



Shell Exploration & Production

Shell Frontier Oil & Gas Inc.
3737 Bellaire Blvd.
Houston, TX 77025

FED EX Tracking # 7983 7083 4460

May 8, 2012

Mr. Travis Marshall
Colorado Department of Natural Resources
Division of Reclamation, Mining and Safety
101 South 3rd Street, Suite 301
Grand Junction, CO 81501

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MAY 09 2012

**GRAND JUNCTION FIELD OFFICE
DIVISION OF
RECLAMATION MINING & SAFETY**

SUBJECT: UPDATED NOI Table 5.3
Oil Shale RDD Lease COC 69166 and
Nahcolite Preference Right Sodium Lease C-0120057
RIO BLANCO COUNTY, COLORADO

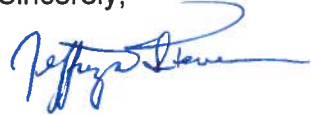
Dear Mr. Marshall:

In response to your email dated May 7, 2012, Shell Frontier Oil & Gas Inc. (SFOGI) has revised Table 5.3 to the Notice of Intent Oil Shale Research, Development and Demonstration (RDD) Lease COC 69166 and Nahcolite Preference Right Sodium Lease C-0120057 "Multi-Mineral RDD" to reflect changes to the proposed NO₂/NO₃ numeric protection limits (NPLs) for the wells associated Hydrology Pad 138. The proposed NPLs for the Uinta, L7, and L6 have been revised from the agricultural limit of 10 mg/L to the domestic limit of 1 mg/L. The NPL for the L5 well remains at 10 mg/l due to the background level (average of 5 measurements plus 2 standard deviations) for this well being greater than the domestic limit of 1 mg/L. Tables 5.1, 5.2 and 5.3A as attached in the May 2, 2012 submittal and attached to this letter for completeness have not been revised.

If during the course of the East RDD project, the NPL for NO₂/NO₃ (as N) of 1.0 mg/L is confirmed as exceeded in the UT, L7 or L6 wells, the follow up action will be to obtain samples and measure the NO₂/NO₃ (as N) and to analyze the concentration of nitrite (NO₂ as N) separately. The NO₂ will be subtracted from the NO₂/NO₃ to determine the Nitrate (NO₃) concentration. The reported concentrations for the NO₂ and the NO₃ will then be compared to their respective water supply standards of 1.0 mg/L and 10 mg/L.

If you have any questions regarding the information in this submittal, please contact me at (713) 245-7732.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeffrey D. Stevenson".

Jeffrey D. Stevenson
Staff Environmental Engineer

Attachments (4)

ATTACHMENT 1
NOI Table 5.1 Update

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	Number Inorganic Analytes	Al (Diss)	Sb (Diss)	As (Diss)	Ba (Diss)	Be (Diss)	Bicarbonate	B (Diss)	Br (Diss)	Cd (Diss)	Ca (Diss)	TOC	Carbonate	Cl (Diss)	Cr (Diss)	Co (Diss)	Cu (Diss)	CN(Tot)	F (Diss)	Calc Hardness	Hydroxid e	Fe (Diss)	Fe (TotRec)	Pb (Diss)	Li (Diss)	Mg (Diss)	Mn (Diss)	Hg (Tot)	Ni (Diss)	NO2/NO3	Ammonia	pH in standard units - Lab	P (Diss)	K (Diss)
138-4-298-UT	138-4-298-UT 031010	52	<0.03	<0.0004	0.0065	0.026	<0.0001	546	0.12	0.07	<0.0001	41.8	6	<2	8	0.0016*	<0.01	<0.01	0.023	0.4*	426	<2	<0.02	0.13	<0.0001	0.06*	78.2	0.021*	<0.0002	<0.0002	<0.02	0.24*	8.2	0.02*	1.1*
138-4-298-UT	138-4-298-UT 060810	49	<0.03	<0.0004	0.0034	0.027	<0.0001	558	0.13	<0.05	<0.0001	46.7	10	<2	9	0.0005*	<0.01	<0.01	<0.003	0.3*	476	<2	0.05*		<0.0001	0.06*	87.2	0.022*	<0.0002	0.0015*	0.05*	0.22*	8.2	0.02*	0.9*
138-4-298-UT	138-4-298-UT 081810	49	<0.03	<0.0004	0.003	0.023	<0.0001	550	0.12	0.09	<0.0001	50.4	1*	<2	9	0.0005*	<0.01	0.01*	<0.003	0.3*	494	<2	<0.02		<0.0001	0.05*	89.4	0.018*	<0.0002	0.0015*	<0.02	0.21*	8.2	<0.01	0.7*
138-4-298-UT	138-4-298-UT 111010	39	<0.03	<0.0004	0.0017*	0.023		557	0.12		<0.0001	54.8		<2	9	0.0005*	<0.01	<0.01		0.3*	561	<2	<0.02		<0.0001	0.06*	103	0.02*	<0.0002	0.0019*	0.1*	0.57			0.4*
138-4-298-UT	138-4-298-UT 032311	39	<0.03	<0.0004	0.001*	0.021		512	0.13		<0.0001	55.9		30	9	<0.0005	<0.01	<0.01		0.3*	568	<2	<0.02		<0.0001	0.06*	104	0.023*	<0.0002	0.001*	<0.02	0.23*			1.6*
138-4-298-A	138-4-298-A 031010	52	<0.03	<0.0004	0.0095	0.028	<0.0001	539	0.31	<0.1	<0.0001	9.8	4*	13*	10	0.0013*	<0.01	<0.01	<0.003	8.6	84	<2	<0.02	<0.02	<0.0001	0.18	18.8	<0.005	<0.0002	<0.0002	<0.02	0.53	8.4	0.02*	0.7*
138-4-298-A	138-4-298-A 060810	48	0.04*	<0.0004	0.0054	0.029	<0.0001	539	0.31	0.04*	<0.0001	10.6	14	15*	11	<0.0005	0.01*	<0.01		9.2	102	<2	<0.02		0.0003*	0.17	18.3	<0.005	<0.0002	<0.0006	0.05*	0.47*	8.3	0.02*	0.3*
138-4-298-A	138-4-298-A 081810	48	0.03*	<0.0004	0.0046	0.041	<0.0001	517	0.32	0.51	<0.0001	10.8	1*	26	10	<0.0005	<0.01	<0.01		9.1	103	<2	<0.02		<0.0001	0.18	18.5	<0.005	<0.0002	<0.0008	<0.02	0.47*	8.4	0.01*	0.4*
138-4-298-A	138-4-298-A 110910	39	<0.03	<0.0004	0.0034	0.027		521	0.31		<0.0001	11		22	12	0.0008*	0.01*	<0.01		9.6	107	<2	<0.02		<0.0001	0.19	19.4	<0.005	<0.0002	0.01885#	0.02*	0.37*			<0.3
138-4-298-A	138-4-298-A 032211	39	<0.06	<0.0004	0.0024	0.021*		482	0.32		<0.0001	9.9		44	10	<0.0005	<0.02	<0.02		9.4	96	<2	<0.04		<0.0001	0.18*	17.4	<0.01	<0.0002	<0.0006	<0.02	0.42*			0.8*
138-4-298-B	138-4-298-B 031010	52	<0.03	<0.0004	0.0493	0.202	<0.0001	575	0.36	0.07	<0.0001	2.5	6	51	10	0.0017*	<0.01	<0.01	<0.003	18.5	15	<2	<0.02	<0.02	<0.0001	0.11	2.1	<0.005	<0.0002	<0.0002	<0.02	0.65	8.6	0.04*	0.8*
138-4-298-B	138-4-298-B 060810	48	<0.03	<0.0004	0.0277	0.2	<0.0001	572	0.37	0.04*	<0.0001	2.5	19	55	11	<0.0005	<0.01	<0.01		19.5	14	<2	0.05*		<0.0001	0.11	2	<0.005	<0.0002	<0.0006	0.03*	0.61	8.7	0.04*	0.8*
138-4-298-B	138-4-298-B 081810	48	0.04*	<0.0004	0.0199	0.215	<0.0001	554	0.38	0.07	<0.0001	2.8	1.6	58	11	0.0008*	<0.01	<0.01		19.5	16	<2	0.03*		<0.0001	0.1	2.1	<0.005	<0.0002	<0.0006	<0.02	0.63	8.7	0.03*	0.7*
138-4-298-B	138-4-298-B 110910	39	<0.03	<0.0004	0.0167	0.205		556	0.38		0.0002*	2.7		52	14	0.0012*	<0.01	<0.01		19.6	15.3855*	<2	<0.02		<0.0001	0.11	2.1	<0.005	<0.0002	<0.0006	<0.02	0.56			0.4*
138-4-298-B	138-4-298-B 032211	39	<0.06	<0.0004	0.0082	0.188		517	0.37		<0.0001	2.5		76	11	<0.0005	<0.02	<0.02		19.1	14*	<2	<0.04		<0.0001	0.11*	1.9*	<0.01	<0.0002	<0.0006	<0.02	0.62			1*
138-4-298-L5	138-4-298-L5 031010	52	0.06*	<0.0004	<0.0005	0.228	<0.0001	550	0.32	0.06	<0.0001	1.8	8	60	9	0.0014*	<0.01	<0.01	<0.003	15.8	11	<2	<0.02	<0.02	<0.0001	0.17	1.6	<0.005	<0.0002	<0.0002	<0.02	0.63	8.7	0.04*	1.1*
138-4-298-L5	138-4-298-L5 060810	48	0.04*	<0.0004	<0.0005	0.217	<0.0001	555	0.32	<0.01	<0.0001	1.8	24	57	10	0.0007*	<0.01	<0.01		16.1	11	<2	0.05		<0.0001	0.15	1.5	<0.005	<0.0002	<0.0006	0.03*	0.59	8.8	0.04*	0.9*
138-4-298-L5	138-4-298-L5 081710	48	<0.03	<0.0004	<0.0005	0.221	<0.0001	537	0.32	0.05	<0.0001	1.9	1.7	62	9	<0.0005	<0.01	<0.01		15.9	11	<2	0.02*		<0.0001	0.15	1.5	<0.005	<0.0002	<0.0006	<0.02	0.65	8.8	0.03*	0.6*
138-4-298-L5	138-4-298-L5 110910	39	<0.03	<0.0008	<0.01	0.225#		545	0.31		<0.003	<5		56	9	<0.01	0.01*	<0.01		16.2	33	<2	<0.5		<0.003	<0.02	<5	<0.005	<0.0002	<0.02	1.53	0.16*			<8
138-4-298-L5	138-4-298-L5 032211	39	<0.03	<0.0004	<0.0005	0.247		512	0.34		<0.0001	2		74	8	<0.0005	<0.01	<0.01		15.6	12	<2	<0.02		<0.0001	0.17	1.8	<0.005	<0.0002	<0.0006	<0.02	0.58			1*
138-4-298-L4*	138-4-298-L4 031010	52	0.2*	<0.002	<0.003	2.5	0.0092	7920	2.01	<0.5	0.0013*	6	<100	<2	560	0.016	<0.05	<0.05	<0.03	65	44	<2	0.1*	<0.1	<0.0005	0.8	7	<0.03	<0.0002	<0.0002	<0.02	7.8	8.3	0.08	13
138-4-298-L4*	138-4-298-L4 060810	48	0.3*	<0.002	<0.003	2.46	0.0088	7860	2.02	<0.2	0.0082	6	40*	6*	410	0.365	<0.05	<0.05		64.9	44	<2	0.1*		0.0009*	0.7	7	<0.03	<0.0002	<0.003	0.04*	8.2	8.2	<0.5	11
138-4-298-L4*	138-4-298-L4 081710	48	<0.2	<0.002	<0.003	2.72	0.0074	8010	2.06	<0.5	0.0021*	9	5.5	<2	430	0.014	<0.05	<0.05		66	47	<2	<0.1		<0.0005	0.7	8	<0.03	<0.0002	<0.003	0.06*	8.4	8.3	0.08	12
138-4-298-L4R	138-4-298-L4 111010	51	1.2*	<0.01	<0.01	6.51	0.004*	42400	8.5	<1	0.006*	14*	3300	<2	310	0.3	0.3*	<0.3	<0.3	55	12*	<2	<0.5	0.8*	<0.003	1.7*	6*	<0.1	<0.002	<0.02	<0.02	31.3	8.4	1.7	37*
138-4-298-L4R	138-4-298-L4 032411	47	<2	<0.01	<0.01	5.9	0.004*	41100	8.8	<2	0.004*	10*	5300	<2	310	0.1	<0.05	<0.05		55.2	66*	<2	<1		0.004*	1*	<10	<0.3	<0.001	<0.02	<0.2	29.3		1.4	50*
138-4-298-L4R	138-4-298-L4 060611	39	0.8*	<0.008	<0.01	4.39		32800	5.6		<0.002	41		<2	280	0.03*	<0.2	<0.2		50	131*	<2	<0.4		<0.002	1.3*	7*	<0.1	<0.002	<0.01	<0.02	20.7			32
138-4-298-L4R	138-4-298-L4 082411	39	<0.6	<0.008	<0.01	4.5		36600	5.8		0.004*	8*		<2	270	0.07	<0.2	<0.2		56.4	49*	<2	<0.4		<0.002 #	1.2*	7*	<0.1	<0.002	<0.01	<0.02	19.9			14*
138-4-298-L4R	138-4-298-L4 101811	39	<0.3	<0.008	<0.03	3.58		37100	4.5		0.006*	6*		<2	280	<0.03	<0.1	<0.1		56.3	40*	<2	<0.2		<0.002	1*	6*	<0.05	<0.002	<0.03	<0.2	22.4			21
135-4-298-L4	135-4-298-L4 060811	52	<0.6	<0.008	0.05	3.99	0.008*	19800	3.7	<2	0.003*	6*	790	<2	2070	<0.01	<0.2	<0.2	<0.02	63	31*	<2	<0.4	<0.4	<0.002	1.1*	<4	<0.1	<0.002	<0.01	0.35	15.4	8.3	0.76	25*
135-4-298-L4	135-4-298-L4 082311	48	<0.6	<0.008	0.04	4.84	0.007*	25100	4.5	<0.5	0.004*	10*	1500	<2	710	0.05	<0.2	<0.2		69.8	41*	<2	<0.4		<0.002 #	1.1*	<4	<0.1	<0.002	<0.01	0.02*	15.8	8.2	0.98	14*
135-4-298-L4	135-4-298-L4 101911	39	<0.3	<0.008	0.06*	4.86		26900	4.7		0.005*	4*		<2	510	<0.03	<0.1	<0.1		66.5	18*	<2	<0.2		<0.002	1.1	2*	<0.05	<0.002	<0.03	<0.2	17.4			20
135-4-298-L4	135-4-298-L4 032712	39	<0.6	<0.008	0.05	5.41		27500	5.5		<0.002	<4		<2	450	<0.01	<0.2	<0.2		66.4	15*	<2	<0.4		<0.002	1.2*	5*	<0.1	<0.001	<0.01	<0.02	17.3			21

Ground Water Quality Standard_Reg 41 (TVS):	Water Supply			0.006	0.010	2.0	0.004				0.005				250	0.1		1	0.2	4			0.3		0.050			0.050	0.002	0.100	1				
	Agriculture		5		0.1		0.1		5		0.01					0.1	0.05	0.2		2			5		0.100	2.5		0.200		0.200	10				

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	Ra226 in pCi/L	Ra228 in pCi/L	Ra226 + Ra228 in pCi/L	TDS	TSS	Se (Diss)	Si (Diss)	Ag (Diss)	Na (Diss)	Sr (Diss)	SO4	Sulfide	TDS (Calc)	Ti (Diss)	Thiocyanate	Alkalinity	U (Diss)	V (Diss)	Zn (Diss)	Field pH in standard units	Field Temp. in °C	Oxidation Reduction Potential in mV	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	
138-4-298-UT	138-4-298-UT 031010	0.46	0.34	0.8	950	<5	<0.0001	30.2	<0.00005	199	5.96	310	<0.02	993	<0.0001	<0.1	546	0.0003*	0.006*	<0.01	7.34	14.54	-26.4	<4	<10	<3	<4	<4	<4	<4	<4	<4	<2	<4	
138-4-298-UT	138-4-298-UT 060810	0.65	0.55	1.2	980	<5	<0.0001	28.9	<0.00005	199	6.11	320	<0.02	1020			558	0.0003*	<0.005	<0.01	7.08	15.02	-120									<2			
138-4-298-UT	138-4-298-UT 081810	0.38	1.1	1.48	1000	<5	<0.0001	30	<0.00005	195	6.22	300	<0.02	1010			550	0.0008	0.005*	<0.01	6.93	15.13	-41										<2		
138-4-298-UT	138-4-298-UT 111010				1030#		<0.0002	30.5	<0.00005	199	6.12	330	<0.02	1070			557	0.0003*	<0.005	<0.01	7.31	14.7	202												
138-4-298-UT	138-4-298-UT 032311				1020		<0.0001#	32.3	<0.00005	209	6.75	310	<0.02	1070			542	0.0002*	<0.005	<0.01	7.21	14.65	-90												
138-4-298-A	138-4-298-A 031010	0.15	0.29	0.44	850	<5	<0.0001	18	<0.00005	265	1.45	188	3.3	855	<0.0001	<0.1	552	0.0007	0.005*	<0.01	7.88	19.01	-271.9	<4	<10	<3	<4	<4	<4	<4	<4	<4	<2	<4	
138-4-298-A	138-4-298-A 060810	0.1	0.47	0.57	840	<5	<0.0001	16.8	<0.00005	282	1.52	175	3.5	864			554	0.0005*	<0.005	<0.01	7.54	19.48	-180										<2		
138-4-298-A	138-4-298-A 081810	0.01	0.59	0.6	840	<5	<0.0001	17.2	<0.00005	293	1.52	148	2.2	846			542	0.0004*	<0.005	<0.01	7.77	19.54	-188										<2		
138-4-298-A	138-4-298-A 110910				830		<0.0002	17.6	<0.00005	295	1.47	163	2.8	864			542	0.0003*	<0.005	<0.01	7.78	18.95	120												
138-4-298-A	138-4-298-A 032211				840		<0.0001#	17.2	<0.00005	292	1.47	147	3.2	839			526	0.0002*	<0.01	<0.02	7.98	18.6	-107												
138-4-298-B	138-4-298-B 031010	0.19	0.04	0.23	770	<5	<0.0001	13.1	<0.00005	289	0.39	33	0.1*	766	<0.0001	<0.1	627	0.0003*	<0.005	<0.01	8.43	22.03	-220.6	<4	<10	<3	<4	<4	<4	<4	<4	<4	<2	<4	
138-4-298-B	138-4-298-B 060810	0.16	0.28	0.44	710	<5	<0.0001	12.4	<0.00005	298	0.37	20	0.09*	765			626	0.0001*	<0.005	<0.01	8.14	22.26	-173										<2		
138-4-298-B	138-4-298-B 081810	0.17	0.57	0.74	750	<5	<0.0001	12.8	<0.00005	306	0.38	23	0.03*	771			611	0.0001*	<0.005	0.02*	8.34	22.66	-72										<2		
138-4-298-B	138-4-298-B 110910				780		<0.0002	12.8	<0.00005	312	0.38	25	0.06*	775			608	0.0001*	<0.005	<0.01	8.36	21.67	181												
138-4-298-B	138-4-298-B 032211				750		<0.0001#	12.3	<0.00005	304	0.36	21	0.09*	780			593	<0.0001	<0.01	<0.02	8.58	21.6	-88												
138-4-298-L5	138-4-298-L5 031010	0.35	0.44	0.79	710	<5	<0.0001	14	<0.00005	281	0.24	<1	0.07*	715	<0.0001	<0.1	610	<0.0001	<0.005	<0.01	8.5	22.63	-225.6	<4	<10	<3	<4	<4	<4	<4	<4	<4	<2	<4	
138-4-298-L5	138-4-298-L5 060810	0.29	0.19	0.48	700	<5	<0.0001	13.4	<0.00005	281	0.23	1*	0.08*	*			612	<0.0001	<0.005	<0.01	8.22	23.29	-179										<2		
138-4-298-L5	138-4-298-L5 081710	0.31	0.34	0.65	700	<5	<0.0001	13.7	<0.00005	287	0.23	1*	0.06*	716			599	<0.0001	<0.005	<0.01	9.04	22.83	1.4										<2		
138-4-298-L5	138-4-298-L5 110910				700		<0.0002	0.6*	<0.001	329	0.5*	2	0.06*	740			601	<0.003	<0.005	<0.01	8.44	21.69	191												
138-4-298-L5	138-4-298-L5 032211				700		<0.0001#	14.2	<0.00005	304	0.25	<1	0.08*	729			586	<0.0001	<0.005	<0.01	8.72	22.28	-70												
138-4-298-L4*	138-4-298-L4 031010	6.7	2.1	8.8	9260	11*	<0.0005	18	0.0005*	3580	0.44	<1	0.12	9010	<0.0005	<0.1	7920	<0.0005	<0.03	<0.05	7.58	25.01	-174.6	<4	<10	<3	<4	<4	<4	<4	5*	<4	<2	<4	
138-4-298-L4*	138-4-298-L4 060810	11	2.7	13.7	9130	7*	0.0013*	17	0.0012	3520	0.41	<1	<0.08	8770			7860	<0.0005	<0.03	0.07*	7.44	25.93	-172										<2		
138-4-298-L4*	138-4-298-L4 081710	7.5	2.4	9.9	9320	10*	<0.0005	18	<0.0003	3580	0.39	<1	<0.3	8940			8010	<0.0005	<0.03	0.24*	7.49	25.31	-67										<2		
138-4-298-L4R	138-4-298-L4 111010	22	9.7	31.7	45000	16*	0.007	20*	<0.001	18200	2	<10	1.7		0.003*	<1	42400	<0.003	<0.1	<0.3	7.61	25.8	-100	<4	<10	<3	<4	<4	<4	<4	<4	<4	<4	<2	<4
138-4-298-L4R	138-4-298-L4 032411	15	6.7	21.7	45100	23	<0.003#	20*	0.001*	17900	1.3*	<100	3.6	43000			41100	<0.003	<0.3	<0.5	7.72	26.24	-210										<2		
138-4-298-L4R	138-4-298-L4 060611				36000		<0.002	21*	<0.001	13400	1.9	<10	3.5	33500			32800	0.003*	<0.1	0.9*	7.58	25.58	-293												
138-4-298-L4R	138-4-298-L4 082411				38200		0.003*	23*	<0.001	15000	1.6	<20	1.9	37400			36600	<0.002	<0.1	<0.2	7.66	25.65													
138-4-298-L4R	138-4-298-L4 101811				32100		<0.005	18*	<0.001	13700	1.3	<20	2.4	36400			37100	<0.005	<0.05	<0.1	7.61	25.44	-241												
135-4-298-L4	135-4-298-L4 060811	12	3.4	15.4	24700	9*	0.007	17*	<0.001	9440	0.7*	<10	0.69	23500	<0.002	1.6*	19800	0.053	<0.1	<0.2	7.59	27.6	-172	<4	<10	<3	<4	<4	<4	<4	<4	<4	<3	<4	
135-4-298-L4	135-4-298-L4 082311	19	5.2	24.2	27000	14*	0.007	20*	<0.001	10500	0.7*	<20	1.18	26400			25100	0.023	<0.1	0.6*	7.57	27.44	-257										<2		
135-4-298-L4	135-4-298-L4 101911				25500		0.012	20*	<0.001	9680	0.8	<20	3.1	26500			26900	0.017*	<0.05	<0.1	7.7	26.89	-290												
135-4-298-L4	135-4-298-L4 032712				28700		<0.002	21*	<0.001	11900	0.8*	<20	3.5	29000			27500	0.008*	<0.1	<0.2	7.67	26.61	-297												

Ground Water Quality Standard Reg 41 (TVS):	Water Supply			5		0.050		0.050			250			0.030			0.030		5	8.5-8.5				200	0.18	2.8		7				70	
	Agriculture					0.020								0.100				2															

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone	2-Chloroethyl vinyl ether	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3- & 4-Methylphenol	3,3-Dichlorobenzidine	3-Nitroaniline	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol
138-4-298-UT	138-4-298-UT 031010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	<10	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-UT	138-4-298-UT 060810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-UT	138-4-298-UT 081810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-UT	138-4-298-UT 111010																														
138-4-298-UT	138-4-298-UT 032311																														
138-4-298-A	138-4-298-A 031010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	<10	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-A	138-4-298-A 060810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-A	138-4-298-A 081810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-A	138-4-298-A 110910																														
138-4-298-A	138-4-298-A 032211																														
138-4-298-B	138-4-298-B 031010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	<10	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-B	138-4-298-B 060810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-B	138-4-298-B 081810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-B	138-4-298-B 110910																														
138-4-298-B	138-4-298-B 032211																														
138-4-298-L5	138-4-298-L5 031010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	<10	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L5	138-4-298-L5 060810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L5	138-4-298-L5 081710			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L5	138-4-298-L5 110910																														
138-4-298-L5	138-4-298-L5 032211																														
138-4-298-L4*	138-4-298-L4 031010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	<10	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L4*	138-4-298-L4 060810			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L4*	138-4-298-L4 081710			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L4R	138-4-298-L4 111010	<4	<4	<2	<4	<4	<4	<2	<4	<2	<4	<10	<2	<2	<4	<20	<2	<10	20*	<5	<2	<2	<2	<2	<10	<4	<4	<4	<10	<2	<2
138-4-298-L4R	138-4-298-L4 032411			<2				<2		<2		<10	<2	<2	<4	<20	<2	<10			<2	<2	<2	<2	<10	<4	8*	<4	<10	<2	<2
138-4-298-L4R	138-4-298-L4 060611																														
138-4-298-L4R	138-4-298-L4 082411																														
138-4-298-L4R	138-4-298-L4 101811																														
135-4-298-L4	135-4-298-L4 060811	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<5.4	<5.4	<2.2	<1.1	<5.4	<5.4	<5.4	<10	<5	<5.4	<2.2	<5.4	<5.4	<5.4	<2.2	<2.2	<5.4	<5.4	<2.2	<5.4
135-4-298-L4	135-4-298-L4 082311			<2				<2		<2		<9	<2	<2	<9	<20	<2	<9			<2	<2	<2	<2	<9	<4	<4	<4	<9	<2	<2
135-4-298-L4	135-4-298-L4 101911																														
135-4-298-L4	135-4-298-L4 032712																														
Ground Water Quality Standard Reg 41 (TVS):	Water Supply Agriculture	0.2	0.00041	600	0.38	0.52		94		75		700	3.2	21	140	14	0.11	230			560	35						0.078			210

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-Pentanone	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Acrylonitrile	Anthracene	Azobenzene	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl) ether	Bis(2-chloroisopropyl) ether	Bis(2-ethylhexyl) phthalate (See Notes)	Bromobenzene	Bromochloromethane
138-4-298-UT	138-4-298-UT 031010	<2	<2	<4	<4	<10	<10	<10	<2	<2	<10	<4	<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<4	<4	<4
138-4-298-UT	138-4-298-UT 060810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	<4		
138-4-298-UT	138-4-298-UT 081810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<4		
138-4-298-UT	138-4-298-UT 111010														<0.2													
138-4-298-UT	138-4-298-UT 032311														<0.2													
138-4-298-A	138-4-298-A 031010	<2	<2	<4	<4	<10	<10	<10	<2	<2	<10	<4	<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	7*	<4	<4
138-4-298-A	138-4-298-A 080810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	8*		
138-4-298-A	138-4-298-A 081810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	17*		
138-4-298-A	138-4-298-A 110910														<0.2													
138-4-298-A	138-4-298-A 032211														<0.2													
138-4-298-B	138-4-298-B 031010	<2	<2	<4	<4	<10	<10	<10	<2	<2	<10	<4	<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	15*	<4	<4
138-4-298-B	138-4-298-B 060810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	11*		
138-4-298-B	138-4-298-B 081810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	16*		
138-4-298-B	138-4-298-B 110910														<0.2													
138-4-298-B	138-4-298-B 032211														<0.2													
138-4-298-L5	138-4-298-L5 031010	<2	<2	<4	<4	<10	<10	<10	<2	<2	<10	<4	<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	52	<4	<4
138-4-298-L5	138-4-298-L5 060810	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	21		
138-4-298-L5	138-4-298-L5 081710	<2	<2				<10	<10	<2	<2			<2	<10	<0.2	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	40		
138-4-298-L5	138-4-298-L5 110910														<0.2													
138-4-298-L5	138-4-298-L5 032211														<0.2													
138-4-298-L4*	138-4-298-L4 031010	<2	<2	<4	<4	<10	<10	<10	<2	<2	<10	<4	<2	<10	0.7*	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	16*	<4	<4
138-4-298-L4*	138-4-298-L4 060810	<2	<2				<10	<10	<2	<2			<2	<10	0.4*	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	25		
138-4-298-L4*	138-4-298-L4 081710	<2	<2				<10	<10	<2	<2			<2	<10	0.2*	<2	<2	<2	<2	<2	10*	<2	<2	<2	<2	16*		
138-4-298-L4R	138-4-298-L4 111010	<2	<2	<4	<4	<10	<10	<10	<2	<2	30*	<4	<2	<10	1*	<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<4	<4	<4
138-4-298-L4R	138-4-298-L4 032411	<2	<2				<10	<10	<2	<2			<2	<10	0.5*	<2	<2	<2	<2	<2	20*	<2	<2	<2	<2	8*		
138-4-298-L4R	138-4-298-L4 060611														0.4*													
138-4-298-L4R	138-4-298-L4 082411														0.6*													
138-4-298-L4R	138-4-298-L4 101811														0.7*													
135-4-298-L4	135-4-298-L4 060811	<5.4	<5.4	<4	<4	<10	<5.4	<8.2	<1.1	<1.1	20*	<4	<2.2		<0.2	<1.1	<1.1	<1.1	<2.2	<2.2	<22	<5.4	<5.4	<2.2	<5.4	6.6	<4	<4
135-4-298-L4	135-4-298-L4 082311	<2	<2				<9	<9	<2	<2			<2	<9	1*	<2	<2	<2	<2	<2	12*	<2	<2	<2	<2	36		
135-4-298-L4	135-4-298-L4 101911														0.6*													
135-4-298-L4	135-4-298-L4 032712														0.8*													
Ground Water Quality Standard Reg 41 (TVS):	Water Supply Agriculture							56	420			0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038	0.0048					0.032		2.5	

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	Bromodichloromethane	Bromoform	Bromomethane	Butyl benzyl phthalate	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloromethane	Chrysene	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibenzo(a,h)anthracene	Dibenzofuran	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Ethylbenzene	Fluoranthene	Fluorene	Hexachlorobenzene
138-4-298-UT	138-4-298-UT 031010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-UT	138-4-298-UT 060810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-UT	138-4-298-UT 081810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-UT	138-4-298-UT 111010																						<0.2			
138-4-298-UT	138-4-298-UT 032311																						<0.2			
138-4-298-A	138-4-298-A 031010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-A	138-4-298-A 060810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-A	138-4-298-A 081810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-A	138-4-298-A 110910																						<0.2			
138-4-298-A	138-4-298-A 032211																						<0.2			
138-4-298-B	138-4-298-B 031010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-B	138-4-298-B 060810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-B	138-4-298-B 081810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-B	138-4-298-B 110910																						<0.2			
138-4-298-B	138-4-298-B 032211																						<0.2			
138-4-298-L5	138-4-298-L5 031010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-L5	138-4-298-L5 060810				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-L5	138-4-298-L5 081710				<2						<2			<2	<2				<2	<2	<2	<2	<0.2	<2	<2	<2
138-4-298-L5	138-4-298-L5 110910																						<0.2			
138-4-298-L5	138-4-298-L5 032211																						<0.2			
138-4-298-L4*	138-4-298-L4 031010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	0.5*	<2	<2	<2
138-4-298-L4*	138-4-298-L4 060810				<2						<2			<2	<2				<2	<2	<2	<2	0.3*	<2	<2	<2
138-4-298-L4*	138-4-298-L4 081710				<2						<2			<2	<2				<2	<2	<2	<2	0.2*	<2	<2	<2
138-4-298-L4R	138-4-298-L4 111010	<4	<4	<4	<2	<4	<10	<4	<4	<4	<2	<4	<4	<2	<2	<4	<4	<5	<2	<2	<2	<2	1.2	<2	<2	<2
138-4-298-L4R	138-4-298-L4 032411				<2						<2			<2	<2				<2	<2	<2	<2	0.9*	<2	<2	<2
138-4-298-L4R	138-4-298-L4 060611																						1.1			
138-4-298-L4R	138-4-298-L4 082411																						1.6			
138-4-298-L4R	138-4-298-L4 101811																						1.7			
135-4-298-L4	135-4-298-L4 060811	<4	<4	<4	<2.2	<4	<10	<4	<4	<4	<1.1	<4	<4	<2.2	<5.4	<4	<4	<5	<2.2	<2.2	<2.2	<2.2	0.9*	<2.2	<2.2	<2.2
135-4-298-L4	135-4-298-L4 082311				<2						<2			<2	<2				<2	<2	<2	<2	2.6	<2	<2	<2
135-4-298-L4	135-4-298-L4 101911																						1.2			
135-4-298-L4	135-4-298-L4 032712																						2.1			
Ground Water Quality Standard, Reg 41 (TVS),	Water Supply Agriculture	0.56	4		1400		0.27	100		4.7	0.0048	70		0.0048		14			5600		700		700	280	280	0.022

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Isopropylbenzene	m p Xylene	Methyl Tert Butyl Ether	Methylene Chloride	Naphthalene	n-Butylbenzene	Nitrobenzene	n-Nitrosodimethylamine	n-Nitroso-di-n-propylamine	n-Nitrosodiphenylamine	n-Propylbenzene	o Xylene	Pentachlorophenol	Phenanthrene
138-4-298-UT	138-4-298-UT 031010	<2	<2	<2	<2	<2	<4	<0.4	<4	<4	<2	<4	<2	<10	<2	<2	<4	<0.2	<10	<2
138-4-298-UT	138-4-298-UT 080810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-UT	138-4-298-UT 081810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-UT	138-4-298-UT 111010							<0.4										<0.2		
138-4-298-UT	138-4-298-UT 032311							<0.4										<0.2		
138-4-298-A	138-4-298-A 031010	<2	<2	<2	<2	<2	<4	<0.4	<4	<4	<2	<4	<2	<10	<2	<2	<4	<0.2	<10	<2
138-4-298-A	138-4-298-A 080810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-A	138-4-298-A 081810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-A	138-4-298-A 110910							<0.4										<0.2		
138-4-298-A	138-4-298-A 032211							<0.4										<0.2		
138-4-298-B	138-4-298-B 031010	<2	<2	<2	<2	<2	<4	<0.4	<4	<4	<2	<4	<2	<10	<2	<2	<4	<0.2	<10	<2
138-4-298-B	138-4-298-B 080810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-B	138-4-298-B 081810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-B	138-4-298-B 110910							<0.4										<0.2		
138-4-298-B	138-4-298-B 032211							<0.4										<0.2		
138-4-298-L5	138-4-298-L5 031010	<2	<2	<2	<2	<2	<4	0.5*	<4	<4	<2	<4	<2	<10	<2	<2	<4	<0.2	<10	<2
138-4-298-L5	138-4-298-L5 080810	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-L5	138-4-298-L5 081710	<2	<2	<2	<2	<2		<0.4			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-L5	138-4-298-L5 110910							<0.4										<0.2		
138-4-298-L5	138-4-298-L5 032211							<0.4										<0.2		
138-4-298-L4*	138-4-298-L4 031010	<2	<2	<2	<2	<2	<4	6.1	<4	<4	<2	<4	<2	<10	<2	<2	<4	0.7*	<10	<2
138-4-298-L4*	138-4-298-L4 080810	<2	<2	<2	<2	<2		2.8			<2		<2	<10	<2	<2		0.4*	<10	<2
138-4-298-L4*	138-4-298-L4 081710	<2	<2	<2	<2	<2		1.9*			<2		<2	<10	<2	<2		0.3*	<10	<2
138-4-298-L4R	138-4-298-L4 111010	<2	<2	<2	<2	<2	<4	3.5	<4	<4	<2	<4	<2	<10	<2	<2	<4	<0.2	<10	<2
138-4-298-L4R	138-4-298-L4 032411	<2	<2	<2	<2	<2		3.2			<2		<2	<10	<2	<2		<0.2	<10	<2
138-4-298-L4R	138-4-298-L4 080811							3.2										0.2		
138-4-298-L4R	138-4-298-L4 082411							4.4										0.3*		
138-4-298-L4R	138-4-298-L4 101811							4.1										0.3*		
135-4-298-L4	135-4-298-L4 080811	<4	<5.4	<5.4	<5.4	<2.2	<4	<2.1	<4	<4	<3	<4	<1.1		<2.2	<2.2	<4	<0.2	<5.4	<1.1
135-4-298-L4	135-4-298-L4 082311	<2	<2	<2	<2	<2		5.5			<2		<2	<2	<2	<2		0.5*	<9	<2
135-4-298-L4	135-4-298-L4 101911							3.7										0.3*		
135-4-298-L4	135-4-298-L4 032712							4.7										0.4*		
Ground Water Quality Standard, Reg 41 (TVS)	Water Supply Agriculture	0.45	42	0.7	0.0048	140		1400		4.7	140		3.5	0.00069	0.005	7.1		1400	0.29	

Footnotes are located on last page of Table.

Table 5.1 Ground water quality data for samples from wells on Pads 138-4-298 and 135-4-298

Sample Location	Sample Designation	Phenol	Phenol - Manual Distillation in mg/L	Pyrene	sec- Butylbenze ne	Styrene	tert- Butylbenze ne	Tetrachloroet hene	Toluene	trans-1,2- Dichloroethe ne	trans-1,3- Dichloropropene	Trichloroeth ene	Trichlorofluorome thane	Vinyl Acetate	Vinyl Chloride	Aniline	Chloroform	Explanatory Footnotes to the Table:
138-4-298-UT	138-4-298-UT 031010	<4	<0.003	<2	<4	<4	<4	<4	<0.2	<4	<3	<5	<4	<4	<4	<4	<4	Concentrations of inorganics are in mg/L, and of organics are in µg/L, unless otherwise specified in column heading.
138-4-298-UT	138-4-298-UT 060810	<4	0.008*	<2					<0.2							<4		* Well 138-4-298-L4 was sampled three times and then deepened to include all of the L4.
138-4-298-UT	138-4-298-UT 081810	<4	0.008*	<2					<0.2								<4	Therefore, 138-4-298-L4 (vs L4R) data are not used to compute the statistics that are shown.
138-4-298-UT	138-4-298-UT 111010								<0.2									
138-4-298-UT	138-4-298-UT 032311								<0.2									TVS = Table Value Standard in Water Quality Control Commission Regulation 41.
138-4-298-A	138-4-298-A 031010	<4	0.004*	<2	<4	<4	<4	<4	<0.2	<4	<3	<5	<4	<4	<4	<4	<4	
138-4-298-A	138-4-298-A 060810	<4	0.005*	<2					<0.2								<4	
138-4-298-A	138-4-298-A 081810	<4	0.005*	<2					0.4*								<4	Explanatory Notes for numeric qualifiers:
138-4-298-A	138-4-298-A 110910								0.3*									* Denotes a value reported by the analytical laboratory as less than the PQL and greater than the MDL but not quantifiable.
138-4-298-A	138-4-298-A 032211								<0.2									# Denotes reanalysis value used.
138-4-298-B	138-4-298-B 031010	<4	<0.003	<2	<4	<4	<4	<4	<0.2	<4	<3	<5	<4	<4	<4	<4	<4	## Denotes average of two analyses used.
138-4-298-B	138-4-298-B 060810	<4	0.008*	<2					0.2*								<4	
138-4-298-B	138-4-298-B 081810	<4	0.005*	<2					0.3*								<4	Bis(2-ethylhexyl) phthalate is a regulated compound normally measured by Method 8270C.
138-4-298-B	138-4-298-B 110910								0.3*									Bis(2-ethylhexyl) phthalate, if reported as detected in Piceance basin samples, is present as a result of analytical contamination/interferences.
138-4-298-B	138-4-298-B 032211								<0.2									Therefore, it is not included in Tables 5.2, 5.2, or 5.3A.
138-4-298-L5	138-4-298-L5 031010	<4	<0.003	<2	<4	<4	<4	<4	0.3*	<4	<3	<5	<4	<4	<4	<4	<4	
138-4-298-L5	138-4-298-L5 060810	<4	0.005*	<2					<0.2								<4	
138-4-298-L5	138-4-298-L5 081710	<4	0.003*	<2					<0.2								<4	This Table may be updated if additional background data are collected.
138-4-298-L5	138-4-298-L5 110910								<0.2									
138-4-298-L5	138-4-298-L5 032211								<0.2									
138-4-298-L4*	138-4-298-L4 031010	<4	0.013*	<2	<4	<4	<4	<4	4.1	<4	<3	<5	<4	<4	<4	<4	<4	
138-4-298-L4*	138-4-298-L4 060810	<4	0.005*	<2					2.1								<4	
138-4-298-L4*	138-4-298-L4 081710	<4	0.004*	<2					1.5								<4	
138-4-298-L4R	138-4-298-L4 111010	<4	0.02*	<2	<4	<4	<4	<4	8.7	<4	<3	<5	<4	<4	<4	<4	<4	
138-4-298-L4R	138-4-298-L4 032411	<4	0.005*	<2					8.1								<4	
138-4-298-L4R	138-4-298-L4 060811								9.5									
138-4-298-L4R	138-4-298-L4 082411								11.7									
138-4-298-L4R	138-4-298-L4 101811								12.7									
135-4-298-L4	135-4-298-L4 060811	<5.4	0.009*	<1.1	<4	<4	<4	<4	<5.3	<4	<2	<5	<4	<4	<4		<4	
135-4-298-L4	135-4-298-L4 082311	<4	0.02*	<2					15.7								<9	
135-4-298-L4	135-4-298-L4 101911								11.1									
135-4-298-L4	135-4-298-L4 032712								14.5									
Ground Water Quality Standard, Reg.41 (TVS):	Water Supply Agriculture	2100	[2.1]	210		100		5	1000	100		5			0.023	6.1	3.5	

Footnotes are located on last page of Table.

ATTACHMENT 2
Table 5.2 NOI Update

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	Al (Diss)	Sb (Diss)	As (Diss)	Ba (Diss)	Be (Diss)	Bicarbonate	B (Diss)	Br (Diss)	Cd (Diss)	Ca (Diss)	TOC	Carbonate	Cl (Diss)	Cr (Diss)	Co (Diss)	Cu (Diss)	CN(Tot)	F (Diss)	Calc Hardness	Hydroxide	Fe (Diss)	Fe (TotRec)	Pb (Diss)	Li (Diss)	Mg (Diss)	Mn (Diss)	Hg (Tot)	Ni (Diss)	NO2/NO3	Ammonia	pH in standard units - Lab	P (Diss)	K (Diss)	Ra226 in pCi/L				
Water Supply Std (TVS)		0.006	0.010	2.0	0.004				0.005				250	0.1		1	0.2	4				0.3		0.050			0.050	0.002	0.100	1.000								
Agriculture Std (TVS)	5		0.1		0.1		5		0.01					0.1	0.05	0.2		2				5		0.100	2.5		0.200		0.200	10.000								
138-4-298 Pad			Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).																																			
Percentile (85th or 50th)	85th Percentile; 50th Percentile for Hg, Ra, TSS, Organics = Background Concentrations																																					
UT	0	0	0.0046	0.026	0	557	0.130	0.049	0	55.24	8.80	12	9.0	0	0	0	0.016	0.12	523	0	0	0.13	0	0	103	0	0	0	0	0.23	8.20	0	0	0	0.46			
L7	0	0	0.0070	0.034	0	539	0.320	0.357	0	10.88	10.10	33.2	11.4	0	0	0	0	9.48	102	0	0	0	0	0	0.180	19	0	0	0.008	0	0.21	8.40	0	0	0.10			
L6	0	0	0.0363	0.209	0	573	0.380	0.070	0	2.74	15.10	65.2	12.2	0	0	0	0	19.54	15	0	0	0	0	0	0.110	2.10	0	0	0	0	0.64	8.70	0	0	0.17			
L5	0	0	0	0.236	0	552	0.328	0.057	0	1.94	19.20	66.8	9.4	0	0	0	0	16.14	12	0	0.020	0	0	0	0.170	1.88	0	0	0	0.61	0.64	8.80	0	0	0.31			
L4	0	0	0	6.144	0	41620	8.620	0	0	16.4	5000	0	310.0	0.18	0	0	0	56.34	77	0	0	0	0	0	0	0	0	0	0	30.10	8.39	1.655	25.4	20.95				
Average			Bold type indicates the average exceeds a Table Value Standard (TVS).																																			
UT	0	0	0.0026	0.024	0	545	0.124	0.023	0	49.92	5.67	6	8.8	0	0	0	0.008	0.06	393	0	0	0.13	0	0	92	0	0	0	0	0.11	8.20	0	0	0	0.50			
L7	0	0	0.0051	0.025	0	520	0.314	0.170	0	10.42	5.00	18.4	10.6	0	0	0	0	9.18	82	0	0	0	0	0	0.110	18	0	0	0.004	0	0.11	8.37	0	0	0.09			
L6	0	0	0.0244	0.202	0	555	0.372	0.047	0	2.60	8.87	58.4	11.4	0	0	0	0	19.24	10	0	0	0	0	0	0.086	1.66	0	0	0	0	0.61	8.67	0	0	0.17			
L5	0	0	0	0.228	0	540	0.322	0.037	0	1.50	11.23	61.8	9.0	0	0	0	0	15.92	9	0	0.010	0	0	0	0.128	1.28	0	0	0	0.31	0.49	8.77	0	0	0.32			
L4	0	0	0	4.976	0	38000	6.640	0	0	8.2	4300	0	286.0	0.094	0	0	0	54.58	32	0	0	0	0	0	0	0	0	0	0	24.72	8.35	1.55	10.6	18.50				
Standard deviation																																						
UT	0	0	0.0027	0.002	0	19	0.005	0.040	0	5.83	4.51	13.4	0.4	0	0	0	0.013	0.13	225	0	0	#DIV/0!	0	0	11	0	0	0	0	0.25	0.00	0	0	0	0.14			
L7	0	0	0.0027	0.015	0	23	0.005	0.294	0	0.54	7.81	18.7	0.9	0	0	0	#DIV/0!	0.38	37	0	0	#DIV/0!	0	0.092	1	0	0	0.008	0	0.24	0.06	0	0	0.07				
L6	0	0	0.0156	0.010	0	23	0.008	0.040	0	0.14	9.05	10.2	1.5	0	0	0	#DIV/0!	0.46	7	0	0	#DIV/0!	0	0.048	0.93	0	0	0	0	0.03	0.06	0	0	0.02				
L5	0	0	0	0.012	0	17	0.011	0.032	0	0.84	11.50	7.2	0.7	0	0	0	#DIV/0!	0.24	5	0	0.022	#DIV/0!	0	0.072	0.73	0	0	0	0.88	0.28	0.06	0	0	0.03				
L4	0	0	0	1.196	0	3833	1.903	0	0	18.34	1414.21	0	23.0	0.123	0	0	#DIV/0!	2.64	47	0	0	#DIV/0!	0	0	0	0	0	0	5.22	0.07	0.21	15.0	4.95					
Avg. + 2σ	Average plus two standard deviations																																					
UT	0	0	0.0080	0.029	0	582	0.135	0.104	0	61.59	14.89	32.8	9.7	0	0	0	0.034	0.33	843	0	0	#DIV/0!	0	0	114	0	0	0	0	0.62	8.20	0	0	0	0.77			
L7	0	0	0.0105	0.055	0	566	0.325	0.759	0	11.50	20.82	55.9	12.4	0	0	0	#DIV/0!	9.93	157	0	0	#DIV/0!	0	0.294	20	0	0	0.021	0	0.58	8.48	0	0	0.23				
L6	0	0	0.0556	0.221	0	601	0.389	0.127	0	2.88	26.96	78.8	14.4	0	0	0	#DIV/0!	20.15	24	0	0	#DIV/0!	0	0.183	3.52	0	0	0	0	0.68	8.78	0	0	0.20				
L5	0	0	0	0.251	0	574	0.344	0.101	0	3.19	34.23	76.2	10.4	0	0	0	#DIV/0!	16.40	19	0	0.055	#DIV/0!	0	0.272	2.73	0	0	0	1.67	1.04	8.88	0	0	0.38				
L4	0	0	0	7.369	0	45667	10.447	0	0	44.87	7128.43	0	332.0	0.340	0	0	#DIV/0!	59.85	126	0	0	#DIV/0!	0	0	0	0	0	0	35.16	8.49	1.97	40.7	28.40					
n = number of samples																																						
UT	5	5	5	5	3	5	5	3	5	5	3	5	5	5	5	5	3	5	5	5	5	1	5	5	5	5	5	5	5	5	3	3	5	3				
L7	0	5	5	5	3	5	5	3	5	5	3	5	5	5	5	5	1	5	5	5	5	1	5	5	5	5	5	5	5	5	3	3	5	3				
L6	5	5	5	5	3	5	5	3	5	5	3	5	5	5	5	5	1	5	5	5	5	1	5	5	5	5	5	5	5	5	3	3	5	3				
L5	5	5	5	5	3	5	5	3	5	5	3	5	5	5	5	5	1	5	5	5	5	1	5	5	5	5	5	5	5	5	3	3	5	3				
L4	5	5	5	5	2	5	5	2	5	5	2	5	5	5	5	5	1	5	5	5	5	1	5	5	5	5	5	5	5	5	2	2	5	2				
135-4-298-L4 Pad			Bold type indicates the value exceeds a Table Value Standard (TVS).																																			
All Statistics																																						
L4 Percentile	0	0	0.0500	5.163	0.0000	27230	5.140	0	0	0	1394	0	1458	0.0275	0	0	0	68.32	0	0	0	0	0	0	0.605	0	0	0	0	0.19	17.36	8.29	0.95	11	15.50			
L4Average	0	0	0.0360	4.775	0.0000	24825	4.600	0	0	0	1145	0	935	0.0125	0	0	0	66.43	0	0	0	0	0	0	0.275	0	0	0	0	0.09	16.48	8.25	0.87	5	15.50			
L4 Standard deviation	0	0	0.0238	0.586	0.0000	3502	0.739	0	0	0	502	0	765	0.0250	0	0	#DIV/0!	2.78	0	0	0	#DIV/0!	0	0.550	0	0	0	0	0	0.18	1.02	0.07	0.16	10	4.95			
L4 Avg + 2σ	0	0	0.0826	5.947	0.0000	31829	6.079	0	0	0	2149	0	2465	0.0625	0	0	#DIV/0!	71.98	0	0	0	#DIV/0!	0	1.375	0	0	0	0	0	0.44	18.52	8.39	1.18	25	25.40			
L4 n	4	4	4	4	2	4	4	2	4	4	2	4	4	4	4	4	1	4	4	4	4	1	4	4	4	4	4	4	4	4	2	2	4	2				

Notes on last page of Table.

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	Ra228 in pCi/L	Ra226 + Ra228 in pCi/L	TDS	TSS	Se (Diss)	Si (Diss)	Ag (Diss)	Na (Diss)	Sr (Diss)	SO4	Sulfide	TDS (Calc)	Ti (Diss)	Thiocyanate	Alkalinity	U (Diss)	V (Diss)	Zn (Diss)	Field pH in standard units	Field Temp. in °C	Oxidation Reduction Potential in mV	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	
Water Supply Std (TVS)		5			0.050		0.050			250			0.002			0.030		5	6.5-8.5				200	0.18	2.8		7				70		
Agriculture Std (TVS)					0.020												0.100	2															
138-4-298 Pad	Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).																																
Percentile (85th or 50th)																																	
UT	0.55	1.20	1024	0	0	31.22	0	203.0	6.43	324.00	0.02	1070	0	0	557	0.0003	0	0	7.32	15.06	65	0	0	0	0	0	0	0	0	0	0	0	0
L7	0.47	0.57	844	0	0	17.76	0	293.8	1.52	180.20	3.38	864	0	0	553	0.0003	0	0	7.92	19.50	-16	0	0	0	0	0	0	0	0	0	0	0	0
L6	0.28	0.44	784	0	0	12.92	0	309.6	0.38	28.2	0.00	773	0	0	626	0	0	0	8.49	22.42	29	0	0	0	0	0	0	0	0	0	0	0	0
L5	0.34	0.65	704	0	0	14.08	0	314.0	0.24	0.8	0.00	733	0	0	611	0	0	0	8.85	23.01	77	0	0	0	0	0	0	0	0	0	0	0	0
L4	9.25	26.70	45040	19.55	0.0028	0	0	18020	1.94	0	3.54	43440	0	0	41620	0	0	0	7.884	25.98	-149.5	0	0	0	0	0	0	0	0	0	0	0	0
Average	Bold type indicates the average a Table Value Standard (TVS).																																
UT	0.66	1.16	996	0	0	30.38	0	198.2	6.23	314.00	0.02	1033	0	0	551	0.0002	0	0	7.17	14.81	-15	0	0	0	0	0	0	0	0	0	0	0	0
L7	0.45	0.54	840	0	0	17.36	0	285.4	1.49	164.20	3.00	854	0	0	543	0.0001	0	0	7.79	19.12	-125	0	0	0	0	0	0	0	0	0	0	0	0
L6	0.30	0.47	748	0	0	12.68	0	302.2	0.38	24.4	0.00	787	0	0	613	0	0	0	8.37	22.04	-75	0	0	0	0	0	0	0	0	0	0	0	0
L5	0.32	0.64	702	0	0	11.06	0	296.4	0.19	0.4	0.00	723	0	0	602	0	0	0	8.68	22.54	-56	0	0	0	0	0	0	0	0	0	0	0	0
L4	8.20	26.70	39280	11.5	0.0014	0	0	15640	1.36	0	2.62	38880	0	0	38000	0	0	0	7.636	25.74	-211	0	0	0	0	0	0	0	0	0	0	0	0
Standard deviation																																	
UT	0.39	0.34	32	0	0	1.23	0	8.3	0.30	11.40	0.01	35	0	0	7	0.0004	0	0	0.17	0.25	127	0	0	0	0	0	0	0	0	0	0	0	0
L7	0.15	0.09	7	0	0	0.46	0	12.5	0.03	17.63	0.51	11	0	0	11	0.0003	0	0	0.16	0.39	149	0	0	0	0	0	0	0	0	0	0	0	0
L6	0.27	0.26	23	0	0	0.33	0	9.0	0.01	5.18	0.00	6	0	0	14	0	0	0	0.16	0.44	155	0	0	0	0	0	0	0	0	0	0	0	0
L5	0.13	0.16	4	0	0	6.19	0	20.5	0.11	0.8944272	0.00	11	0	0	10	0	0	0	0.31	0.60	165	0	0	0	0	0	0	0	0	0	0	0	0
L4	2.12	7.07	5702	16.3	0.0031	0	0	2283	0.81	0	0.89	4514	#DIV/0!	#DIV/0!	3633	0	0	0	0.06	0.31	82	0	0	0	0	0	0	0	0	0	0	0	0
Avg. + 2σ	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																																
UT	1.45	1.84	1080	0	0	32.84	0	212.8	6.84	336.80	0.03	1104	0	0	584	0.0009	0	0	7.51	15.32	239	0	0	0	0	0	0	0	0	0	0	0	0
L7	0.75	0.71	854	0	0	18.27	0	310.3	1.55	199.45	4.03	876	0	0	585	0.0008	0	0	8.12	19.90	173	0	0	0	0	0	0	0	0	0	0	0	0
L6	0.83	0.98	794	0	0	13.33	0	320.2	0.40	34.75	0.00	779	0	0	641	0	0	0	8.69	22.92	236	0	0	0	0	0	0	0	0	0	0	0	0
L5	0.57	0.95	711	0	0	23.44	0	337.4	0.40	2.1888544	0.00	745	0	0	622	0	0	0	9.21	23.75	273	0	0	0	0	0	0	0	0	0	0	0	0
L4	12.44	40.84	50685	44.0	0.0077	0	0	20206	2.98	0	4.39	47908	#DIV/0!	#DIV/0!	45667	0	0	0	7.75	26.36	-48	0	0	0	0	0	0	0	0	0	0	0	0
n = number of samples																																	
UT	3	3	5	4	5	5	5	5	5	5	5	5	2	2	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	3	1	
L7	3	3	5	4	5	5	5	5	5	5	5	5	2	2	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	3	1	
L6	3	3	5	4	5	5	5	5	5	5	5	5	2	2	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	3	1	
L5	3	3	5	4	4	5	5	5	5	5	5	5	2	2	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	3	1	
L4	2	2	5	2	5	5	5	5	5	5	5	5	1	1	5	5	5	5	5	5	4	1	1	1	1	1	1	1	1	1	2	1	
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).																																
All Statistics																																	
L4 Percentile	4.30	19.80	27935	0	0.0098	0	0	11270	0.44	0	3.32	27875	0	0	27230	0.0395	0	0	7.69	27.53	-210	0	0	0	0	0	0	0	0	0	0	0	0
L4 Average	4.30	19.80	26475	0	0.0065	0	0	10380	0.20	0	2.12	26350	0	0	24825	0.0190	0	0	7.63	27.14	-254	0	0	0	0	0	0	0	0	0	0	0	0
L4 Standard deviation	1.27	6.22	1763	0	0.0049	0	0	1110	0.40	0	1.39	2249	#DIV/0!	#DIV/0!	3502	0.0251	0	0	0.06	0.46	57	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
L4 Avg + 2σ	6.85	32.25	30002	0	0.0164	0	0	12601	1.00	0	4.90	30847	#DIV/0!	#DIV/0!	31829	0.0693	0	0	7.76	28.06	-139	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
L4 n	2	2	4	2	4	4	4	4	4	4	4	4	1	1	4	4	4	4	4	4	4	1	1	1	1	1	1	1	1	2	1	1	

Notes on last page of Table.

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Butanone	2-Chloroethyl vinyl ether	2-Chloronaphthalene	2-Chlorophenol	2-Chlorotoluene	2-Hexanone	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3- & 4-Methylphenol	3,3-Dichlorobenzidine
Water Supply Std (TVS)	0.2	0 00041	600	0 38	0.52		94		75		700	3.2	21	140	14	0.11	230			560	35								0 078
Agriculture Std (TVS)																													
138-4-298 Pad	Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).																												
Percentile (85th or 50th)																													
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	Bold type indicates the average a Table Value Standard (TVS).																												
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Standard deviation																													
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg. + 2σ	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																												
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
n = number of samples																													
UT	1	1	3	1	1	1	3	1	3	1	3	3	3	3	3	3	3	1	1	3	3	1	1	3	3	3	3	3	3
L7	1	1	3	1	1	1	3	1	3	1	3	3	3	3	3	3	3	1	1	3	3	1	1	3	3	3	3	3	3
L6	1	1	3	1	1	1	3	1	3	1	3	3	3	3	3	3	3	1	1	3	3	1	1	3	3	3	3	3	3
L5	1	1	3	1	1	1	3	1	3	1	3	3	3	3	3	3	3	1	1	3	3	1	1	3	3	3	3	3	3
L4	1	1	2	1	1	1	2	1	2	1	2	2	2	2	2	2	2	1	1	2	2	1	1	2	2	2	2	2	2
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).																												
All Statistics																													
L4 Percentile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4 Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
L4 Standard deviation	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	0
L4 Avg + 2σ	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	0
L4 n	1	1	2	1	1	1	2	1	2	1	2	2	2	2	2	2	2	1	1	2	2	1	1	2	2	2	2	2	2

Notes on last page of Table.

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-Pentanone	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetone	Acrylonitrile	Anthracene	Azobenzene	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl) ether	
Water Supply Std (TVS)		0.27		210							56	420			0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038	0.0048				0.032	
Agriculture Std (TVS)																												
138-4-298 Pad	Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).																											
Percentile (85th or 50th)																												
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Average	Bold type indicates the average a Table Value Standard (TVS).																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Standard deviation	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg. + 2σ	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	
n = number of samples	Bold type indicates the value exceeds a Table Value Standard (TVS).																											
UT	3	3	3	3	3	3	1	1	1	3	3	3	3	1	1	3	3	5	3	3	3	3	3	3	3	3	3	
L7	3	3	3	3	3	3	1	1	1	3	3	3	3	1	1	3	3	5	3	3	3	3	3	3	3	3	3	
L6	3	3	3	3	3	3	1	1	1	3	3	3	3	1	1	3	3	5	3	3	3	3	3	3	3	3	3	
L5	3	3	3	3	3	3	1	1	1	3	3	3	3	1	1	3	3	5	3	3	3	3	3	3	3	3	3	
L4	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	2	2	5	2	2	2	2	2	2	2	2	2	
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).																											
All Statistics	Bold type indicates the value exceeds a Table Value Standard (TVS).																											
L4 Percentile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4 Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4 Standard deviation	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	#DIV/0!	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	
L4 Avg. + 2σ	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	#DIV/0!	0	#DIV/0!	0	0	0	0	0	0	0	0	0	0	
L4 n	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	2	1	4	2	2	2	2	2	2	2	2	2	

Notes on last page of Table

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	Bis(2-chloroisopropyl) ether	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Butyl benzyl phthalate	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloromethane	Chrysene	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibenzo(a,h)anthracene	Dibenzofuran	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	Ethylbenzene	Fluoranthene	Fluorene	
Water Supply Std (TVS)				0.56	4		1400		0.27	100		4.7	0.0048	70		0.0048		14			5600		700		700	280	280	
Agriculture Std (TVS)																												
138-4-298 Pad	Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).																											
Percentile (85th or 50th)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	0	0	
Average	Bold type indicates the average a Table Value Standard (TVS).																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.12	0	0	
Standard deviation																												
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.68	0	0	
Avg. + 2σ	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.47	0	0	
n = number of samples																												
UT	3	1	1	1	1	1	3	1	1	1	1	1	3	1	1	3	3	1	1	1	3	3	3	3	5	3	3	
L7	3	1	1	1	1	1	3	1	1	1	1	1	3	1	1	3	3	1	1	1	3	3	3	3	5	3	3	
L6	3	1	1	1	1	1	3	1	1	1	1	1	3	1	1	3	3	1	1	1	3	3	3	3	5	3	3	
L5	3	1	1	1	1	1	3	1	1	1	1	1	3	1	1	3	3	1	1	1	3	3	3	3	5	3	3	
L4	2	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	2	2	2	2	5	2	2	
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).																											
All Statistics																												
L4 Percentile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.65	0	0	
L4 Average	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.48	0	0	
L4 Standard deviation	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	0	1.14	0	0
L4 Avg. + 2σ	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	0	3.78	0	0
L4 n	2	1	1	1	1	1	2	1	1	1	1	1	2	1	1	2	2	1	1	1	2	2	2	2	4	2	2	

Notes on last page of Table

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Isopropylbenzene	m p Xylene	Methyl Tert Butyl Ether	Methylene Chloride	Naphthalene	n-Butylbenzene	Nitrobenzene	n-Nitrosodimethylamine	n-Nitroso-di-n-propylamine	n-Nitrosodiphenylamine	n-Propylbenzene	o Xylene	Pentachlorophenol	Phenanthrene	Phenol	Phenol - Manual Distillation in mg/L	Pyrene	sec-Butylbenzene	Styrene	tert-Butylbenzene	
Water Supply Std (TVS)	0.022	0.45	42	0.7	0.0048	140		1400		4.7	140		3.5	0.00069	0.005	7.1		1400	0.29		2100	[2.1]	210		100		
Agriculture Std (TVS)																											
138-4-298 Pad	Bold type indicates the 95th (or 50th) percentile exceeds a Table Value Standard (TVS).																										
Percentile (95th or 50th)																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	3.50	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
Average	Bold type indicates the average a Table Value Standard (TVS).																										
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	3.68	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
Standard deviation																											
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	0.54	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
Avg. + 2σ	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).																										
UT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
L4	0	0	0	0	0	0	0	4.77	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	
n = number of samples																											
UT	3	3	3	3	3	3	1	5	1	1	3	1	3	3	3	3	1	5	3	3	3	3	3	1	1	1	
L7	3	3	3	3	3	3	1	5	1	1	3	1	3	3	3	3	1	5	3	3	3	3	3	1	1	1	
L6	3	3	3	3	3	3	1	5	1	1	3	1	3	3	3	3	1	5	3	3	3	3	3	1	1	1	
L5	3	3	3	3	3	3	1	5	1	1	3	1	3	3	3	3	1	5	3	3	3	3	3	1	1	1	
L4	2	2	2	2	2	2	1	5	1	1	2	1	2	2	2	2	1	5	2	2	2	2	2	1	1	1	
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).																										
All Statistics																											
L4 Percentile	0	0	0	0	0	0	0	4.20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4 Average	0	0	0	0	0	0	0	4.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
L4 Standard deviation	0	0	0	0	0	0	#DIV/0!	1.47	#DIV/0!	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0	#DIV/0!	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	
L4 Avg. + 2σ	0	0	0	0	0	0	#DIV/0!	6.93	#DIV/0!	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0	0	#DIV/0!	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	
L4 n	2	2	2	2	2	2	1	4	1	1	2	1	2	1	2	2	1	4	2	2	2	2	2	1	1	1	

Notes on last page of Table

Table 5.2 Statistics describing background ground water quality at Pads 138-4-298 and 135-4-298.

Hydrostratigraphic Interval	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl Acetate	Vinyl Chloride	Aniline	Chloroform
Water Supply Std (TVS)	5	1000	100		5			0.023	6.1	3.5
Agriculture Std (TVS)										
138-4-298 Pad	Bold type indicates the 85th (or 50th) percentile exceeds a Table Value Standard (TVS).									
Percentile (85th or 50th)										
UT	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0
L4	0	9.5	0	0	0	0	0	0	0	0
	Bold type indicates the average a Table Value Standard (TVS).									
Average										
UT	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0
L4	0	10.14	0	0	0	0	0	0	0	0
Standard deviation										
UT	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0
L4	0	1.98	0	0	0	0	0	0	0	0
	Bold type indicates the average plus 2σ exceeds a Table Value Standard (TVS).									
Avg. + 2σ										
UT	0	0	0	0	0	0	0	0	0	0
L7	0	0	0	0	0	0	0	0	0	0
L6	0	0	0	0	0	0	0	0	0	0
L5	0	0	0	0	0	0	0	0	0	0
L4	0	14.09	0	0	0	0	0	0	0	0
n = number of samples										
UT	1	5	1	1	1	1	1	1	3	1
L7	1	5	1	1	1	1	1	1		3
L6	1	5	1	1	1	1	1	1	3	1
L5	1	5	1	1	1	1	1	1	3	1
L4	1	5	1	1	1	1	1	1	2	1
135-4-298-L4 Pad	Bold type indicates the value exceeds a Table Value Standard (TVS).									
All Statistics										
L4 Percentile	0	12.8	0	0	0	0	0	0	0	0
L4 Average	0	11.65	0	0	0	0	0	0	0	0
L4 Standard deviation	#DIV/0!	4.66	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
L4 Avg. + 2σ	#DIV/0!	20.97	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
L4 n	1	4	1	1	1	1	1	1	1	1

Notes on last page of Table

Explanatory Footnotes to theTable:

Concentrations of inorganics are in mg/L and organics are in µg/L, unless otherwise specified.

Background is computed as the 85th percentile of the dataset from Table 5.1 for dissolved constituents and as the 50th percentile of the dataset for those constituents measured as total. Mercury (T), Radium ²²⁶-²²⁸, TSS, and organics are represented by 50th percentiles.

Average value is the arithmetric mean of the data from Table 5-1 divided by the number (n) of samples collected.

The average plus two standard deviations (2 sigma or 2 σ) estimates the maximum value expected in future measurements.

"#DIV/0!" denotes there was one sample and a standard deviation was not computed.

Bold type denotes value exceeding Table Value Standard.

This Table may be updated if additional background data are collected.

ATTACHMENTS 3 and 4
Tables 5.3 and 5.3A NOI Update

Table 5.3 Proposed numeric protection limits for Pad 138-4-298.

Hydrostratigraphic Interval	Al (Diss)	Sb (Diss)	As (Diss)	Ba (Diss)	Be (Diss)	B (Diss)	Cd (Diss)	Cl (Diss)	Cr (Diss)	Co (Diss)	Cu (Diss)	CN(Tot)	F (Diss)	Fe (Diss)	Pb (Diss)	Li (Diss)	Mn (Diss)	Hg (Tot)	Ni (Diss)	NO2/NO3	Ra226 + Ra228 in pCi/L	TDS	Se (Diss)	Ag (Diss)	SO4	Tl (Diss)	U (Diss)	V (Diss)	Zn (Diss)	Field pH in standard units	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane
138-4-298																																
UT	5	0.006	0.010	2.0	0.004	5	0.005	250	0.1	0.05	0.2	0.2	2	0.3	0.050	2.5	0.050	0.002	0.100	1	5	1325	0.020	0.050	337	0.002	0.030	0.100	2	7.51	200	0.18
L7	5	0.006	0.0105	2.0	0.004	5	0.005	250	0.1	0.05	0.2	0.2	9.93	0.3	0.050	2.5	0.050	0.002	0.100	1	5	1088	0.020	0.050	250	0.002	0.030	0.100	2	8.12	200	0.18
L6	5	0.006	0.0556	2.0	0.004	5	0.005	250	0.1	0.05	0.2	0.2	20.15	0.3	0.050	2.5	0.050	0.002	0.100	1	5	992	0.020	0.050	250	0.002	0.030	0.100	2	8.69	200	0.18
L5	5	0.006	0.010	2.0	0.004	5	0.005	250	0.1	0.05	0.2	0.2	16.40	0.3	0.050	2.5	0.050	0.002	0.100	10	5	889	0.020	0.050	250	0.002	0.030	0.100	2	9.21	200	0.18
L4																					40.84	63356									200	0.18

Hydrostratigraphic Interval	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	3,3-Dichlorobenzidine	4,6-Dinitro-2-methylphenol	4-Chloro-3-methylphenol	4-Nitrophenol	Acenaphthene	Acrylonitrile	Anthracene	Azobenzene	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene
138-4-298																																
UT	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	560	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038
L7	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	560	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038
L6	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	560	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038
L5	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	560	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038
L4	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	560	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038

Hydrostratigraphic Interval	Benzo(k)fluoranthene	Bis(2-chloroethyl) ether	Bromodichloromethane	Bromoform	Butyl benzyl phthalate	Carbon Tetrachloride	Chlorobenzene	Chloromethane	Chrysene	cis-1,2-Dichloroethene	Dibenzo(a,h)anthracene	Dibromochloromethane	Diethylphthalate	Di-n-butyl phthalate	Ethylbenzene	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	m,p Xylene	Methylene Chloride	Naphthalene	Nitrobenzene	n-Nitrosodimethylamine	n-Nitroso-di-n-propylamine	n-Nitrosodiphenylamine	o Xylene
138-4-298																															
UT	0.0048	0.032	0.56	4	1400	0.27	100	4.7	0.0048	70	0.0048	14	5600	700	700	280	280	0.022	0.45	42	0.7	0.0048	140	1400	4.7	140	3.5	0.00069	0.005	7.1	1400
L7	0.0048	0.032	0.56	4	1400	0.27	100	4.7	0.0048	70	0.0048	14	5600	700	700	280	280	0.022	0.45	42	0.7	0.0048	140	1400	4.7	140	3.5	0.00069	0.005	7.1	1400
L6	0.0048	0.032	0.56	4	1400	0.27	100	4.7	0.0048	70	0.0048	14	5600	700	700	280	280	0.022	0.45	42	0.7	0.0048	140	1400	4.7	140	3.5	0.00069	0.005	7.1	1400
L5	0.0048	0.032	0.56	4	1400	0.27	100	4.7	0.0048	70	0.0048	14	5600	700	700	280	280	0.022	0.45	42	0.7	0.0048	140	1400	4.7	140	3.5	0.00069	0.005	7.1	1400
L4	0.0048	0.032	0.56	4	1400	0.27	100	4.7	0.0048	70	0.0048	14	5600	700	700	280	280	0.022	0.45	42	0.7	0.0048	140	1400	4.7	140	3.5	0.00069	0.005	7.1	1400

Hydrostratigraphic Interval	Pentachlorophenol	Phenol	Phenol - Manual Distillation in mol/l	Pyrene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Vinyl Chloride	Aniline	Chloroform
138-4-298												
UT	0.29	2100	[2.1]	210	100	5	1000	100	5	0.023	6.1	3.5
L7	0.29	2100	[2.1]	210	100	5	1000	100	5	0.023	6.1	3.5
L6	0.29	2100	[2.1]	210	100	5	1000	100	5	0.023	6.1	3.5
L5	0.29	2100	[2.1]	210	100	5	1000	100	5	0.023	6.1	3.5
L4	0.29	2100	[2.1]	210	100	5	1000	100	5	0.023	6.1	3.5

Notes:
Concentrations of inorganics are in mg/L and organics are in µg/L, unless otherwise specified.
Consistent with Regulation 41.6.a, Table 5.3 provides numeric protection limits for radioactive and organic constituents for 138-L4 limited use and quality ground waters.
The values shown are the most restrictive Table Value Standard or the average plus two standard deviations, (whichever is greater). The latter used when background is greater than the standard.
This Table may be updated if additional background data are collected.

Table 5.3A Proposed numeric threshold values for Pad 135-4-298.

Hydrostratigraphic Interval	Ra226 + Ra228 in pCi/L	TDS	1,1,1-Trichloroethane	1,1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromomethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene
135-4-298																						
L4	32.25	37502	200	0.18	2.8	7	70	0.2	0.00041	600	0.38	0.52	94	75	700	3.2	21	140	14	0.11	230	580

Hydrostratigraphic Interval	2-Chlorophenol	3,3-Dichlorobenzidine	4,6-Dinitro-2-methylphenol	4-Chloro-3-methylphenol	4-Nitrophenol	Acenaphthene	Acrylonitrile	Anthracene	Azobenzene	Benzene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Bis(2-chloroethyl) ether	Bromodichloromethane	Bromoform	Butyl benzyl phthalate	Carbon Tetrachloride	Chlorobenzene
135-4-298																					
L4	35	0.078	0.27	210	56	420	0.065	2100	0.32	5	0.0048	0.0048	0.0048	0.0038	0.0048	0.032	0.56	4	1400	0.27	100

Hydrostratigraphic Interval	Chloromethane	Chrysene	cis-1,2-Dichloroethene	Dibenzo(a,h)anthracene	Dibromochloromethane	Diethylphthalate
135-4-298						
L4	4.7	0.0048	70	0.0048	14	5600

Notes:
Concentrations of inorganics are in mg/L and organics are in µg/L, unless otherwise specified.
The numeric threshold values (NTV) shown are the most restrictive Table Value Standard or the average plus two standard deviations, (whichever is greater). The latter used when background is greater than the standard.
Exceedences of NTVs at 135-4-298-L4 in and of themselves are not exceedences of permit conditions to protect ground water quality. Rather, they are early warnings that allow investigation and early action necessary to maintain compliance at Pad 138.
This Table may be updated if additional background data are collected.