APPENDIX E

BIGGS STUDY AREA

WATER QUALITY DATA

DRAFT

APPENDIX E: BIGGS STUDY AREA WATER QUALITY DATA

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E 1: Butte Creek, upstream near Nelson Road (520BUT902)

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen	pH	Water Temperature	Turbidity	Specific Conductivity	*E. coli*	Ammonia as N	Boron	Chloride	Fluoride	Perchlorate	Sodium	Sulfate	Total Dissolved Solids
	mg/L		°C	ntu	µS/cm	MPN	mg/L	µg/L	mg/L					
4/19/2012	14.9	7.74	11.9	1.9	89			< 50.0				3		
5/9/2012	9.5	7.80	16.5	3.6	87									
5/24/2012	11.1	7.74	15.6	6.0	117			< 50.0				8		
6/7/2012	10.0	7.73	15.5	2.1	101									
6/26/2012	9.0	7.71	17.7	3.5	137			30				4		
7/12/2012	8.6	7.85	20.2	3.3	137									
7/26/2012	8.3	7.83	19.9	5.0	143			< 50.0				4		
8/13/2012	8.0	7.53	20.3	3.1	153	25.9								
8/29/2012	9.2	7.64	16.3	4.2	155	42.8		< 50.0				5		
9/12/2012	7.7	7.61	19.1	3.2	171	43.2								
9/26/2012	9.4	7.78	16.8	3.7	117	52.0	< 1.0	< 50.0	1.0	< 0.10	< 4.0	4	< 2.0	76
10/11/2012	9.7	7.88	15.3	3.0	105	52.1								
10/30/2012	11.1	7.81	12.9	2.6	104		< 1.0	30	1.0			4	2.2	72
11/15/2012	11.2	7.79	11.3	3.2	109	20.1								
11/27/2012	12.2	7.37	10.1	2.2	110		< 0.1	23	1.3			4	2.4	62
12/13/2012	13.4	8.20	7.4	4.1	95	28.5								
12/27/2012	12.6	7.95	7.0	19.6	92			17				3		
1/10/2013	14.6	8.14	5.8	3.2	102	25.6								
1/30/2013	13.4	7.80	5.7	3.0	96		< 0.1	19	1.3	< 0.10	< 2.0	3	< 2.0	58
2/14/2013	13.4	8.27	6.4	2.5	107	37.3								
2/26/2013	13.7	7.80	6.2	1.7	103		0.1	23	1.3			4	< 2.0	120
3/14/2013	11.2	8.35	10.5	2.3	92	19.9								
3/28/2013	11.5	7.81	11.0	2.4	81		< 0.1	23	1.3	< 0.10	< 2.0	3	< 2.0	57
4/25/2013	9.0	8.04	15.7	4.2	100	150.0	0.1		1.1			3	< 2.0	67
5/21/2013	8.7	7.63	18.3	3.0	118	73.3	< 0.1		1.2			4	2.7	84
6/20/2013	9.3	7.73	19.2	4.6	140	48.0	< 0.1		1.4	< 0.10	< 2.0	5	3.1	94
7/25/2013		7.96	21.6	6.5	214	31.5	0.1		1.7			6	5.2	130
8/29/2013	8.6	7.56	19.2	5.7	148	137.4	< 0.1		1.5			5	3.6	100
9/26/2013		7.73	15.9	3.9	119	21.6	< 0.1		1.7	< 0.10	< 2.0	4	2.6	82
Count	26	28	28	28	28	16	12	11	12	5	5	17	12	12
Min	7.7	7.37	5.7	1.7	81	19.9	< 0.1	17	1.0	< 0.10	< 2.0	3	< 2.0	57
Max	14.9	8.35	21.6	19.6	214	150.0	< 1.0	< 50.0	1.7	< 0.10	< 4.0	8	5.2	130
Median	10.0	7.80	15.6	3.2	109	40.1	< 0.1	30	1.3	< 0.10	< 2.0	4	2.3	79
Mean	10.7	7.82	14.1	4.0	119	50.6	0.1	18.9	1.3	< 0.10	0.6	4	2.0	84

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 1: Butte Creek, upstream near Nelson Road (520BUT902) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.14	< 0.15					95		< 10.0			
5/9/2012												
5/24/2012	0.17	< 0.15					127		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					110		< 1.0			
7/12/2012												
7/26/2012	< 0.11						146		< 10.0			
8/13/2012												
8/29/2012	0.12						133		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	28.8	< 10.0	140	< 5.0	< 1.0	16	< 1.0	< 1.0
10/11/2012												
10/30/2012	< 0.20			< 10.0					< 1.0			
11/15/2012												
11/27/2012	< 0.10			0.5					0.6			
12/13/2012												
12/27/2012	0.23								0.6			
1/10/2013												
1/30/2013	< 0.22		< 5.0	0.3	< 10.0	3.4	56	< 0.5	0.4	6	< 0.5	< 0.3
2/14/2013												
2/26/2013	< 0.22			0.4					0.4			
3/14/2013												
3/28/2013	< 0.22		< 5.0	0.3	< 10.0	< 1.0	100	< 0.5	0.3	5	< 0.5	< 0.3
4/25/2013				0.4					0.5			
5/21/2013				0.5					0.5			
6/20/2013			< 5.0	0.6	< 10.0	1.1	220	< 0.5	0.7	16	< 0.5	< 0.3
7/25/2013				1.0					1.1			
8/29/2013				0.6					0.7			
9/26/2013			< 5.0	0.6	15.0	< 1.0	210	< 0.5	0.6	16	< 0.5	< 0.3
Count	11	2	5	12	5	5	9	5	17	5	5	5
Min	< 0.10	< 0.15	< 5.0	0.3	< 10.0	< 1.0	56	< 0.5	0.3	5	< 0.5	< 0.25
Max	0.23	< 0.15	< 50.0	< 10.0	28.8	< 10.0	220	< 5.0	< 10.0	16	< 1.0	< 1.0
Median	0.16	< 0.15	< 5.0	0.5	< 10.0	1.1	130	< 0.5	0.7	16	< 0.5	< 0.25
Mean	0.07	< 0.15	3.5	0.8	10.3	1.5	134	0.4	0.9	12	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

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E 1: Butte Creek, upstream near Nelson Road (520BUT902) continued…

	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
Date	µg/L												
4/19/2012			11		7								
5/9/2012													
5/24/2012			199		24								
6/7/2012													
6/26/2012			150		25								
7/12/2012													
7/26/2012			188		37								
8/13/2012													
8/29/2012			194		33								
9/12/2012													
9/26/2012	< 5.0	< 5.0	160	< 1.0	19	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	< 0.5	0.5	73	< 0.1	9	< 0.2		< 1.0	< 1.0	< 1.0	< 1.0		< 5.0
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	0.6	0.5	120	< 0.1	7	< 0.2		< 1.0	< 1.0	< 1.0	< 1.0		< 5.0
4/25/2013													
5/21/2013													
6/20/2013	0.8	1.0	230	< 0.1	32	< 0.2		1.3	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/29/2013													
9/26/2013	0.7	0.9	230	0.3	19	< 0.2		1.2	< 1.0	< 0.3	< 1.0		2.4
Count	5	5	9	5	9	5	1	5	5	5	5	1	5
Min	< 0.5	0.5	11	< 0.1	7	< 0.2	< 5.0	< 1.0	< 1.0	0.3	< 1.0	< 10.0	2.4
Max	< 5.0	< 5.0	230	< 1.0	37	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
Median	0.7	0.9	174	< 0.1	21	< 0.2	< 5.0	1.2	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	0.7	0.8	156	0.1	21	< 0.2	< 5.0	0.9	1.2	0.4	< 1.0	< 10.0	1.5

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For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 1: Butte Creek, upstream near Nelson Road (520BUT902) continued…

Date	Organics														
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
4/19/2012															
5/9/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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Reporting Limit values vary between labs.

DRAFT

E 1: Butte Creek, upstream near Nelson Road (520BUT902) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
4/19/2012				< 0.5	< 0.5				< 0.5			< 0.5			
5/9/2012															
5/24/2012				< 0.5	< 0.5				< 0.5			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				< 0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				< 0.5			< 0.5			
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	4	4	1	1	1	4	1	1	4	1	1	1
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 1: Butte Creek, upstream near Nelson Road (520BUT902) continued…

	Organics															
	m,p-Xylene	MBAs	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
Date	µg/L	mg/L	µg/L													
4/19/2012		< 0.1														
5/9/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012																
10/11/2012																
10/30/2012																
11/15/2012																
11/27/2012																
12/13/2012																
12/27/2012																
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2/14/2013																
2/26/2013																
3/14/2013																
3/28/2013																
4/25/2013																
5/21/2013																
6/20/2013																
7/25/2013																
8/29/2013																
9/26/2013																
Count	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104)

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen mg/L	pH	Water Temperature °C	Turbidity ntu	Specific Conductivity µS/cm	*E. coli* MPN	Ammonia as N mg/L	Boron µg/L	Chloride mg/L	Fluoride mg/L	Perchlorate mg/L	Sodium mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
5/9/2012*	5.2	7.70	21.1	41.2	255									
5/24/2012	7.3	7.83	24.3	31.4	223			< 50.0				29		
6/7/2012	7.0	7.58	22.4	24.6	246									
6/26/2012	6.8	7.86	22.2	26.1	236			49				12		
7/12/2012	4.6	7.57	27.9	20.8	271									
7/26/2012	6.8	7.73	27.6	16.4	274			< 50.0				11		
8/13/2012	6.5	7.71	26.7	12.3	246	26.5								
8/29/2012	6.9	8.07	24.7	15.3	384	83.3		72				20		
9/12/2012	3.9	7.58	23.5	10.8	298	40.4								
9/26/2012	4.1	7.71	22.5	10.8	374	14.8	8.4	75	12.0	0.10	< 4.0	26	2.6	230
10/11/2012	8.4	7.90	20.4	13.2	341	38.3								
10/30/2012	6.2	7.86	17.3	18.1	288		1.0	61	9.6			18	5.9	170
11/15/2012	8.6	7.99	12.5	8.6	269	98.7								
11/27/2012	6.4	7.34	11.8	15.2	254		0.1	31	6.6			13	7.8	151
12/13/2012	8.2	7.71	10.1	19.8	207	60.5								
12/27/2012	10.0	7.78	8.0	46.5	131			25				7		
1/10/2013	11.5	8.10	7.4	36.1	238	37.3								
1/30/2013	10.1	7.80	10.2	25.0	269		< 0.1	35	5.2	0.10	< 2.0	15	5.3	160
2/14/2013	10.9	8.22	11.9	45.1	353	40.8								
2/26/2013	10.4	7.92	11.1	28.7	321		0.1	33	8.1			17	6.0	220
3/14/2013	8.1	8.20	17.5	17.3	322	21.3								
3/28/2013	8.5	7.79	16.6	16.6	279		< 0.1	33	4.5	< 0.10	< 2.0	15	4.0	160
4/25/2013	6.3	7.70	19.8	17.8	306	63.7	0.2		12.0			17	5.7	170
5/21/2013	6.1	7.50	22.9	12.1	261	146.7	< 0.1		6.6			13	9.4	160
6/20/2013	6.8	8.16	24.4	22.4	272	290.9	0.1		5.5	0.12	< 2.0	14	7.1	170
7/25/2013		8.36	29.7	13.9	283	47.3	0.1		4.6			11	8.7	170
8/29/2013	6.6	7.54	24.6	19.7	318	15.6	0.2		8.0			19	4.5	210
9/26/2013		7.70	19.9	22.5	332	9.6	0.2		11.0	< 0.10	< 2.0	17	4.5	200
Count	26	28	28	28	28	16	12	11	12	5	5	17	12	12
Min	3.9	7.34	7.4	8.6	131	9.6	< 0.1	25	4.5	< 0.10	< 2.0	7	2.6	151
Max	11.5	8.36	29.7	46.5	384	290.9	8.4	75	12.0	0.12	< 4.0	29	9.4	230
Median	6.9	7.79	20.8	18.9	273	40.6	0.1	49	7.3	0.10	< 2.0	15	5.8	170
Mean	7.4	7.82	19.2	21.7	280	64.7	0.9	40.0	7.8	0.07	0.6	16	6.0	181

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
5/9/2012*												
5/24/2012	0.17	< 0.15					1660		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					350		3.7			
7/12/2012												
7/26/2012	0.21						209		< 10.0			
8/13/2012												
8/29/2012	< 0.11						529		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	96.8	148.7	350	< 5.0	6.3	82	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.24			< 10.0					4.0			
11/15/2012												
11/27/2012	< 0.10			2.5					3.5			
12/13/2012												
12/27/2012	0.20								1.9			
1/10/2013												
1/30/2013	< 0.22		8.3	2.1	72.0	2.4	1200	< 0.5	3.0	59	< 0.5	< 0.3
2/14/2013												
2/26/2013	< 0.22			2.5					3.4			
3/14/2013												
3/28/2013	< 0.22		6.6	2.9	23.0	< 1.0	620	< 0.5	3.5	52	< 0.5	< 0.3
4/25/2013				5.3					5.8			
5/21/2013				3.3					3.7			
6/20/2013			9.3	4.2	19.0	< 1.0	860	< 0.5	4.8	64	< 0.5	< 0.3
7/25/2013				3.8					4.1			
8/29/2013	< 0.22			3.1					3.5			
9/26/2013			< 5.0	4.5	78.0	25.0	790	< 0.5	5.2	75	< 0.5	< 0.5
Count	12	2	5	12	5	5	9	5	17	5	5	5
Min	< 0.10	< 0.15	< 5.0	2.1	19.0	< 1.0	209	< 0.5	1.9	52	< 0.5	< 0.25
Max	0.24	< 0.15	< 50.0	< 10.0	96.8	148.7	1660	< 5.0	< 10.0	82	< 1.0	< 1.0
Median	0.21	< 0.15	8.3	3.6	72.0	2.4	620	< 0.5	4.0	64	< 0.5	< 0.25
Mean	0.09	< 0.15	7.6	4.2	57.8	35.3	730	0.4	3.8	66	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104) continued…

	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
Date	µg/L												
5/9/2012*													
5/24/2012			1680		104								
6/7/2012													
6/26/2012			670		69								
7/12/2012													
7/26/2012			321		59								
8/13/2012													
8/29/2012			692		81								
9/12/2012													
9/26/2012	< 5.0	< 5.0	1600	< 1.0	320	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	2.9	3.3	1700	0.5	74	< 0.2		< 1.0	< 1.0	< 1.0	< 1.0		< 5.0
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	1.8	2.0	860	0.4	91	< 0.2		3.1	< 1.0	< 1.0	< 1.0		< 5.0
4/25/2013													
5/21/2013													
6/20/2013	2.3	4.1	1100	0.4	89	< 0.2		5.2	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/29/2013													
9/26/2013	2.2	2.4	1500	0.5	430	< 0.2		4.9	< 2.0	< 0.5	< 2.0		3.9
Count	5	5	9	5	9	5	1	5	5	5	5	1	5
Min	1.8	2.0	321	0.4	59	< 0.2	< 5.0	< 1.0	< 1.0	< 0.5	< 1.0	< 10.0	3.9
Max	< 5.0	< 5.0	1700	< 1.0	430	< 0.2	< 5.0	5.2	< 20.0	< 5.0	< 2.0	< 10.0	< 5.0
Median	2.3	3.3	1100	0.5	89	< 0.2	< 5.0	4.9	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	2.1	2.6	1125	0.4	146	< 0.2	< 5.0	2.9	1.3	0.4	0.3	< 10.0	1.8

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104) continued…

Date	Organics														
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
5/9/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
5/9/2012															
5/24/2012				< 0.5	< 0.5				< 0.5			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				< 0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				< 0.5			< 0.5			
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	4	4	1	1	1	4	1	1	4	1	1	1
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 2: Butte Slough, downstream of effluent at Farmlan (520COL104) continued…

	Organics															
	m,p-Xylene	MBAs	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
Date	µg/L	mg/L	µg/L													
5/9/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012																
10/11/2012																
10/30/2012																
11/15/2012																
11/27/2012																
12/13/2012																
12/27/2012																
1/10/2013																
1/30/2013																
2/14/2013																
2/26/2013																
3/14/2013																
3/28/2013																
4/25/2013																
5/21/2013																
6/20/2013																
7/25/2013																
8/29/2013																
9/26/2013																
Count	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

*5/9/2012 data was sampled at Butte Slough near Meridian (water quality is expected to be comparable to Butte Slough at Farmlan)

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001)

	Field Data					Bacteria	General Chemistry							
	Dissolved Oxygen	pH	Water Temperature	Turbidity	Specific Conductivity	*E. coli*	Ammonia as N	Boron	Chloride	Fluoride	Perchlorate	Sodium	Sulfate	Total Dissolved Solids
Date	mg/L		°C	ntu	µS/cm	MPN	mg/L	µg/L	mg/L					
4/19/2012	9.2	8.56	20.7	28.7	533			< 50.0				22		
5/10/2012	7.5	7.82	20.3	175.7	386									
5/24/2012	8.9	7.69	18.8	39.5	174			< 50.0				15		
6/7/2012	7.3	7.68	20.8	17.8	215									
6/26/2012	7.7	7.54	20.5	20.5	202			32				7		
7/12/2012	6.6	7.41	25.6	16.5	218									
7/26/2012	6.7	7.33	23.4	17.0	241			< 50.0				7		
8/13/2012	7.2	7.46	23.4	17.7	225	325.5								
8/29/2012	7.6	7.36	19.7	18.3	212	126.7		< 50.0				7		
9/12/2012	8.8	7.54	18.6	16.5	203	109.5								
9/26/2012	8.4	7.64	19.3	17.7	199	238.2	< 1.0	< 50.0	1.8	< 0.10	< 4.0	7	3.9	92
10/11/2012	10.0	7.93	17.3	20.4	207	325.5								
10/30/2012	9.0	7.96	15.4	22.9	273		< 1.0	32	3.9			11	8.4	160
11/15/2012	9.6	7.49	11.7	18.0	185	131.4								
11/27/2012	6.8	7.32	11.7	43.3	268		0.1	27	4.3			12	8.9	144
12/13/2012	10.3	7.67	9.9	72.3	281	65.7								
12/27/2012	10.8	7.60	7.7	66.2	245			27				10		
1/10/2013	11.8	7.65	7.2	66.2	276	29.2								
1/30/2013	11.2	7.69	10.0	46.1	398		0.1	29	4.5	0.14	< 2.0	14	11.0	260
2/14/2013	10.2	7.81	11.7	95.0	463	38.8								
2/26/2013	11.5	8.17	12.2	53.7	525		0.1	36	6.5			20	19.0	340
3/14/2013	9.7	8.02	17.4	25.2	547	88.4								
3/28/2013	10.5	8.16	16.8	29.6	521		0.1	43	6.2	0.12	< 2.0	20	16.0	310
4/25/2013	6.7	7.60	18.4	62.9	162	307.6	0.2		2.1			7	4.9	100
5/21/2013	7.7	7.55	21.2	8.8	229	325.5	< 0.1		2.6			8	6.9	140
6/20/2013	7.5	7.49	22.1	13.8	222	139.6	< 0.1		3.0	0.11	< 2.0	7	5.5	130
7/25/2013		7.98	25.7	10.1	242	95.9	0.1		2.6			8	6.8	140
8/29/2013	7.2	7.39	20.5	20.3	214	218.7	0.2		2.1			8	3.9	140
9/26/2013		7.96	17.1	11.9	205	118.7	< 0.1		2.7	< 0.10	< 20.0	7	5.2	120
Count	27	29	29	29	29	16	12	12	12	5	5	18	12	12
Min	6.6	7.32	7.2	8.8	162	29.2	< 0.1	27	1.8	< 0.10	< 2.0	7	3.9	92
Max	11.8	8.56	25.7	175.7	547	325.5	< 1.0	< 50.0	6.5	0.14	< 20.0	22	19.0	340
Median	8.8	7.65	18.6	20.5	229	129.1	0.1	40	2.9	0.11	< 2.0	8	6.9	140
Mean	8.8	7.71	17.4	37.0	285	167.8	0.1	24.0	3.5	0.08	1.5	11	8.4	173

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.29	< 0.15					1570		< 10.0			
5/10/2012												
5/24/2012	0.16	< 0.15					1080		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					1000		2.9			
7/12/2012												
7/26/2012	< 0.11						350		< 10.0			
8/13/2012												
8/29/2012	0.12						526		< 10.0			
9/12/2012												
9/26/2012	0.12		< 50.0	< 10.0	38.1	17.1	650	< 5.0	2.3	45	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.34			< 10.0					3.2			
11/15/2012												
11/27/2012	< 0.10			3.4					4.4			
12/13/2012												
12/27/2012	0.52								4.0			
1/10/2013												
1/30/2013	0.53		5.0	4.5	28.0	< 1.0	2700	< 0.5	5.8	120	< 0.5	< 0.25
2/14/2013												
2/26/2013	0.55			6.4					7.0			
3/14/2013												
3/28/2013	0.26		< 5.0	8.0	5.3	4.0	1200	< 0.5	8.2	110	< 0.5	< 0.25
4/25/2013				2.4					3.2			
5/21/2013				2.7					2.8			
6/20/2013			10.0	2.8	23.0	3.9	410	< 0.5	3.3	66	< 0.5	< 0.25
7/25/2013				2.8					3.2			
8/29/2013				1.7					2.1			
9/26/2013			< 5.0	2.3	24.0	< 1.0	510	< 0.5	2.3	43	< 0.5	< 0.25
Count	12	3	5	12	5	5	10	5	18	5	5	5
Min	< 0.10	< 0.15	< 5.0	1.7	5.3	< 1.0	350	< 0.5	2.1	43	< 0.5	< 0.25
Max	0.55	< 0.15	< 50.0	< 10.0	38.1	17.1	2700	< 5.0	< 10.0	120	< 1.0	< 1.0
Median	0.21	< 0.15	5.0	3.1	24.0	3.9	825	< 0.5	3.7	66	< 0.5	< 0.25
Mean	0.25	< 0.15	6.0	3.5	23.7	5.1	1000	0.4	3.6	77	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001) continued…

	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
Date	µg/L												
4/19/2012			1280		278								
5/10/2012													
5/24/2012			1060		143								
6/7/2012													
6/26/2012			1400		100								
7/12/2012													
7/26/2012			421		97								
8/13/2012													
8/29/2012			732		77								
9/12/2012													
9/26/2012	< 5.0	< 5.0	860	< 1.0	74	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	6.0	5.3	2900	0.9	150	< 0.2		7.8	< 1.0	< 1.0	< 1.0		7.2
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	3.8	3.4	1300	0.7	250	< 0.2		4.5	< 1.0	< 1.0	< 1.0		5.3
4/25/2013													
5/21/2013													
6/20/2013	2.0	3.9	800	0.3	80	< 0.2		4.3	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/29/2013													
9/26/2013	1.6	1.5	580	0.3	51	< 0.2		2.3	< 1.0	< 0.3	< 1.0		2.7
Count	5	5	10	5	10	5	1	5	5	5	5	1	5
Min	1.6	1.5	421	0.3	51	< 0.2	< 5.0	2.3	< 1.0	< 0.3	< 1.0	10.0	2.7
Max	6.0	5.3	2900	< 1.0	278	< 0.2	< 5.0	7.8	< 20.0	< 5.0	< 1.0	10.0	7.2
Median	3.8	3.9	960	0.7	99	< 0.2	< 5.0	4.5	< 1.0	< 1.0	< 1.0	10.0	< 5.0
Mean	2.9	3.1	1133	0.5	130	< 0.2	< 5.0	4.0	1.2	0.4	< 1.0	10.0	3.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001) continued…

Date	Organics														
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
4/19/2012															
5/10/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
4/19/2012				< 0.5	< 0.5				< 0.5			< 0.5			
5/10/2012															
5/24/2012				< 0.5	< 0.5				< 0.5			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				< 0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				< 0.5			< 0.5			
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	5	5	1	1	1	5	1	1	5	1	1	1
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 3: Main Drainage Canal (C Main Drain), downstream of effluent (520BUT001) continued…

	Organics															
	m,p-Xylene	MBAs	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
Date	µg/L	mg/L	µg/L													
4/19/2012		< 0.1														
5/10/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012																
10/11/2012																
10/30/2012																
11/15/2012																
11/27/2012																
12/13/2012																
12/27/2012																
1/10/2013																
1/30/2013																
2/14/2013																
2/26/2013																
3/14/2013																
3/28/2013																
4/25/2013																
5/21/2013																
6/20/2013																
7/25/2013																
8/29/2013																
9/26/2013																
Count	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
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DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002)

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen mg/L	pH	Water Temperature °C	Turbidity ntu	Specific Conductivity µS/cm	*E. coli* MPN	Ammonia as N mg/L	Boron µg/L	Chloride mg/L	Fluoride mg/L	Perchlorate mg/L	Sodium mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
4/19/2012	10.9	8.34	19.6	34.2	232			< 50.0				10		
5/10/2012	8.5	8.05	19.3	25.4	412									
5/24/2012	7.8	7.64	20.1	18.8	172			< 50.0				17		
6/7/2012	7.8	7.81	21.0	11.2	212									
6/26/2012	7.0	7.63	20.9	7.9	165			< 20.0				7		
7/12/2012	3.0	7.16	27.2	4.9	208									
7/26/2012	5.1	7.22	25.2	5.5	197			< 50.0				7		
8/13/2012	4.7	7.28	25.1	5.5	193	35.5								
8/29/2012	5.9	7.34	21.0	6.8	184	19.9		< 50.0				7		
9/12/2012	6.7	7.46	19.8	7.3	161	31.8								
9/26/2012	5.6	7.56	19.9	7.1	231	10.9	< 1.0	< 50.0	2.8	0.13	< 4.0	11	4.6	120
10/11/2012	7.6	7.72	16.9	1.8	460	14.5								
10/30/2012	8.2	7.83	15.0	2.7	457		3.9	37	5.1			21	15.0	280
11/15/2012	8.8	7.52	11.9	14.6	219	137.6								
11/27/2012	6.9	7.33	11.4	11.6	203		0.1	20	5.4			9	8.0	129
12/13/2012	12.3	7.61	9.3	57.9	194	69.1								
12/27/2012	11.9	7.80	7.4	85.4	109			14				5		
1/10/2013	13.9	7.84	6.8	41.0	176	44.3								
1/30/2013	11.2	7.78	9.1	45.4	233		< 0.1	18	3.7	0.10	< 2.0	11	6.0	160
2/14/2013	11.5	7.90	10.0	56.0	280	63.1								
2/26/2013	11.0	7.92	9.2	92.0	279		0.1	16	5.8			13	9.1	240
3/14/2013	9.0	8.04	16.4	16.8	384	63.1								
3/28/2013	9.0	7.95	15.7	20.6	392		< 0.1	23	4.6	0.11	< 10.0	17	12.0	240
4/25/2013	7.7	7.65	17.2	32.1	164	88.0	0.2		2.0			7	6.0	99
5/21/2013	7.0	7.40	21.0	7.7	195	33.2	< 0.1		3.2			9	8.7	130
6/20/2013	6.6	7.41	21.9	4.7	203	37.9	< 0.1		2.2	0.12	< 2.0	9	6.3	130
7/25/2013		7.45	26.2	4.8	203	83.9	< 0.1		2.6			7	5.8	120
8/29/2013	5.2	7.29	21.5	10.1	198	23.3	0.1		2.1			9	3.4	130
9/26/2013		7.86	16.1	5.4	288	44.1	< 0.1		4.9	< 0.10	< 2.0	12	8.2	170
Count	27	29	29	29	29	16	12	12	12	5	5	18	12	12
Min	3.0	7.16	6.8	1.8	109	10.9	< 0.1	14	2.0	< 0.10	< 2.0	5	3.4	99
Max	13.9	8.34	27.2	92.0	460	137.6	3.9	< 50.0	5.8	0.13	< 10.0	21	15.0	280
Median	7.8	7.64	19.3	11.2	203	41.0	< 0.1	30	3.5	0.11	< 2.0	9	7.2	130
Mean	8.2	7.65	17.3	22.2	242	50.0	0.4	16.3	3.7	0.11	1.0	10	7.8	162

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DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.15	< 0.15					1740		< 10.0			
5/10/2012												
5/24/2012	0.11	< 0.15					927		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					210		1.0			
7/12/2012												
7/26/2012	< 0.11						174		< 10.0			
8/13/2012												
8/29/2012	< 0.11						208		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	121.5	13.3	110	< 5.0	1.0	90	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.25			< 10.0					4.9			
11/15/2012												
11/27/2012	< 0.10			1.8					2.2			
12/13/2012												
12/27/2012	0.29								1.6			
1/10/2013												
1/30/2013	< 0.22		18.0	1.6	240.0	1.6	1700	< 0.5	2.8	110	< 0.5	< 0.25
2/14/2013												
2/26/2013	0.22			1.6					3.4			
3/14/2013												
3/28/2013	< 0.22		5.7	3.0	20.0	15.0	670	< 0.5	3.2	120	< 0.5	< 0.25
4/25/2013				1.4					1.8			
5/21/2013				1.5					1.8			
6/20/2013			9.2	1.8	46.0	5.7	190	< 0.5	2.1	72	< 0.5	< 0.25
7/25/2013				1.7					2.0			
8/29/2013				1.0					1.3			
9/26/2013			< 5.0	1.9	58.0	3.3	180	< 0.5	2.0	82	< 0.5	< 0.25
Count	12	3	5	12	5	5	10	5	18	5	5	5
Min	< 0.10	< 0.15	< 5.0	1.0	20.0	1.6	110	< 0.5	1.0	72	< 0.5	< 0.25
Max	0.29	< 0.15	< 50.0	< 10.0	240.0	15.0	1740	< 5.0	< 10.0	120	< 1.0	< 1.0
Median	0.13	< 0.15	9.2	1.8	58.0	5.7	209	< 0.5	2.2	90	< 0.5	< 0.25
Mean	0.10	< 0.15	9.3	1.9	97.1	7.8	611	0.4	2.3	95	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002) continued…

Date	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
	µg/L												
4/19/2012			1790		138								
5/10/2012													
5/24/2012			990		58								
6/7/2012													
6/26/2012			610		30								
7/12/2012													
7/26/2012			366		44								
8/13/2012													
8/29/2012			526		17								
9/12/2012													
9/26/2012	< 5.0	< 5.0	480	< 1.0	25	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	4.0	6.0	3500	0.9	150	< 0.2		7.7	< 1.0	< 1.0	< 1.0		5.9
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	2.0	2.6	980	0.4	200	< 0.2		3.7	< 1.0	< 1.0	< 1.0		< 5.0
4/25/2013													
5/21/2013													
6/20/2013	0.6	3.1	350	0.1	30	< 0.2		3.3	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/29/2013													
9/26/2013	0.6	1.2	380	0.1	44	< 0.2		2.1	< 1.0	< 0.3	< 1.0		1.8
Count	5	5	10	5	10	5	1	5	5	5	5	1	5
Min	0.6	1.2	350	0.1	17	< 0.2	< 5.0	2.1	< 1.0	< 0.3	< 1.0	< 10.0	1.8
Max	< 5.0	6.0	3500	< 1.0	200	< 0.2	< 5.0	7.7	< 20.0	< 5.0	< 1.0	< 10.0	5.9
Median	2.0	3.1	568	0.4	44	< 0.2	< 5.0	3.7	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	1.7	2.8	997	0.4	74	< 0.2	< 5.0	3.6	1.2	0.4	< 1.0	< 10.0	2.3

NOTE: Values reported as <##, < Reporting Limit was used.
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For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002) continued…

Date	Organics														
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
4/19/2012															
5/10/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
4/19/2012				< 0.5	< 0.5				< 0.5			< 0.5			
5/10/2012															
5/24/2012				< 0.5	< 0.5				< 0.5			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				< 0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				< 0.5			< 0.5			
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/25/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/29/2013															
9/26/2013															
Count	1	1	1	5	5	1	1	1	5	1	1	5	1	1	1
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 4: Cherokee Canal, upstream of effluent (520BUT002) continued…

	Organics															
	m,p-Xylene	MBAs	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
Date	µg/L	mg/L	µg/L													
4/19/2012		< 0.1														
5/10/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012																
10/11/2012																
10/30/2012																
11/15/2012																
11/27/2012																
12/13/2012																
12/27/2012																
1/10/2013																
1/30/2013																
2/14/2013																
2/26/2013																
3/14/2013																
3/28/2013																
4/25/2013																
5/21/2013																
6/20/2013																
7/25/2013																
8/29/2013																
9/26/2013																
Count	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
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Reporting Limit values vary between labs.

DRAFT

E 5: Biggs Effluent

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen mg/L	pH	Water Temperature °C	Turbidity ntu	Specific Conductivity µS/cm	*E. coli* MPN	Ammonia as N mg/L	Boron µg/L	Chloride mg/L	Fluoride mg/L	Perchlorate mg/L	Sodium mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
4/19/2012	8.0	7.60	16.8	12.6	240			89				46		
5/7/2012		7.50	18.9	8.2	370									
5/24/2012	8.1	7.56	18.7	6.1	414			98				153		
6/7/2012	8.2	7.59	20.1	23.9	869									
6/26/2012	7.4	7.38	19.5	53.8	807		4.9	140	69.0	< 0.10		69	35.0	510
7/12/2012	7.0	7.31	24.7	16.0	839									
7/26/2012	6.1	7.44	22.9	29.0	837			115				67		
8/13/2012	9.9	7.30	24.0	23.9	827	1119.9								
8/29/2012	7.9	7.37	21.1	46.2	900	14.8		117				83		
9/12/2012	6.8	7.33	20.4	59.2	863	4.1								
9/26/2012	9.2	7.47	19.7	38.0	809	> 2419.6	12.0	100	52.0	0.12	< 4.0	61	30.0	420
10/11/2012	10.6	7.30	17.2	44.4	895	35.0								
10/30/2012	8.9	7.30	15.5	97.7	842		11.0	110	68.0			75	24.0	490
11/15/2012	8.6	7.19	11.9	84.5	814	7.5								
11/27/2012	8.3	7.34	12.5	50.0	370		12.6	85	42.1			48	14.3	368
12/13/2012	8.3	7.35	11.3	27.8	684	121.1								
12/27/2012	10.5	7.31	9.8	7.0	637			87				35		
1/10/2013	8.5	7.50	9.0	12.8	667	33.2								
1/30/2013	10.3	7.30	10.7	17.1	677		5.4	82	32.0	0.14	< 10.0	45	20.0	410
2/14/2013	9.0	7.34	10.7	18.8	645	579.4								
2/26/2013	6.5	7.46	9.8	19.0	671		6.1	84	28.0			44	18.0	430
3/14/2013	6.7	7.53	14.6	31.6	678	46.7								
3/28/2013	6.7	7.40	14.2	36.3	702		7.4	94	40.0	0.13	< 10.0	48	8.5	420
4/10/2013		7.40	14.4											
4/25/2013	5.4	7.12	16.7	67.3	796	< 1.0	9.5		51.0			60	12.0	450
5/8/2013		7.50												
5/21/2013	6.5	7.15	20.1	62.4	757	9.6	8.8		51.0			58	12.0	460
6/20/2013	7.3	7.39	21.4	95.4	793	2.0	12.0		48.0	0.15	< 40.0	59	16.0	460
7/25/2013		7.08	25.7	30.4	819	325.5	14.0		57.0			59	12.0	460
8/6/2013		7.30		39.0										
8/29/2013	8.9	7.58	22.9	66.3	823	< 1.0	14.0		63.0			66	14.0	520
9/10/2013		7.50		32.0										
9/26/2013		7.54	18.5	38.1	900	< 1.0	13.0		92.0	0.10	< 20.0	81	36.0	510
Count	26	33	30	31	29	16	13	12	13	6	5	18	13	13
Min	5.4	7.08	9.0	6.1	240	< 1.0	4.9	82	28.0	< 0.10	< 4.0	35	8.5	368
Max	10.6	7.60	25.7	97.7	900	> 2419.6	14.0	140	92.0	0.15	< 40.0	153	36.0	520
Median	8.2	7.38	17.8	32.0	796	24.0	11.0	96	51.0	0.13	< 10.0	60	16.0	460
Mean	8.1	7.39	17.1	38.5	722	295.1	10.1	100.1	53.3	0.11	4.2	64	19.4	454

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E 5: Biggs Effluent continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.14	< 0.15					< 50.0		< 10.0			
5/7/2012												
5/24/2012	0.13	< 0.15					< 50.0		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					11.0	< 1.0	3.2	82		< 0.2
7/12/2012												
7/26/2012	< 0.11						< 50.0		< 10.0			
8/13/2012												
8/29/2012	0.11						< 50.0		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	44.2	18.4	< 50.0	< 5.0	2.9	78	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.28			< 10.0					3.8			
11/15/2012												
11/27/2012	< 0.10			2.6					2.6			
12/13/2012												
12/27/2012	0.25								3.6			
1/10/2013												
1/30/2013	< 0.22		5.4	3.4	75.0	25.0	12.0	< 0.5	4.2	79	< 0.5	< 0.25
2/14/2013												
2/26/2013	< 0.44			3.1					3.4			
3/14/2013												
3/28/2013	0.28		< 5.0	2.9	67.0	3.1	9.8	< 0.5	2.9	74	< 0.5	< 0.25
4/10/2013												
4/25/2013				4.2					3.5			
5/8/2013												
5/21/2013				3.6					3.8			
6/20/2013			21.0	3.7	33.0	17.0	18.0	< 0.5	4.2	81	< 0.5	< 0.25
7/25/2013				4.6					4.6			
8/6/2013												
8/29/2013				3.3					3.0			
9/10/2013												
9/26/2013			7.3	3.1	35.0	14.0	13.0	< 0.5	2.9	70	< 0.5	< 0.25
Count	12	3	5	12	5	5	10	6	18	6	5	6
Min	< 0.10	< 0.15	< 5.0	2.6	33.0	3.1	9.8	< 0.5	2.6	70	< 0.5	< 0.2
Max	0.44	< 0.15	< 50.0	< 10.0	75.0	25.0	< 50.0	< 5.0	< 10.0	82	< 1.0	< 1.0
Median	0.14	< 0.15	7.3	3.5	44.2	17.0	34.0	< 0.5	3.7	79	< 0.5	< 0.25
Mean	0.11	< 0.15	9.5	3.3	50.8	15.5	12.6	0.3	3.3	77	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

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Reporting Limit values vary between labs.

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E 5: Biggs Effluent continued…

Date	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
	µg/L												
4/19/2012			553		32								
5/7/2012													
5/24/2012			42		18								
6/7/2012													
6/26/2012	2.2	2.3	160	< 0.5	28			2.0	< 1.0	< 1.0	< 1.0		< 5.0
7/12/2012													
7/26/2012			42		22								
8/13/2012													
8/29/2012			54		32								
9/12/2012													
9/26/2012	< 5.0	< 5.0	57	< 1.0	19	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	5.7
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	2.0	2.8	990	< 0.1	37	< 0.2		1.9	< 1.0	< 1.0	< 1.0		< 5.0
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	1.8	1.8	120	< 0.1	17	< 0.2		1.1	< 1.0	< 1.0	< 1.0		< 5.0
4/10/2013													
4/25/2013													
5/8/2013													
5/21/2013													
6/20/2013	2.0	2.8	57	< 0.1	19	< 0.2		1.6	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/6/2013													
8/29/2013													
9/10/2013													
9/26/2013	1.3	1.3	53	< 0.1	17	< 0.2		1.4	< 1.0	< 0.3	< 1.0		2.9
Count	6	6	10	6	10	5	1	6	6	6	6	1	6
Min	1.3	1.3	42	< 0.1	17	< 0.2	< 5.0	1.1	< 1.0	< 0.3	< 1.0	< 10.0	2.9
Max	< 5.0	< 5.0	990	< 1.0	37	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	5.7
Median	2.0	2.6	57	< 0.1	21	< 0.2	< 5.0	1.8	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	1.8	2.0	213	0.1	24	< 0.2	< 5.0	1.5	1.0	0.4	< 1.0	< 10.0	2.3

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E 5: Biggs Effluent continued…

	Organics																	
Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	2,3,7,8-TCDD (Dioxin)	2,4,5-TP (Silvex)
	µg/L															mg/L	µg/L
4/19/2012																	
5/7/2012																	
5/24/2012																	
6/7/2012																	
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.5	< 0.5
7/12/2012																	
7/26/2012																	
8/13/2012																	
8/29/2012																	
9/12/2012																	
9/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
10/11/2012																	
10/30/2012																	
11/15/2012																	
11/27/2012																	
12/13/2012																	
12/27/2012																	
1/10/2013																	
1/30/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5		
2/14/2013																	
2/26/2013																	
3/14/2013																	
3/28/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5		
4/10/2013																	
4/25/2013																	
5/8/2013																	
5/21/2013																	
6/20/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5		
7/25/2013																	
8/6/2013																	
8/29/2013																	
9/10/2013																	
9/26/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5		
Count	6	6	6	6	6	6	6	6	6	6	6	3	6	6	6	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5								< 0.5		< 0.5	< 0.5	< 5.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

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For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

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E 5: Biggs Effluent continued…

Date	Organics																
	2,4-D	2,4-DB	2,4-Dimethylphenol	2-Chlorophenol	2-Methylnaphthalene	4,4'-DDD	4,4'-DDE	4,4'-DDT	Acenaphthene	Acrolein	Acrylonitrile	Aldrin	alpha-BHC	Anthracene	Atrazine	Benzene	Benzo (a) anthracene
	µg/L																
4/19/2012																	
5/7/2012																	
5/24/2012																	
6/7/2012																	
6/26/2012	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.05	< 0.05	< 0.05	< 5.0	< 10.0	< 5.0	< 0.05	< 0.05	< 5.0	< 0.5	< 0.5	< 5.0
7/12/2012																	
7/26/2012																	
8/13/2012																	
8/29/2012																	
9/12/2012																	
9/26/2012										< 10.0	< 5.0					< 0.5	
10/11/2012																	
10/30/2012																	
11/15/2012																	
11/27/2012																	
12/13/2012																	
12/27/2012																	
1/10/2013																	
1/30/2013																< 0.5	
2/14/2013																	
2/26/2013																	
3/14/2013																	
3/28/2013																< 0.5	
4/10/2013																	
4/25/2013																	
5/8/2013																	
5/21/2013																	
6/20/2013																< 0.5	
7/25/2013																	
8/6/2013																	
8/29/2013																	
9/10/2013																	
9/26/2013																< 0.5	
Count	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	6	1
Min	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.05	< 0.05	< 0.05	< 5.0	< 10.0	< 5.0	< 0.05	< 0.05	< 5.0	< 0.5	< 0.5	< 5.0
Max	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.05	< 0.05	< 0.05	< 5.0	< 10.0	< 5.0	< 0.05	< 0.05	< 5.0	< 0.5	< 0.5	< 5.0
Median	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.05	< 0.05	< 0.05	< 5.0	< 10.0	< 5.0	< 0.05	< 0.05	< 5.0	< 0.5	< 0.5	< 5.0
Mean	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.05	< 0.05	< 0.05	< 5.0	< 10.0	< 5.0	< 0.05	< 0.05	< 5.0	< 0.5	< 0.5	< 5.0

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 5: Biggs Effluent continued…

Date	Organics																
	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	beta-BHC	Bis(2-chloroethyl) ether	Bis(2-ethylhexyl) phthalate	Bromodichloromethane	Bromoform	Carbaryl	Carbofuran	Carbon tetrachloride	Chlordane (tech)	Chlorobenzene	Chloroethane	Chloroform	Chlorpyrifos	Chrysene
	µg/L																
4/19/2012							< 0.5	< 0.5							0.6		
5/7/2012																	
5/24/2012							< 0.5	< 0.5							1.9		
6/7/2012																	
6/26/2012	< 5.0	< 5.0	< 5.0	< 0.05	< 5.0	< 5.0	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.2	< 5.0
7/12/2012																	
7/26/2012							< 0.5	< 0.5							4.4		
8/13/2012																	
8/29/2012							< 0.5	< 0.5							6.1		
9/12/2012																	
9/26/2012							< 0.5	< 0.5			< 0.5		< 0.5	< 0.5	1.1		
10/11/2012																	
10/30/2012																	
11/15/2012																	
11/27/2012																	
12/13/2012																	
12/27/2012																	
1/10/2013																	
1/30/2013							< 0.5	< 0.5			< 0.5		< 0.5	< 0.5	< 0.5		
2/14/2013																	
2/26/2013																	
3/14/2013																	
3/28/2013							< 0.5	< 0.5			< 0.5		< 0.5	< 0.5	1.2		
4/10/2013																	
4/25/2013																	
5/8/2013																	
5/21/2013																	
6/20/2013							< 0.5	< 0.5			< 0.5		< 0.5	< 0.5	1.0		
7/25/2013																	
8/6/2013																	
8/29/2013																	
9/10/2013																	
9/26/2013							< 0.5	< 0.5			< 0.5		< 0.5	< 0.5	1.0		
Count	1	1	1	1	1	1	10	10	1	1	6	1	6	6	10	1	1
Min	< 5.0	< 5.0	< 5.0	< 0.05	< 5.0	< 5.0	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5	< 0.1	< 0.5	< 0.5	< 0.5	< 0.2	< 5.0
Max	< 5.0	< 5.0	< 5.0	< 0.05	< 5.0	5.0	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5	< 0.1	< 0.5	< 0.5	6.1	< 0.2	< 5.0
Median	< 5.0	< 5.0	< 5.0	< 0.05	< 5.0	5.0	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5	< 0.1	< 0.5	< 0.5	1.1	< 0.2	< 5.0
Mean	< 5.0	< 5.0	< 5.0	< 0.05	< 5.0	5.0	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5	< 0.1	< 0.5	< 0.5	1.8	< 0.2	< 5.0

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 5: Biggs Effluent continued…

Date	Organics																	
	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dalapon	Diazinon	Dibromochloromethane	Dicamba	Dieldrin	Dinoseb	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin	Endrin aldehyde	Ethylbenzene	Fluoranthene	Fluorene	Heptachlor epoxide	Hexachlorobutadiene
	µg/L																	
4/19/2012					< 0.5													
5/7/2012																		
5/24/2012					< 0.5													
6/7/2012																		
6/26/2012	< 0.5	< 0.5	< 20.0	< 0.2	< 0.5	< 0.5	< 0.06	< 2.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 5.0	< 5.0	< 0.06	< 0.5
7/12/2012																		
7/26/2012					< 0.5													
8/13/2012																		
8/29/2012					< 0.5													
9/12/2012																		
9/26/2012	< 0.5	< 0.5			< 0.5									< 0.5				< 0.5
10/11/2012																		
10/30/2012																		
11/15/2012																		
11/27/2012																		
12/13/2012																		
12/27/2012																		
1/10/2013																		
1/30/2013	< 0.5	< 0.5			< 0.5									< 0.5				< 5.0
2/14/2013																		
2/26/2013																		
3/14/2013																		
3/28/2013	< 0.5	< 0.5			< 0.5									< 0.5				< 5.0
4/10/2013																		
4/25/2013																		
5/8/2013																		
5/21/2013																		
6/20/2013	< 0.5	< 0.5			< 0.5									< 0.5				< 5.0
7/25/2013																		
8/6/2013																		
8/29/2013																		
9/10/2013																		
9/26/2013	< 0.5	< 0.5			< 0.5									< 0.5				< 5.0
Count	6	6	1	1	10	1	1	1	1	1	1	1	1	6	1	1	1	6
Min	< 0.5	< 0.5	< 20.0	< 0.2	< 0.5	< 0.5	< 0.06	< 2.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 5.0	< 5.0	< 0.06	< 0.5
Max	< 0.5	< 0.5	< 20.0	< 0.2	< 0.5	< 0.5	< 0.06	< 2.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 5.0	< 5.0	< 0.06	< 5.0
Median	< 0.5	< 0.5	< 20.0	< 0.2	< 0.5	< 0.5	< 0.06	< 2.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 5.0	< 5.0	< 0.06	< 5.0
Mean	< 0.5	< 0.5	< 20.0	< 0.2	< 0.5	< 0.5	< 0.06	< 2.5	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.5	< 5.0	< 5.0	< 0.06	

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 5: Biggs Effluent continued…

	Organics																	
	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Isopropylbenzene	m,p-Xylene	MBAs	Methoxychlor	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	Nitrobenzene	N-Nitrosodimethylamine	N-Nitrosodi-n-propylamine	n-Propylbenzene	o-Xylene	PCB-1016	PCB-1221
Date	µg/L					mg/L	µg/L											
4/19/2012						0.2												
5/7/2012																		
5/24/2012						< 0.1												
6/7/2012																		
6/26/2012	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	0.1	< 0.06	< 1.0	< 1.0	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																		
7/26/2012						< 0.1												
8/13/2012																		
8/29/2012						0.2												
9/12/2012																		
9/26/2012				< 0.5	< 0.5			< 1.0	< 1.0	< 0.5	< 0.5				< 0.5	< 0.5		
10/11/2012																		
10/30/2012																		
11/15/2012																		
11/27/2012																		
12/13/2012																		
12/27/2012																		
1/10/2013																		
1/30/2013				< 5.0	< 0.5				< 0.5	< 5.0	< 5.0				< 5.0	< 0.5		
2/14/2013																		
2/26/2013																		
3/14/2013																		
3/28/2013				< 5.0	< 0.5				< 0.5	< 5.0	< 5.0				< 5.0	< 0.5		
4/10/2013																		
4/25/2013																		
5/8/2013																		
5/21/2013																		
6/20/2013				< 5.0	< 0.5				< 0.5	< 5.0	< 5.0				< 5.0	< 0.5		
7/25/2013																		
8/6/2013																		
8/29/2013																		
9/10/2013																		
9/26/2013	< 50.0			< 5.0	< 0.5				< 0.5	< 5.0	< 5.0				< 5.0	< 0.5		
Count	2	1	1	6	6	5	1	2	6	6	6	1	1	1	6	6	1	1
Min	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.1	< 0.06	< 1.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 50.0	< 5.0	< 5.0	< 5.0	< 0.5	0.2	< 0.06	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
Median	27.5	< 5.0	< 5.0	< 5.0	< 0.5	0.1	< 0.06	< 1.0	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
Mean		< 5.0	< 5.0		< 0.5	0.1	< 0.06	< 1.0				< 5.0	< 5.0	< 5.0		< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 5: Biggs Effluent continued…

	Organics																	
Date	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	Pentachlorophenol	Pyrene	sec-butylbenzene	Simazine	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	Toxaphene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trifluralin	Vinyl chloride
	µg/L																	
4/19/2012																		
5/7/2012																		
5/24/2012																		
6/7/2012																		
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.56	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5
7/12/2012																		
7/26/2012																		
8/13/2012																		
8/29/2012																		
9/12/2012																		
9/26/2012								< 10.0		< 0.5	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5		< 0.5
10/11/2012																		
10/30/2012																		
11/15/2012																		
11/27/2012																		
12/13/2012																		
12/27/2012																		
1/10/2013																		
1/30/2013								< 5.0		< 5.0	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5		< 0.5
2/14/2013																		
2/26/2013																		
3/14/2013																		
3/28/2013								< 5.0		< 5.0	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5		< 0.5
4/10/2013																		
4/25/2013																		
5/8/2013																		
5/21/2013																		
6/20/2013								< 5.0		< 5.0	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5		< 0.5
7/25/2013																		
8/6/2013																		
8/29/2013																		
9/10/2013																		
9/26/2013								< 5.0		< 5.0	< 0.5	< 0.5		< 0.5	< 0.5	< 0.5		< 0.5
Count	1	1	1	1	1	1	1	6	1	6	6	6	1	6	6	6	1	6
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.56	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 10.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.56	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.56	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0		< 0.5		< 0.5	< 0.5	< 0.56	< 0.5	< 0.5	< 0.5	< 0.06	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003)

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen	pH	Water Temperature	Turbidity	Specific Conductivity	*E. coli*	Ammonia as N	Boron	Chloride	Fluoride	Perchlorate	Sodium	Sulfate	Total Dissolved Solids
	mg/L		°C	ntu	µS/cm	MPN	mg/L	µg/L	mg/L					
4/19/2012	8.9	7.83	17.6	12.1	629			58				35		
5/7/2012	7.7	7.50	18.9	8.2	370									
5/24/2012	6.7	7.71	18.7	24.8	248			< 50.0				40		
6/7/2012	4.9	7.67	19.5	12.2	351									
6/26/2012	8.0	7.72	18.6	10.2	142			29				6		
7/12/2012	3.3	7.39	22.8	10.1	231									
7/26/2012	4.5	7.20	21.6	16.8	244			< 50.0				12		
8/13/2012	3.9	7.20	22.3	21.0	297	387.3								
8/29/2012	5.9	7.29	17.7	15.1	224	72.7		< 50.0				11		
9/12/2012	7.3	7.58	17.4	23.0	250	27.5								
9/26/2012	6.5	7.54	18.6	21.5	409	920.8	3.0	50	15.0	< 0.10	< 4.0	24	12.0	220
10/11/2012	7.5	7.57	16.4	19.3	507	67.0								
10/30/2012	7.9	7.66	14.6	47.2	508		5.1	64	28.0			37	14.0	280
11/15/2012	9.3	7.73	10.8	9.6	192	52.8								
11/27/2012	8.0	7.16	12.7	59.4	305		1.8	29	8.4			14	7.5	145
12/13/2012	8.5	7.45	10.1	42.6	367	127.4								
12/27/2012	9.8	7.59	7.6	39.9	301			36				14		
1/10/2013	10.2	7.68	7.7	31.7	371	45.7								
1/30/2013	11.7	7.62	10.3	34.2	549		2.4	49	18.0	0.14	< 2.0	30	17.0	330
2/14/2013	9.6	7.59	9.9	74.6	513	196.8								
2/26/2013	9.9	7.65	9.2	10.8	622		3.9	64	21.0			36	17.0	440
3/14/2013	10.0	7.75	14.5	16.9	583	58.1								
3/28/2013	9.4	7.66	14.8	13.9	616		4.7	77	29.0	0.13	< 10.0	41	13.0	390
4/10/2013	9.5	7.00												
4/25/2013	6.8	7.45	15.4	29.0	278	1120.0	0.9		26.0			18	4.4	180
5/8/2013		7.00												
5/21/2013	6.3	7.63	18.5	8.0	160	410.6	0.7		4.2			7	4.8	110
6/20/2013	6.6	7.71	20.0	12.2	175	258.1	0.8		4.1	< 0.10	< 2.0	8	5.0	120
7/25/2013		7.60	24.0	25.1	193	67.0	0.8		4.6			9	6.7	120
8/6/2013				18.0										
8/13/2013	7.7	6.90												
8/29/2013	6.8	7.39	19.4	35.7	197	193.5	0.9		4.5			10	3.8	150
9/10/2013	8.4	6.90		16.0										
9/26/2013		7.75	15.0	13.0	451	129.6	3.0		25.0	25	< 2.0	28	14.0	270
Count	30	33	29	31	29	16	12	12	12	5	5	18	12	12
Min	3.3	6.90	7.6	8.0	142	27.5	0.7	29	4.1	< 0.10	< 2.0	6	3.8	110
Max	11.7	7.83	24.0	74.6	629	1120.0	5.1	77	29.0	25	< 10.0	41	17.0	440
Median	7.8	7.59	17.4	18.0	305	128.5	2.1	< 50.0	16.5	0.13	< 2.0	16	9.7	200
Mean	7.7	7.49	16.0	23.6	355	258.4	2.3	41.1	15.7	5.06	1.0	21	9.9	230

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.50	< 0.15					246		< 10.0			
5/7/2012												
5/24/2012	0.21	< 0.15					1000		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					310		1.3			
7/12/2012												
7/26/2012	< 0.11						409		< 10.0			
8/13/2012												
8/29/2012	0.13						418		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	24.4	60.8	350	< 5.0	2.4	66	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.32			< 10.0					3.0			
11/15/2012												
11/27/2012	0.10			2.4					3.8			
12/13/2012												
12/27/2012	0.63								2.7			
1/10/2013												
1/30/2013	0.66		< 5.0	3.2	41.0	1.5	1300	< 0.5	3.9	110	< 0.5	< 0.25
2/14/2013												
2/26/2013	0.60			3.3					3.5			
3/14/2013												
3/28/2013	0.41		< 5.0	3.8	39.0	29.0	120	< 0.5	3.7	91	< 0.5	< 0.25
4/10/2013												
4/25/2013				2.7					2.9			
5/8/2013												
5/21/2013				1.4					1.4			
6/20/2013			13.0	1.6	73.0	6.0	300	< 0.5	1.9	45	< 0.5	< 0.25
7/25/2013				1.6					2.1			
8/6/2013												
8/13/2013												
8/29/2013				1.2					1.4			
9/10/2013												
9/26/2013			< 5.0	2.6	22.0	220.0	460	< 0.5	2.8	71	< 0.5	< 0.25
Count	12	3	5	12	5	5	10	5	18	5	5	5
Min	< 0.10	< 0.15	< 5.0	1.2	22.0	1.5	120	< 0.5	1.3	45	< 0.5	< 0.25
Max	0.66	< 0.15	< 50.0	< 10.0	73.0	220.0	1300	< 5.0	< 10.0	110	< 1.0	< 1.0
Median	0.27	< 0.15	< 5.0	2.7	39.0	29.0	380	< 0.5	3.0	71	< 0.5	< 0.25
Mean	0.30	< 0.15	5.9	2.4	39.9	63.5	491	0.4	2.6	77	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003) continued…

	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
Date	µg/L												
4/19/2012			557		145								
5/7/2012													
5/24/2012			1030		184								
6/7/2012													
6/26/2012			510		56								
7/12/2012													
7/26/2012			731		141								
8/13/2012													
8/29/2012			860		64								
9/12/2012													
9/26/2012	< 5.0	< 5.0	440	< 1.0	88	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	4.0	4.9	1800	0.5	200	< 0.2		5.2	< 1.0	< 1.0	< 1.0		5.4
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	1.6	1.7	200	< 0.1	59	< 0.2		1.8	< 1.0	< 1.0	< 1.0		< 5.0
4/10/2013													
4/25/2013													
5/8/2013													
5/21/2013													
6/20/2013	1.2	3.1	470	0.2	38	< 0.2		4.2	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/6/2013													
8/13/2013													
8/29/2013													
9/10/2013													
9/26/2013	1.7	1.6	590	0.2	300	< 0.2		3.2	< 1.0	< 0.3	< 1.0		2.5
Count	5	5	10	5	10	5	1	5	5	5	5	1	5
Min	1.2	1.6	200	< 0.1	38	< 0.2	< 5.0	1.8	< 1.0	< 0.3	< 1.0	< 10.0	2.5
Max	< 5.0	< 5.0	1800	< 1.0	300	< 0.2	< 5.0	5.2	< 20.0	< 5.0	< 1.0	< 10.0	5.4
Median	1.7	3.1	574	0.2	115	< 0.2	< 5.0	4.2	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	2.0	2.5	719	0.2	127	< 0.2	< 5.0	3.1	1.2	0.4	< 1.0	< 10.0	2.3

NOTE: Values reported as <##, < Reporting Limit was used.
For *E. coli*, values reported as >2419.6 was used for evaluation.
For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003) continued…

Date	Organics															
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
4/19/2012															
5/7/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5
4/10/2013															
4/25/2013															
5/8/2013															
5/21/2013															
6/20/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5
7/25/2013															
8/6/2013															
8/13/2013															
8/29/2013															
9/10/2013															
9/26/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0		< 0.5	< 0.5	< 0.5		< 5.0	< 0.5	< 0.5
Count	6	6	6	6	6	6	6	5	6	6	6	2	6	6	6
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5								< 0.5		< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
4/19/2012				< 0.5	< 0.5				< 0.5			< 0.5			
5/7/2012															
5/24/2012				< 0.5	< 0.5				6.8			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				0.4			< 0.5			
9/12/2012															
9/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
4/10/2013															
4/25/2013															
5/8/2013															
5/21/2013															
6/20/2013			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
7/25/2013															
8/6/2013															
8/13/2013															
8/29/2013															
9/10/2013															
9/26/2013			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
Count	2	2	6	10	10	6	6	6	10	6	6	10	6	6	6
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6.8	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9	< 0.5	< 0.5	< 0.5	< 0.5		

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 6: Lateral K, 100 ft downstream (520BUT003) continued…

	Organics															
Date	m,p-Xylene µg/L	MBAs mg/L	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
										µg/L						
4/19/2012		< 0.1														
5/7/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012	< 0.5		< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/11/2012																
10/30/2012																
11/15/2012																
11/27/2012																
12/13/2012																
12/27/2012																
1/10/2013																
1/30/2013	< 0.5			< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2/14/2013																
2/26/2013																
3/14/2013																
3/28/2013	< 0.5			< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4/10/2013																
4/25/2013																
5/8/2013																
5/21/2013																
6/20/2013	< 0.5			< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/25/2013																
8/6/2013																
8/13/2013																
8/29/2013																
9/10/2013																
9/26/2013	< 0.5			< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Count	6	5	2	6	6	6	6	6	6	6	6	6	6	6	6	6
Min	< 0.5	< 0.1	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 5.0	< 5.0	< 5.0	< 0.5	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 0.5	< 5.0	< 5.0	< 5.0	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0					< 0.5			< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 7: Lateral K, 100 ft upstream of effluent (520BUT004)

	Field Data					Bacteria	General Chemistry							
Date	Dissolved Oxygen	pH	Water Temperature	Turbidity	Specific Conductivity	*E. coli*	Ammonia as N	Boron	Chloride	Fluoride	Perchlorate	Sodium	Sulfate	Total Dissolved Solids
	mg/L		°C	ntu	µS/cm	MPN	mg/L	µg/L	mg/L					
4/19/2012	9.5	7.70	17.2	20.0	502			< 50.0				24		
5/7/2012	7.9	7.50	18.9	11.0	260									
5/24/2012	6.1	7.51	18.4	23.9	147			< 50.0				13		
6/7/2012	7.7	7.61	18.9	9.8	165									
6/26/2012	7.9	7.47	18.3	10.4	117			24				4		
7/12/2012	6.5	7.11	22.6	10.7	191									
7/26/2012	4.6	7.00	21.1	15.4	191			< 50.0				5		
8/13/2012	8.6	6.80	22.0	16.7	162	206.4								
8/29/2012	1.8	7.37	17.8	21.1	191	107.6		< 50.0				6		
9/12/2012	4.9	7.32	17.2	17.0	191	16.1								
9/26/2012	6.7	7.49	18.0	14.6	274	13.4	1.1	< 50.0	3.1	< 0.10	< 4.0	12	6.3	150
10/11/2012	8.1	7.48	15.6	7.7	333	65.0								
10/30/2012	5.4	7.49	13.7	15.4	291		< 1.0	34	3.7			11	7.4	190
11/15/2012	8.2	7.41	10.6	9.3	158	70.3								
11/27/2012	7.6	7.33	12.5	108.9	222		0.1	21	3.3			8	5.7	110
12/13/2012	8.9	7.43	9.4	36.1	237	101.9								
12/27/2012	10.4	7.55	6.9	48.8	206			24				8		
1/10/2013	13.2	7.86	6.9	39.4	266	35.0								
1/30/2013	9.8	7.39	9.6	44.2	452		< 0.1	31	6.6	0.14	< 2.0	20	14.0	280
2/14/2013	10.2	7.62	9.3	113.0	320	83.6								
2/26/2013	12.0	7.75	7.4	19.3	364		0.2	30	8.5			22	17.0	370
3/14/2013	9.7	7.70	13.9	20.0	453	143.9								
3/28/2013	8.5	7.63	14.8	14.3	90		0.2	40	8.3	0.13	< 2.0	22	16.0	320
4/10/2013	8.9	7.00												
4/25/2013	6.7	7.10	15.1	25.6	279	2420.0	0.3		28.0			15	4.2	180
5/8/2013		6.90												
5/21/2013	5.6	7.25	18.2	6.9	135	410.6	0.4		2.5			5	4.6	95
6/20/2013	6.5	7.38	19.8	19.0	128	108.6	< 0.1		1.6	< 0.10	< 2.0	5	3.2	97
7/25/2013		7.80	22.9	24.5	155	44.8	0.1		1.5			5	6.2	94
8/6/2013				17.0										
8/29/2013	7.0	7.33	19.5	37.3	193	235.9	0.2		1.7			6	3.4	120
9/10/2013	9.7	7.00		19.0										
9/26/2013		7.42	13.8	26.2	309	185.0	< 0.1		3.5	< 0.10	< 2.0	11	6.7	190
Count	29	32	29	31	29	16	12	12	12	5	5	18	12	12
Min	1.8	6.80	6.9	6.9	90	13.4	< 0.1	21	1.5	< 0.10	< 2.0	4	3.2	94
Max	13.2	7.86	22.9	113.0	502	2420.0	1.1	< 50.0	28.0	0.14	< 4.0	24	17.0	370
Median	7.9	7.43	17.2	19.0	206	104.8	0.2	37	3.4	< 0.10	< 2.0	10	6.3	165
Mean	7.9	7.40	15.5	26.5	241	265.5	0.2	22.2	6.0	0.07	0.6	11	7.9	183

NOTE: Values reported as <##, < Reporting Limit was used.
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For summary calculations, one fourth of any < (less than) values were used.
Reporting Limit values vary between labs.

DRAFT

E 7: Lateral K, 100 ft upstream of effluent (520BUT004) continued…

	Nutrients		Metals									
	Nitrate as N	Nitrite as N	Dissolved Aluminum	Dissolved Arsenic	Dissolved Iron	Dissolved Manganese	Total Aluminum	Total Antimony	Total Arsenic	Total Barium	Total Beryllium	Total Cadmium
Date	mg/L		µg/L									
4/19/2012	0.86	< 0.15					693.0		< 10.0			
5/7/2012												
5/24/2012	0.18	< 0.15					1150.0		< 10.0			
6/7/2012												
6/26/2012	< 0.11	< 0.15					350.0		1.3			
7/12/2012												
7/26/2012	0.11						359.0		< 10.0			
8/13/2012												
8/29/2012	0.25						498.0		< 10.0			
9/12/2012												
9/26/2012	< 0.11		< 50.0	< 10.0	17.8	58.7	440.0	< 5.0	2.2	61	< 1.0	< 1.0
10/11/2012												
10/30/2012	0.23			< 10.0					2.3			
11/15/2012												
11/27/2012	0.11			2.5					3.6			
12/13/2012												
12/27/2012	0.65								2.4			
1/10/2013												
1/30/2013	0.93		6.7	2.8	21.0	120.0	2600.0	< 0.5	4.1	130	< 0.5	< 0.25
2/14/2013												
2/26/2013	1.00			3.3					3.6			
3/14/2013												
3/28/2013	0.50		18.0	5.4	11.0	5.2	290.0	< 0.5	5.1	120	< 0.5	< 0.25
4/10/2013												
4/25/2013				3.6					3.3			
5/8/2013												
5/21/2013				1.3					1.4			
6/20/2013			14.0	1.4	83.0	4.1	320.0	< 0.5	1.6	41	< 0.5	< 0.25
7/25/2013				1.3					2.0			
8/6/2013												
8/29/2013				0.9					1.5			
9/10/2013												
9/26/2013			< 5.0	2.4	19.0	100.0	680.0	< 0.5	3.3	71	< 0.5	< 0.25
Count	12	3	5	12	5	5	10	5	18	5	5	5
Min	< 0.11	< 0.15	< 5.0	0.9	11.0	4.1	290.0	< 0.5	1.3	41	< 0.5	< 0.25
Max	1.00	< 0.15	< 50.0	< 10.0	83.0	120.0	2600.0	< 5.0	< 10.0	130	< 1.0	< 1.0
Median	0.24	< 0.15	14.0	2.7	19.0	58.7	469.0	< 0.5	3.3	71	< 0.5	< 0.25
Mean	0.41	< 0.15	10.5	2.5	30.4	57.6	738.0	0.4	2.7	85	0.2	0.1

NOTE: Values reported as <##, < Reporting Limit was used.

For *E. coli*, values reported as >2419.6 was used for evaluation.

For summary calculations, one fourth of any < (less than) values were used.

Reporting Limit values vary between labs.

DRAFT

E 7: Lateral K, 100 ft upstream of effluent (520BUT004) continued…

	Metals												
	Total Chromium	Total Copper	Total Iron	Total Lead	Total Manganese	Total Mercury	Total Molybdenum	Total Nickel	Total Selenium	Total Silver	Total Thallium	Total Vanadium	Total Zinc
Date	µg/L												
4/19/2012			676		290								
5/7/2012													
5/24/2012			1140		162								
6/7/2012													
6/26/2012			590		58								
7/12/2012													
7/26/2012			736		151								
8/13/2012													
8/29/2012			944		69								
9/12/2012													
9/26/2012	< 5.0	< 5.0	560	< 1.0	120	< 0.2	< 5.0	< 5.0	< 20.0	< 5.0	< 1.0	< 10.0	< 5.0
10/11/2012													
10/30/2012													
11/15/2012													
11/27/2012													
12/13/2012													
12/27/2012													
1/10/2013													
1/30/2013	6.5	7.2	2700	0.9	350	< 0.2		8.1	< 1.0	< 1.0	< 1.0		6.7
2/14/2013													
2/26/2013													
3/14/2013													
3/28/2013	1.1	1.4	300	0.2	160	< 0.2		3.0	< 1.0	< 1.0	< 1.0		< 5.0
4/10/2013													
4/25/2013													
5/8/2013													
5/21/2013													
6/20/2013	1.4	3.4	510	0.2	37	< 0.2		4.3	< 1.0	< 1.0	< 1.0		< 5.0
7/25/2013													
8/6/2013													
8/29/2013													
9/10/2013													
9/26/2013	2.0	1.7	780	0.3	390	< 0.2		3.8	< 1.0	< 0.3	< 1.0		6.3
Count	5	5	10	5	10	5	1	5	5	5	5	1	5
Min	1.1	1.4	300	0.2	37	< 0.2	< 5.0	3.0	< 1.0	< 0.3	< 1.0	< 10.0	< 5.0
Max	6.5	7.2	2700	< 1.0	390	< 0.2	< 5.0	8.1	< 20.0	< 5.0	< 1.0	< 10.0	6.7
Median	2.0	3.4	706	0.3	156	< 0.2	< 5.0	4.3	< 1.0	< 1.0	< 1.0	< 10.0	< 5.0
Mean	2.5	3.0	894	0.4	179	< 0.2	< 5.0	4.1	1.2	0.4	< 1.0	< 10.0	3.4

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E 7: Lateral K, 100 ft upstream of effluent (520BUT004) continued…

Date	Organics														
	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane (123TCP)	1,2,4-trichlorobenzene	1,2,4-Trimethylbenzene	1,2-dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (1,2-DCA)	1,2-Dichloropropane	1,2-Dichlrobenzene	1,3,5-Trimethylbenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
	µg/L														
4/19/2012															
5/7/2012															
5/24/2012															
6/7/2012															
6/26/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012															
8/13/2012															
8/29/2012															
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/10/2013															
4/25/2013															
5/8/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/6/2013															
8/29/2013															
9/10/2013															
9/26/2013															
Count	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 5.0	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

NOTE: Values reported as <##, < Reporting Limit was used.
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E 7: Lateral K, 100 ft upstream of effluent (520BUT004) continued…

	Organics														
Date	Acrolein	Acrylonitrile	Benzene	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Ethylbenzene	Hexachlorobutadiene	Isopropylbenzene
	µg/L														
4/19/2012				< 0.5	< 0.5				< 0.5			< 0.5			
5/7/2012															
5/24/2012				< 0.5	< 0.5				< 0.5			< 0.5			
6/7/2012															
6/26/2012	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012															
7/26/2012				< 0.5	< 0.5				< 0.5			< 0.5			
8/13/2012															
8/29/2012				< 0.5	< 0.5				< 0.5			< 0.5			
9/12/2012															
9/26/2012															
10/11/2012															
10/30/2012															
11/15/2012															
11/27/2012															
12/13/2012															
12/27/2012															
1/10/2013															
1/30/2013															
2/14/2013															
2/26/2013															
3/14/2013															
3/28/2013															
4/10/2013															
4/25/2013															
5/8/2013															
5/21/2013															
6/20/2013															
7/25/2013															
8/6/2013															
8/29/2013															
9/10/2013															
9/26/2013															
Count	1	1	1	5	5	1	1	1	5	1	1	5	1	1	1
Min	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 10.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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E 7: Lateral K, 100 ft upstream of effluent (520BUT004) continued…

	Organics															
	m,p-Xylene	MBAs	Methylene chloride	Methyl-tert-Butyl Ether (MTBE)	Naphthalene	n-butylbenzene	n-Propylbenzene	o-Xylene	sec-butylbenzene	tert-Butylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Vinyl chloride
Date	µg/L	mg/L	µg/L													
4/19/2012		< 0.1														
5/7/2012																
5/24/2012		< 0.1														
6/7/2012																
6/26/2012	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
7/12/2012																
7/26/2012		< 0.1														
8/13/2012																
8/29/2012		< 0.1														
9/12/2012																
9/26/2012																
10/11/2012																
10/30/2012																
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5/21/2013																
6/20/2013																
7/25/2013																
8/6/2013																
8/29/2013																
9/10/2013																
9/26/2013																
Count	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Max	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Median	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Mean	< 0.5	< 0.1	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 10.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

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