IMWP TA-05

Young, John, NMENV

From: Shen, Hai, NMENV

Sent: Wednesday, June 14, 2006 10:57 AM

To: katzman@lanl.gov

Cc: Young, John, NMENV; Cobrain, Dave, NMENV; Bearzi, James, NMENV; Dale, Michael

Subject: Response to your request regarding the total Cr vs. hexavalent Cr sampling

Danny,

This email services as transmittal of information that NMED intends to approve the request regarding the use of the total chromium data as a replacement of hexavalent chromium concentrations in some wells. We still need a formal request letter from LANL for the final approval.

The request sounds reasonable based on our review of the findings in the comparison analysis of the pilot study data. We notice you are still going to do Cr(VI) measurements in selected wells in the coming sampling event. Also, we should mention to you that the filtered total Cr could be biased higher than Cr(VI) under certain conditions, although this may not be a public concern.

If you have any questions, please give me a call at 428-2539.

Hai

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Comparison of Hexavalent Chromium to Filtered Total Chromium

Location	Sample Type	Methods	Result (ug/L)	RPD to Cr(VI) (%)
R-1	Filtered (total) - GEL	ICPMS - 6020	4.5	0.00
	Cr(VI) Severn Trent - LA	IC - 7199	4.5	
R-11	Filtered (total)	ICPMS - 6020	28.1	-2.89
	Cr(VI) Severn Trent - LA	IC - 7199	27.3	
R-28	Filtered (field dup)	ICPMS - 6020	405.0	2.92
	Filtered (total)	ICPMS - 6020	413.0	0.96
	Cr(VI) Severn Trent - LA	IC - 7199	417.0	

Location	ANYL_METH_CODE	ANALYTE_CODE	STD_RESULT	STD_RESULT_UOM	Validation Flag	Validation Reason	Lab Qual	STD_MDL	Lab Sample Type	COC_ID	SAMPLE_ID	Filtered?
R1	EPA:200.8	Cr	5.20	ug/L				1	CS	WG-03717-EE	EF06040G01R01	Filtered
R1	EPA:200.8	Cr	5	ug/L				1	RE	WG-03717-EE	EF06040G01R01	Filtered
R-1	EPA:200.8	Cr	5	ug/L				1	REDP	WG-03717-EE	EF06040G01R01	Filtered
R-1	SW-846:6020	Cr	4.50	ug/L				1	CS	WG-03717-GE	GF06040G01R01	Filtered
R-1	SW-846:6020	Cr(VI)	9.80	ug/L				1	CS	WG-03717-GE	GF06040G01R01	Filtered
R-1	SW-846:7199	Cr(VI)	5.70	ug/L				1	CS	WG-03717-EE	EF06040G01R01	Filtered
R-1	SW-846:7199	Cr(VI)	5.40	ug/L				1	RE	WG-03717-EE	EF06040G01R01	Filtered
R-1	SW-846:7199	Cr(VI)	6	ug/L				1	REDP	WG-03717-EE	EF06040G01R01	Filtered
R-1	SW-846:7199	Cr(VI)	4.50	ug/L				0.05	CS	WG-03717-ST	SF06040G01R01	Filtered
R-1	EPA:200.8	Cr	5.80	ug/L				1	CS	WG-03717-EE	EU06040G01R01	
R-1	EPA:200.8	Cr	5.10	ug/L				1	RE	WG-03717-EE	EU06040G01R01	
R-1	EPA:200.8	Cr	5.30	ug/L				1	REDP	WG-03717-EE	EU06040G01R01	
R-1	SW-846:6020	Cr	5.30	ug/L				1	CS	WG-03717-GE	GU06040G01R01	
R-11	EPA:200.8	Cr	29.10	ug/L				1	CS	WG-03718-EE	EF06040G11R01	Filtered
R-11	EPA:200.8	Cr	27.60	ug/L				1	RE	WG-03718-EE	EF06040G11R01	Filtered
R-11	EPA:200.8	Cr	28.90	ug/L				1	REDP	WG-03718-EE	EF06040G11R01	Filtered
R-11	SW-846:6020	Cr	28.10	ug/L				1	CS	WG-03718-GE	GF06040G11R01	Filtered
R-11	SW-846:6020	Cr(VI)	22.60	ug/L				1	CS	WG-03718-GE	GF06040G11R01	Filtered
R-11	SW-846:7199	Cr(VI)	21.60	ug/L				1	CS	WG-03718-EE	EF06040G11R01	Filtered
R-11	SW-846:7199	Cr(VI)	22.10	ug/L				1	RE	WG-03718-EE	EF06040G11R01	Filtered
R-11	SW-846:7199	Cr(VI)	22.50	ug/L				1	REDP	WG-03718-EE	EF06040G11R01	Filtered
R-11	SW-846:7199	Cr(VI)	27.30	ug/L	J	IWQ1		0.25	CS	WG-03718-ST	SF06040G11R01	Filtered
R-11	EPA:200.8	Cr	24.80	ug/L				1	CS	WG-03718-EE	EU06040G11R01	
R-11	EPA:200.8	Cr	22	ug/L				1	RE	WG-03718-EE	EU06040G11R01	
R-11	EPA:200.8	Cr	24.50	ug/L				1	REDP	WG-03718-EE	EU06040G11R01	
R-11	SW-846:6020	Cr	25.20	ug/L				1	CS	WG-03718-GE	GU06040G11R01	
R-28	EPA:200.8	Cr	434	ug/L				1	CS	WG-03719-EE	EF06040G28R01	Filtered
R-28	EPA:200.8	Cr	416	ug/L				1	RE	WG-03719-EE	EF06040G28R01	Filtered
R-28	EPA:200.8	Cr	410	ug/L				1	REDP	WG-03719-EE	EF06040G28R01	Filtered
R-28	SW-846:6020	Cr	413	ug/L				1	CS	WG-03719-GE	GF06040G28R01	Filtered
R-28	SW-846:6020	Cr(VI)	380	ug/L				1	CS	WG-03719-GE	GF06040G28R01	Filtered
R-28	SW-846:6020	Cr	405	ug/L				1	CS	WG-03719-GE	GF06040G28R90	Filtered
R-28	SW-846:6020	Cr(VI)	376	ug/L				1	CS	WG-03719-GE	GF06040G28R90	Filtered
R-28	SW-846:7199	Cr(VI)	430	ug/L				1	CS	WG-03719-EE	EF06040G28R01	Filtered
R-28	SW-846:7199	Cr(VI)	415	ug/L				1	RE	WG-03719-EE	EF06040G28R01	Filtered
R-28	SW-846:7199	Cr(VI)	411	ug/L				1	REDP	WG-03719-EE	EF06040G28R01	Filtered
R-28	SW-846:7199	Cr(VI)	417	ug/L	J	IWQ1		1	CS	WG-03719-ST	SF06040G28R01	Filtered
R-28	EPA:200.8	Cr	428	ug/L				1	CS	WG-03719-EE	EU06040G28R01	
R-28	EPA:200.8	Cr	402	ug/L				1	RE	WG-03719-EE	EU06040G28R01	
R-28	EPA:200.8	Cr	407	ug/L				1	REDP	WG-03719-EE	EU06040G28R01	
R-28	SW-846:6020	Cr	398	ug/L				1	CS	WG-03719-GE	GU06040G28R01	
R-28	SW-846:6020	Cr	392	ug/L				1	CS	WG-03719-GE	GU06040G28R90	

COC_ID	SAMPLE_ID	ANYL_METH_CODE	ANALYTE_CODE	SYMBOL	STD_RESULT	STD_RESULT_UOM	CONCAT_FLAG_CODE	CONCAT_REASON_CODE	LAB_QUAL_CODE	STD_MDL	LAB_SAMPLE_TYPE_CODE
WG-03717-EE	EF06040G01R01	EPA:200.8	Cr		5.20	ug/L				1	CS
WG-03717-EE	EF06040G01R01	EPA:200.8	Cr		5	ug/L				1	RE
WG-03717-EE	EF06040G01R01	EPA:200.8	Cr		5	ug/L				1	REDP
WG-03717-EE	EF06040G01R01	SW-846:7199	Cr(VI)		5.70	ug/L				1	CS
WG-03717-EE	EF06040G01R01	SW-846:7199	Cr(VI)		5.40	ug/L				1	RE
WG-03717-EE	EF06040G01R01	SW-846:7199	Cr(VI)		6	ug/L				1	REDP
WG-03717-EE	EU06040G01R01	EPA:200.8	Cr		5.80	ug/L				1	CS
WG-03717-EE	EU06040G01R01	EPA:200.8	Cr		5.10	ug/L				1	RE
WG-03717-EE	EU06040G01R01	EPA:200.8	Cr		5.30	ug/L				1	REDP
WG-03717-GE	GF06040G01R01	SW-846:6020	Cr		4.50	ug/L				1	CS
WG-03717-GE	GF06040G01R01	SW-846:6020	Cr(VI)		9.80	ug/L				1	CS
WG-03717-GE	GU06040G01R01	SW-846:6020	Cr		5.30	ug/L				1	CS
WG-03717-ST	SF06040G01R01	SW-846:7199	Cr(VI)		4.50	ug/L				0.05	CS
WG-03718-EE	EF06040G11R01	EPA:200.8	Cr		29.10	ug/L				1	CS
WG-03718-EE	EF06040G11R01	EPA:200.8	Cr		27.60	ug/L				1	RE
WG-03718-EE	EF06040G11R01	EPA:200.8	Cr		28.90	ug/L				1	REDP
WG-03718-EE	EF06040G11R01	SW-846:7199	Cr(VI)		21.60	ug/L				1	CS
WG-03718-EE	EF06040G11R01	SW-846:7199	Cr(VI)		22.10	ug/L				1	RE
WG-03718-EE	EF06040G11R01	SW-846:7199	Cr(VI)		22.50	ug/L				1	REDP
WG-03718-EE	EU06040G11R01	EPA:200.8	Cr		24.80	ug/L				1	CS
WG-03718-EE	EU06040G11R01	EPA:200.8	Cr		22	ug/L				1	RE
WG-03718-EE	EU06040G11R01	EPA:200.8	Cr		24.50	ug/L				1	REDP
WG-03718-GE	GF06040G11R01	SW-846:6020	Cr		28.10	ug/L				1	CS
WG-03718-GE	GF06040G11R01	SW-846:6020	Cr(VI)		22.60	ug/L				1	CS
WG-03718-GE	GU06040G11R01	SW-846:6020	Cr		25.20	ug/L				1	CS
WG-03718-ST	SF06040G11R01	SW-846:7199	Cr(VI)		27.30	ug/L	J		IWQ1	0.25	CS
WG-03719-EE	EF06040G28R01	EPA:200.8	Cr		434	ug/L				1	CS
WG-03719-EE	EF06040G28R01	EPA:200.8	Cr		416	ug/L				1	RE
WG-03719-EE	EF06040G28R01	EPA:200.8	Cr		410	ug/L				1	REDP
WG-03719-EE	EF06040G28R01	SW-846:7199	Cr(VI)		430	ug/L				1	CS
WG-03719-EE	EF06040G28R01	SW-846:7199	Cr(VI)		415	ug/L				1	RE
WG-03719-EE	EF06040G28R01	SW-846:7199	Cr(VI)		411	ug/L				1	REDP
WG-03719-EE	EU06040G28R01	EPA:200.8	Cr		428	ug/L				1	CS
WG-03719-EE	EU06040G28R01	EPA:200.8	Cr		402	ug/L				1	RE
WG-03719-EE	EU06040G28R01	EPA:200.8	Cr		407	ug/L				1	REDP
WG-03719-GE	GF06040G28R01	SW-846:6020	Cr		413	ug/L				1	CS
WG-03719-GE	GF06040G28R01	SW-846:6020	Cr(VI)		380	ug/L				1	CS
WG-03719-GE	GF06040G28R90	SW-846:6020	Cr		405	ug/L				1	CS
WG-03719-GE	GF06040G28R90	SW-846:6020	Cr(VI)		376	ug/L				1	CS
WG-03719-GE	GU06040G28R01	SW-846:6020	Cr		398	ug/L				1	CS
WG-03719-GE	GU06040G28R9C	SW-846:6020	Cr		392	ug/L				1	CS
WG-03719-ST	SF06040G28R01	SW-846:7199	Cr(VI)		417	ug/L	J		IWQ1	1	CS