Environment Canada
Laboratory Services
4195 Marine Drive
West Vancouver, B.C.
V7V 1N8 (604)926-7791

Lab Reference
870645

21:07 23-Oct-8

020472

FINAL REPORT

Identification: CURRAGH RESOURCES

Type of Sample: EF

Submitted by: CORNETT, DAN
DINA, WHITEHORSE
WATER RESOURCES
DINA
FED. GOVT

Logged in: 01-Sep-87 (15 samples)

Completed: 22-Oct-87 (952 results)

Charged to: 99-100
D. I. N. A. - WHITEHORSE

Analyzed for: GENERAL CHEM., NUTRIENTS, METALS
RESIDUES

Notes:

Checked by: [signature]

August 25 - 27 /87
INSPECTION

7276 - 7290

RESULTS FOR CURRAGH RESOURCES SAMPLES

28C-X4 28C-X5 28C-X11 28C-X12 28C-X

Parameter Analyzed		Units	7276 870645-001	7277 870645-002	7278 870645-003	7279 870645-004	7280 870645-0
ALKALINITY		mg/l	99.0	96.9	140	169	169
CHLORIDE		mg/l	61.7	46	2.8	1.1	2.3
CONDUCTIVITY		umho/cm	1080	1030	1230	780	1230
METALS/EXT.(WATER-ICP SCAN)	AL	mg/l	.26	.05	.09	.06	.07
	AS	mg/l	<.05	<.05	<.05	<.05	<.05
	B	mg/l	<.001	<.001	<.001	<.001	<.001
	BA	mg/l	.18	.107	.104	.082	.102
	BE	mg/l	<.001	<.001	<.001	<.001	<.001
	CA	mg/l	85.3	94.2	157	90.9	177
	CD	mg/l	.005	<.002	<.002	<.002	.004
	CO	mg/l	.055	.012	.017	.007	.028
	CR	mg/l	.008	<.005	<.005	<.005	<.005
	CU	mg/l	.163	.073	<.005	<.005	<.005
	FE	mg/l	1.89	.186	.962	.032	.92
	MG	mg/l	19.3	18.4	21.9	23.1	28.3
	MN	mg/l	1.09	1.3	3.72	.988	3.55
	MO	mg/l	.017	.013	.008	<.005	<.005
	NA	mg/l	108	98.8	69.3	30.4	65.6
	NI	mg/l	.09	.04	<.02	<.02	<.02
	P	mg/l	.09	.06	.08	.12	.08
	PB	mg/l	.43	.25	<.02	<.02	<.02
	SB	mg/l	<.05	<.05	<.05	<.05	<.05
	SE	mg/l	<.05	<.05	<.05	<.05	<.05
	SI	mg/l	1.6	1.5	4.6	3.6	4.5
	SN	mg/l	<.01	<.01	<.01	<.01	<.01
	SR	mg/l	.258	.273	.454	.311	.521
	TI	mg/l	.008	<.002	<.002	<.002	<.002
	V	mg/l	.013	.006	<.005	<.005	.006
	ZN	mg/l	.433	.213	.007	.011	.014
METALS/EXT: HARDNESS/CA+MG	HC	mg/l	293	311	483	322	558
METALS/EXT: HARDNESS/TOTAL	HT	mg/l	300	314	493	324	567
METALS/TOTAL(WATER-ICP)	AL	mg/l	.38	.09	.09	<.05	.07
	AS	mg/l	<.05	<.05	<.05	<.05	<.05
	B	mg/l	<.001	<.001	<.001	<.001	<.001
	BA	mg/l	.65	.11	.11	.088	.102
	BE	mg/l	<.001	<.001	<.001	<.001	<.001
	CA	mg/l	89.5	94.7	169	101	182
	CD	mg/l	<.002	<.002	<.002	<.002	<.002
	CO	mg/l	.113	.016	.029	<.005	.03
	CR	mg/l	.006	<.005	<.005	<.005	<.005
	CU	mg/l	.183	.074	<.005	<.005	<.005
	FE	mg/l	4.41	.202	1.04	.039	.97
	MG	mg/l	20.5	18.6	23.6	25.7	29.5
	MN	mg/l	1.13	1.29	3.91	1.07	3.6
	MO	mg/l	.028	.009	.013	<.005	<.005
	NA	mg/l	114	99.8	75	33.9	68.4
	NI	mg/l	.08	.02	<.02	<.02	<.02
	P	mg/l	.11	<.05	.09	.11	.08
	PB	mg/l	.43	.24	<.02	<.02	.03
	SB	mg/l	<.05	<.05	<.05	<.05	<.05
	SE	mg/l	<.05	<.05	<.05	<.05	<.05
	SI	mg/l	1.6	1.4	4.8	3.5	4.5

RESULTS FOR CURRAGH RESOURCES SAMPLES

Parameter Analyzed		Units	7276 870645-001 (X4)	7277 870645-002 (X5)	7278 870645-003 (X11)	7279 870645-004 (X12)	7280 870645-00 (X13)
METALS/TOTAL(WATER-ICP)	SN	mg/l	<.01	<.01	<.01	<.01	<.01
	SR	mg/l	.269	.27	.481	.34	.528
	TI	mg/l	.007	<.002	<.002	<.002	<.002
	V	mg/l	.006	<.005	<.005	<.005	<.005
	ZN	mg/l	.493	.213	.007	.009	.014
NITROGEN/AMMONIA		mg/l	.265	.391	.946	.181	.601
NITROGEN/NITRITE		mg/l	.041	.045	<.005	<.005	<.005
NITROGEN/NITRITE+NITRATE		mg/l	.374	.158	<.005	.04	.007
PH		Rel.U.	7.7	7.7	7.7	7.6	7.5
PHOSPHORUS/TOTAL		mg/l	.008	<.002	.004	.003	.003
RESIDUE/FILTERABLE		mg/l	809	772	967	563	989
RESIDUE/NON-FILTERABLE		mg/l	33	<5	5	<5	<5
SULPHATE		mg/l	310	330	500	230	510
TURBIDITY		FTU	6.8	0.4	3.8	0.1	4.8

RESULTS FOR CURRAGH RESOURCES SAMPLES

Parameter Analyzed		Units	7281 870645-006 (2BC-X1)	7282 870645-007 (2BC-X10)	7283 870645-008 (2BC-X22)	7284 870645-009 (Zone II (Pipe))	7285 870645-010 (Zone II (Pit))
ALKALINITY		mg/l	35.4	83.1	65.4	168	-
CHLORIDE		mg/l	5.2	<.5	<.5	4.6	-
CONDUCTIVITY		umho/cm	2050	185	530	2650	-
METALS/EXT.(WATER-ICP SCAN)	AL	mg/l	.45	.1	.57	.44	.13
	AS	mg/l	<.05	<.05	<.05	<.05	<.05
	B	mg/l	.038	<.001	<.001	.113	<.001
	BA	mg/l	.117	.06	.053	.045	.053
	BE	mg/l	<.001	<.001	<.001	<.001	<.001
	CA	mg/l	330	26.3	68.1	409	133
	CD	mg/l	.031	.003	<.002	.12	.026
	CO	mg/l	.652	.008	.014	2.16	.172
	CR	mg/l	<.005	<.005	<.005	<.005	<.005
	CU	mg/l	.016	<.005	<.005	.204	.025
	FE	mg/l	24.1	.18	.699	95.1	4.08
	MG	mg/l	102	6.3	18.6	128	47.2
	MN	mg/l	9.14	.018	.023	9.14	2.55
	MO	mg/l	.052	<.005	<.005	.211	<.005
	NA	mg/l	31.5	1.7	3.7	35.5	11.2
	NI	mg/l	.38	<.02	.02	.65	.16
	P	mg/l	.31	<.05	.06	.52	.1
	PB	mg/l	.45	<.02	<.02	.05	.04
	SB	mg/l	<.05	<.05	<.05	<.05	<.05
	SE	mg/l	<.05	<.05	<.05	.12	<.05
	SI	mg/l	4.6	3.4	7	6.9	4.7
	SN	mg/l	<.01	<.01	<.01	<.01	<.01
	SR	mg/l	1.69	.109	.202	2.41	.741
	TI	mg/l	.009	.002	.024	<.002	<.002
	V	mg/l	<.005	<.005	<.005	.007	<.005
	ZN	mg/l	55	<.002	4.1	83.2	21.4
METALS/EXT: HARDNESS/CA+MG	HC	mg/l	1240	91.6	247	1550	527
METALS/EXT: HARDNESS/TOTAL	HT	mg/l	1390	92.6	258	1870	574
METALS/TOTAL(WATER-ICP)	AL	mg/l	.54	.1	.85	.48	-
	AS	mg/l	<.05	<.05	<.05	<.05	-
	B	mg/l	.067	<.001	<.001	.093	-
	BA	mg/l	.279	.06	.054	.059	-
	BE	mg/l	<.001	<.001	<.001	<.001	-
	CA	mg/l	330	26.3	68.1	411	-
	CD	mg/l	.031	<.002	<.002	.121	-
	CO	mg/l	.705	<.005	.013	2.29	-
	CR	mg/l	<.005	<.005	<.005	<.005	-
	CU	mg/l	.022	<.005	<.005	.204	-
	FE	mg/l	24.3	.206	.883	95.9	-
	MG	mg/l	102	6.4	18.5	128	-
	MN	mg/l	9.15	.024	.021	9.45	-
	MO	mg/l	.057	<.005	.006	.224	-
	NA	mg/l	32.5	1.6	3.7	35.4	-
	NI	mg/l	.38	<.02	<.02	.67	-
	P	mg/l	.32	<.05	.08	.55	-
	PB	mg/l	.47	<.02	<.02	.06	-
	SB	mg/l	<.05	<.05	<.05	<.05	-
	SE	mg/l	.05	<.05	<.05	.13	-
	SI	mg/l	4.5	3.9	7.3	5.7	-

RESULTS FOR CURRAGH RESOURCES SAMPLES

Parameter Analyzed		Units	7281 870645-006 (X1)	7282 870645-007 (X10)	7283 870645-008 (X22)	7284 870645-009 (Zone II pipe)	7285 870645-01((Zone II p
METALS/TOTAL(WATER-ICP)	SN	mg/l	<.01	.04	<.01	<.01	-
	SR	mg/l	1.7	.11	.203	2.5	-
	TI	mg/l	.014	<.002	.035	<.002	-
	V	mg/l	<.005	<.005	<.005	<.005	-
	ZN	mg/l	56.1	.017	4.24	97.3	-
NITROGEN/AMMONIA		mg/l	1.56	<.005	.01	1.45	-
NITROGEN/NITRITE		mg/l	.26	<.005	<.005	.047	-
NITROGEN/NITRITE+NITRATE		mg/l	.794	.02	.295	.724	-
PH		Rel.U.	6.4	7.9	7.5	5.9	-
PHOSPHORUS/TOTAL		mg/l	.011	.004	.009	.013	-
RESIDUE/FILTERABLE		mg/l	2080	109	379	2760	-
RESIDUE/NON-FILTERABLE		mg/l	58	16	16	221	-
SULPHATE		mg/l	1200	10	180	1500	-
TURBIDITY		FTU	78	0.4	2.8	180	-

RESULTS FOR CURRAGH RESOURCES SAMPLES

2BC-X8 2BC-X23 2BC-X14 2BC-X 2 2BC-X

Parameter Analyzed		Units	7286 870645-011	7287 870645-012	7288 870645-013	7289 870645-014	7290 870645-01
ALKALINITY		mg/l	15.4	446	94.9	70.2	63.1
CHLORIDE		mg/l	<.5	14.1	8	<.5	.7
CONDUCTIVITY		umho/cm	39.5	2800	500	155	145
METALS/EXT.(WATER-ICP SCAN)	AL	mg/l	.1	.11	.08	.06	.06
	AS	mg/l	<.05	<.05	<.05	<.05	<.05
	B	mg/l	<.001	.015	<.001	<.001	<.001
	BA	mg/l	.031	.057	.079	.058	.046
	BE	mg/l	<.001	<.001	<.001	<.001	<.001
	CA	mg/l	4.4	471	56.9	22.3	20.7
	CD	mg/l	<.002	.007	<.002	<.002	<.002
	CO	mg/l	<.005	.153	<.005	<.005	<.005
	CR	mg/l	<.005	<.005	<.005	<.005	<.005
	CU	mg/l	<.005	<.005	.02	<.005	<.005
	FE	mg/l	.064	.169	.267	.171	.23
	MG	mg/l	.9	166	11.6	4.3	4.2
	MN	mg/l	.002	11.3	.687	.034	.019
	MO	mg/l	<.005	<.005	<.005	<.005	<.005
	NA	mg/l	1.8	34.1	30	1.8	1.3
	NI	mg/l	<.02	.32	<.02	<.02	<.02
	P	mg/l	<.05	.36	<.05	<.05	<.05
	PB	mg/l	<.02	.13	.07	<.02	<.02
	SB	mg/l	<.05	<.05	<.05	<.05	<.05
	SE	mg/l	<.05	<.05	<.05	<.05	.05
	SI	mg/l	5.6	6.1	3.7	4.4	2.6
	SN	mg/l	.02	<.01	<.01	<.01	.01
	SR	mg/l	.028	2.24	.193	.101	.103
	TI	mg/l	<.002	<.002	<.002	<.002	.003
	V	mg/l	<.005	<.005	<.005	<.005	<.005
	ZN	mg/l	<.002	26	.23	.036	.031
METALS/EXT: HARDNESS/CA+MG	HC	mg/l	14.8	1860	190	73.5	69.2
METALS/EXT: HARDNESS/TOTAL	HT	mg/l	15.5	1920	192	74.4	70.2
METALS/TOTAL(WATER-ICP)	AL	mg/l	.11	.14	.15	.12	.11
	AS	mg/l	<.05	.07	<.05	<.05	<.05
	B	mg/l	<.001	<.001	<.001	<.001	<.001
	BA	mg/l	.03	.061	.083	.058	.046
	BE	mg/l	<.001	<.001	<.001	<.001	<.001
	CA	mg/l	4.4	489	60.4	22.6	21.1
	CD	mg/l	<.002	.014	.002	<.002	<.002
	CO	mg/l	<.005	.151	.006	<.005	.007
	CR	mg/l	<.005	<.005	.007	<.005	.007
	CU	mg/l	<.005	.005	.027	<.005	.005
	FE	mg/l	.07	.191	.332	.192	.297
	MG	mg/l	.9	173	12.4	4.5	4.4
	MN	mg/l	.002	11.4	.717	.034	.02
	MO	mg/l	<.005	<.005	<.005	<.005	<.005
	NA	mg/l	1.8	35.7	31.7	1.9	1.3
	NI	mg/l	<.02	.33	<.02	<.02	<.02
	P	mg/l	<.05	.43	<.05	<.05	<.05
	PB	mg/l	<.02	.14	.07	<.02	.02
	SB	mg/l	<.05	<.05	<.05	<.05	<.05
	SE	mg/l	<.05	<.05	<.05	<.05	<.05
	SI	mg/l	6	6.6	3.6	4.2	2.7

RESULTS FOR CURRAGH RESOURCES SAMPLES

Parameter Analyzed		Units	7286 870645-011 (X8)	7287 870645-012 (X23)	7288 870645-013 (X14)	7289 870645-014 (X2)	7290 870645-01 (X3)
METALS/TOTAL(WATER-ICP)	SN	mg/l	.03	<.01	<.01	<.01	.01
	SR	mg/l	.028	2.29	.201	.1	.102
	TI	mg/l	.002	<.002	.007	<.002	.006
	V	mg/l	<.005	<.005	<.005	<.005	.011
	ZN	mg/l	.007	26.6	.277	.04	.046
NITROGEN/AMMONIA		mg/l	.007	.622	.196	.007	.005
NITROGEN/NITRITE		mg/l	<.005	.42	.01	<.005	<.005
NITROGEN/NITRITE+NITRATE		mg/l	.006	4.78	.091	.009	.006
PH		Rel.U.	7.1	6.9	7.8	7.6	7.8
PHOSPHORUS/TOTAL		mg/l	.007	.008	.003	.003	.005
RESIDUE/FILTERABLE		mg/l	41	2870	354	105	91
RESIDUE/NON-FILTERABLE		mg/l	<5	7	<5	<5	<5
SULPHATE		mg/l	4	1500	160	10	10
TURBIDITY		FTU	0.6	0.6	0.6	0.3	0.5