Table 3-12. Cr(VI) Concentrations in 116-K-2 Trench Area (K North Plume), 2011 to 2013

Well or Aquifer Tube Name	Current Well Use and P&T System[b]	Fall[a] 2011 Unfiltered Cr(VI)		Fall[a] 2012 Unfiltered Cr(VI)		Fall[a] 2013 Unfiltered Cr(VI)		Percent Change in Concentration (Negative = Decrease)	
		Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	2011 to 2012	2012 to 2013
199-K-19	P	10/27/2011	5	10/26/2012	6	11/22/2013	5.4	20	-10
199-K-20	C	10/10/2011	2 (U)	10/2/2012	2 (U)	10/17/2013	5.93	NC	197
199-K-21	P	10/11/2011	2 (U)	9/20/2012	16.7	10/17/2013	19.2	735	15
199-K-22	P	12/19/2011	52	10/31/2012	50.5	12/31/2013	56.8	-2.9	13
199-K-37	P	10/11/2011	16.2	10/26/2012	18.2	12/5/2013	22.5	12	23
199-K-113A	E/C-KR4	10/10/2011	9	10/25/2012	9.3	10/1/2013	9	3.3	NC
199-K-114A	E/C-KR4	11/22/2011	8	10/1/2012	4	10/1/2013	4	-50	NC
199-K-115A	E/C-KR4	11/1/2011 11/29/2011	17	10/25/2012	22.1	10/1/2013	41	30	86
199-K-116A	E/C-KR4	11/15/2011	13	10/1/2012	17	9/4/2013	9	31	-47
199-K-117A	C	9/28/2011	2 (U)	10/2/2012	2 (U)	10/17/2013	2 (U)	NC	NC
199-K-119A	P-KR4	12/20/2011	2.3 (B)	11/1/2012	5.2	12/4/2013	2.8	126	-46
199-K-125A	C	11/11/2011	3.7 (U)	10/26/2012	5.4	12/2/2013	9.7 (U)	46	80
199-K-129/K-112A	E/C-KR4	--	--	10/26/2012	3.7 (B)	11/6/2013	5	--	35
199-K-130	E/C-KX	12/7/2011	33	10/16/2012	17.3	11/21/2013	14	-48	-19
199-K-131	E/C-KX	10/4/2011 11/1/2011 12/7/2011	17	10/25/2012	11.5	11/21/2013	11	-32	NC

Table 3-12. Cr(VI) Concentrations in 116-K-2 Trench Area (K North Plume), 2011 to 2013

Well or Aquifer Tube Name	Current Well Use and P&T System[b]	Fall[a] 2011 Unfiltered Cr(VI)		Fall[a] 2012 Unfiltered Cr(VI)		Fall[a] 2013 Unfiltered Cr(VI)		Percent Change in Concentration (Negative = Decrease)	
		Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	2011 to 2012	2012 to 2013
699-78-62	M	--	--	--	--	11/12/2013	2 (U)	--	--
199-K-121A	I-KR4	2011 avg.	3.85	2012 avg.	2.55	2013 avg.	1	-34	-60
199-K-122A	I-KR4	2011 avg.	3.85	2012 avg.	2.55	2013 avg.	1	-34	-60
199-K-123A	I-KR4	2011 avg.	3.85	2012 avg.	2.55	2013 avg.	1	-34	-60
199-K-128	I-KR4	2011 avg.	3.85	2012 avg.	2.55	2013 avg.	1	-34	-60
199-K-143	I-KX	2011 avg.	3.85	2012 avg.	2.55	2013 avg.	1	-34	-60
199-K-146	E/C-KX	12/7/2011	19	10/25/2012	6.7	12/2/2013	7	-65	4
199-K-147	E/C-KX	12/7/2011	32	10/25/2012	16.5	11/4/2013	22	-48	33
199-K-148	E/C-KX	12/7/2011	31	10/25/2012	17.9	12/2/2013	29	-42	62
199-K-149	C-KX	12/19/2011	2 (U)	11/6/2012	5.3	--	--	--	--
199-K-150	C-KX	11/9/2011	3.7 (U)	12/19/2012	2 (U)	10/17/2013	2 (U)	NC	NC
199-K-151	P	10/26/2011	3.7 (U)	10/2/2012	4.4 (B)	11/12/2013	4.9	19	11
199-K-152	E/C-KX	9/15/2011	71.3	10/16/2012	57.4	11/12/2013	43.2	-19	-25
199-K-153	E-KX	11/1/2011 12/7/2011	23	10/25/2012	20.6	11/21/2013	92	-10	345
199-K-154	E-KX	11/1/2011 12/7/2011	72	10/25/2012	65.3	10/2/20123	60	-9.3	-8

Table 3-12. Cr(VI) Concentrations in 116-K-2 Trench Area (K North Plume), 2011 to 2013

Well or Aquifer Tube Name	Current Well Use and P&T System[b]	Fall[a] 2011 Unfiltered Cr(VI)		Fall[a] 2012 Unfiltered Cr(VI)		Fall[a] 2013 Unfiltered Cr(VI)		Percent Change in Concentration (Negative = Decrease)	
		Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	2011 to 2012	2012 to 2013
199-K-159	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-160	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-161	E/C-KX	12/7/2011	8	10/25/2012	7.3	11/4/2013	11	-8.8	51
199-K-163	E/C-KX	11/1/2011 12/7/2011	41	10/25/2012	26.8	10/2/2013	16	-35	-40
199-K-164	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-169	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-170	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-171	E/C-KX	11/1/2011 12/7/2011	41	10/25/2012	33.7	12/2/2013	33	-18	NC
199-K-172	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-179	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-180	I-KX	2011 avg.	3.38	2012 avg.	2.38	2013 avg.	0.6	-30	-75
199-K-182	E/C-KX	--	--	11/29/2012	66.6	11/20/2013	47.5	--	-29
199-K-193	RI/FS	9/28/2011	15.5	11/6/2012	19.4	11/22/2013	24.4	25	26
199-K-201	RI/FS	10/10/2011	118	9/20/2012	102	12/3/2013	81.2	-14	-20
199-N-16	P	10/12/2011	2 (U)	11/6/2012	2 (U)	--	--	NC	NC
199-N-71	P	--	--	11/7/2012	4 (B)	12/18/2013	4.2	--	NC

Table 3-12. Cr(VI) Concentrations in 116-K-2 Trench Area (K North Plume), 2011 to 2013

Well or Aquifer Tube Name	Current Well Use and P&T System[b]	Fall[a] 2011 Unfiltered Cr(VI)		Fall[a] 2012 Unfiltered Cr(VI)		Fall[a] 2013 Unfiltered Cr(VI)		Percent Change in Concentration (Negative = Decrease)	
		Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	2011 to 2012	2012 to 2013
Effluent annual avg. (KR4)	--	2011 avg.	3.85	2013 avg.	2.55	2013 Average	1	-34	-61
Effluent annual avg. (KX)	--	2011 avg.	3.38	2013 avg.	2.38	2013 Average	0.6	-30	-75
21-M	AT	9/26/2011	2 (U)	10/8/2012	2 (U)	9/25/2013	2 (U)	NC	NC
22-M/D	AT	--	--	10/9/2012	5	10/1/2013	6.2	--	24
26-D	AT	--	--	10/11/2012	4.4 (B)	10/2/2013	2.2	--	-50
C6251	AT	9/26/2011	8.9	10/4/2012	2 (B)	9/19/2013	3.9	-78	95
C6252	AT	9/26/2011	23	10/4/2012	12.5	9/19/2013	8.3	-46	-34
C6253	AT	9/26/2011	30.7	10/4/2012	12.2	9/19/2013	7.6	-60	-38
C6254	AT	9/26/2011	2 (U)	10/8/2012	2 (U)	9/25/2013	2 (U)	NC	NC
C6255	AT	9/26/2011	3.3 (B)	10/8/2012	9.4	9/25/2013	7.9	185	-16
C6256	AT	9/26/2011	13	10/8/2012	17.2	9/25/2013	12.1	32	-30
C6257	AT	--	--	10/8/2012	2 (U)	9/25/2013	2 (U)	--	NC
C6258	AT	9/9/2011	2 (U)	10/8/2012	2 (U)	9/25/2013	2 (U)	NC	NC
C6259	AT	9/9/2011	2 (U)	10/8/2012	2 (U)	9/25/2013	2 (U)	NC	NC
C6260	AT	--	--	10/9/2012	2 (U)	10/1/2013	2 (U)	--	NC
C6263	AT	--	--	10/11/2012	3.8 (B)	10/2/2013	3.9	--	3

Table 3-12. Cr(VI) Concentrations in 116-K-2 Trench Area (K North Plume), 2011 to 2013

Well or Aquifer Tube Name	Current Well Use and P&T System[b]	Fall[a] 2011 Unfiltered Cr(VI)		Fall[a] 2012 Unfiltered Cr(VI)		Fall[a] 2013 Unfiltered Cr(VI)		Percent Change in Concentration (Negative = Decrease)	
		Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	Date Collected	Unfiltered Concentration (µg/L)	2011 to 2012	2012 to 2013
C6264	AT	--	--	10/11/2012	3 (B)	10/2/2013	3.5	--	17
C6265	AT	--	--	10/11/2012	4.9 (B)	10/2/2013	4.6	--	-6
DK-04-2	AT	--	--	10/30/2012	2 (U)	10/2/2013	2 (U)	--	NC
AT-K-4-M	AT	--	--	10/9/2012	2 (U)	10/1/2013	2 (U)	--	NC
AT-K-5-D	AT	--	--	10/9/2012	8.8	10/3/2013	7.8	--	11
AT-K-6-M	AT	--	--	10/11/2012	2 (U)	10/2/2013	2 (U)	--	NC

Note: The percent change in concentration is calculated using the following formula: ([Cr(VI)] year 2 – [Cr(VI)]year 1) / [Cr(VI)] year 1). Decreases in concentration are reported as negative values. Increases in concentration are reported as positive values. Where values are reported as nondetects (i.e., "U"-qualified data), the indicated detection limit was used as the value.

Aquifer tube nomenclature regarding relative depth: D = deepest and M = middle.

The average (avg.) results for injection wells are Cr(VI) concentrations from treated effluent.

Laboratory qualifiers: U = nondetect (shown with detection limit), B = detected above instrument or method detection limit but below contract-required detection limit, and N = spiked sample recovery not within control limits.

a. Fall represents the period from September 1 to December 31 for the specified calendar year. The maximum concentration reported during this period is listed.

b. Well use: C = compliance, E = extraction, I = injection, M = monitoring, P = performance, AT = aquifer tube, E/C-KR4 = KR4 extraction/compliance, E/C-KX = KX extraction/compliance.

RI/FS = remedial investigation/feasibility study

-- = sample was not collected or analysis was not performed

Cr(VI) = hexavalent chromium

NC = no change in concentration; not calculated because results are both nondetect

P&T = pump-and-treat