10	2	2	14	9.0	J	1	18	9.0	J					34	12	4.0	S/Q		clayey gouge
26.2	2.05	1.6	R2	12	1	0	—	—	—	0	—	—	—					11	13	6.0	S		
29.3	3.0	1.6	R2	14	1	2	15	10.0	J	3	16	10.0	J					28	12	10.0	S		
32.3	3.1	1.3	R2	14	1	0	—	—	—	1	9	10.0	G					38	13	6.0	S		clayey gouge
35.4	2.9	1.0	R2	15	1	2	15	10.0	J	1	14	10.0	J					37	13	6.0	S		
38.4	3.2	1.2	R2	10	1	2	15	10.0	J	4	13	10.0	S,J					34	12	6.0	S		
39.9	1.4	0.7	R2	13	1	0	—	—	—	2	14	10.0	J					15	12	10.0	S		
41.45	1.7	0.5	R2	12	1	2	16	10.0	J	2	15	10.0	J					18	12	10.0	S		
44.5	2.9	1.1	R2	9	1	1	13	10.0	J	0	—	—	—					44	12	3.0	S		
46.9	2.8	0.9	R2	11	1	1	15	10.0	J	1	14	10.0	J					41	12	3.0	S		
48.2	0.8	0.3	R2	6	2	1	8	10.0	G	0	—	—	—					17	12	6.0	S		clayey gouge
50.6	2.3	0.6	R2	12	2	0	—	—	—	4	14	10.0	J					31	13	6.0	S		
53.0	3.6	0.7	R2	11	3	2	14	0.0	J	2	16	10.0	J					45	12	2.0	S		
56.1	2.8	1.2	R2	11	3	2	16	8.0	J	2	16	10.0	J					32	13	6.0	S		
59.1	3.1	0.1	R2	6	2	2	16	10.0	J	2	14	10.0	J					69	13	3.0	S		
62.2	3.0	2.3	R2	11	1	1	16	10.0	J	2	18	10.0	J					25	13	9.0	S		
65.5	3.0	1.6	R2	14	1	0	—	—	—	2	16	10.0	J					11	12	10.0	S		
68.6	3.0	2.1	R2	14	1	0	—	—	—	3	15	10.0	J					30	12	6.0	S		
71.6	3.0	1.2	R2	12	1	1	16	10.0	J	3	14	10.0	J					44	12	3.0	S		
74.7	3.0	1.4	R2	10	1	1	16	10.0	J	2	15	10.0	J					36	11	6.0	S		
78.0	3.1	1.1	R2	11	1	1	16	10.0	J	1	14	10.0	J					35	11	6.0	S		
81.1	3.0	1.6	R2	12	1	0	—	—	—	1	16	10.0	J					37	11	6.0	S		
84.1	3.0	1.4	R2	13	1	2	16	10.0	J	1	14	10.0	J					41	14	3.0	S		

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

DDH# 90DY-07

Units: Feet / Metres

Date: Jan. 25/99

Logged By: D. Halliwell

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Run (Length)	TCR (Length)	RCD (Length)	Strength	Degree Breakage	Weathering Alteration	FRACTURES w.r.t. CA												Core Size	Comments
						0-30				30-65				65-90					
						No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type		
87.2	3.0	1.1	R2	11	1	1	16	10.0	J	2	15	10.0	J	40	11	3.0	S	B0	
90.2	3.1	2.3	R2	14	1	1	16	10.0	J	2	14	10.0	J	25	13	9.0	S	7	
93.3	3.0	1.7	R2	13	1	0	-	-	-	0	-	-	-	27	12	6.0	S		
96.3	3.0	2.5	R2	11	1	0	-	-	-	0	-	-	-	35	12	6.0	S		
97.8	1.4	0.8	R2	5	1	1	14	10.0	J	1	15	10.0	J	35	12	6.0	S		
99.4	1.6	0.7	R2	12	1	1	14	10.0	J	1	16	10.0	J	27	12	6.0	S		
102.4	2.8	1.3	R2	14	1	0	-	-	-	2	15	10.0	J	31	12	6.0	S		
105.5	3.1	2.5	R2	14	1	0	-	-	-	3	14	10.0	J	37	12	6.0	S		
108.5	3.1	1.7	R2	15	1	0	-	-	-	1	14	10.0	J	40	12	3.0	S		
111.6	3.1	1.5	R2	14	1	2	16	10.0	J	2	14	10.0	J	29	11	6.0	S		
114.6	3.1	2.6	R2	15	1	0	-	-	-	0	-	-	-	18	13	10.0	S		
117.7	3.1	2.1	R2	14	1	1	6	10.0	J	2	14	10.0	J	21	12	10.0	S		
120.7	3.1	1.4	R2	12	1	1	15	10.0	J	0	-	-	-	40	12	3.0	S		
123.7	3.1	2.3	R2	13	1	0	-	-	-	2	12	10.0	S	28	12	6.0	S		
126.8	3.0	2.0	R2	14	1	1	15	10.0	J	0	-	-	-	28	12	6.0	S		
129.8	2.9	1.8	R2	14	1	0	-	-	-	1	12	10.0	S	24	12	6.0	S		
132.9	3.1	1.3	R2	11	1	0	-	-	-	4	16	10.0	J	31	12	6.0	S		
135.9	2.7	0.5	R2	10	1	1	15	10.0	J	2	14	10.0	J	55	12	3.0	S		
138.1	2.0	0.2	R2	7	1	2	16	10.0	J	2	15	10.0	J	55	12	3.0	S		
140.0	1.8	0.1	R2	8	1	1	15	10.0	J	0	-	-	-	20	12	3.0	S		
142.0	1.9	0.1	R2	10	1	1	15	10.0	J	1	14	10.0	J	24	12	3.0	S		
145.1	3.1	2.0	R2	12	1	0	-	-	-	1	16	10.0	J	41	14	3.0	S		
149.2	3.0	0.5	R2	8	1	2	15	10.0	J	2	16	10.0	J	55	13	3.0	S		
151.2	3.0	0.5	R2	8	1	2	16	10.0	J	1	16	10.0	J	72	12	3.0	S		
153.2	2.1	0.0	R1	4	1	0	-	-	-	3	18	10.0	J	120	12	2.0	S		
156.4	3.0	0.9	R2	11	1	0	-	-	-	2	16	10.0	J	22	14	6.0	S		
158.2	2.0	0.2	R2	9	2	2	16	10.0	J	2	16	10.0	J	49	13	3.0	S		
160.3	1.9	0.0	R2	6	3	2	16	10.0	J	2	15	10.0	J	60	12	3.0	S		
163.4	3.1	0.4	R2	10	2	1	16	10.0	J	2	17	10.0	J	59	14	3.0	S		
166.4	3.1	0.6	R2	11	3	2	17	10.0	J	2	16	10.0	J	50	13	3.0	S		
169.5	3.4	0.2	R2	9	3	2	16	10.0	J	1	13	10.0	J	62	12	3.0	S		
172.5	3.1	0.9	R2	12	2	0	-	-	-	0	-	-	-	37	12	6.0	S		

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

 DDH# 98DY-07

Units: Feet / Metres

 Date: Jun 27/91

 Logged By: D. Halliwell

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Run (Length)	TCR (Length)	ROD (Length)	Strength	Degree Breakage	Weathering Alteration	FRACTURES												COMMENTS
						0 - 40				40 - 60				60 - 90				
						No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type	
175.6	3.0	2.3	R2	14	2	0	-	-	-	0	-	-	-	19	12	10.0	S	
178.6	3.1	1.8	R2	14	2	1	16	10.0	J	1	16	10.0	J	35	11	6.0	S	
181.7	3.0	1.8	R2	15	1	0	-	-	-	1	17	10.0	J	19	13	10.0	S	
184.7	3.0	2.8	R2	15	1	0	-	-	-	1	13	10.0	S	19	13	10.0	S	
187.8	3.1	2.4	R2	16	1	0	-	-	-	0	-	-	-	14	12	10.0	S	
190.8	3.0	2.2	R2	16	1	1	16	10.0	J	0	-	-	-	11	12	10.0	S	
193.9	3.0	1.8	R2	14	1	0	-	-	-	2	14	10.0	J.S	20	12	10.0	S	
196.8	2.7	2.4	R2	12	1	0	-	-	-	1	13	10.0	S	15	11	10.0	S	
199.9	3.1	2.1	R2	13	1	1	16	10.0	J	0	-	-	-	26	12	10.0	S	
203.0	3.0	2.0	R2	12	1	2	16	10.0	J	1	17	10.0	J	16	13	10.0	S	
206.0	3.1	2.4	R2	10	1	1	16	10.0	J	2	16	10.0	J	29	13	6.0	S	
209.1	3.1	1.1	R2	13	1	1	13	10.0	J	0	-	-	-	22	13	6.0	S	
212.1	3.1	2.2	R2	14	1	1	16	10.0	J	1	16	10.0	J	25	12	6.0	S	
215.2	3.2	1.9	R2	13	1	1	15	10.0	J	2	14	10.0	J	23	12	6.0	S	
218.2	2.0	0.0	R2	5	1	1	14	10.0	J	2	8	10.0	G	60	9	3.0	S	MISMATCH: 3' CORE LOSS. COULD
221.3	3.1	0.2	R2	8	1	1	15	10.0	J	1	16	10.0	J	66	11	3.0	S	
224.3	3.2	0.4	R2	8	1	2	16	10.0	J	1	13	10.0	S	69	13	3.0	S	
227.1	2.8	0.4	R2	9	1	0	-	-	-	3	16	10.0	J	47	13	3.0	S	
230.9	3.2	0.8	R2	8	1	0	-	-	-	3	14	10.0	J	49	13	3.0	S	
230.9	0.9	0.1	R2	6	1	0	-	-	-	3	14	10.0	J	20	14	5.0	S	
233.5	2.6	0.5	R2	8	1	2	17	10.0	J	4	14	10.0	J	45	14	3.0	S	
235.0	1.0	0.0	R2	5	1	2	15	10.0	J	0	-	-	-	30	13	6.0	S	
237.1	1.8	0.2	R2	7	1	2	15	10.0	J	1	13	10.0	S	49	13	3.0	S	
238.7	1.3	0.1	R2	6	1	1	16	10.0	J	0	-	-	-	33	12	6.0	S	
241.7	3.1	0.6	R2	10	1	3	14	10.0	J	2	13	10.0	J	49	12	3.0	S	
244.0	2.3	0.3	R2	8	1	2	16	10.0	J	2	16	10.0	J	62	13	3.0	S	
245.1	0.8	0.2	R2	8	1	2	16	10.0	J	1	16	10.0	J	18	14	6.0	S	
246.3	1.2	0.0	R2	8	1	0	-	-	-	3	16	10.0	J	25	14	6.0	S	
248.4	1.6	0.7	R2	10	1	0	-	-	-	5	14	10.0	S	16	12	10.0	S	
251.6	3.1	1.9	R2	12	1	0	-	-	-	0	-	-	-	25	11	6.0	S	

BQ

PROJECT _____ DRILLHOLE NO. _____ COORDINATES: N _____ DATE _____ 19__
 LOCATION _____ HOLE SIZE _____ E _____ PAGE _____ of _____
 LOGS _____ INCLINATION _____ ELEVATION _____

A



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.		
376.7																		
379.8		3.1		3.0				12	F							14		Well headed shear - mud band
382.5		2.6		1.1				10								30		head shear local cut and broken
384.4		1.8		0.5				7								28		cut rock mud section
385.9		1.5		0.55				6								21		strongly broken above 385.1
388.9		3.0		0.9				7								37		strongly broken fault subparallel CA.
391.7		2.8		1.2				7								26		strongly broken along // CA
394.7		2.9		1.7				9								15		broken subparallel CA.
397.8		3.1		2.0				11								19		local break // CA
400.8		3.0		0.9				7								38		rough broken along // S ₂
403.9		3.1		1.9				11								32		strongly broken // S ₂
406.9		3.0		1.15				6								44		strongly broken along // S ₂ above 405.8
410.0		3.1		2.0				10								31		moderately broken
413.0		3.0		2.1				9								27		
416.1		3.1		0.65				7								54		
419.1		3.0		1.8				11								36		
422.2		2.8		1.7				11	V							29		

Fig. 1. Typical rock mechanics core log.

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

DDH# 90DY-07

Units: Feet / Metres:

Date: Jan 29/91

Logged By: D Halliwell

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Run (Length)	TCR (Length)	RCD (Length)	Strength	Degree Breakage	Weathering Alteration	FRACTURES w/ CA.																Core Size	Comments
						0-30				30- 35 65				35-40				65-90					
						No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type		
254.8	3.05	2.1	R2	12	1	0	-	-	-	3	16	10.0	J					23	12	6.0	S	80	
257.9	3.1	2.2	R2	13	1	1	11	10.0	J	0	-	-	-					28	12	6.0	S		
260.9	3.1	2.2	R2	14	1	2	11	10.0	J	1	12	10.0	S					27	12	6.0	S		
264.0	3.2	1.5	R2	14	1	1	16	10.0	J	1	15	10.0	J					33	12	5.0	S		
267.0	3.0	1.7	R2	13	1	1	16	10.0	J	3	16	10.0	J					33	12	5.0	S		
270.1	3.1	1.1	R2	11	1	1	16	10.0	J	1	17	10.0	J					55	12	3.0	S		
273.1	3.0	1.9	R2	10	1	1	15	10.0	J	6	17	10.0	J					38	12	4.0	S		
276.1	3.05	0.6	R2	10	1	1	16	10.0	J	2	17	10.0	J					64	12	3.0	S		
279.2	2.9	1.6	R2	11	1	2	16	10.0	J	2	17	10.0	J					35	12	5.0	S		
282.3	3.0	0.7	R2	9	1	2	16	10.0	J	2	17	10.0	J					60	12	3.0	S		
285.3	3.0	1.2	R2	11	1	2	14	10.0	J	0	-	-	-					41	12	4.0	S		
288.0	2.6	0.8	R2	9	1	1	16	10.0	J	0	-	-	-					38	12	4.0	S		
289.9	2.0	0.7	R2	11	1	1	16	10.0	J	0	-	-	-					32	12	5.0	S		
291.4	1.7	0.1	R2	4	2	4	15	10.0	J	0	-	-	-					54	12	3.0	S		
294.4	3.1	0.3	R2	7	1	1	16	10.0	J	3	16	10.0	J					68	12	3.0	S		
297.5	3.1	0.6	R2	9	1	2	15	10.0	J	3	16	10.0	J					53	12	3.0	S		
300.5	3.0	1.2	R2	14	1	1	15	10.0	J	3	16	10.0	J					35	12	3.0	S		
303.6	3.1	1.3	R2	11	1	0	-	-	-	0	-	-	-					41	12	3.0	S		
306.6	3.0	1.0	R2	10	1	1	16	10.0	J	1	14	10.0	J					46	12	3.0	S		
309.7	3.0	1.9	R2	11	1	0	-	-	-	1	14	10.0	J					34	12	4.0	S		
311.5	1.9	0.2	R2	8	1	0	-	-	-	2	15	10.0	J					36	12	3.0	S		
313.0	0.9	0.1	R2	7	1	1	17	10.0	J	1	15	10.0	J					40	12	3.0	S		
313.9	3.0	2.4	R2	8	1	0	-	-	-	0	-	-	-					24	13	6.0	S		
317.0	3.1	1.4	R2	14	1	0	-	-	-	0	-	-	-					18	14	8.0	S		
320.2	3.2	2.2	R2	12	1	1	15	10.0	J	3	17	10.0	J					41	14	3.0	S		
323.2	3.0	2.2	R2	11	1	0	-	-	-	2	16	10.0	J					23	13	6.0	S		
326.4	3.0	2.7	R2	13	1	0	-	-	-	3	16	10.0	J					18	12	6.0	S		
329.5	3.1	1.1	R2	8	1	1	16	10.0	J	1	16	10.0	J					46	12	3.0	S		
332.5	3.05	1.7	R2	10	1	0	-	-	-	2	15	10.0	J					40	12	3.0	S		
335.6	3.1	1.6	R2	8	1	0	-	-	-	4	14	10.0	J					38	12	4.0	S		

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

DDH#

90DY-07

Units: Feet / Metres

Date:

Jan 29/91

Logged By:

D. Halliwell

Page

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of

Run (Length)	TCH (Length)	FOD (Length)	Strength	Degree Fractage	Weathering Alteration	FRACTURES w.r.t. CA																Core Size	Comments
						0-30				30-65				65-90				65-90					
						No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type		
338.8	3.3	0.8	R2	7	1	0	-	-	-	4	14	10.0	J					42	11	3.0	S	R0	
342.0	3.1	1.9	R2	12	1	0	-	-	-	1	16	10.0	J					32	13	5.0	S		
345.0	3.1	1.2	R2	11	1	0	-	-	-	2	16	10.0	J					41	14	3.0	S		
346.3	1.2	0.7	R2	9	1	0	-	-	-	0	-	-	-					19	13	8.0	S		
349.3	3.1	1.5	R2	9	1	0	-	-	-	0	-	-	-					34	14	4.0	S		
352.3	3.0	2.2	R2	13	1	0	-	-	-	3	14	10.0	J					23	14	6.0	S		
355.4	3.0	1.7	R2	12	1	1	16	10.0	J	2	14	10.0	J					27	12	6.0	S		
358.4	3.0	2.3	R2	14	1	0	-	-	-	2	14	10.0	J					19	13	8.0	S		
361.5	3.1	2.5	R2	14	1	0	-	-	-	2	13	10.0	S					18	13	9.0	S		
364.5	3.0	2.1	R2	14	1	0	-	-	-	1	15	10.0	J					17	13	10.0	S		
367.6	3.0	2.7	R2	12	1	0	-	-	-	1	15	10.0	J					38	13	4.0	S		
370.6	3.0	2.4	R2	12	1	1	15	10.0	J	1	15	10.0	J					22	13	8.0	S		
372.2	3.1	2.2	R2	12	1	0	-	-	-	3	15	10.0	J					20	13	5.0	S		
372.3	3.1	2.4	R2	12	1	0	-	-	-	3	14	10.0	J					23	13	10.0	S		
379.8	3.1	3.0		12	1	0	-	-	-	0	-	-	-					14			S		well-healed shear zone
382.5	2.6	1.1		10	1	0	-	-	-	0	-	-	-					30			S		hard hold shear, locally soft
384.4	1.8	0.5		7	1	0	-	-	-	0	-	-	-					28			S		broken soft rock, med broken
385.9	1.5	0.55		6	1	0	-	-	-	0	-	-	-					21			S		strongly broken above
388.9	3.0	0.9		7	1	0	-	-	-	0	-	-	-					37			S		385.1 old fault
391.7	2.8	1.2		7	1	0	-	-	-	0	-	-	-					26			S		strongly broken fault
394.7	2.9	1.7		9	1	0	-	-	-	0	-	-	-					15			S		strongly broken since
397.8	3.1	2.0		11	1	0	-	-	-	0	-	-	-					19			S		locally broken
400.9	3.0	0.9		7	1	0	-	-	-	0	-	-	-					38			S		locally broken, slight
403.9	3.1	1.9		11	1	0	-	-	-	0	-	-	-					32			S		115.1 heavily broken
406.9	3.0	1.15		6	1	0	-	-	-	0	-	-	-					44			S		strongly broken
410.0	3.1	2.0		10	1	0	-	-	-	0	-	-	-					31			S		strongly broken
413.0	3.0	2.1		9	1	0	-	-	-	0	-	-	-					27			S		strongly broken
416.1	3.1	0.65		7	1	0	-	-	-	0	-	-	-					54			S		
419.1	3.0	1.8		11	1	0	-	-	-	0	-	-	-					36			S		
422.2	2.8	1.7		11	1	0	-	-	-	0	-	-	-					29			S		
425.2	3.1	2.3	R2	13	1	2	16	10.0	J	3	15	10.0	J					18	12	10.0	S		

hard
 broken
 old
 format
 logged
 by J.
 before
 Dec 31/90
 405.8

CURRAGH RESOURCES INC.

GEOTECHNICAL LOG

DDH# 90DY-07

Units: Feet / Metres

Date: Jan 31/91

Logged By: D Halliwell

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Run (Length)	TCR (Length)	RCD (Length)	Strength	Degree Breakage	Weathering Alteration	FRACTURES <i>w.r.t. CA</i>																Core Size	Comments
						0-30				30- 65				65-90				65-90					
						No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type	No	Rough	Alt	Type		
428.2	3.1	2.1	R2	11	1	2	17	10.0	J	2	13	10.0	J					21	12	9.0	S	NQ	
431.3	3.1	2.3	R2	13	1	0	-	-	-	2	17	10.0	J					13	13	10.0	S		
434.3	3.1	2.6	R2	14	1	3	17	10.0	J	3	16	10.0	JJS					11	12	10.0	S		
437.4	3.1	1.1	R2	9	2	4	16	10.0	J	2	10	10.0	G					51	12	3.0	S	limonitic clay zone at 435.6.	
440.4	3.2	1.4	R2	10	1	1	15	10.0	J	2	14	10.0	J					38	13	6.0	S		
443.5	3.2	2.1	R2	11	1	2	17	10.0	J	3	15	10.0	J					31	12	6.0	S		
446.5	3.1	2.2	R2	13	1	1	12	10.0	J	2	15	10.0	J					22	12	9.0	S		
449.6	3.0	2.8	R2	8	2	2	11	10.0	J	1	16	10.0	J					28	12	6.0	S		
452.6	3.1	2.0	R2	14	1	1	13	10.0	J	1	13	10.0	J					35	12	6.0	S		
455.7	3.0	2.1	R2	13	1	1	15	10.0	J	2	16	10.0	J					22	12	9.0	S		
458.7	3.1	2.0	R2	14	1	1	14	10.0	J	0	-	-	-					21	12	9.0	S		
461.8	3.1	2.7	R2	14	1	1	14	10.0	J	2	17	10.0	J					17	17	10.0	S		
464.8	3.1	2.4	R2	12	1	3	14	10.0	J	2	16	10.0	J					29	12	6.0	S		
467.9	3.0	2.1	R2	12	1	2	16	10.0	J	0	-	-	-					35	12	6.0	S		
471.2	2.8	1.7	R2	11	1	1	14	10.0	J	0	-	-	-					33	12	6.0	S		
474.3	3.1	2.0	R2	17	1	2	16	10.0	J	2	15	10.0	J					35	12	6.0	S		
477.3	3.0	2.7	R2	12	1	1	16	10.0	J	0	-	-	-					24	12	6.0	S		
480.4	3.1	2.2	R2	19	1	0	-	-	-	0	-	-	-					41	13	5.0	S		
483.4	3.2	2.2	R2	11	1	0	-	-	-	2	15	10.0	J					35	12	6.0	S		
486.5	3.1	2.2	R2	12	1	0	-	-	-	0	-	-	-					29	12	6.0	S		
489.5	3.1	1.3	R2	11	1	1	14	10.0	J	0	-	-	-					44	13	3.0	S		
492.6	3.1	2.2	R2	10	1	0	-	-	-	1	14	10.0	J					21	12	6.0	S		
495.6	3.1	2.1	R2	9	1	1	14	10.0	J	3	14	10.0	J					33	12	6.0	S		
498.7	3.1	1.9	R2	12	1	1	14	10.0	J	2	16	10.0	J					33	12	6.0	S		
501.7	2.7	2.7	R2	13	1	0	-	-	-	3	15	10.0	J					29	12	6.0	S		
504.7	2.9	1.7	R2	11	1	2	13	10.0	J	2	14	10.0	J					32	12	6.0	S		
507.8	3.0	2.0	R2	14	1	0	-	-	-	0	-	-	-					28	11	6.0	S		
510.8	3.1	2.0	R2	12	1	0	-	-	-	1	16	10.0	J					30	12	6.0	S		
513.9	3.0	2.4	R2	13	1	0	-	-	-	1	17	10.0	J					18	13	6.0	S		

90DY-07

Lower one

PROJECT _____ DRILLHOLE NO. 90DY-07 COORDINATES: N _____ DATE _____ 19__
 LOCATION _____ HOLE SIZE _____ E _____ PAGE ___ of ___
 LOGGER J. Zentgraf 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.		
577.8																		
580.9		3.1		2.7			13		F									17
582.3		1.9		0.2			7		E									43
584.6		1.8		0.3			9		E									26
587.0		2.4		0.9			7		E									40
590.1		3.1		2.1			11		F									33
592.7		2.1		1.8			11											19
595.3		3.1		2.1			11											34
597.4		2.1		1.9			12											19
598.6		1.2		0.9			11											7
601.7		3.1		3.1			14											5
604.7		3.0		2.7			13											14
607.8		3.1		2.1			11											31
608.7		0.9		0.7			11											11
610.5		2.2		0			5											34
613.6		3.1		2.6			14		↓									12
616.0		2.8		2.0														
617.5		2.0		0.1														
620.6		2.9		2.75														
623.6		3.1		2.8														
625.8		2.2		2.0														
626.7		1.3		0.2														
628.8		2.1		0.7														
631.8		3.2		2.1														
633.4		1.7		0.5														
635.5		2.5		2.1														
637.9		2.3		0.7														
640.1		2.5		1.35														

RE COPIED ON NEW FORMS

Fig. 1. Typical rock mechanics core log.

Code	From		To		Feature	S ₁ Dip Direct.	S ₂ Dip Direct.	S ₃ Dip Direct.	Description
	10	14	16	20					
S			11	16	CS2Z	046 54	17,0 78	TT	
S			18	20	CS2Z	023 25	185 85	TT	
S			21	22	CS2Z	156 43	011 86	TT	
S			29	24	CS2S	069 22	272 88	TT	
S			33	26	CS2Z	057 42	335 85	TT	
S			38	28	CS2S	165 35	346 63	TT	
S			42	32	CS2S	068 31	280 58	TT	
S			50	34	CS2Z	030 12	094 84	TT	
S			52	36	PS2		70	TT	
S			60	38	CS2S	153 05	340 58	TT	
S			67	40	CS2Z	012 52	188 83	TT	
S			72	42	CS2Z	153 30	140 79	TT	
S			79	44	CS2Z	035 55	305 66	TT	
S			85	46	CS2S	048 54	069 85	TT	
S			91	48	CS2S	040 52	000 86	TT	
S			94	50	CS2S	012 41	031 85	TT	
S			99	52	PS2		89	TT	
S			108	54	CS2S	057 63	308 77	TT	
S			112	56	CS2S	019 63	000 79	TT	
S			115	58	CS2S	013 47	006 81	TT	
S			127	60	CS2S	010 08	035 80	TT	
S			134	62	CS2Z	166 35	068 75	TT	
S			142	64	PS2		84	TT	
S			143	66	CS2-		20 90	TT	
S			149	68	CS2-		53 90	TT	
S			154	70	CS2S	019 51	000 71	TT	
S			161	72	CS2Z	170 14	036 82	TT	
S			167	74	CS2S	025 31	010 74	TT	
S			175	76	CS2Z	013 06	176 76	TT	
S			176	78	CS2S	030 38	027 69	TT	
S			185	80	CS2S	060 22	016 79	TT	
S			192	82	CS2Z	010 10	012 72	TT	
S			197	84	CS2S	042 20	044 69	TT	
S			201	86	CS2S	031 23	322 71	TT	
S			208	88	CS2S	037 34	316 83	TT	
S			212	90	CS2S	068 52	293 72	TT	

Code	From		To		Feature	L ₃		S ₁		S ₂		Description	
	10	14	16	20		22	24	26	28	32	34		38
S			219	220	PSZ							84	
S			227	228	CS2Z			020	12	038	80		
S			228	237	CS2S			046	32	070	76		
S			237	241	PSZ							79	
S			241	250	CS2Z			078	19	067	74		
S			250	254	CS2S			091	41	032	80		
S			254	258	CS2S			036	59	023	69		
S			258	264	CS2S			032	43	006	85		
S			264	270	CS2Z			058	37	077	79		
S			270	278	PSZ							88	
S			278	284	CS2Z			026	30	067	74		
S			284	285	CS2S			071	48	023	69		
S			285	295	CS2S			155	24	023	80		
S			295	300	PSZ							88	
S			300	302	CS2S			041	47	025	77		
S			302	309	CS2Z			164	20	205	69		
S			309	314	CS2S			027	09	020	65		
S			314	323	CS2S			049	20	032	58		
S			323	327	PSZ							84	
S			327	333	CS2S			028	44	022	78		
S			333	337	CS2Z			020	17	292	73		
S			337	342	CS2S			038	21	024	81		
S			342	349	CS2Z			037	57	245	80		
S			349	355	PSZ							82	
S			355	361	PSZ							83	
S			361	364	CS2S			060	28	049	79		
S			364	375	CS2Z			052	34	073	84		
S			375		CS2S			061	57	017	72		

CONTINUED
ON NEXT PAGE

Code	From				To				Feature	S ₁	S ₂	Description
	10	14	16	20	22	24	26	28				
S				421	CS25				2232	01277		
S				4301	CS22				03535	29770		
S				4347	CS25				06141	03983		
S				4399	CS22				08615	08489		
S				4443	CS25				08725	07583		
S				4517	CS22				06024	05083		
S				4553	CS22				09059	05785		
S				4614	CS25				06038	04285		
S				4668	CS25				06729	33080		
S				4723	CS22				04538	17784		
S				4782	CS25				16025	33681		
S				4822	CS22				08805	07980		
S				4883	CS25				16732	00067		
S				4928	CS25				05436	29380		
S				5084	CS25				07022	27682		
S				5101	CS22				16247	14484		
S				5112	CS22				17212	00984		
S				5168	CS25				07127	27280		
S				5235	CS25				12833	30579		
S				5287	CS25				03029	00074		
S				5376	CS25				06425	08570		
S				5408	CS25				09316	34073		
S				5477	CS25				11833	32076		
S				5512	CS22				14157	31865		
S				5580	CS25				13421	30372		
S				5667	CS25				22326	31759		
S				5709	CS25				10850	34667		
S				5789	CS25				07930	07671		
S				5807	CS25				08116	29669		
S				5879	PS2						55	
S				5937	PS2						62	
S				5998	CS25				25312	80		11 bedding in 444 CS ₂ is banded 4A4
S				6032	PS2						58	
S				6074	PS2						81	
S				6162	PS2						50	
S				6216	PS2						67	

Code	From				To				Feature	S _E	S ₃				S ₁				S ₂				Description	
	10	14	16	20	22	24	26	28			Dip	Direct.	32	34	38	40	Dip	Direct.	38	40	Dip	Direct.		40
S				6245	CS2S				f2					22	32				81					
S				6373	CS2S				28					65	81				67					
S				6381	PS2														66					
S				6480	PS2														56					
S				6517	PS2														60					
S				6573	PS2														60					
S				6625	PS2														70					
S				6682	PS2														62					
S				6750	PS2														77					
S				6807	PS2														87					
S				6837	PS2														85					

Fault Log

Date: Jan 26/91 Logged By: D. Halliwell

Code	FROM		TO (At)		Feature	REG	UPPER Dip Direct		INTERNAL Dip Direct		LOWER Dip Direct		Description
	10	14	18	20			22	24	26	28	32	34	
F		100		85	4B								Overburden
F		95		99	3B								Overburden
F		131		132	1B		50	TT	TT		90	TT	Broken core, limonitized
F		191		193	1B		85	TT	TT		86	TT	Broken core, limonitized
F		238		243	2B		53	TT	TT		80	TT	Broken core
F		467		473	2B,G		58	TT	TT		88	TT	Broken core, Clayey gouge
F		520		524	2B		60	TT	TT		87	TT	Broken core
F		579		585	2B		65	TT	TT		65	TT	Broken core
F		643		645	2G		87	TT	TT		65	TT	Clayey-carbonaceous gouge
F		809		811	1B		80	TT	TT		66	TT	Broken core
F		968		974	2B,G		82	TT	TT		88	TT	Clayey gouge
F		1050		1051	1B,G		27	TT	TT		78	TT	Clayey gouge
F		1353		1365	3B		82	TT	TT		84	TT	Broken core, friable
F		1379		1383	2B		86	TT	TT		62	TT	Broken core, friable
F		1455		1457	1B		72	TT	TT		76	TT	Broken core, friable, limonitized
F		1460		1465	2B,G		72	TT	TT	TT	55	TT	Broken friable core, some clayey gouge
F		1483		1487	1B		80	TT	TT	TT	83	TT	Broken friable core
F		1512		1522	3B		90	TT	TT	TT		TT	Broken friable core
F		1526		1533	2B		85	TT	TT	TT	75	TT	Broken friable core
F		1570		1576	2B		83	TT	TT	TT	83	TT	Broken friable core
F		1596		1602	2B		80	TT	TT	TT	85	TT	Broken blocky core
F		1764		1767	1B		90	TT	TT	TT	87	TT	Broken blocky to friable core
F		1999		2002	1B		63	TT	TT	TT	67	TT	Broken blocky core
F		2158		2182	4B		90	TT	TT	TT	90	TT	Broken blocky to friable core
F		2224		2233	1B		66	TT	TT	TT	72	TT	Broken blocky core
F		2300		2306	1B		62	TT	TT	TT	72	TT	Broken blocky core, some clayey gouge
F		2308		2315	1B		82	TT	TT	TT	82	TT	Broken blocky core
F		2330		2358	4B,G		90	TT	75	TT	84	TT	Clayey gouge at 2350. Friable
F		2379		2389	3B		68	TT	TT	TT	87	TT	Blocky broken core
F		2422		2429	1B		80	TT	TT	TT	63	TT	Blocky broken core
F		2458		2463	1B		67	TT	TT	TT	67	TT	Blocky broken core
F		2747		2750	1B		53	TT	TT	TT	65	TT	Blocky to friable broken core
F		2901		2904	2G		72	TT	TT	TT	73	TT	Clayey gouge
F		2909		2920	2B		83	TT	TT	TT	86	TT	Blocky broken core
F		3113		3126	3B		75	TT	TT	TT	90	TT	Blocky broken core
F		3353		3360	2B		81	TT	TT	TT	82	TT	Blocky broken core

DDH 9001-07
2 8

UPPER 2085

CURRAGH RESOURCES INC.
Fault Log

Page 98 of

Date: Logged By: JS 2

Code	FROM		TO (At)		Feature	REC	UPPER		INTERNAL		LOWER		Description	
	Dip	Direct	Dip	Direct			Dip	Direct	Dip	Direct	Dip	Direct		
1	10	14	16	20	22	24	26	28	32	34	38	40	44	UNLOGGED -
	379	7	380.4				28	—	68	—	19	—		Well bedded sh. fabric with distinct SAX texture - odd stratigraphic location no orientation relative S ₂ possible
	380	4	381.8				25		10		39			moderately well bedded sh. fabric locally very soft. No orientation relative S ₂ possible Weak linear fabric: 030° within shear plane
	381	6	387.4				19	291	15	154	22	060		sporadic crushed and gouge zones 1.0-3.0cm. Generally strongly bedded. Mud slicken side
	387	4	393				—	21	292	15	917			Open fractures and slip planes are very common and oriented subparallel core axis. Dip are variable
	397	9	405.7				—	—	—	—	—	—		Common beds along S ₂ - strongly bedded. rare crushed (≤ 3.0cm)
	415	1	417.3				—	—	—	—	—	—		strongly bedded; common // S ₂
	420	0	420.2				—	27	130	—	—	—		crushed and gouged

Fault Log

Date: Jan 29/91 Logged By: D. Halliwell

Code	FROM				TO (At)				Feature	REC	UPPER		INTERNAL		LOWER		Description
	10	14	16	20	22	24	26	28			32	34	36	38	40	44	
F	4356		4359		2G,B					3, 4	5, 8						(435.65) Clay-chloritic fault gouge underlain by blocky cgl. Fault plane is at CA 60° (upper contact), CA 31° (fault gouge just below upper contact), CA 82° (lower contact)
F	4463		4465		1B												Blocky core. No gouge Upper contact at CA 87° Lower contact at CA 28°
F	4491		4496		2B												Blocky core. No gouge. Upper & lower contacts at CA 87°
F	4716		4721		1B												Blocky core. No gouge Upper contact at CA 36° Lower contact at CA 88°
F	5205		5209		1B												Pyrite with sphalerite selvage in quartz band concordant vein within blocky interval.
F	5260		5268		2B												Blocky to friable zone. No gouge Contacts both at CA 80°
F	5313		5320		1B												Blocky zone. No gouge Contacts both at CA 80°-85°
F	5368		6369		2G,B												White clayey gouge. Friable zone Upper, lower contact at CA 60°, CA 69°, respectively.
F	5435		5449		2B												Friable zone. No gouge. Upper contact at CA 85°. Lower contact at CA 80°.
F	5642		5653														Blocky to friable graphitic zone Upper, lower contacts at CA 85°, CA 35°, respectively.

Fault Log

Code	FROM		TO (At)		Feature	REG.	UPPER Dip Direct		INTERNAL Dip Direct		LOWER Dip Direct		Description
	10	14	16	20			22	24	26	28	32	34	
F	564	4	564	7									Locally brecciated C-fractures at $044^{\circ}24'$ S- fractures at $044^{\circ}57'$. Synthetic minor structures to major structure. Too much potential for rotated breccia clasts and variable S_2 for measurements relative S_2 . Clay-graphite fault zone at lower contact, $\approx 0.15m$ wide.
CONTINUED ON NEXT PAGE													

DDH 4004-07

CURRAGH RESOURCES INC.

Page 101 of

Lower side Fault Log

Date: Dec '40 Logged By: J. Zb. 1/A

Code	FROM		TO (At)		Feature	REG	UPPER Dip Direct		INTERNAL Dip Direct		LOWER Dip Direct		Description	
	10	14	16	20			22	24	26	28	32	34		36
	584		584									37	025	Crushed rock & gouge
	592		592				45	317						Strongly bedded, minor crushed rock and gouge
CONTINUED ON NEXT PAGE														

Code	FROM		TO (At)		Feature	RES	UPPER Dip Direct.		INTERNAL Dip Direct.		LOWER Dip Direct.		Description
	10	14	18	20			22	24	26	28	32	34	
F	6077		6080		1.B								Blocky zone. No gouge. Upper, lower contacts at CA 89°, CA 50° respectively.
F	6086		6106		3B								Blocky to friable zone. No gouge. Upper, lower contacts at CA 72°, CA 75° respectively.
F	6271		6278		1.B								Blocky zone. No gouge. Upper, lower contacts at CA 83°, CA 75° respectively.
F	6374		6379		1.B								Blocky zone. No gouge. Upper, lower contacts at CA 68°, 45° respectively. Graphitic gouge at lower contact.
F	6380		6380		2G				00				Graphitic gouge at 638.0 at CA 50°. 0.5cm thick. Approx. 0° to S ₂ (parallel S ₂)
F	6419		6434		2B								Blocky zone. No gouge.
F	6440		6467		4.B						36		Blocky to friable zone with graphitic gouge (1-3% graphite, overall) at lower contact at CA 30° (S ₂ at CA 36°).
F	6509		6516		1.B								Blocky zone. No gouge 687.7m = EOH

CODE	FROM		TO		SAMPLE		INTR.		REC (m)		UNIT		DESCRIPTION
	10	14	16	20	22	26	28	30	32	34	36	40	
	9.10		381.0										WASTE
	381.0		383.0		651139		1.						
	383.0		384.7		651140		1.						
	384.0		385.0		651141		0.						
	385.0		387.0		651142		2.						
	387.0		388.0		651143		1.						
	388.0		390.0		651144		1.						
	390.0		391.0		651145		1.						
	391.0		393.0		651146		1.						
	393.0		394.0		651147		1.						
	394.0		396.0		651148		1.						
	396.0		398.0		651149		1.						
	398.0		APP.		651150		2.						
	A00		A01		651151		1.						
	A01		A02		651152		1.						
	A02		A03		651153		1.						
	A03		A05		651154		1.						
	A05		A07		651155		1.						
	A07		A08		651156		1.						
	A08		A09		651157		1.						
	A09		A10		651158		10.						
	A10		A10		651159		0.						
	A10		A13		651160		2.						
	A13		A14		651161		1.						
	A14		A16		651162		2.						
	A16		A17		651163		0.						
	A17		A18		651164		1.						
	A18		A19		651165		10.						
													WASTE
	587.0		587.0		651166		0.5						
	587.0		589.0		651167		1.1						
	589.0		590.0		651168		1.7						
	590.0		592.0		651169		1.						
	592.0		594.0		651170		1.0						
	594.0		595.0		651171		1.						
	595.0		596.0		651172		1.0						

ASSAY LOG (SAMPLER'S COPY)

Date Dec '90

Sampled by J. Zbeed

CODE	FROM		TO		SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION					
	10	14	16	20						22	26	28	30	32
	596.		596.		6151173	10.								
	596.		597.		6151174	0.								
	597.		598.		6151175	1.								
	598.		599.		6151176	1.								
	599.		601.		6151177	1.								
	601.		603.		6151178	1.								
	603.		603.		6151179	10.								
														LAST TO EOH

ROSSBACHER LABORATORY LTD.

2225 G. Springer Ave., Burnaby,
British Columbia, Can. V5B 3H1
Ph: (604)299-6910 Fax: 299-6262

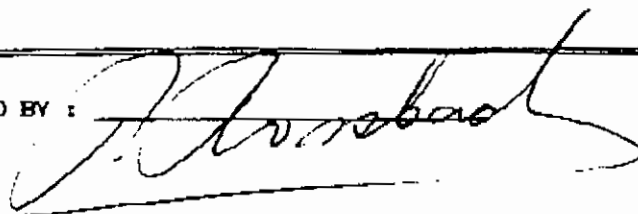
CERTIFICATE OF ANALYSIS

TO : NORTHERN ANALYTICAL LABORATORY LTD.
105 COPPER ROAD
WHITEHORSE, Y.T.
PROJECT : 13087
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # : WC#13087
INVOICE # : 20218
DATE ENTERED : 91-04-05
FILE NAME : NAL91069
PAGE # : 1

PRE FIX	SAMPLE NAME	% Ba	% BaSO4
P	64157	0.08	0.14
F	64163	0.16	0.27

CERTIFIED BY :



October 19, 1990

Work Order # 08471

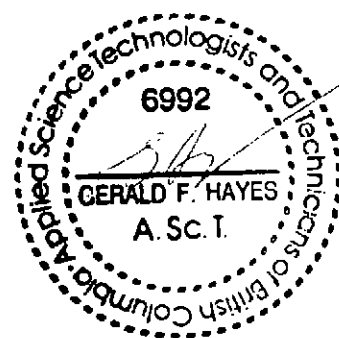
Curragh Resources Inc.
 P.O. Box 1000
 Faro, Yukon
 Y0B 1K0

File # 08471a

MPR # 21088

Assay Certificate for Samples Provided

Sample	g/t Au	g/t Ag	% Pb	% Zn	% Fe	SG
65101	0.35	29.6	2.00	5.42	14.40	4.25
65102	0.11	11.2	0.61	3.32	28.04	3.85
65103	0.02	<0.1	0.04	0.11	3.27	2.91
65104	0.46	35.0	2.33	8.87	14.89	4.03
65105	0.45	39.4	2.76	9.21	15.01	4.19
65106	0.46	32.3	3.15	7.30	12.11	4.33
65107	0.35	87.4	5.46	18.30	12.00	4.11
65108	1.21	6.4	0.54	1.29	9.17	2.79
65109	0.17	13.2	1.00	1.64	7.87	2.69
65110	0.08	<0.1	0.02	0.04	4.83	2.76
65111	0.39	18.7	1.20	0.12	14.15	3.11
65112	0.77	73.4	8.86	12.20	18.28	3.98
65113	0.54	55.3	4.67	5.03	15.11	3.27
65114	0.72	87.5	7.27	6.06	24.76	4.18
65115	0.78	189.9	10.20	21.40	14.72	4.25



ROSSBACHER LABORATORY LTD.


2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3M1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : NORTHERN ANALYTICAL LABORATORY LTD.
105 COPPER ROAD
WHITEHORSE, Y.T.
PROJECT : WD#08471
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # : 90543
INVOICE # : 20071
DATE ENTERED : 90-10-26
FILE NAME : NAL90543
PAGE # : 1

PRE FIX	SAMPLE NAME	% Ba	% Ra SO4
P	65101	21.90	37.21
P	65102	11.60	19.71
P	65103	2.22	3.77
P	65104	17.00	28.43
P	65105	13.60	23.45
P	65106	22.60	35.40
P	65107	10.70	18.18
P	65108	1.04	1.77
P	65109	0.85	1.44
P	65110	0.50	0.85
P	65111	0.75	1.27
P	65112	0.20	0.34
P	65113	0.42	0.71
P	65114	0.69	1.15
P	65115	0.14	0.24

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

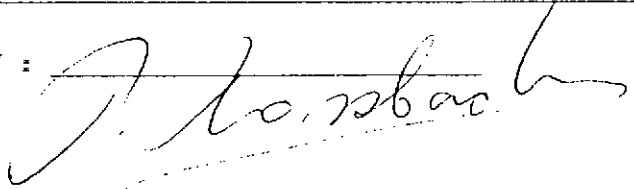
2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : NORTHERN ANALYTICAL LABORATORY LTD.
105 COPPER ROAD
WHITEHORSE, Y.T.
PROJECT : NA
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # :
INVOICE # : WD# 13051
DATE ENTERED : 20178
FILE NAME : 91-02-07
NAL90124
PAGE # : 1

PRE FIX	SAMPLE NAME	% Ba	% RaSO4
P	65212	0.13	0.22
P	65213	0.09	0.15
P	65214	2.26	14.03
P	65215	0.24	0.58
P	65216	0.50	0.85
P	65217	0.37	0.63
P	65218	0.16	0.57
P	65217	0.75	0.95
P	65220	0.29	0.49
P	65221	0.34	0.58
P	65222	0.97	1.14
P	65223	0.27	0.54
P	65224	0.17	0.97
P	65225	0.34	0.51
P	65226	0.12	0.41
P	65227	0.11	0.39

CERTIFIED BY : 

ROSSBACHER LABORATORY LTD.

2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6910 Fax: 299-6252

CERTIFICATE OF ANALYSIS

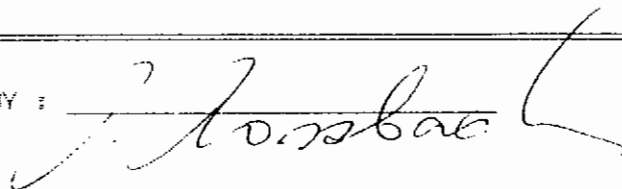
TO : NORTHERN ANALYTICAL LABORATORY LTD.
105 CUMBER ROAD
WHITEHORSE, Y.T.

CERTIFICATE # : WO#13050
INVOICE # : 20178
DATE ENTERED : 91-02-07
FILE NAME : NAL91023
PAGE # : 1

PROJECT : NA
TYPE OF ANALYSIS : ASSAY

PRE FIX	SAMPLE NAME	% Ba	% BaSO4
P	65166	0.11	0.19
P	65167	0.30	0.51
P	65168	0.15	0.25
P	65169	0.29	0.47
P	65170	0.31	0.53
P	65171	0.26	0.44
P	65172	0.23	0.39
P	65173	0.16	0.27
P	65174	0.30	0.51
P	65175	0.09	0.15
P	65176	0.09	0.15
P	65177	0.29	0.47
P	65178	0.36	0.61
P	65179	0.25	0.42
P	65180	2.62	4.79
P	65181	18.10	30.75
P	65182	19.60	33.30
P	65183	24.80	42.14
P	65184	28.40	48.25
P	65185	7.22	12.27
P	65186	22.00	37.38
P	65187	0.72	1.22
P	65188	0.23	0.39
P	65189	20.00	33.93
P	65190	7.60	12.91
P	65191	16.90	28.71
P	65192	24.00	40.78
P	65193	5.06	8.60
P	65194	0.53	0.90
P	65195	0.89	1.51
P	65196	2.24	3.81
P	65197	2.20	3.74
P	65198	0.53	0.90
P	65199	4.10	6.97
P	65200	0.54	0.92
P	65201	6.90	11.72
P	65202	3.52	5.98
P	65203	1.14	1.94
P	65204	1.24	2.11
P	65205	0.27	0.46

CERTIFIED BY :



ROSSBACHER LABORATORY LTD.

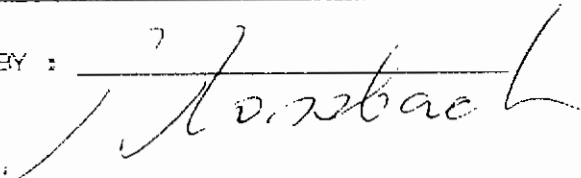
2225 S. Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph: (604)299-6810 Fax: 299-6252

CERTIFICATE OF ANALYSIS

TO : N. WINDEN ANALYTICAL LABORATORY LTD.
1-A COPPER ROAD
WHITEHORSE, Y.T.
PROJECT : NA
TYPE OF ANALYSIS : ASSAY

CERTIFICATE # : W0#13050
INVOICE # : 20178
DATE ENTERED : 91-02-07
FILE NAME : NAL91023
PAGE # : 2

PRE FIX	SAMPLE NAME	% Ba	% BaSO4
	65206	0.13	0.22
	65207	0.11	0.19
	65208	0.12	0.20
	65209	0.16	0.27
	65210	0.19	0.32
	65211	0.16	0.27

CERTIFIED BY : 

CODE	FROM	TO	SAMPLE	INTR.	REC (m)	UNIT	DESCRIPTION						
10	14	16	20	22	26	28	30	32	34	36	40	42	
	9.0	381.8											WASTE
	381.8	383.4	651139	1.									
	383.4	384.7	651140	1.									
	384.7	385.5	651141	0.									
	385.5	387.0	651142	2.									
	387.0	388.8	651143	1.									
	388.8	390.0	651144	1.									
	390.0	391.1	651145	1.									
	391.1	393.0	651146	1.									
	393.0	394.7	651147	1.									
	394.7	396.2	651148	1.									
	396.2	398.3	651149	1.									
	398.3	APP.	651150	2.									
	400.0	401.1	651151	1.									
	401.1	402.8	651152	1.									
	402.8	403.8	651153	1.									
	403.8	405.5	651154	1.									
	405.5	407.0	651155	1.									
	407.0	408.8	651156	1.									
	408.8	409.9	651157	1.									
	409.9	410.0	651158	0.									
	410.0	410.7	651159	0.									
	410.7	413.0	651160	2.									
	413.0	414.4	651161	1.									
	414.4	416.0	651162	2.									
	416.0	417.3	651163	0.									
	417.3	418.7	651164	1.									
	418.7	419.9	651165	0.									
													WASTE
	587.7	587.9	651166										
	587.9	589.0											
	589.0	590.7											
	590.7	592.7											
	592.7	594.2											
	594.2	595.5											
	595.5	596.0											

*logged, photo'd
split and shipped
for analysis.
Should receive results
before Christmas!*

*logged, photo'd
NOT split!*

cont'd

December 20, 1990

Work Order # 13041

Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

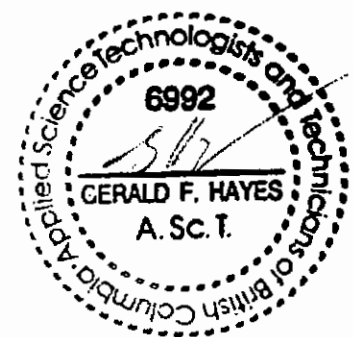
File # 13041a

MPR # 49002

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65139	<0.01	0.1	0.07	0.01	3.54	2.76
65140	<0.01	<0.1	0.01	<0.01	3.85	2.79
65141	0.01	<0.1	0.06	0.08	8.47	2.76
65142	0.02	<0.1	0.01	<0.01	4.91	2.84
65143	0.19	10.1	0.76	0.89	13.90	3.08
65144	0.30	12.9	0.33	0.08	15.09	3.58
65145	0.53	11.4	0.32	0.18	31.37	4.04
65146	0.41	9.9	0.03	<0.01	30.81	3.83
65147	0.25	5.7	0.07	0.06	22.72	3.41
65148	0.22	6.0	0.14	0.03	21.29	3.24
65149	0.19	12.1	0.87	0.19	16.80	4.05
65150	0.16	7.3	0.46	0.18	15.40	3.21
65151	0.81	9.2	0.16	0.07	23.02	3.44
65152	0.38	8.5	0.17	0.06	18.22	3.15
65153	0.18	6.5	0.14	0.02	17.60	3.06
65154	0.06	2.7	0.06	<0.01	9.39	2.78
65155	0.30	6.3	0.18	0.04	19.59	3.16
65156	0.13	4.4	0.24	0.30	14.02	3.00
65157	0.14	0.7	0.07	0.02	8.70	2.76
65158	<0.01	<0.1	0.03	<0.01	4.37	2.78
65159	0.06	<0.1	0.03	0.02	3.47	2.67
65160	0.01	0.8	0.05	0.04	4.27	2.54
65161	<0.01	0.4	0.02	0.04	4.03	2.79
65162	0.02	0.1	<0.01	0.01	4.35	2.68
65163	<0.01	0.4	0.01	<0.01	3.95	2.74
65164	0.19	3.4	0.05	0.02	21.94	3.22
65165	0.01	1.8	0.03	<0.01	4.28	2.71

D1 07



December 20, 1990

Work Order # 13041

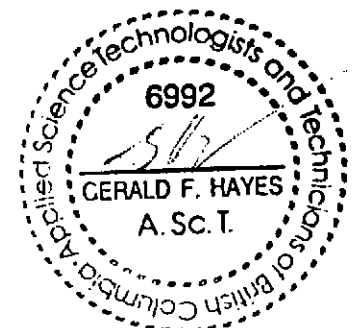
Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

File # 13041a

MPR # 49002

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65139	<0.01	0.1	0.07	0.01	3.54	2.76
65140	<0.01	<0.1	0.01	<0.01	3.85	2.79
65141	0.01	<0.1	0.06	0.08	8.47	2.76
65142	0.02	<0.1	0.01	<0.01	4.91	2.84
65143	0.19	10.1	0.76	0.89	13.90	3.08
65144	0.30	12.9	0.33	0.08	15.09	3.58
65145	0.53	11.4	0.32	0.18	31.37	4.04
65146	0.41	9.9	0.03	<0.01	30.81	3.83
65147	0.25	5.7	0.07	0.06	22.72	3.41
65148	0.22	6.0	0.14	0.03	21.29	3.24
65149	0.19	12.1	0.87	0.19	16.80	4.05
65150	0.16	7.3	0.46	0.18	15.40	3.21
65151	0.81	9.2	0.16	0.07	23.02	3.44
65152	0.38	8.5	0.17	0.06	18.22	3.15
65153	0.18	6.5	0.14	0.02	17.60	3.06
65154	0.06	2.7	0.06	<0.01	9.39	2.78
65155	0.30	6.3	0.18	0.04	19.59	3.16
65156	0.13	4.4	0.24	0.30	14.02	3.00
65157	0.14	0.7	0.07	0.02	8.70	2.76
65158	<0.01	<0.1	0.03	<0.01	4.37	2.78
65159	0.06	<0.1	0.03	0.02	3.47	2.67
65160	0.01	0.8	0.05	0.04	4.27	2.54
65161	<0.01	0.4	0.02	0.04	4.03	2.79
65162	0.02	0.1	<0.01	0.01	4.35	2.68
65163	<0.01	0.4	0.01	<0.01	3.95	2.74
65164	0.19	3.4	0.05	0.02	21.94	3.22
65165	0.01	1.8	0.03	<0.01	4.28	2.71



December 20, 1990

Work Order # 13041

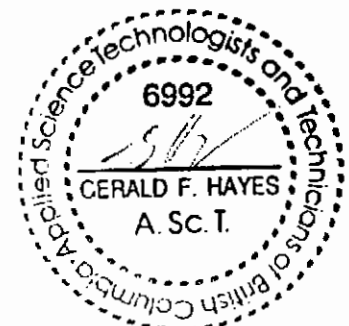
Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

File # 13041a

MPR # 49002

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65139	<0.01	0.1	0.07	0.01	3.54	2.76
65140	<0.01	<0.1	0.01	<0.01	3.85	2.79
65141	0.01	<0.1	0.06	0.08	8.47	2.76
65142	0.02	<0.1	0.01	<0.01	4.91	2.84
65143	0.19	10.1	0.76	0.89	13.90	3.08
65144	0.30	12.9	0.33	0.08	15.09	3.58
65145	0.53	11.4	0.32	0.18	31.37	4.04
65146	0.41	9.9	0.03	<0.01	30.81	3.83
65147	0.25	5.7	0.07	0.06	22.72	3.41
65148	0.22	6.0	0.14	0.03	21.29	3.24
65149	0.19	12.1	0.87	0.19	16.80	4.05
65150	0.16	7.3	0.46	0.18	15.40	3.21
65151	0.81	9.2	0.16	0.07	23.02	3.44
65152	0.38	8.5	0.17	0.06	18.22	3.15
65153	0.18	6.5	0.14	0.02	17.60	3.06
65154	0.06	2.7	0.06	<0.01	9.39	2.78
65155	0.30	6.3	0.18	0.04	19.59	3.16
65156	0.13	4.4	0.24	0.30	14.02	3.00
65157	0.14	0.7	0.07	0.02	8.70	2.76
65158	<0.01	<0.1	0.03	<0.01	4.37	2.78
65159	0.06	<0.1	0.03	0.02	3.47	2.67
65160	0.01	0.8	0.05	0.04	4.27	2.54
65161	<0.01	0.4	0.02	0.04	4.03	2.79
65162	0.02	0.1	<0.01	0.01	4.35	2.68
65163	<0.01	0.4	0.01	<0.01	3.95	2.74
65164	0.19	3.4	0.05	0.02	21.94	3.22
65165	0.01	1.8	0.03	<0.01	4.28	2.71



HOLE-ID	FROM	TO	INT.	SEC.	% RECSAMPLE#	SG-WR	Pb+Zn	Pb	Zn	
90Dy07	381.8	383.4	1.6	1.6	100	65139	2.76	0.08	0.07	0.01
90Dy07	383.4	384.7	1.3	1.3	100	65140	2.79	0.02	0.01	0.01
90Dy07	384.7	385.1	0.4	0.4	100	65141	2.76	0.14	0.06	0.08
90Dy07	385.1	387.2	2.1	2.1	100	65142	2.84	0.02	0.01	0.01
90Dy07	387.2	388.4	1.2	1.2	100	65143	3.08	1.85	0.76	0.89
90Dy07	388.4	390.1	1.7	1.7	100	65144	3.56	0.41	0.33	0.08
90Dy07	390.1	391.7	1.6	1.6	100	65145	4.04	0.5	0.32	0.15
90Dy07	391.7	393.4	1.7	1.7	100	65146	3.83	0.04	0.03	0.01
90Dy07	393.4	394.9	1.5	1.5	100	65147	3.41	0.13	0.07	0.06
90Dy07	394.9	396.3	1.4	1.4	100	65148	3.24	0.17	0.14	0.03
90Dy07	396.3	398.6	2.3	2.3	100	65149	4.05	1.06	0.87	0.19
90Dy07	398.6	400.6	2.0	2.0	100	65150	3.21	0.64	0.46	0.18
90Dy07	400.6	401.6	1.0	1.0	100	65151	3.44	0.23	0.16	0.07
90Dy07	401.6	402.8	1.2	1.2	100	65152	3.15	0.23	0.17	0.06
90Dy07	402.8	403.9	1.1	1.1	100	65153	3.06	0.16	0.14	0.02
90Dy07	403.9	405.7	1.8	1.8	100	65154	2.73	0.07	0.06	0.01
90Dy07	405.7	407.1	1.4	1.4	100	65155	3.16	0.22	0.18	0.04
90Dy07	407.1	408.1	1.0	1.0	100	65156	3	0.54	0.24	0.3
90Dy07	408.1	409.6	1.5	1.5	100	65157	2.76	0.09	0.07	0.02
90Dy07	409.6	410.0	0.4	0.4	100	65158	2.78	0.04	0.03	0.01
90Dy07	410.0	410.7	0.7	0.7	100	65159	2.67	0.05	0.03	0.02
90Dy07	410.7	413.0	2.3	2.3	100	65160	2.54	0.09	0.05	0.04
90Dy07	413.0	414.4	1.4	1.4	100	65161	2.79	0.06	0.02	0.04
90Dy07	414.4	416.6	2.2	2.2	100	65162	2.82	0.02	0.01	0.01
90Dy07	416.6	417.3	0.7	0.7	100	65163	2.74	0.02	0.01	0.01
90Dy07	417.3	418.4	1.1	1.1	100	65164	3.22	0.07	0.05	0.03
90Dy07	418.4	419.0	0.6	0.6	100	65165	2.71	0.04	0.03	0.01
WASTE										
90Dy07	587.4	587.6	0.2	0.2	100	65166	5.52	1.92	3.54	
90Dy07	587.6	588.0	0.4	0.4	100	65167	0.02	0.01	0.01	
90Dy07	588.0	589.7	1.7	1.7	100	65168	5.61	2.19	3.62	5.95% 3.4m
90Dy07	589.7	592.4	2.7	2.7	100	65169	3.09	1.94	4.15	
90Dy07	592.4	594.2	1.8	1.8	100	65170	0.23	0.07	0.16	5.92 3.6m 1.31 8.76% 3.8m
90Dy07	594.2	595.5	1.3	1.3	100	65171	2.04	0.82	1.36	
90Dy07	595.5	596.0	0.5	0.5	100	65172	3.5	1.09	1.91	
90Dy07	596.0	596.5	0.5	0.5	100	65173	13.27	3.19	2.03	
90Dy07	596.5	597.2	0.7	0.7	100	65174	0.44	0.11	0.33	
90Dy07	597.2	598.2	1.0	1.0	100	65175	15.12	3.25	3.87	
90Dy07	598.2	599.8	1.6	1.6	100	65176	7.01	3.11	3.3	
90Dy07	599.8	601.7	1.9	1.9	100	65177	0.89	0.45	0.54	
90Dy07	601.7	603.0	1.3	1.3	100	65178	0.02	0.01	0.01	
90Dy07	603.0	603.9	0.9	0.9	100	65179	12.77	5.41	4.38	

TABLE 3. Preliminary results for 90Dy-07, Decline drill program.

January 31, 1991

Work Order # 13050

Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

File # 13050a

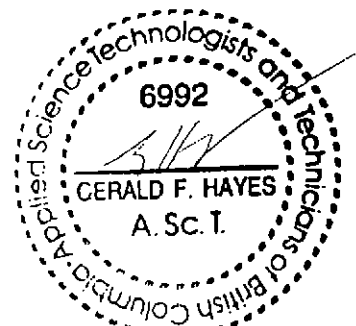
MPR # 33601

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65166	0.03	10.4	1.98	3.54	3.51	2.43
65167	<0.01	2.2	<0.01	0.01	4.44	2.72
65168	0.11	29.4	2.19	3.62	3.45	3.19
65169	0.05	19.6	1.94	4.15	3.90	2.67
65170	<0.01	3.1	0.07	0.16	5.36	2.59
65171	<0.01	6.5	0.66	1.38	6.43	2.75
65172	0.08	10.6	1.39	1.91	3.59	2.57
65173	0.11	70.6	5.19	8.08	6.98	2.99
65174	0.03	7.9	0.11	0.33	4.43	2.58
65175	0.59	97.9	6.25	8.87	5.85	2.97
65176	0.51	45.9	3.11	3.90	7.15	3.01
65177	0.08	7.2	0.45	0.54	7.20	2.79
65178	0.07	<0.1	<0.01	<0.01	5.23	2.74
65179	0.22	86.7	5.41	7.36	14.50	3.56
65180	0.08	1.1	<0.01	0.05	3.42	2.47
65181	0.17	19.9	1.50	3.57	13.91	3.71
65182	0.14	29.5	0.79	2.06	5.45	4.09
65183	0.16	18.4	1.83	3.60	12.37	4.30
65184	0.11	39.0	0.98	3.18	10.99	4.16
65185	0.05	0.7	<0.01	0.04	5.24	2.84
65186	0.12	56.3	3.61	6.15	11.20	4.34
65187	0.78	108.7	6.60	18.40	17.51	4.48
65188	0.61	89.2	4.38	11.90	20.86	4.47
65189	0.18	79.6	4.89	8.12	12.09	4.35
65190	<0.01	3.0	0.18	0.44	7.63	3.05
65191	0.09	16.3	1.56	3.78	23.84	4.16
65192	0.13	10.2	0.64	1.76	14.82	4.31
65193	0.85	109.7	6.53	16.10	15.28	4.50
65194	0.51	69.2	5.30	7.09	10.69	3.48
65195	0.25	4.1	0.16	0.18	6.07	2.90

9.0.07.07

11.07.09



January 31, 1991

Work Order # 13050

Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

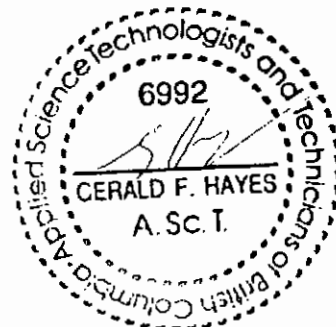
File # 13050b

P.O. # 33601

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65196	0.49	29.5	1.87	4.01	14.08	3.49
65197	0.02	3.7	0.14	0.30	4.73	2.95
65198	0.50	19.2	1.93	2.12	11.94	2.96
65199	<0.01	1.5	<0.01	0.03	4.30	2.88
65200	0.31	88.9	3.81	4.66	38.92	4.15
65201	<0.01	5.0	0.20	0.58	7.31	3.06
65202	<0.01	0.9	<0.01	0.02	4.14	2.87
65203	1.07	111.5	6.56	9.16	13.57	3.72
65204	<0.01	1.3	<0.01	0.05	4.23	2.82
65205	<0.01	2.4	0.16	0.25	9.11	2.88
65206	<0.01	2.0	0.13	0.25	6.83	2.77
65207	<0.01	0.6	<0.01	0.03	6.55	2.81
65208	<0.01	3.5	0.23	0.26	8.90	2.89
65209	0.03	1.5	0.07	0.11	6.03	2.88
65210	0.01	1.8	0.20	0.16	5.56	2.86
65211	<0.01	0.5	<0.01	0.02	5.81	2.84

900709



January 31, 1991

Work Order # 13050

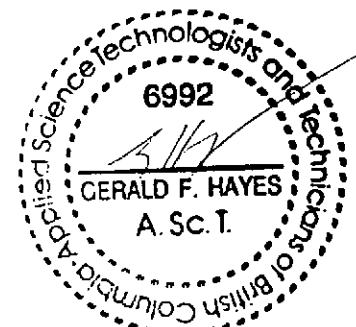
Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

File # 13050a

MPR # 33601

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65166	0.03	10.4	1.98	3.54	3.51	2.43
65167	<0.01	2.2	<0.01	0.01	4.44	2.72
65168	0.11	29.4	2.19	3.62	3.45	3.19
65169	0.05	19.6	1.94	4.15	3.90	2.67
65170	<0.01	3.1	0.07	0.16	5.36	2.59
65171	<0.01	6.5	0.66	1.38	6.43	2.75
65172	0.08	10.6	1.39	1.91	3.59	2.57
65173	0.11	70.6	5.19	8.08	6.98	2.99
65174	0.03	7.9	0.11	0.33	4.43	2.58
65175	0.59	97.9	6.25	8.87	5.85	2.97
65176	0.51	45.9	3.11	3.90	7.15	3.01
65177	0.08	7.2	0.45	0.54	7.20	2.79
65178	0.07	<0.1	<0.01	<0.01	5.23	2.74
65179	0.22	86.7	5.41	7.36	14.50	3.56
65180	0.08	1.1	<0.01	0.05	3.42	2.47
65181	0.17	19.9	1.50	3.57	13.91	3.71
65182	0.14	29.5	0.79	2.06	5.45	4.09
65183	0.16	18.4	1.83	3.60	12.37	4.30
65184	0.11	39.0	0.98	3.18	10.99	4.16
65185	0.05	0.7	<0.01	0.04	5.24	2.84
65186	0.12	56.3	3.61	6.15	11.20	4.34
65187	0.78	108.7	6.60	18.40	17.51	4.48
65188	0.61	89.2	4.38	11.90	20.86	4.47
65189	0.18	79.6	4.89	8.12	12.09	4.35
65190	<0.01	3.0	0.18	0.44	7.63	3.05
65191	0.09	16.3	1.56	3.78	23.84	4.16
65192	0.13	10.2	0.64	1.76	14.82	4.31
65193	0.85	109.7	6.53	16.10	15.28	4.50
65194	0.51	69.2	5.30	7.09	10.69	3.48
65195	0.25	4.1	0.16	0.18	6.07	2.90



January 31, 1991

Work Order # 13050

Curragh Resources Inc.
117 Industrial Road.
Whitehorse, Yukon
Y1A 2T8

File # 13050b

P.O. # 33601

Assay Certificate

Sample	g/t Au	g/t Ag	%Pb	%Zn	%Fe	SG
65196	0.49	29.5	1.87	4.01	14.08	3.49
65197	0.02	3.7	0.14	0.30	4.73	2.95
65198	0.50	19.2	1.93	2.12	11.94	2.96
65199	<0.01	1.5	<0.01	0.03	4.30	2.88
65200	0.31	88.9	3.81	4.66	38.92	4.15
65201	<0.01	5.0	0.20	0.58	7.31	3.06
65202	<0.01	0.9	<0.01	0.02	4.14	2.87
65203	1.07	111.5	6.56	9.16	13.57	3.72
65204	<0.01	1.3	<0.01	0.05	4.23	2.82
65205	<0.01	2.4	0.16	0.25	9.11	2.88
65206	<0.01	2.0	0.13	0.25	6.83	2.77
65207	<0.01	0.6	<0.01	0.03	6.55	2.81
65208	<0.01	3.5	0.23	0.26	8.90	2.89
65209	0.03	1.5	0.07	0.11	6.03	2.88
65210	0.01	1.8	0.20	0.16	5.56	2.86
65211	<0.01	0.5	<0.01	0.02	5.81	2.84

