

Environment
CanadaEnvironnement
CanadaEnvironmental
ProtectionProtection de
l'environnement

Environmental Protection
225 - 308 Main Street
Whitehorse, Yukon
Y1A 2B5

Your file Votre référence

Our file Notre référence

1098 09 04

4780-37/A293-1

Mr. David Wright
Chief Assayer
Currag Resources Inc.
P. O. Box 1000
Faro, Yukon
Y0B 1K0

Dear Mr. Wright:

In reply to your letter dated August 7, 1987 please find enclosed a copy of the preliminary data for the Environmental Protection (E.P.) monitoring conducted during July 14 - 16.

Please be advised that the data has not been fully verified by the E. P. laboratory. However, we have reviewed the results and there does not appear to be any anomalies or obvious errors in the determinations. A final compliance assessment report will be prepared and a copy will be forwarded to your office.

Yours sincerely,

Ken Wile
Manager, Industrial Programs

KW/bs

encl.

Curragh Compliance Audit - July 13-17/87

Water Licence		Monitoring		CN		C - composite		Time span		Date		Time	Temp	D.O.	Cond	pH
Station	Sample #	Lab Id	Analysis*	G - grab	composite	July/87										
X - 5	2.1	1	X	C	14:00 hr	14	930								720	7.2
	2.2	2		G		14	1000	14	7.6						790	7.2
	2.3	3		G		14	1830	19	7.8						800	7.4
	2.4	4	X	C	14:00 hr	15	930									7.8
	2.5	5		G		15	1000	14.6	8						780	7.7
	2.6	6		G		15	1630	15	7.8						780	7.6
	2.7	7	X	C	15:30 hr	16	930									7.6
	2.8	8		G		16	945	14.5	7.1						780	7.7
	2.9	9		G		16	1320	15.5	8.4						800	7.5
X - 13	3.1	10	X	C	14:10 hr	14	910								496	6.8
	3.2	11		G		14	1430	5	8.7						740	6.8
	3.3	12		G		14	1800	5	5.4						800	7.25
	3.4	13	X	C	13:45 hr	15	900								850	7.2
	3.5	14		G		15	900	3.2	4.8						750	6.8
	3.6	15		G		15	1615	6	5						800	7.4
	3.7	16	X	C	14:30 hr	16	830								910	7.5
	3.8	17		G		16	845	3.5	4.7						750	6.6
	3.9	18		G		16	1305	8	5.4						900	7.5
X - 3	1.1	19		G		14	1100	11	9						60	7.55
	1.2	20		G		14	1530	13	8.8						60	7.8
	1.3	21	X	C	14:15 hr	15	1045								65	7.4
	1.4	22		G		15	1310	12.6	9.1						60	7.6
	1.5	23		C	16:30 hr	16	1030								60	7.5
	~~1.6~~	~~24~~		~~G~~		~~16~~										
Sewage lagoon	4.1	25		G		15										
X - 16A	4.2	26		G		16		4.2							220	
X - 16B	4.3	27		G		16		4							145	

*Analyses done on filtered water and sediments.

*Preliminary data, un-verified
by the EPS laboratory!*

WATER QUALITY DATA FOR COMPOSITES TAKEN AT CURRAGH RESOURCES

Aug 6 27

		X-5 Station 2			X-13 Station 3			X-3 Station 1		
		Day 1	Day 2	Day 3	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
ALKALINITY	mo/l	82.5	84.5	84.5	144	144	141		37.6	37.6
CONDUCTIVITY	umho/cm	1000	980	980	1280	1280	1280		90	88
CYANATE										
CYANIDE	mo/l	0.03	0.04	0.03	0.03		0.03			
CYANIDE/WEAK ACID DISSOC.	mo/l	0.03	0.03	0.03	0.03		0.03			
METALS/EXT: HARDNESS/CA+MG	HC mo/l	401	388	394	705	684	718	46.9	46.4	
METALS/EXT: HARDNESS/TOTAL	HT mo/l	404	392	398	716	695	730	47.3	46.8	
METALS/TOTAL (WATER-ICP)	XW									
NITROGEN/AMMONIA	mo/l	0.433	4.414	0.416	0.537	0.534	0.507	0.005	0.005	
PH	Rel.U.	7.8	8	7.9	8.3	8.3	8.3	7.8	7.8	
RESIDUE/FILTERABLE		<inc>	<inc>	<inc>						
RESIDUE/NON-FILTERABLE		<inc>	<inc>	<inc>						
SULPHATE		<inc>	<inc>	<inc>						
THIOCYANATE	mo/l	13.6	15	15	0.5		0.5			

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WATER QUALITY DATA FOR GRABS TAKEN AT CURRAGH RESOURCES

		Station 2						Station 3					
		Day 1	Day 2			Day 3		Day 1	Day 2			Day 3	
ALKALINITY	! mo/l !	82.5	86.1	84.5	84.5	84.4	84.5	147	144	144	144	149	146
CONDUCTIVITY	! umho/cm !	1000	980	980	980	980	980	1280	1280	1280	1280	1230	1250
CYANATE	! !												
CYANIDE	! mo/l !							0.03					
CYANIDE/WEAK ACID DISSOC.	! mo/l !							0.03					
METALS/EXT: HARDNESS/CA+MG	HC ! mo/l !	393	395	391	386	390	390	641	686	698	704	696	681
METALS/EXT: HARDNESS/TOTAL	HT ! mo/l !	397	399	395	390	394	394	650	697	709	716	707	692
METALS/TOTAL (WATER-ICP)	XW ! !												
NITROGEN/AMMONIA	! mo/l !	0.43	0.431	0.424	0.432	0.408	0.423	0.5	0.563	0.513	0.523	0.464	0.452
PH	! Rel.U. !	7.9	7.8	7.8	7.8	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.2
RESIDUE/FILTERABLE	! !	<inc> !	<inc> !	<inc> !									
RESIDUE/NON-FILTERABLE	! !	<inc> !	<inc> !	<inc> !									
SULPHATE	! !	<inc> !	<inc> !	<inc> !									
THIOCYANATE	! mo/l !							0.5					

WATER QUALITY DATA FOR GRABS TAKEN AT CURRAGH RESOURCES

X-3

		Station 1				
		Day 1	Day 2		X - 16A	X - 16B
ALKALINITY	! mo/l !	36.1	36.1	37.1	135	141
CONDUCTIVITY	! umho/cm !	85	85	88	400	295
CYANATE	! !					
CYANIDE	! mo/l !	0.03			0.03	
CYANIDE/WEAK ACID DISSOC.	! mo/l !	0.03				
METALS/EXT: HARDNESS/CA+MG	HC ! mo/l !	43.1	42.6	44.9	233	170
METALS/EXT: HARDNESS/TOTAL	HT ! mo/l !	43.4	43	45.2	234	171
METALS/TOTAL (WATER-ICP)	XW ! !					
NITROGEN/AMMONIA	! mo/l !	0.005	0.005	0.005	0.005	0.005
PH	! Rel.U. !	7.8	7.8	7.9	8.2	8.3
RESIDUE/FILTERABLE	! !	<inc> !	<inc> !	<inc> !		
RESIDUE/NON-FILTERABLE	! !	<inc> !	<inc> !	<inc> !		
SULPHATE	! !	<inc> !	<inc> !	<inc> !		
THIOCYANATE	! mo/l !	0.5				

WATER QUALITY DATA FOR COMPOSITES TAKEN AT CURRAGH RESOURCES

				X-5			X-13			X-3		
				Station 2			Station 3			Station 1		
				Day 1	Day 2	Day 3	Day 1	Day 2	Day 3	Day 1	Day 2	Day 3
METALS/EXT. (WATER-ICP SCAN)	AL : mg/l :			0.05	0.07	0.05	0.07	0.06	0.13		0.05	0.05
	AS : mg/l :			0.05	0.05	0.05	0.05	0.05	0.05		0.05	0.05
	B : mg/l :			0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001
	BA : mg/l :			0.08	0.084	0.09	0.098	0.095	0.102		0.024	0.025
	BE : mg/l :			0.001	0.001	0.001	0.001	0.001	0.001		0.001	0.001
	CA : mg/l :			127	123	122	227	217	231		14.3	14.1
	CD : mg/l :			0.002	0.002	0.002	0.002	0.002	0.002		0.002	0.002
	CO : mg/l :			0.008	0.008	0.005	0.012	0.013	0.015		0.005	0.005
	CR : mg/l :			0.005	0.005	0.005	0.005	0.005	0.005		0.005	0.005
	CU : mg/l :			0.027	0.041	0.016	0.005	0.005	0.005		0.005	0.005
	FE : mg/l :			0.107	0.125	0.105	1.16	1.09	1.31		0.127	0.127
	MG : mg/l :			20.6	19.7	21.6	33.6	34.7	34		2.7	2.7
	MN : mg/l :			1.4	1.43	1.44	4.41	4.24	4.52		0.016	0.014
	MO : mg/l :			0.017	0.013	0.015	0.005	0.006	0.007		0.005	0.005
	NA : mg/l :			71.1	53.8	83.8	41.5	57.2	39.7		1.2	1.2
	NI : mg/l :			0.02	0.02	0.02	0.02	0.02	0.02		0.02	0.02
	P : mg/l :			0.1	0.12	0.05	0.13	0.09	0.15		0.05	0.05
	PB : mg/l :			0.12	0.16	0.16	0.02	0.02	0.02		0.02	0.02
	SB : mg/l :			0.05	0.05	0.05	0.05	0.05	0.05		0.05	0.05
	SE : mg/l :			0.05	0.05	0.05	0.05	0.05	0.05		0.05	0.05
	SI : mg/l :			1.5	1.4	1.5	5	5	5.1		3.3	3.4
	SN : mg/l :			0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01
	SR : mg/l :			0.306	0.3	0.312	0.625	0.611	0.637		0.078	0.078
	TI : mg/l :			0.003	0.003	0.002	0.002	0.002	0.003		0.003	0.003
	V : mg/l :			0.005	0.005	0.005	0.005	0.005	0.005		0.005	0.005
	ZN : mg/l :			0.135	0.165	0.171	0.009	0.007	0.01		0.008	0.003

WATER QUALITY DATA FOR GRABS TAKEN AT CURRAGH RESOURCES

		K-5 Station 2						X-13 Station 3					
		Day 1	Day 2		Day 3			Day 1	Day 2		Day 3		
METALS/EXT. (WATER-ICP SCAN)	AL : mg/l :	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.1	0.11
	AS : mg/l :	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	B : mg/l :	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.001
	BA : mg/l :	0.102	0.107	0.101	0.106	0.1	0.099	0.089	0.102	0.102	0.102	0.1	0.099
	BE : mg/l :	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
	CA : mg/l :	125	125	123	120	121	122	203	219	219	221	223	219
	CD : mg/l :	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	CO : mg/l :	0.01	0.008	0.007	0.005	0.005	0.005	0.011	0.014	0.011	0.016	0.016	0.015
	CR : mg/l :	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
	CU : mg/l :	0.014	0.012	0.011	0.01	0.009	0.011	0.005	0.005	0.005	0.005	0.005	0.005
	FE : mg/l :	0.131	0.128	0.125	0.121	0.116	0.122	1.04	1.1	1.13	1.13	1.09	1.16
	MG : mg/l :	19.5	19.8	20.4	21.3	21.2	20.6	32.7	34.1	36.7	36.9	33.9	32.7
	MN : mg/l :	1.39	1.47	1.42	1.39	1.42	1.45	3.95	4.21	4.35	4.53	4.45	4.22
	MO : mg/l :	0.018	0.014	0.011	0.017	0.013	0.015	0.005	0.008	0.005	0.009	0.005	0.009
	NA : mg/l :	56.7	51.6	64	85.7	79.2	71.9	48.9	42.1	57.7	60.8	36.3	37.8
	NI : mg/l :	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	P : mg/l :	0.11	0.11	0.08	0.05	0.06	0.06	0.08	0.12	0.1	0.1	0.16	0.14
	PB : mg/l :	0.19	0.23	0.19	0.18	0.18	0.19	0.02	0.02	0.02	0.02	0.02	0.02
	SB : mg/l :	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	SE : mg/l :	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	SI : mg/l :	1.4	1.4	1.4	1.5	1.5	1.5	4.7	4.9	5.2	5.3	5	4.9
	SN : mg/l :	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	SR : mg/l :	0.297	0.304	0.305	0.304	0.309	0.307	0.587	0.618	0.63	0.637	0.612	0.599
	TI : mg/l :	0.004	0.003	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.002	0.002
	V : mg/l :	0.008	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
	ZN : mg/l :	0.142	0.166	0.163	0.158	0.168	0.16	0.007	0.008	0.009	0.015	0.014	0.005

WATER QUALITY DATA FOR GRABS TAKEN AT CURRAGH RESOURCES

X-3

		Station 1			
		Day 1	Day 2	X - 16A	X - 16B
METALS/EXT. (WATER-ICP SCAN)	AL : mg/l :	0.05	0.05	0.06	0.05
	AS : mg/l :	0.05	0.05	0.05	0.05
	B : mg/l :	0.002	0.002	0.001	0.001
	BA : mg/l :	0.025	0.024	0.026	0.181
	BE : mg/l :	0.001	0.001	0.001	0.001
	CA : mg/l :	13.3	13.4	13.5	69
	CD : mg/l :	0.002	0.002	0.002	49
	CO : mg/l :	0.005	0.005	0.005	0.002
	CR : mg/l :	0.005	0.005	0.005	0.005
	CU : mg/l :	0.005	0.005	0.006	0.005
	FE : mg/l :	0.136	0.141	0.122	0.005
	MG : mg/l :	2.4	2.2	2.7	0.288
	MN : mg/l :	0.014	0.014	0.014	0.041
	HD : mg/l :	0.005	0.005	0.005	14.7
	NA : mg/l :	1	0.8	1.3	11.6
	NI : mg/l :	0.02	0.02	0.02	0.11
	P : mg/l :	0.05	0.05	0.05	0.001
	PB : mg/l :	0.02	0.02	0.02	0.005
	SB : mg/l :	0.05	0.05	0.05	0.006
	SE : mg/l :	0.05	0.05	0.05	1.9
	SI : mg/l :	3.2	3	3.4	2.1
	SN : mg/l :	0.01	0.01	0.01	0.02
	SR : mg/l :	0.074	0.073	0.077	0.02
	TI : mg/l :	0.002	0.002	0.004	0.08
	V : mg/l :	0.005	0.005	0.007	0.02
	ZN : mg/l :	0.003	0.002	0.002	0.05