CURRAGH INC.

005695

Inter-Office Memorandum

TO: Godfrey McDonald
Vice-President, Metallurgy
Toronto Office

FROM: Gregg A. Jilson
Vice-President, Exploration
Whitehorse Office

cc: Cameron Reed, Chief Geologist, Faro
Srjdan Bulatovic, Lakefield Research

RE: Dy Metallurgical Samples

DATE: 06 19 1992

A typical intersection of Dy sulphide was selected from hole 91DY05. The intersection is from 588.5 m depth to 601.5m depth. A band of carbonaceous phyllite 2.3m thick has been included. Each assay interval has been bagged separately so that they can be combined as required. The sample is in 2 pails (#1 and #2).

The core was not noticeably oxidized from its 1.2 years of storage, most of which would have been at below zero temperatures (this includes 1 full summer and only the beginning of the second which, regrettably, has not yet provided much above zero temperature!).

The interval, includes relatively minor baritic ore (4G) and very little massive pyritic ore (4E). This is unusual for most deposits but not particularly unusual for this part of the Dy deposit (the B Zone). The sample is relatively zinc rich compared to lead but this again is a characteristic of the B Zone (this sample averages 25-30% of base metal as lead (Pb/Pb+Zn) whereas the overall deposit averages 43% as lead or 38% for B Zone). The sample is also higher grade than average. The sulphide zones average approximately 20% Pb+Zn; overall the average grade is 16% if the 2.3m waste interval is added in. The deposit averages 12.9% Pb+Zn at a 9% cutoff grade (the B zone averages 13.05%).

When compositing you may or may not wish to include sample 65339, the graphitic phyllite waste (unit 5A) or you may want to include a limited amount, say 10-20%, to mimic overall expected dilution. In any case a test on that sample alone would be pointless and probably quite frustrating.

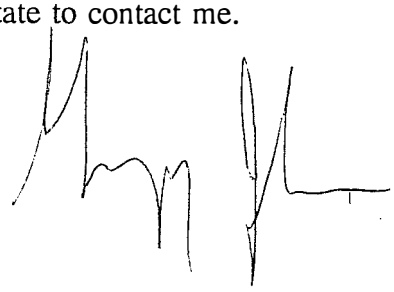
The third pail contains a small sample of as typical a carbonaceous quartzite ore as we could find. The grade is a little low (8.1% Pb+Zn) but the ore is otherwise representative. The core was not oxidized.

Summary assay logs are attached along with copies of the relevant portions of the drill core logs.

If you chose to re-assay the core I would like to get a copy of the results in order to check precision.

If you do mineralogy on selected pieces of intact core, I would recommend a representative piece from interval 65176 for 4A, 65337 for 4G, 65334 and 65346 for 4C/4D.

If you require further samples or more information on the geology, please don't hesitate to contact me.



Curragh Inc.
Dy Deposit – 1992 metallurgical samples

DDH 91-DY-05 (pails 1&2)

sample number	from (m.)	to (m.)	interval (m.)	Pb+Zn (%)	Pb (%)	Zn (%)	Ag (g/t)	Au (g/t)	Pb/(Pb+Zn)
65334	588.5	590.0	1.5	11.96	4.10	7.86	61.4	0.98	34.3%
65335	590.0	590.5	0.5	14.92	4.32	10.60	66.7	0.88	29.0%
65336	590.5	591.6	1.1	33.40	11.20	22.20	190.8	0.83	33.5%
65337	591.6	592.2	0.6	25.31	9.21	16.10	130.7	1.27	36.4%
65338	592.2	592.7	0.5	14.68	4.58	10.10	87.4	0.55	31.2%
65339	592.7	595.0	2.3	0.50	0.21	0.29	3.5	0.12	42.0%
65340	595.0	595.5	0.5	12.94	3.55	9.39	85.6	0.85	27.4%
65341	595.5	595.8	0.3	12.45	3.00	9.45	70.5	0.51	24.1%
65342	595.8	596.5	0.7	5.18	1.09	4.09	13.3	0.32	21.0%
65343	596.5	597.1	0.6	2.40	0.75	1.65	9.8	0.09	31.3%
65344	597.1	597.7	0.6	31.19	7.29	23.90	192.1	0.62	23.4%
65345	597.7	598.0	0.3	8.96	2.57	6.39	31.2	0.31	28.7%
65346	598.0	599.2	1.2	31.03	8.23	22.80	169.8	0.62	26.5%
65347	599.2	599.8	0.6	20.55	6.95	13.60	106.1	0.94	33.8%
65348	599.8	601.5	1.7	27.60	6.20	21.40	108.6	0.47	22.5%
Averages:									
	588.5	592.7	4.2	20.16	6.77	13.39	108.92	0.92	33.6%
	595.0	601.5	6.5	20.49	5.17	15.31	100.89	0.53	25.2%
	588.5	601.5	13.0	16.84	4.81	12.03	86.25	0.58	28.6%
For comparison									
CRI entire deposit+9% cutoff				12.87	5.54	7.33	81.1	0.87	43.0%
CAMC B2 Zone at 9% cutoff				13.05	4.91	8.14	82.6	0.76	37.6%

DDH 90-DY-07 (pail 3)

65172	595.5	596.0	0.5	3.30	1.39	1.91	10.6	0.08	42.1%
65173	596.0	596.5	0.5	13.27	5.19	8.08	70.6	0.11	39.1%
65174	596.5	597.2	0.7	0.44	0.11	0.33	7.9	0.03	25.0%
65175	597.2	598.2	1.0	15.12	6.25	8.87	97.9	0.59	41.3%
65176	598.2	599.8	1.6	7.01	3.11	3.9	45.9	0.51	44.4%
Average:									
	595.5	599.8	4.3	8.12	3.39	4.73	50.57	0.35	41.8%

Drill Hole: 90DY07 Section:
Northing: 900768.6 Easting: 597774.6 Elevation: 1034.2
Length: 686.7 Core: DDH Record: 65

ASSAYS

Sample #	---Depths--- From	To	Int m	Rec %	Rock Unit	Rock Code	Pulp S.G.	Pb+Zn %	Pb %	Zn %	Ag g/t	Au g/t
	.0	381.8	381.8		WASTE							
65139	381.8	383.4	1.6		4LO		2.76	.08	.07	.01	.1	.01
65140	383.4	384.7	1.3		4LO		2.79	.02	.01	.01	.1	.01
65141	384.7	385.1	.4		4K@$		2.76	.14	.06	.08	.1	.01
65142	385.1	387.2	2.1		4LO$		2.84	.02	.01	.01	.1	.02
65143	387.2	388.4	1.2		4LO$		3.08	1.65	.76	.89	10.1	.19
65144	388.4	390.1	1.7		4EO$		3.58	.41	.33	.08	12.9	.30
65145	390.1	391.7	1.6		4EO		4.04	.50	.32	.18	11.4	.53
65146	391.7	393.4	1.7		4EO		3.83	.04	.03	.01	9.9	.41
65147	393.4	394.9	1.5		4CO		3.41	.13	.07	.06	5.7	.25
65148	394.9	396.6	1.7		4CO		3.24	.17	.14	.03	6.0	.22
65149	396.6	398.6	2.0		4CO		4.05	1.06	.87	.19	12.1	.19
65150	398.6	400.6	2.0		4CO		3.21	.64	.46	.18	7.3	.16
65151	400.6	401.6	1.0		4CO		3.44	.23	.16	.07	9.2	.81
65152	401.6	402.8	1.2		4CO		3.15	.23	.17	.06	8.5	.38
65153	402.8	403.9	1.1		4CO		3.06	.16	.14	.02	6.5	.18
65154	403.9	405.7	1.8		4CO		2.78	.07	.06	.01	2.7	.06
65155	405.7	407.1	1.4		4CO		3.16	.22	.18	.04	6.3	.30
65156	407.1	408.1	1.0		4L14		3.00	.54	.24	.30	4.4	.13
65157	408.1	409.6	1.5		4L14		2.76	.09	.07	.02	.7	.14
65158	409.6	410.0	.4		5A69		2.78	.04	.03	.01	.1	.01
65159	410.0	410.7	.7		5B219		2.67	.05	.03	.02	.1	.06
65160	410.7	413.0	2.3		5A19		2.54	.09	.05	.04	.8	.01
65161	413.0	414.4	1.4		5A109		2.79	.06	.02	.04	.4	.01
65162	414.4	416.6	2.2		5B6		2.68	.02	.01	.01	.1	.02
65163	416.6	417.3	.7		5B619		2.74	.02	.01	.01	.4	.01
65164	417.3	418.4	1.1		4CO		3.22	.07	.05	.02	3.4	.19
65165	418.4	419.0	.6		5B612		2.71	.04	.03	.01	1.8	.01
	419.0	587.4			WASTE							
65166	587.4	587.9	.5		4AO		2.43	5.52	1.98	3.54	10.4	.03
65167	587.9	589.0	1.1		5B6		2.72	.02	.01	.01	2.2	.01
65168	589.0	590.7	1.7		4A04		3.19	5.81	2.19	3.62	29.4	.11
65169	590.7	592.4	1.7		4A04		2.67	6.09	1.94	4.15	19.6	.05
65170	592.4	594.2	1.8		4AO		2.59	.23	.07	.16	3.1	.01
65171	594.2	595.5	1.3		4AO		2.75	2.04	.66	1.38	6.5	.01
65172	595.5	596.0	.5		4AO		2.57	3.30	1.39	1.91	10.6	.08
65173	596.0	596.5	.5		4A4		2.99	13.27	5.19	8.08	70.6	.11
65174	596.5	597.2	.7		4AO		2.58	.44	.11	.33	7.9	.03
65175	597.2	598.2	1.0		4A4		2.97	15.12	6.25	8.87	97.9	.59
65176	598.2	599.8	1.6		4A04		3.01	7.01	3.11	3.90	45.9	.51
65177	599.8	601.7	1.9		4L1		2.79	.99	.45	.54	7.2	.08
65178	601.7	603.0	1.3		4L1		2.74	.02	.01	.01	.1	.07
65179	603.0	603.9	.9		4A4		3.56	12.77	5.41	7.36	86.7	.22
	603.9	686.7			WASTE							

intervals sampled

DDH 90DX-07 (2 8)

CURRAGH RESOURCES INC.

Lithologic Log

Date: Dec '90 Logged By: J. Beetn-H

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
	599.	600.		1,513	AA4	(500 : 410) · 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 cs_y 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 high silicous and has sph mineralization disseminated throughout with only a very crude banding parallel S_y (?).
						Unit hosts 5-7% clotty and stringy quartz-dolomite veins and wisps and bands @ 500 and 410 which do not exceed 3 cm in width. From 599.4 - 600.0 AA4 is cs_y foliated with 0.2-0.5 cm bands with high A/ content and moderate sph content defining a cs_y fabric. Rock is hard, slightly broken, rarely moderately broken with good recovery throughout. Upper and lower contacts are sharp and parallel S_y. Internal contacts also parallel S_y. ESTIMATED grade 10-15%.
	600.	603.0		1,514	AA11	→ 5361
						Light-medium gray slightly buff unit is non-calcareous variably siliceous, ps_y foliated and hosts 10% stringy clotty networks of quartz dolomite veinlets which crosscut S_y at variable relationships. Silicification is generally moderate locally very strong to intense and locally weak. Unit

Drill Hole: 91DY05 Section:
Northing: 901217.8 Easting: 597497.9 Elevation: 1086.6
Length: 709.9 Core: DDH Record: 85

ASSAYS

Sample #	---Depths--- From	To	Int m	Rec %	Rock Unit	Rock Code	Pulp S.G.	Pb+Zn %	Pb %	Zn %	Ag g/t	Au g/t
0	.0	584.9	584.9	.0	WASTE		.00	.00	.00	.00	.0	.00
65381	430.8	431.7	.9	100.0	5B4		2.81	.19	.06	.13	1.9	.01
65382	431.7	432.1	.4	100.0	4C0		3.26	.31	.23	.08	3.4	.34
65383	432.1	433.0	.9	100.0	5B4		2.61	.03	.01	.02	.8	.01
65384	433.0	434.3	1.3	100.0	4E0		3.17	.06	.02	.04	1.3	.35
65385	434.3	436.9	2.6	100.0	5B4		2.80	.07	.01	.06	.6	.01
65386	436.9	437.7	.8	100.0	5C4		2.85	.08	.01	.07	.9	.02
65387	437.7	439.8	2.1	100.0	4G8		3.83	.13	.08	.05	5.6	.63
65388	439.8	440.6	.8	100.0	4G84		3.58	2.01	1.09	.92	16.9	.59
65389	440.6	442.4	1.8	100.0	5C4		3.10	1.24	.57	.67	7.1	.10
65390	442.4	443.5	1.1	100.0	4E7		3.88	3.96	2.35	1.61	27.0	.73
65391	443.5	446.1	2.6	100.0	5C46		2.85	.10	.03	.07	.6	.07
65392	451.3	452.5	1.2	100.0	5C67		2.77	.13	.05	.08	1.9	.02
65393	452.5	453.7	1.2	100.0	4K0		3.62	.19	.11	.08	5.0	.30
65394	453.7	455.3	1.6	100.0	4K87		3.31	.13	.08	.05	4.4	.34
65395	455.3	456.5	1.2	100.0	4K*		3.54	.04	.02	.02	5.5	.32
65396	456.5	457.7	1.2	100.0	4K0		3.79	.09	.03	.06	3.8	.44
65397	457.7	458.4	.7	100.0	4K7		3.82	.08	.05	.03	3.6	.59
65398	458.4	459.0	.6	100.0	4K0		3.68	.13	.09	.04	4.1	.36
65399	459.0	461.2	2.2	100.0	4L0		2.82	.06	.01	.05	1.2	.01
65400	461.2	461.6	.4	100.0	4CE4		3.42	2.01	.98	1.03	14.6	1.92
65401	461.6	463.3	1.7	100.0	4E48		4.11	1.08	.83	.25	11.8	.91
65402	463.3	464.5	1.2	100.0	4E48		4.25	1.62	.87	.75	11.9	.65
65403	464.5	465.4	.9	100.0	4CE8		3.73	2.39	1.24	1.15	16.9	.49
65404	465.4	466.4	1.0	100.0	5B4		2.78	.10	.04	.06	1.8	.05
0	466.4	543.2	76.8	.0	WASTE		.00	.00	.00	.00	.0	.00
65358	543.2	543.7	.5	100.0	5A6		2.79	.03	.01	.02	3.1	.07
65359	543.7	544.1	.4	100.0	5A6$		2.81	.69	.28	.41	5.2	.06
65360	544.1	544.4	.3	100.0	4H8		3.42	12.60	4.05	8.55	99.6	.29
65361	544.4	545.1	.7	100.0	4D44		3.45	10.63	3.41	7.22	69.1	.42
65362	545.1	546.0	.9	100.0	5A6$		2.80	.16	.05	.11	.9	.06
65363	546.0	548.0	2.0	100.0	5A6$		2.79	.21	.04	.17	.7	.08
65364	548.0	549.2	1.2	100.0	4A14		2.87	6.53	2.01	4.52	39.9	.31
65365	549.2	549.5	.3	100.0	5A6		2.77	1.94	.51	1.43	8.3	.11
65366	549.5	549.9	.4	100.0	5A69		2.84	3.05	1.01	2.04	17.8	.28
65367	549.9	550.9	1.0	100.0	5B4		2.81	.92	.81	.11	10.8	.10
65368	550.9	552.4	1.5	100.0	4L14		2.59	4.71	1.82	2.89	31.5	.66
65369	552.4	553.5	1.1	100.0	5C46		2.81	.16	.07	.09	.6	.04
65370	553.5	554.7	1.2	100.0	5C46		2.78	.52	.20	.32	2.6	.07
65371	554.7	555.1	.4	100.0	5A61		2.74	.70	.30	.40	5.5	.09
65372	555.1	558.2	3.1	100.0	5C7		2.75	.11	.02	.09	.1	.02
65373	558.2	559.0	.8	100.0	5A6		2.67	1.09	.26	.83	1.3	.02
65374	559.0	559.4	.4	100.0	5C7		2.82	.60	.25	.35	2.6	.01
65375	559.4	560.7	1.3	100.0	5A6		2.74	3.76	1.44	2.32	19.5	.44

65376	560.7	561.3	.6	100.0	5F46	2.85	.14	.04	.10	.1	.01
65377	561.3	562.1	.8	100.0	5A61	2.94	1.22	.31	.91	3.9	.16
65378	562.1	562.8	.7	100.0	5C6	2.80	.27	.06	.21	.1	.02
65379	562.8	563.3	.5	100.0	5C6	2.82	.24	.06	.18	.1	.04
0	563.3	579.5	16.2	.0	WASTE	.00	.00	.00	.00	.0	.00
65380	579.5	580.5	1.0	100.0	5A69	2.85	3.13	1.07	2.06	19.7	.23
0	580.5	584.9	4.4	.0	WASTE	.00	.00	.00	.00	.0	.00
65329	584.9	585.6	.7	100.0	4E4	4.04	19.29	9.05	10.24	123.0	1.25
65330	585.6	586.5	.9	100.0	4G0*	4.32	10.24	5.46	4.78	89.0	1.02
65331	586.5	587.7	1.2	100.0	4G0	4.30	18.66	8.06	10.60	132.3	1.16
65332	587.7	588.2	.5	100.0	5A61	2.85	1.64	.48	1.16	4.3	.36
65333	588.2	588.5	.3	100.0	4C4	3.42	5.04	2.31	2.73	32.2	.81
65334	588.5	590.0	1.5	100.0	4D4	3.68	11.96	4.10	7.86	61.4	.98
65335	590.0	590.5	.5	100.0	4C4	3.34	14.92	4.32	10.60	66.7	.88
65336	590.5	591.6	1.1	100.0	4G4	4.23	33.40	11.20	22.20	190.8	.83
65337	591.6	592.2	.6	100.0	4G44	3.68	25.31	9.21	16.10	130.7	1.27
65338	592.2	592.7	.5	100.0	4C48	3.36	14.68	4.58	10.10	87.4	.55
65339	592.7	595.0	2.3	100.0	5A6	2.58	.50	.21	.29	3.5	.12
65340	595.0	595.5	.5	100.0	4A4	3.39	12.94	3.55	9.39	85.6	.85
65341	595.5	595.8	.3	100.0	4D4	3.73	12.45	3.00	9.45	70.5	.51
65342	595.8	596.5	.7	100.0	4G48	3.86	5.18	1.09	4.09	13.3	.32
65343	596.5	597.1	.6	100.0	5C14	3.26	2.40	.75	1.65	9.8	.09
65344	597.1	597.7	.6	100.0	4G44	3.88	31.19	7.29	23.90	192.1	.62
65345	597.7	598.0	.3	100.0	5C41	3.18	8.96	2.57	6.39	31.2	.31
65346	598.0	599.2	1.2	100.0	4D4	3.94	31.03	8.23	22.80	169.8	.62
65347	599.2	599.8	.6	100.0	4D44	3.89	20.55	6.95	13.60	106.1	.94
65348	599.8	601.5	1.7	100.0	4G4	3.39	27.60	6.20	21.40	108.6	.47
65349	601.5	603.7	2.2	100.0	5A6	2.54	.16	.05	.11	.1	.04
65350	603.7	604.4	.7	100.0	5B46	2.69	.13	.06	.07	.1	.06
65351	604.4	604.6	.2	100.0	4H84	3.74	10.58	3.44	7.14	50.8	.11
65352	604.6	605.8	1.2	100.0	10E9	2.86	.48	.16	.32	1.5	.06
65353	605.8	606.3	.5	100.0	5B16	2.86	.05	.03	.02	.1	.03
65354	606.3	606.7	.4	100.0	4H0	4.22	12.86	3.29	9.57	60.2	.16
65355	606.7	607.0	.3	100.0	10C99	3.47	14.41	3.81	10.60	67.2	.43
65356	607.0	607.5	.5	100.0	4K0	3.77	13.89	4.35	9.54	108.6	.42
65357	607.5	608.1	.6	100.0	4E04	4.11	9.24	2.60	6.64	49.4	.40
0	608.1	709.9	101.8		WASTE						

interval sample

Code	From	To	Recov.	No.	Unit	Description
						dense barite as disseminations and patches. Off-white creamy weakly calcareous, fg dolomite as laminae parallel S_2 and patches. Very good core recovery. Good RQD. Gradational upper contact parallel S_2. Sharp lower contact at CA 80°.
L	587.7	588.2			5A61	(5A6) 60:40 Dark grey to black graphitic phyllite with off-white quartz-dolomite siltstone laminae/beds following S_1, S_2/S_2. Very weakly calcareous. PS_2 and CS_2 foliated. Black graphitic fracture surfaces. Moderately hard (weakly silicified). Disseminated mg euhedral-cubic pyrite cubes; 3-6%, overall. Veinlet-filling fg, subhedral pyrrhotite; 1-2%, overall. Very good core recovery. Good RQD. Sharp upper contact at CA 80°. Sharp lower contact at CA 40°. Non-silicified unit occurring at 587.9-588.2 is dark grey to black, PS_2 and CS_2 foliated, graphitic (fractures) and moderately soft (to soft). Gradational contact with 5A61.
L	588.2	588.5			4C4	Sphalerite-bearing pyritic quartzite containing 55% quartz, 25% pyrite, 15% dolomite and 5% pyrrhotite. Very weakly calcareous. PS_2 foliated. Grey-white-brassy yellow fracture surfaces. Hard. Brassy yellow, fg (euhedral-cubic?) pyrite as bands and disseminations. Brown fg sphalerite as disseminations, laminae parallel S_2. Very good core recovery. Good RQD. Sharp upper contact at CA 90°. Gradational lower contact
L	588.5	590.0			4D4	

DDH 91DY-05

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb. 19/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
						hotite and 10% dolomite. Very weakly calcareous. PS_2 and (rarely) CS_2 foliated. Brassy yellow-white-grey fracture surfaces. Hard. Brassy yellow f.g. (euhedral-cubic?) pyrite as bands (1-5cm wide) parallel S_2. Reddish-brown f.g. subhedral sphalerite as laminae-bands (1-3mm. wide) following S_1, S_2. Off-white (cream) f.g., soft, weakly calcareous dolomite as patches and laminae following S_1, S_2. Locally vuggy (dissolved calcite).
						Very good core recovery. Good RQD. Gradational upper contact. Gradational upper contact. Gradational upper, lower contacts parallel S_2.
L	5900	5903			5A16	9
						Dark grey to black weakly silicified graphitic phyllite with off-white quartz-dolomite laminae following S_1, S_2. Very weakly calcareous. CS_2 and PS_2 foliated. Graphitic fracture surfaces. Moderately hard (weakly silicified). Reddish-brown sphalerite laminae following S_1, S_2. Very good core recovery. Good RQD. Gradational contacts parallel S_2.
L	5903	5905			4E4	
						Sphalerite-bearing pyritic massive sulphide containing 70% pyrite, 20% quartz, 5% sphalerite, 5% dolomite. Very weakly calcareous. Massive to PS_2 foliated. Brassy-yellow-grey-white fracture surfaces. Hard. Brassy yellow f.g. (euhedral-cubic?) pyrite as masses. Reddish-brown f.g. (subhedral?) sphalerite as patches and laminae parallel S_2. Off-white (cream) f.g. weakly calcareous (i.e. 10% HCl acid reaction) dolomite as patches. Very good core recovery. Good RQD. Gradational contacts parallel S_2.

DDH 91UY-05 (2 / 8)

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb 18/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
	10 14	16 20	22 24	26 28	30 34	35
L	590.5	591.6			4GA	
						Sphalerite (±galena)-bearing baritic massive sulphide containing 5% galena, 20% sphalerite, 10% barite, 5% dolomite, 10% quartz and trace galena. Very weakly calcareous. Massive to PS_2 foliated. Brassy yellow-brown-white-grey fracture surfaces. Hard. Brassy yellow fg (euhedral-cubic?) pyrite as masses and bands (2-10 cm wide). Purplish red-brown metallic fg (subhedral?) sphalerite as patches and bands (0.5-3 cm wide) parallel S_2. Off-white, soft, non-calcareous, dense barite as disseminations as patches. Trace purplish-grey fg-mg. euhedral-cubic galena within sphalerite patches (590.9, etc.). Vuggy, with vugs at 590.5-590.8 as ellipses elongate parallel S_2 (0.5-1.5 cm. long). Dense, heavy.
						Very good core recovery. Good to very good RQD. Gradational contacts parallel S_2. Slickensided lower contact (083°/44° to strike of S_2).
L	591.6	592.7			4G44	
						Sphalerite-rich baritic massive sulphide containing 35% sphalerite, 30% pyrite, 20% quartz, 10% barite and 5% carbonate (dolomite+calcite). Weakly to moderately calcareous. Massive to PS_2 foliated. Purplish red-brown, brassy yellow, white-grey fracture surfaces. Hard. Cross-cut by laminae or veinlets subparallel S_2 containing quartz-dolomite-Mg chlorite (olive-grey). Vuggy at 592.1-592.2 with vugs (1-2 cm dia.) still containing some calcite. No galena seen. Dense, heavy.
						Purplish reddish-brown fg (subhedral?) sphalerite as masses, bands (2-5 cm. wide) parallel S_2. Brassy yellow fg (euhedral-cubic?) pyrite as masses, bands (2-4 cm. wide) parallel S_2 and disseminations. Off-white fg anhedral barite as disseminations and patches, is soft, non-calcareous and dense. Off-white (Cream) fg (anhedral?) dolomite as patches. Calcite as vug-fillings (partial) along veinlets at CA 0-20, 45°.

DDH 91-04-05

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb 18/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
L	592.2	592.7			4C48	(100#) 80:20
						Sphalerite-magnetite-bearing pyritic quartzite with minor quartz breccia containing 35% quartz, 35% pyrite, 10% sphalerite, 10% magnetite, 10% carbonate (dolomite + calcite). Weakly to moderately (veinlets) calcareous. Massive to PS_2 foliated. Minor healed oligomict clast-supported breccia. Hard.
						Brassy yellow fg. (euhedral-cubic?) pyrite as masses and bands (2-5cm. wide) parallel S_2. Purplish red-brown fg. (subhedral?) sphalerite as bands (1-3cm. wide) parallel S_2 and selvages of quartz bands (veinlets?) within breccia (592.5-592.6). Black fg. (subhedral?) strongly magnetic magnetite as patches and veinlet-fillings (both at 592.5-592.6).
						Off-white fg. (anhedral?) dolomite as patches. Off-white calcite-quartz veinlet network at 592.5-592.6 at CA 0°-30°.
						Very good core recovery. Good RQD. Gradational upper contact parallel S_2. Sharp lower contact at CA 80° (parallel S_2).
						White-buff bull quartz at 592.6-592.7 is cut by calcite-quartz veinlets at CA 0°-30°, is moderately calcareous, hard, and has sharp contacts with 4C48.
L	592.7	595.0			5A6	(5A61:5A9:100#) 60:30:08:02
						Black to dark grey graphitic phyllite with off-white quartz-dolomite siltstone laminae/beds following S_1, S_2/S_2. Very weakly calcareous, CS_2 and PS_2 foliated. Black graphitic fracture surfaces. Moderately soft to soft. Trace brassy yellow mg. euhedral-cubic pyrite as veinlet-filling within late quartz-calcite veinlets at CA 0°-60°. Good core recovery. Fair RQD. Blocky core at 593.5, 594.4-594.6. Sharp upper contact at CA 80°. Sharp lower contact at CA 75°. Ochre (limonite) fractures near lower contact.
						Dark grey weakly silicified graphitic phyllite is weakly calcareous, moderately

DDH 91DY-05 (2 8)

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb. 18/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
						Sphalerite-bearing graphitic phyllite at 592.7-592.9 is dark gray, weakly calcareous, moderately soft and has gradational contact with 5A6.
						Bull quartz-calcite veinlet at CA 25° at 593.4 is moderately calcareous, hard, vuggy and cross-cuts S_2 having sharp contacts with 5A6.
L	5950	5955			4A41	NOT RIBBON-BANDED.
						Black to dark grey graphitic phyllite with sphalerite, pyrite bands (not ribbon-banded). Very weakly calcareous. PS_2 and CS_2 foliated. Black graphitic fracture surfaces sometimes with brassy-yellow and purplish red-brown colours (sulphides). Moderately hard (silicified). Vuggy (1-10mm. dia.) at 595.0-595.5. Contains 20% pyrite and 10% sphalerite. Brassy yellow f.g.-m.g. euhedral-cubic pyrite as bands (1-3cm. wide) parallel S_2 and laminae (wisps) following S_1. Purplish red-brown laminae-bands (1-5mm wide) parallel S_2.
						Very good core recovery, RQD. Sharp upper contact at CA 80°. Sharp lower contact at CA 75°.
L	5955	5958			4D4	
						Sphalerite-bearing pyritic massive sulphide containing 60% pyrite, 30% sphalerite, 8% quartz, 2% dolomite (?). Very weakly calcareous. Massive to PS_2 foliated. Brassy yellow-purplish red-brown-white fracture surfaces. Hard.
						Brassy yellow f.g. (euhedral-cubic?) pyrite as masses and bands (2-6 cm. wide) parallel S_2. Purplish red-brown f.g. (subhedral?) sphalerite as bands (1-3cm wide) parallel S_2. Off-white (creamy) f.g. dolomite as patches

DDH 91DY-05

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb.18/91 Logged By: D.Halliwell

Code	From	To	Recov.	No.	Unit	Description
	10 14	16 20	22 24	26 28	30 34	35
L	5958	5965			4G48	
						Sphalerite-magnetite-bearing baritic massive sulphide containing 60% pyrite, 20% quartz, 10% sphalerite, 5% magnetite and 5% dolomite. Very weakly calcareous. Massive to PS_2 foliated (locally, CS_2 foliated). Brassy yellow-grey-reddish brown-black fracture surfaces. Hard. Heavy, dense.
						Brassy yellow f.g.m.g. euhedral-cubic pyrite as masses, disseminations and bands (2-7cm. wide) parallel S_2. Purplish reddish-brown f.g. (subhedral?) sphalerite as bands (0.5-2.0cm. wide) parallel S_2. Black v.f.g. (subhedral?) strongly magnetic magnetite as patches and laminae following S_1 (locally). Off-white (creamy) f.g. (anhedral?) dolomite as patches and laminae following S_1, S_2.
						Very good core recovery. Good RQD. Gradational upper contact parallel S_2. Sharp lower contact at CA70°.
L	5965	5967			5C14	
						Light to medium grey v.f.g. aphanitic metabasitic groundmass, white f.g. anhedral (leucoxene?) phenocrysts and black f.g. subhedral (amphibole, pyroxene?) phenocrysts within relict porphyritic igneous texture. Overprinted by white-grey quartz-dolomite laminae, bands parallel S_2. Very weakly calcareous. PS_2 foliated. Grey fracture surfaces. Moderately hard and smooth (weakly silicified). Weak quartz-sericitic "bleaching" alteration. No sulphides. Very good core recovery, RQD. Sharp upper contact at CA70°. Sharp lower contact at CA60°
L	5967	5971			4K8	87? VERY MAGNETIC.

DDH 91-UY-05

CURRAGH RESOURCES INC.
Lithologic Log

Date: Feb. 19/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
						20% pyrrhotite, 10% quartz. Very weakly calcareous (10% HCl acid reaction). Massive to F_2 foliated. White-grey-black-brown fracture surfaces. Moderately hard. Vuggy at 596.9-597.0 (carbonate-Mg chlorite? nearby). Off-white to ochre (limonite?), hard, fg-mg very weakly calcareous ankerite(?) as large patches and fracture-fillings. Black fg. (subhedral?) magnetite as patches, veinlet-fillings and interstitial-fillings. Brassy fg-mg. subhedral pyrrhotite as patches, bands (1-3 cm. wide) parallel S_2 and veinlet fillings.
						Very good core recovery. Good RQD. Sharp upper contact at CA 60°. Gradational lower contact parallel S_2.
L	597.1	597.7			4644	
						Sphalerite-rich baritic massive sulphide containing 35% sphalerite, 25% pyrite, 20% quartz, 15% barite and 5% dolomite. Very weakly calcareous. Massive to F_2 foliated. Purpluish red-brown, brassy yellow, white-grey fracture surfaces. Hard. Heavy, dense.
						Purpluish red-brown fg. (subhedral?) sphalerite as masses and bands (0.5-2.5 cm wide) parallel S_2. Brassy yellow fg. (euhedral-cubic) pyrite as masses and bands (0.5-2.5 cm. wide) parallel S_2. Off-white fg. soft, non-calcareous, dense barite as disseminations and patches. Off-white (creamy) fg., soft, weakly calcareous dolomite as patches and laminae, bands parallel S_2.
						Very good core recovery. Good RQD. Gradational upper contact parallel S_2. Sharp lower contact at CA 70°.
L	597.7	598.0			5C41	9 (4E4) 60:40

DDH 92-RY-05

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb. 12/93 Logged By: D. Hallinan

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
						vane?) phenocrysts and black f.g. subhedral (amphibole, pyroxene?) phenocrysts within relict porphyritic igneous texture. Overprinted by dark grey matrix bands/laminae, off-white quartz-dolomite and reddish brown sphalerite laminae parallel S_2. Very weakly calcareous. PS_2 foliated to massive. Grey fracture surfaces. Moderately hard (weakly silicified). Weak quartz-sericite-chlorite alteration. Red-brown sphalerite laminae (1-3mm wide) parallel S_2. Very good core recovery. Good RQD. Sharp upper contact at CA 70°. Sharp lower contact at CA 80°.
						Sphalerite-rich pyritic massive sulphide occurs at 599.9-599.95. Reddish-brown sphalerite occurs as masses, bands parallel S_2.
L	598	599			404	(404) 60:40
						Sphalerite-bearing pyritic massive sulphide containing 50% pyrite, 25% sphalerite, 15% quartz, 10% dolomite. Very weakly calcareous. Massive to PS_2 foliated. Brassy yellow, purplish red-brown, grey-white fracture surfaces. Hard. Brassy yellow f.g. (subhedral-cubic) pyrite as masses and bands (2-10cm wide). Honey and red-brown f.g.-v.f.g. (subhedral?) sphalerite as masses and bands (1-4 cm wide) parallel S_2. Off-white (creamy) f.g. (anhedral?) dolomite as patches, laminae-bands parallel S_2.
						Very good core recovery, RQD. Sharp upper contact at CA 80°. Gradational lower contact 11 S_2.
						Sphalerite-rich (25-40%) equivalent occurs at 599.2-599.8. Unit is purplish reddish-brown and has gradational contact with 404. (Sharp contact with 599.8).
L	599	601			4HB4	
						Magnetite-sphalerite-bearing massive pyrrhotite sulphides is brown-coloured and contains 65% pyrrhotite, 10% magnetite, 10% sphalerite, 10% quartz and 5% dolomite. Very weakly calcareous. Massive to PS_2 foliated. Brassy brown fracture surfaces except

DDH 91-04-05

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb. 19/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
						Brassy brown vf.g. (subhedral?) weakly magnetic pyrrhotite as masses. Reddish-brown fg. (subhedral) sphalerite as bands parallel S_2 and masses. Off-white (creamy) fg. (subhedral?) dolomite as veinlets cross-cutting S_2 at CA 0°-20°, 60°-70° separating pyrrhotite clasts with healed minor oligomict clast-supported matrix. Black f.g. (subhedral?) strongly magnetic magnetite as patches and veinlet-fillings.
						Very good core recovery. Good RQD. Gradational upper contact parallel S_2. Sharp lower contact at CA 70°.
L	6012	6013			5A1,69	
						Dark grey to black graphitic phyllite with off-white quartz-dolomite siltstone laminae/beds following S_1, S_2 / S_2. Very weakly calcareous. PS_2 and CS_2 foliated. Black graphitic fracture surfaces. Moderately hard (silicified, weakly). Contains reddish-brown sphalerite laminae-bands (1-3mm wide) parallel S_2; 15% sphalerite, overall. Trace disseminated chalcopyrite along microfractures. White (kaolinite) fracture at low CA. Good core recovery, RQD. Sharp upper contact at CA 70°. Sharp lower contact at CA 80°.
L	6013	6015			4E4	→464 (100) 95:05
						Sphalerite-bearing pyritic massive sulphide containing 70% pyrite, 20% quartz, 5% sphalerite and 5% dolomite. Very weakly calcareous. Massive to PS_2 foliated - Brassy yellow fracture surfaces. Hard. Brassy yellow f.g. (subhedral-cubic) pyrite as masses and bands (1-4cm. wide) parallel S_2. Reddish-brown f.g. (subhedral?) sphalerite as bands (1-3cm wide) parallel S_2. Off-white (creamy) f.g. anhedral patches (clots) and laminae parallel S_2. Very good core recovery. Good to fair RQD. Sharp upper contact at CA 80°.

DDH 91DY-05 (2 8)

CURRAGH RESOURCES INC.

Lithologic Log

Date: Feb. 19/91 Logged By: D. Halliwell

Code	From	To	Recov.	No.	Unit	Description
1	10 14	16 20	22 24	26 28	30 34	35
						Locally contains 5-10% off-white, non-calcareous, soft, dense barite clots.
L	6015	6037			5A6	→5B26
						Dark grey to black graphitic phyllite with off-white quartz-dolomite siltstone laminae/beds following S_1, S_2/S_2. Very weakly calcareous. CS_2 and PS_2 foliated. Dark grey to black graphitic fracture surfaces. Moderately soft to soft. Pyrite masses and laminae/beds following S_1/S_2; 3% pyrite, overall. Good core recovery. Fair to poor RQD. Blocky to "poker-chippy" at 6016-6024. Sharp upper contact at CA 80°. Gradational lower contact parallel S_2.
L	6037	6044			5B4 6	1→4L01
						Light to medium grey phyllite with yellowish-green (quartz-sericite-chlorite alteration) tint and off-white quartz-dolomite siltstone laminae/beds following S_1, S_2/S_2. Very weakly calcareous. CS_2 and PS_2 foliated. Moderately hard (weakly silicified). Minor brecciated aligned clast-supported breccia defined by late quartz-dolomite veinlets at several CA angles. Very good core recovery. Good to fair RQD. Gradational upper contact parallel S_2. Sharp contact at CA 80°.
L	6044	6046			4H84	(4H0) 60:40
						Magnetite-sphalerite-bearing massive pyrrhotitic sulphide contains 70% pyrrhotite, 10% magnetite, 10% quartz, 5% sphalerite, 5% dolomite. Very weakly calcareous. Massive to PS_2 foliated. Bronze-brown fg. (subhedral?) pyrrhotite as masses.