

LLNL Livermore Site Third Quarter 2015 Self-Monitoring Report

This quarterly report presents the third quarter 2015 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the third quarter of 2015 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, and bioassay analyses (Tables A-1 through A-5). During the third quarter of 2015, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the third quarter of 2015.

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Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, July through September 2015.

Treatment Area ^a	Month	Volume of ground water extracted (Kgal) ^b	Volume of vapor extracted (Kcf) ^b
TFA	July	9,170	-
	August	9,236	-
	September	8,540	-
TFB	July	2,661	-
	August	2,638	-
	September	2,334	-
TFC	July	3,048	-
	August	2,994	-
	September	2,071	-
TFD	July	4,227	797
	August	4,303	753
	September	3,833	869
TFE	July	2,130	708
	August	2,400	738
	September	2,378	872
TFG	July	323	-
	August	295	-
	September	247	-
TFH	July	630	2,801
	August	755	2,607
	September	345	3,049
TOTAL^c		64,558	13,194

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B.

^c Rounded number.

Kcf = Thousands of cubic feet.

Kgal = Thousands of gallons.

Table 2. VOC mass removed at the Livermore Site, July through September 2015.

Treatment Area ^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	0.8	-	0.8
TFB	0.5	-	0.5
TFC	0.9	-	0.9
TFD	3.4	0.3	3.7
TFE	2.0	0.3	2.3
TFG	0.08	-	0.1
TFH	0.4	3.3	3.7
TOTAL^b	8.1	3.9	12.0

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through September 2015.

Treatment Area ^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Mcf)
TFA	2,262	-
TFB	550	-
TFC	616	-
TFD	1,255	150
TFE	457	222
TFG	100	-
TFH	192	324
TOTAL^b	5,432	696

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through September 2015.

Treatment Area ^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	221	0	221
TFB	87	-	87
TFC	118	-	118
TFD	916	102	1,018
TFE	244	160	404
TFG	13	-	13
TFH	44	1,305	1,349
TOTAL^b	1,643	1,567	3,210

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = Millions of cubic feet.

Mgal = Millions of gallons.

VOC = Volatile organic compound.

Attachment A

VOC, Chromium, and Bioassay Analyses

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
TFA-I001	14-JUL-15	E624MOD	<0.5	1.1	<0.5	<0.5	0.98	<1	<0.5	5.3	<0.5	0.58	<0.5
TFA-I001	03-AUG-15	E624MOD	<0.5	0.97	0.61	<0.5	1	<1	<0.5	4.6	<0.5	0.55	<0.5
TFA-I001	02-SEP-15	E624MOD	<0.5	0.92	0.55	<0.5	0.87	<1	<0.5	4.4	<0.5	<0.5	<0.5
TFA-E001	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E^a													
W-254	03-SEP-15	E624MOD	<0.5	<0.5	0.86	<0.5	0.72	1.6	<0.5	86	<0.5	2.2	<0.5
TFB													
TFB-I002	13-JUL-15	E624MOD	0.58	2.7	<0.5	<0.5	1.4	<1	3.4	1.3	<0.5	14	<0.5
TFB-I002	03-AUG-15	E624MOD	0.59	2.6	<0.5	<0.5	1.4	<1	3.4	1.2	<0.5	13	<0.5
TFB-I002	02-SEP-15	E624MOD	0.57	2.4	<0.5	<0.5	1.2	<1	3	1.1	<0.5	12	<0.5
TFB-E002	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	08-JUL-15	E624MOD	<0.5	1.1	<0.5	<0.5	0.71	<1	8.5	3.5	<0.5	12	<0.5
TFC-I003	03-AUG-15	E624MOD	<0.5	1.1	<0.5	<0.5	0.75	<1	8.7	2.9	<0.5	11	<0.5
TFC-I003	01-SEP-15	E624MOD	<0.5	0.97	<0.5	<0.5	0.68	<1	8.2	2.9	<0.5	11	<0.5
TFC-E003	08-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	01-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E													
MTU1-I	20-JUL-15	E624MOD	<0.5	12	<0.5	<0.5	0.78	<1	12	0.8	<0.5	8.6	3.7
MTU1-I	05-AUG-15	E624MOD	<0.5	11	<0.5	<0.5	0.8	<1	12	0.77	<0.5	8.2	3.6
MTU1-I	11-SEP-15	E624MOD	<0.5	11	<0.5	<0.5	0.73	<1	11	0.76	<0.5	8.3	3.7
MTU1-E	20-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	11-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-SE													
PTU1-I	08-JUL-15	E624MOD	<0.5	6.3	<0.5	<0.5	1.6	<1	16	0.83	<0.5	15	1
PTU1-I	03-AUG-15	E624MOD	<0.5	5.8	<0.5	<0.5	1.5	<1	15	0.73	<0.5	13	0.94
PTU1-I	01-SEP-15	E624MOD	<0.5	5.4	<0.5	<0.5	1.3	<1	14	0.7	<0.5	13	0.96
PTU1-E	08-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD^b	---	---	--	--	--	--	--	--	--	--	--	--	--
TFD-E													
PTU8-I	21-JUL-15	E624MOD	4.5	1.6	<0.5	0.78	6.4	<1	<0.5	5	<0.5	78	0.77
PTU8-I	06-AUG-15	E624MOD	3.9	1.3	<0.5	<0.5	4.3	<1	<0.5	3.5	<0.5	69	0.66
PTU8-I	11-SEP-15	E624MOD	3.5	1	<0.5	<0.5	3.3	<1	<0.5	3	<0.5	73	<0.5
PTU8-E	21-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	06-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	11-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-HPD													
PTU10-I	13-JUL-15	E624MOD	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	33	<0.5
PTU10-I	05-AUG-15	E624MOD	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	31	<0.5
PTU10-I	11-SEP-15	E624MOD	1.2	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	30	<0.5
PTU10-E	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	11-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-S													
PTU2-I	22-JUL-15	E624MOD	<0.5	2.4	<0.5	<0.5	3.2	<1	1	4.6	<0.5	39	<0.5
PTU2-I	18-AUG-15	E624MOD	0.53	2.2	<0.5	<0.5	3.5	<1	1	4.9	<0.5	42	<0.5
PTU2-I	03-SEP-15	E624MOD	<0.5	1.8	<0.5	<0.5	2.8	<1	0.9	4.5	<0.5	38	<0.5
PTU2-E	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	18-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	03-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-SE													
PTU11-I	09-JUL-15	E624MOD	<0.5	2.8	0.68	1.3	11	<1	0.63	29	<0.5	84	<0.5
PTU11-I	04-AUG-15	E624MOD	<0.5	2.2	0.6	0.97	7.9	<1	<0.5	19	<0.5	60	<0.5
PTU11-I	02-SEP-15	E624MOD	<0.5	2.3	0.58	1.1	7.9	<1	0.52	22	<0.5	68	<0.5
PTU11-E	09-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	04-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	15-JUL-15	E624MOD	2.1	2.7	<0.5	1.4	8.5	<1	0.59	14	<0.5	81	9.2
PTU12-I	05-AUG-15	E624MOD	1.9	2.1	<0.5	1.1	7.3	<1	0.53	10	<0.5	87	7.9
PTU12-I	03-SEP-15	E624MOD	2.1	2.1	<0.5	1.2	7	<1	0.54	11	<0.5	92	8.5
PTU12-E	15-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	03-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	09-JUL-15	E624MOD	<0.5	5.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	29
PTU6-I	06-AUG-15	E624MOD	<0.5	5.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.3	27
PTU6-I	03-SEP-15	E624MOD	<0.5	4.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.3	26
PTU6-E	09-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	06-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	03-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E													
PTU3-I	14-JUL-15	E624MOD	0.59	5	<0.5	0.57	7.9	<1	5.7	10	<0.5	88	<0.5
PTU3-I	03-AUG-15	E624MOD	0.57	4.5	<0.5	0.52	7.7	<1	5.6	8.8	<0.5	79	<0.5
PTU3-I	09-SEP-15	E624MOD	0.62	4.8	<0.5	0.6	7.1	<1	5.3	9.6	<0.5	84	<0.5
PTU3-E	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	09-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-HS^c													
GTU07-I	14-JUL-15	E624MOD	3.1	1.9	<0.5	<0.5	5.2	2	1.8	5.7	<0.5	220	<0.5
GTU07-I	04-AUG-15	E624MOD	3	1.7	<0.5	<0.5	5.2	2	1.8	4.8	<0.5	190	<0.5
GTU07-I	25-AUG-15	E624MOD	2.8	1.6	<0.5	<0.5	4.7	1.9	1.8	4.9	<0.5	190	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-HS (cont.)													
GTU07-I	04-SEP-15	E624MOD	2.5	1.6	<0.5	<0.5	4	1.8	1.1	3.5	<0.5	140	<0.5
GTU07-E	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	04-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	25-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	04-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	14-JUL-15	E624MOD	<0.5	1.2	<0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	12	<0.5
PTU9-I	04-AUG-15	E624MOD	<0.5	1	<0.5	<0.5	<0.5	<1	0.96	<0.5	<0.5	9.6	<0.5
PTU9-I	02-SEP-15	E624MOD	<0.5	1	<0.5	<0.5	<0.5	<1	0.95	<0.5	<0.5	9.4	<0.5
PTU9-E	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	04-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE													
W-359	09-JUL-15	E624MOD	2.4	3.8	<0.5	<0.5	13	<1	5.9	8.1	<0.5	150	<0.5
MTU04-I	03-AUG-15	E624MOD	2.2	3.4	<0.5	<0.5	12	<1	5.6	6.5	<0.5	140	<0.5
MTU04-I	09-SEP-15	E624MOD	2.1	3.6	<0.5	0.51	10	<1	5.3	7.2	<0.5	150	<0.5
MTU04-E	09-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	03-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	09-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW													
MTU03-I	15-JUL-15	E624MOD	1.2	1.8	<0.5	<0.5	0.76	<1	0.53	1.3	<0.5	34	<0.5
MTU03-I	05-AUG-15	E624MOD	1.3	1.7	<0.5	<0.5	0.8	<1	0.53	1.3	<0.5	31	<0.5
MTU03-I	14-SEP-15	E624MOD	1.2	1.6	<0.5	<0.5	0.68	<1	0.5	1.3	<0.5	30	<0.5
MTU03-E	15-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	14-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	16-JUL-15	E624MOD	<0.5	0.91	<0.5	<0.5	1.4	<1	6.7	5.8	<0.5	24	<0.5
MTU05-I	06-AUG-15	E624MOD	<0.5	0.88	<0.5	<0.5	1.4	<1	6.9	5.1	<0.5	22	<0.5
MTU05-I	14-SEP-15	E624MOD	<0.5	0.84	<0.5	<0.5	1.2	<1	6.6	5.2	<0.5	21	<0.5
MTU05-E	16-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-W (cont.)													
MTU05-E	06-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	14-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	23-JUL-15	E624MOD	3.9	8.8	<0.5	<0.5	0.78	<1	<0.5	0.92	<0.5	3.9	<0.5
GTU01-I	04-AUG-15	E624MOD	4.1	8.5	<0.5	<0.5	0.78	<1	<0.5	0.91	<0.5	4.1	<0.5
GTU01-I	03-SEP-15	E624MOD	3.8	7.8	<0.5	<0.5	0.72	<1	<0.5	0.95	<0.5	4.1	<0.5
GTU01-E	23-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	04-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	03-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-N													
MTU02-I	15-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	1.6	<1	1.4	20	<0.5	5.6	<0.5
MTU02-I	04-AUG-15	E624MOD	<0.5	1.2	<0.5	<0.5	1.4	<1	1.2	15	<0.5	4.3	<0.5
MTU02-I	03-SEP-15	E624MOD	<0.5	1.2	<0.5	<0.5	1.2	<1	1.1	15	<0.5	4.2	<0.5
MTU02-E	15-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	04-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	03-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406													
PTU5-I	16-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.6	<0.5
PTU5-I	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.1	<0.5
PTU5-I	30-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3	<0.5
PTU5-E	16-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	05-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	30-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW													
W-1801	22-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	<0.5	<1	3	0.82	<0.5	17	<0.5
GTU03-I	18-AUG-15	E624MOD	<0.5	1.8	<0.5	<0.5	<0.5	<1	2.7	0.84	<0.5	19	<0.5
GTU03-I	02-SEP-15	E624MOD	<0.5	1.5	<0.5	<0.5	<0.5	<1	2.4	0.75	<0.5	17	<0.5
GTU03-E	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	18-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF518-N^d W-1410	03-SEP-15	E624MOD	1.7	1.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	10	<0.5
TF5475-1^e W-1302-2	30-JUL-15	E624MOD	2.3	38	1.4	5	29	1.4	8.8	57	<0.5	440	<0.5
TF5475-2^f GTU09-I	22-JUL-15	E624MOD	2.1	23	0.67	3.2	19	<1	5.3	36	<0.5	300	<0.5
GTU09-I	12-AUG-15	E624MOD	1.4	14	<0.5	2.1	13	<1	3.2	24	<0.5	190	<0.5
GTU09-I	18-AUG-15	E624MOD	1.4	14	<0.5	2	13	<1	3.3	24	<0.5	190	<0.5
GTU09-I	02-SEP-15	E624MOD	1.3	13	<0.5	2.1	11	<1	3.1	24	<0.5	190	<0.5
GTU09-E	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	18-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	02-SEP-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF5475-3^g	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA-E did not operate during the reporting period due to the single extraction well W-254 being dry due to dewatering in the area.

^b TFD was secured (and did not operate during this reporting period) to drill replacement extraction wells and to perform system upgrades as part of the Remediation Evaluation (REVAL) process.

^c TFE-HS had multiple samples collected during the month of August following a facility restart (the facility had been secured to replace the granular activated carbon).

^d TF518-N did not operate during the reporting period due to mixed waste disposition issues.

^e TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

^f TF5475-2 had multiple samples collected during the month of August following a facility restart (the facility had been secured to replace the granular activated carbon).

^g TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	28-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.73	0.86	<0.5	<0.5	<0.5
W-262	28-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-404	22-JUL-15	E624MOD	<0.5	<0.5	0.58	<0.5	0.92	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-408	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.5	<0.5	<0.5	<0.5	<0.5
W-415	22-JUL-15	E624MOD	<0.5	2.1	0.66	<0.5	1.6	<1	<0.5	9.8	<0.5	1.1	<0.5
W-457	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	0.6	<1	<0.5	4.4	<0.5	<0.5	<0.5
W-518	28-JUL-15	E624MOD	<0.5	<0.5	3.8	<0.5	2.1	<1	<0.5	2.9	<0.5	<0.5	<0.5
W-522	28-JUL-15	E624MOD	<0.5	<0.5	0.91	<0.5	0.68	<1	<0.5	2.2	<0.5	<0.5	<0.5
W-605	22-JUL-15	E624MOD	<0.5	<0.5	0.79	<0.5	0.93	<1	<0.5	9.6	<0.5	0.5	<0.5
W-614	22-JUL-15	E624MOD	<0.5	0.5	<0.5	<0.5	<0.5	<1	<0.5	3.7	<0.5	<0.5	<0.5
W-712	22-JUL-15	E624MOD	2.7	3	1	<0.5	3.6	<1	<0.5	1.9	<0.5	3	<0.5
W-714	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	4.7	<0.5	<0.5	<0.5
W-903	22-JUL-15	E624MOD	<0.5	<0.5	0.77	<0.5	0.68	<1	<0.5	3.7	<0.5	<0.5	<0.5
W-904	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	0.77	<1	<0.5	4.6	<0.5	<0.5	<0.5
W-1001	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	22-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.9	<0.5	<0.5	<0.5
W-1009	22-JUL-15	E624MOD	0.95	4.4	0.61	<0.5	2.8	<1	<0.5	8.6	<0.5	1.6	<0.5
TFA-E^a													
W-254	03-SEP-15	E624MOD	<0.5	<0.5	0.86	<0.5	0.72	1.6	<0.5	86	<0.5	2.2	<0.5
TFB													
W-357	13-JUL-15	E624MOD	1.4	3.3	<0.5	<0.5	1.2	<1	3.1	1.2	<0.5	31	<0.5
W-610	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	0.56	<1	0.76	<0.5	<0.5	1.1	<0.5
W-620	13-JUL-15	E624MOD	<0.5	0.7	<0.5	<0.5	0.76	<1	0.97	0.79	<0.5	2.6	<0.5
W-621	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.1	<0.5
W-655	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	5.9	<0.5	<0.5	0.63	<0.5
W-704	13-JUL-15	E624MOD	0.57	4.2	<0.5	<0.5	2.2	<1	6	2.4	<0.5	18	<0.5
W-1423	13-JUL-15	E624MOD	0.74	4.9	<0.5	<0.5	3.1	<1	3	1.7	<0.5	8.7	<0.5
W-2501	13-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	1.1	<0.5	<0.5	3.9	<0.5
W-2502	13-JUL-15	E624MOD	<0.5	2.3	<0.5	<0.5	1.4	<1	<0.5	<0.5	<0.5	2.2	<0.5
TFC													
W-701	08-JUL-15	E624MOD	<0.5	2	<0.5	<0.5	1.5	<1	21	2.1	<0.5	20	<0.5
W-1104	08-JUL-15	E624MOD	<0.5	0.56	<0.5	<0.5	<0.5	<1	1.9	4.1	<0.5	7.4	<0.5
W-1116	08-JUL-15	E624MOD	<0.5	1	<0.5	<0.5	<0.5	<1	5	3.1	<0.5	6.4	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E													
W-368	20-JUL-15	E624MOD	<0.5	4.9	<0.5	<0.5	<0.5	<1	15	2.5	<0.5	12	2.7
W-413	20-JUL-15	E624MOD	<0.5	14	<0.5	<0.5	0.93	<1	11	<0.5	<0.5	8.1	4
TFC-SE													
W-1213	23-JUL-15	E624MOD	<0.5	6.2	<0.5	<0.5	2.3	<1	6.7	<0.5	<0.5	14	0.57
W-2201	23-JUL-15	E624MOD	<0.5	5.7	<0.5	<0.5	1.4	<1	17	0.83	<0.5	14	1
TFD^a													
W-351 ^b	08-APR-15	E624MOD	26	4.6	<0.5	0.82	7	<1	4.6	6	<0.5	460	1.3
W-653 ^b	08-APR-15	E624MOD	17	5.3	<0.5	<0.5	0.64	<1	2.3	0.67	<0.5	420	<0.5
W-2011 ^b	08-APR-15	E624MOD	0.82	0.75	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	18	<0.5
W-2101 ^b	08-APR-15	E624MOD	3.1	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	110	<0.5
W-2102 ^b	08-APR-15	E624MOD	12	3.8	<0.5	<0.5	<0.5	<1	1.4	<0.5	<0.5	320	1.1
W-1206 ^b	08-APR-15	E624MOD	0.66	2.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	11	<0.5
W-1208 ^b	08-APR-15	E624MOD	1.8	1.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	35	22
TFD-E													
W-2006	21-JUL-15	E624MOD	0.99	2.3	3.5	11	96	1.5	<0.5	92	<0.5	560	<0.5
W-1301	21-JUL-15	E624MOD	7.1	3	1.8	5.9	53	<1	0.71	40	<0.5	280	<0.5
W-1303	21-JUL-15	E624MOD	2.8	2	<0.5	1.1	3.8	<1	<0.5	4.1	<0.5	99	5.1
W-1306	21-JUL-15	E624MOD	1.8	1.5	<0.5	<0.5	<0.5	<1	<0.5	1.9	<0.5	55	<0.5
W-1307	21-JUL-15	E624MOD	4.1	1.1	<0.5	<0.5	0.65	<1	<0.5	0.84	<0.5	68	<0.5
W-1550	21-JUL-15	E624MOD	5.6	4.2	<0.5	<0.5	0.75	<1	<0.5	1.9	<0.5	140	<0.5
W-2203	21-JUL-15	E624MOD	8.3	2.7	<0.5	<0.5	1.8	<1	1.7	5.5	<0.5	94	<0.5
TFD-HPD													
W-1254	13-JUL-15	E624MOD	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	35	<0.5
W-1650	23-JUL-15	E624MOD	1.7	1.4	<0.5	<0.5	<0.5	1.7	1.1	<0.5	<0.5	120	<0.5
W-1653	23-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	32	<0.5	<0.5	<0.5	36	<0.5
W-1655	23-JUL-15	E624MOD	<0.5	1.1	<0.5	<0.5	<0.5	1	<0.5	1.3	<0.5	29	<0.5
W-1657	23-JUL-15	E624MOD	7	3.8	<0.5	<0.5	<0.5	2.7	2.1	<0.5	<0.5	820	<0.5
TFD-S													
W-1503	22-JUL-15	E624MOD	0.87	1.3	<0.5	<0.5	0.79	<1	<0.5	1.1	<0.5	26	<0.5
W-1504	22-JUL-15	E624MOD	<0.5	0.66	<0.5	<0.5	8.1	<1	1.8	11	<0.5	53	<0.5
W-1510	22-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	1.7	<1	<0.5	3.1	<0.5	22	<0.5
W-2601	22-JUL-15	E624MOD	<0.5	5.6	<0.5	<0.5	2.6	<1	1.4	4.1	<0.5	47	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-SE													
W-314	09-JUL-15	E624MOD	<0.5	<0.5	0.52	<0.5	0.8	<1	<0.5	1.5	<0.5	5.9	<0.5
W-2005	09-JUL-15	E624MOD	<0.5	1.3	0.56	1.6	19	<1	<0.5	44	<0.5	100	<0.5
W-1308	09-JUL-15	E624MOD	<0.5	1.2	0.86	2.4	15	<1	<0.5	59	<0.5	93	<0.5
W-1403	09-JUL-15	E624MOD	1.8	15	1.2	4.5	34	<1	3.2	85	<0.5	320	<0.5
W-1904 ^b	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	13	<0.5	6	<0.5
SIP-ETC-201	12-AUG-15	E624MOD	<0.5	0.66	2.2	0.83	66	<1	<0.5	310	<0.5	200	<0.5
TFD-SS													
W-1523	15-JUL-15	E624MOD	3.9	3.3	<0.5	1.8	16	<1	1.4	19	<0.5	150	<0.5
W-1601	15-JUL-15	E624MOD	3.2	3.6	1.2	4.8	21	<1	1.1	77	<0.5	210	<0.5
W-1602	15-JUL-15	E624MOD	<0.5	1.7	<0.5	<0.5	<0.5	<1	<0.5	0.94	<0.5	9.2	1.9
W-1603	15-JUL-15	E624MOD	1.4	2	<0.5	1.1	5	<1	<0.5	8	<0.5	80	13
TFD-W													
W-1215	09-JUL-15	E624MOD	<0.5	7.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.6	12
W-1216	09-JUL-15	E624MOD	<0.5	4.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.3	21
W-1902	09-JUL-15	E624MOD	<0.5	3.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4	42
TFE-E													
W-566	14-JUL-15	E624MOD	0.69	5.8	<0.5	0.67	6.8	<1	6.4	8.1	<0.5	87	<0.5
W-1109	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	18	<1	3	28	<0.5	130	<0.5
W-1903	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	13	<1	3.5	13	<0.5	32	<0.5
W-1909 ^b	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305 ^b	01-OCT-14	E601	<0.5	<0.5	<0.5	<0.5	11	<1	2.7	18	<0.5	39	<0.5
TFE-HS													
W-2105	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	3.4	<0.5	43	<0.5
W-2801	14-JUL-15	E624MOD	3.7	2.2	<0.5	<0.5	6.3	2.3	1.9	5	<0.5	250	<0.5
TFE-NW													
W-1211	14-JUL-15	E624MOD	<0.5	1.3	<0.5	<0.5	<0.5	<1	1.2	<0.5	<0.5	7.5	<0.5
W-1409	14-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	1.2	<0.5	24	<0.5
TFE-SE													
W-359	09-JUL-15	E624MOD	2.4	3.8	<0.5	<0.5	13	<1	5.9	8.1	<0.5	150	<0.5
TFE-SW													
W-1516	15-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	<0.5	<1	0.56	<0.5	<0.5	7.9	<0.5
W-1518 ^b	13-JAN-15	E601	<0.5	<0.5	<0.5	<0.5	1.4	1.1	0.63	0.55	<0.5	9.5	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SW (cont.)													
W-1520	15-JUL-15	E624MOD	4	2.7	<0.5	1	0.76	<1	<0.5	4.5	<0.5	92	<0.5
W-1522	15-JUL-15	E624MOD	8.3	5.4	<0.5	2.2	5.9	4.9	0.64	9.8	<0.5	220	<0.5
TFE-W													
W-292	16-JUL-15	E624MOD	<0.5	0.81	<0.5	<0.5	0.96	2.1	1.1	1.3	<0.5	18	<0.5
W-305	16-JUL-15	E624MOD	<0.5	1	<0.5	<0.5	1.6	<1	9.4	8.6	<0.5	29	<0.5
TFG-1													
W-1111	23-JUL-15	E624MOD	3.9	8.8	<0.5	<0.5	0.78	<1	<0.5	0.92	<0.5	3.9	<0.5
TFG-N													
W-1806	15-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	8.3	<0.5	2	<0.5
W-1807	15-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	1.6	<1	1.4	19	<0.5	5.5	<0.5
TF406													
W-1309	16-JUL-15	E624MOD	0.58	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.9	<0.5
W-1310	16-JUL-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.4	<0.5
TF406-NW													
W-1801	22-JUL-15	E624MOD	<0.5	1.5	<0.5	<0.5	<0.5	<1	3	0.82	<0.5	17	<0.5
TF518-N^a													
W-1410	03-SEP-15	E624MOD	1.7	1.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	10	<0.5
TF518-PZ													
W-1615	24-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	2.2	<1	<0.5	22	<0.5	130	<0.5
W-518-1913 ^b	23-MAY-11	E601	<0.5	<0.5	<0.5	<0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914	24-AUG-15	E624MOD	<0.5	<0.5	<0.5	<0.5	<0.5	4	<0.5	34	<0.5	3.6	<0.5
W-518-1915	24-AUG-15	E624MOD	<0.5	0.57	<0.5	<0.5	1.5	<1	<0.5	30	<0.5	170	<0.5
SVB-518-201 ^b	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5
SVB-518-204 ^b	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^a													
W-1302-2	30-JUL-15	E624MOD	2.3	38	1.4	5	29	1.4	8.8	57	<0.5	440	<0.5
TF5475-2													
W-1108	22-JUL-15	E624MOD	2.2	23	0.7	3.3	19	<1	5.3	37	<0.5	310	<0.5
W-1415 ^b	04-SEP-14	E601	1.4	14	<0.5	2.2	12	<1	4.2	24	<0.5	210	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF5475-3^a													
W-1604 ^{bc}	11-JUN-15	E624MOD	4.1	59	1.5	14	39	3.6	9.6	91	<1	730	<1
W-1605	01-SEP-15	E624MOD	<0.5	27	<0.5	2.2	1.2	<1	<0.5	3.2	<0.5	45	<0.5
W-1608 ^b	27-MAY-15	E624MOD	<0.5	12	<0.5	1.8	<0.5	<1	<0.5	1.5	<0.5	14	<0.5
W-1609 ^b	27-MAY-15	E624MOD	<0.5	29	<0.5	2.1	3.6	<1	0.53	9.8	<0.5	82	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^b Most recent VOC sample results available.

^c Elevated reporting limit due to sample dilution.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTFD-ETCS													
W-1904	22-SEP-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.022	<0.005	0.0054	<0.005
W-ETC-2003	22-SEP-15	TO15DIT	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.097	<0.018	0.022	<0.018
W-ETC-2004A	22-SEP-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.021	<0.005	0.0056	<0.005
W-ETC-2004B	22-SEP-15	TO15DIT	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	1.3	<0.36
SIP-ETC-201	22-SEP-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.03	<0.005	0.025	<0.005
VTFE-ELM													
W-1903	19-AUG-15	TO15DIT	<0.13	<0.13	<0.13	<0.13	0.46	<0.13	<0.13	0.32	<0.13	0.75	<0.13
W-1909 ^a	30-SEP-14	TO15DIT	<0.005	<0.005	0.0082	<0.005	1.2	<0.005	0.38	0.71	<0.005	1.6	<0.005
W-2305 ^a	06-OCT-11	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.2	<0.005	0.036	0.46	<0.005	0.55	<0.005
W-543-001	19-AUG-15	TO15DIT	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	0.36	<0.063	0.23	<0.063
W-543-003	19-AUG-15	TO15DIT	<0.15	<0.15	<0.15	<0.15	0.2	<0.15	<0.15	0.28	<0.15	0.76	<0.15
W-543-1908	19-AUG-15	TO15DIT	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.081	<0.05	0.29	<0.05
VTFE-HS													
W-2105	19-AUG-15	TO15DIT	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.3	<0.3
W-ETS-2008A	19-AUG-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.012	<0.005
W-ETS-2008B	19-AUG-15	TO15DIT	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	<0.028	0.18	<0.028	0.18	<0.028
W-ETS-2009	19-AUG-15	TO15DIT	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.077	<0.035	0.21	<0.035
W-ETS-2010A	19-AUG-15	TO15DIT	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0.078	<0.031	0.09	<0.031
W-ETS-2010B	19-AUG-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	0.031	<0.005
VTF406-HS													
W-217	19-AUG-15	TO15DIT	<0.2	<0.2	<0.2	<0.2	0.51	<0.2	<0.2	0.34	<0.2	1	<0.2
W-514-2007A	19-AUG-15	TO15DIT	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	4.6
W-514-2007B	19-AUG-15	TO15DIT	<0.063	<0.063	<0.063	<0.063	0.16	<0.063	<0.063	0.078	<0.063	0.28	<0.063
VTF511													
W-2204	23-SEP-15	TO15DIT	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	2.4	<0.31
W-2205	29-SEP-15	TO15DIT	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	1.2	<0.19
W-2206	23-SEP-15	TO15DIT	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	0.8	<0.21
W-2207A	23-SEP-15	TO15DIT	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.15	<0.02
W-2207B	23-SEP-15	TO15DIT	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.62	<0.16
W-2208A	23-SEP-15	TO15DIT	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	1.3	<0.17
W-2208B	23-SEP-15	TO15DIT	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	3.9	<1.3
VTF518-PZ													
W-1615	22-SEP-15	TO15DIT	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	1.6	<1.3	4.5	<1.3
W-2214A ^a	16-JUN-15	TO15DIT	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	2.2	<0.65

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF518-PZ (cont.)													
W-2214B ^a	18-JUN-15	TO15DIT	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	2.4	<0.44
W-2215A ^a	24-FEB-15	TO15DIT	<12	<12	<12	<10	<12	<10	<12	<12	<12	58	<12
W-2215B ^a	24-FEB-15	TO15DIT	<0.012	<0.012	<0.012	<0.019	<0.012	<0.019	<0.012	<0.012	<0.012	0.072	<0.012
W-2217A ^a	18-JUN-15	TO15DIT	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	0.024	<0.0074	0.042	<0.0074
W-2217B ^a	18-JUN-15	TO15DIT	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.014	<0.011	<0.011	<0.011
W-518-1913	22-SEP-15	TO15DIT	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.7	<0.2
W-518-1914	22-SEP-15	TO15DIT	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	0.26	<0.063	<0.063	<0.063
W-518-1915	22-SEP-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	0.67	<0.005	0.46	<0.005
SVB-518-201	22-SEP-15	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0096	<0.005	0.018	<0.005
SVB-518-204	22-SEP-15	TO15DIT	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	<0.063	0.4	<0.063
VTF5475^b													
W-1605	25-AUG-15	TO15DIT	<0.32	0.52	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	1.7	<0.32
W-1608	25-AUG-15	TO15DIT	<0.17	0.29	<0.17	<0.17	0.17	<0.17	<0.17	<0.17	<0.17	0.88	<0.17
W-2211	26-AUG-15	TO15DIT	<0.0071	0.011	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.045	<0.0071
W-2212	26-AUG-15	TO15DIT	<0.012	0.013	<0.012	<0.012	0.019	<0.012	0.045	<0.012	<0.012	0.077	<0.012
W-ETS-507	25-AUG-15	TO15DIT	<0.17	1.1	<0.17	<0.17	<0.17	<0.17	<0.17	0.25	<0.17	1	<0.17
W-2302	25-AUG-15	TO15DIT	<0.3	<0.3	<0.3	<0.3	1.4	<0.3	0.47	<0.3	<0.3	1.8	<0.3
W-2303	15-JUL-15	TO15DIT	<0.25	0.26	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1	<0.25
SVI-ETS-504	26-AUG-15	TO15DIT	<0.017	0.057	<0.017	<0.017	<0.017	<0.017	<0.017	0.032	<0.017	0.15	<0.017

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a Most recent VOC vapor sample results available.

^b VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = Volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFA	TFA-I001	14-JUL-15	0.0098	NA
	TFA-E001	14-JUL-15	0.0092	NA
TFB	TFB-I002	13-JUL-15	0.015	NA
	TFB-E002	13-JUL-15	0.016	NA
	TFB-E002	03-AUG-15	0.017	NA
	TFB-E002	02-SEP-15	0.02	NA
	TFB-R002	13-JUL-15	0.0089	NA
TFC	TFC-I003	08-JUL-15	0.017	NA
	TFC-E003	08-JUL-15	0.018	NA
	TFC-E003	03-AUG-15	0.018	NA
	TFC-E003	01-SEP-15	0.022	NA
	TFC-R003	08-JUL-15	0.0071	NA
TFC-E	MTU1-I	20-JUL-15	0.029	NA
	MTU1-E	20-JUL-15	0.03	NA
	MTU1-E	05-AUG-15	0.032	NA
	MTU1-E	11-SEP-15	0.033	NA
TFC-SE	PTU1-I	08-JUL-15	0.022	NA
	PTU1-E	08-JUL-15	0.021	NA
	PTU1-E	03-AUG-15	0.025	NA
	PTU1-E	01-SEP-15	0.028	NA
TFD-E	PTU8-I	21-JUL-15	0.005	NA
	PTU8-E	21-JUL-15	0.0052	NA
TFD-HPD	PTU10-I	13-JUL-15	0.01	NA
	PTU10-E	13-JUL-15	0.01	NA
TFD-S	PTU2-I	22-JUL-15	0.0068	NA
	PTU2-E	22-JUL-15	0.0066	NA
TFD-SE	PTU11-I	09-JUL-15	0.0064	NA
	PTU11-E	09-JUL-15	0.0065	NA
TFD-SS	PTU12-I	15-JUL-15	0.0086	NA
	PTU12-E	15-JUL-15	0.0078	NA
TFD-W	PTU6-I	09-JUL-15	0.0077	NA
	PTU6-E	09-JUL-15	0.0079	NA
TFE-E	PTU3-I	14-JUL-15	0.0084	NA
	PTU3-E	14-JUL-15	0.0086	NA
TFE-HS	GTU07-I	14-JUL-15	0.0058	NA
	GTU07-E	14-JUL-15	<0.001	NA
TFE-NW	PTU9-I	14-JUL-15	0.008	NA
	PTU9-E	14-JUL-15	0.0081	NA
TFE-SE	W-359	09-JUL-15	0.0062	NA
	MTU04-E	09-JUL-15	0.0061	NA
TFE-SW	MTU03-I	15-JUL-15	0.01	NA
	MTU03-E	15-JUL-15	0.0097	NA

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFE-W	MTU05-I	16-JUL-15	0.0083	NA
	MTU05-E	16-JUL-15	0.0087	NA
TFG-1	W-1111	23-JUL-15	0.0069	NA
	GTU01-E	23-JUL-15	<0.001	NA
	TFG-ASW	23-JUL-15	0.011	NA
TFG-N	MTU02-I	15-JUL-15	0.0058	NA
	MTU02-E	15-JUL-15	0.0059	NA
TF406	PTU5-I	16-JUL-15	0.0094	NA
	PTU5-E	16-JUL-15	0.01	NA
TF406-NW	W-1801	22-JUL-15	<0.001	NA
	GTU03-E	22-JUL-15	<0.001	NA
TF5475-2	GTU09-I	22-JUL-15	0.0081	NA
	GTU09-E	22-JUL-15	0.0095	NA

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFB	TFB-E002	13-JUL-15	100 (100)	NA	NA
TFC-E	MTU1-E	20-JUL-15	100 (100)	NA	NA
TFD-E	PTU8-E	21-JUL-15	100 (100)	NA	NA
TFD-S	PTU2-E	22-JUL-15	100 (100)	NA	NA
TFD-SS	PTU12-E	15-JUL-15	100 (100)	NA	NA
TFE-E	PTU3-E	14-JUL-15	100 (100)	NA	NA
TFE-HS	GTU07-E	14-JUL-15	100 (100)	NA	NA
TFE-SW	MTU03-E	15-JUL-15	100 (100)	NA	NA
TFE-W	MTU05-E	16-JUL-15	100 (100)	NA	NA
TFG-1	GTU01-E	23-JUL-15	100 (100)	NA	NA
TFG-N	MTU02-E	15-JUL-15	100 (100)	NA	NA
TF406	PTU5-E	16-JUL-15	100 (100)	NA	NA
TF406-NW	GTU03-E	22-JUL-15	100 (100)	NA	NA
TF5475-2	GTU09-E	22-JUL-15	100 (100)	NA	NA

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

Explanation of Abbreviations

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-14-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 23.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	400	0.0
W-262	154	0.0
W-404	1,444,100	32.5
W-408	1,272,600	28.5
W-415	1,861,488	42.1
W-457	363,896	8.1
W-605	398,820	8.7
W-904	721,312	15.9
W-518	69,948	4.0
W-522	172,288	12.5
W-614	469,976	11.8
W-1001	60,926	1.4
W-1004	345,512	8.6
W-1009	1,000,288	22.4
W-712	227,036	5.0
W-714	226,848	4.9
W-903	534,640	11.5
Total:	<u>9,170,232</u>	<u>217.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,749,224</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

4,421,008

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Steve Vargas

Date: 08-10-2015

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-03-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,430,036	31.2
W-408	1,264,952	28.5
W-415	1,581,904	38.8
W-457	350,216	8.1
W-605	394,512	8.9
W-1009	925,664	22.7
W-518	197,104	4.3
W-522	594,048	12.8
W-614	402,468	10.0
W-712	225,380	5.4
W-714	223,520	5.0
W-903	513,008	10.8
W-904	713,456	16.5
W-1001	59,864	1.3
W-1004	360,344	8.3
Total:	<u>9,236,476</u>	<u>212.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,171,076</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

5,065,400

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Steve George C.

Date: 09-04-2015

Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 708

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-02-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 19

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	6	0.0
W-404	1,331,864	30.8
W-408	1,223,416	28.5
W-415	1,614,640	39.9
W-457	340,224	7.6
W-518	181,086	4.3
W-522	570,528	13.3
W-605	374,152	8.8
W-614	450,284	10.8
W-712	203,164	4.9
W-714	204,952	4.9
W-903	482,824	10.7
W-904	333,792	15.3
W-1001	49,452	1.3
W-1004	317,992	7.6
W-1009	862,032	22.7
Total:	<u>8,540,408</u>	<u>211.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,835,908</u>

**Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA**

Arroyo Seco

TFG-ASW

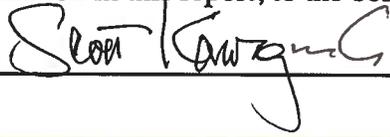
4,704,500

6. Comments:

Facility was shutdown on 09-09-2015 to replace influent flow meter. Facility was restarted on 09-10-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 10-02-2015

Self-Monitoring Report

LLNL Solar Treatment Unit 06 (STU06)

AREA TFA-E

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

June	30														
July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

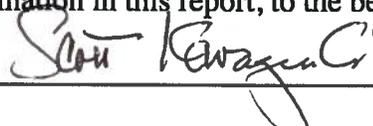
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-31-2015**

Self-Monitoring Report

LLNL Solar Treatment Unit 06 (STU06)

AREA TFA-E

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July	31														
August	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

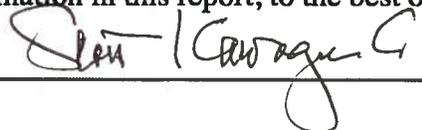
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-31-2015

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August 31
 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**
 Influent pH:
 Effluent pH:
 Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>0</u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: **09-30-2015**

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-13-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 23.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	345,224	7.8
W-610	311,552	7.0
W-620	208,782	4.7
W-621	204	0.0
W-655	200	0.0
W-704	780,368	17.6
W-1423	118,692	2.8
W-2501	729,354	16.4
W-2502	166,502	3.7
Total:	<u>2,660,878</u>	<u>60.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,384,971</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>1,275,907</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

Operator Signature: Scott Conway Date: 08-10-2015

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month July Year 2015
2. Date compliance sampling performed 07-13-2015
3. Weather Conditions:

Average air tempertaure (°C):	<u>18.18</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>8/ WSW</u>

4. Receiving Data:

Sample			
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>	
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>	

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:
7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawczynski Date: 08-10-2015

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 754

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-03-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 20.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	371,544	8.3
W-610	311,144	7.1
W-620	178,200	4.3
W-621	0	0.0
W-655	0	0.0
W-704	775,984	17.4
W-1423	112,924	2.6
W-2501	729,110	16.4
W-2502	159,344	3.7
Total:	<u>2,638,250</u>	<u>59.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,631,380</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>1,006,870</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

Operator Signature: Steve Kwozycki Date: 09-04-2015

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month August Year 2015
2. Date compliance sampling performed 08-03-2015
3. Weather Conditions:

Average air tempertaure (°C):	<u>22.41</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

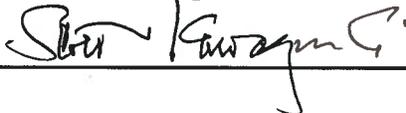
4. Receiving Data:

<u>Sample</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:
7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-04-2015

Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-02-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	334,984	8.4
W-610	276,532	7.1
W-620	151,088	3.6
W-621	0	0.0
W-655	0	0.0
W-704	671,664	17.4
W-1423	103,396	2.5
W-2501	650,998	16.3
W-2502	145,356	3.5
Total:	<u>2,334,018</u>	<u>58.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>1,369,785</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>964,233</u>

6. Comments:

Facility was shutdown on 09-26-2015 due to high flow fault. Facility was restarted on 09-28-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility B (TFB)
AREA TFB

Operator Signature: Steve Ferguson Date: 10-02-2015

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month September Year 2015

2. Date compliance sampling performed 09-02-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>21.27</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shah Karaguchi Date: 10-07-2015

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 756

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-08-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 20.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	598,224	13.1
W-1104	1,156,896	26.0
W-1116	72,580	1.4
Total:	<u>1,827,700</u>	<u>40.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,827,700</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shirley Kawaguchi Date: 08-10-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month July Year 2015
2. Date compliance sampling performed 07-08-2015
3. Weather Conditions:

Average air tempertaure (°C): 20.64
6-day total precipitation (in): 0.01
Average wind speed/direction (mph): 7/ WSW

4. Receiving Data:

Sample
Location pH Temperature (C)
Receiving Water N/M N/M

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 08-10-2015

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-03-2015
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 23

4. Wellfield Data:

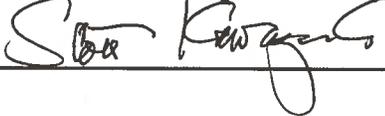
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	609,040	13.7
W-1104	1,125,056	25.4
W-1116	73,528	1.6
Total:	<u>1,807,624</u>	<u>40.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,807,624</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-04-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month August Year 2015
2. Date compliance sampling performed 08-03-2015
3. Weather Conditions:

Average air temperture (°C):	<u>22.41</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

4. Receiving Data:

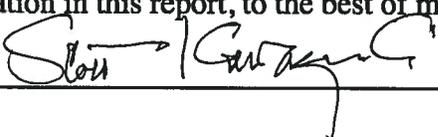
Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-04-2015

Self-Monitoring Report LLNL Treatment Facility C (TFC) AREA TFC

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 708

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-01-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	530,304	13.5
W-1104	1,058,528	24.6
W-1116	65,249	1.6
Total:	<u>1,654,081</u>	<u>39.7</u>

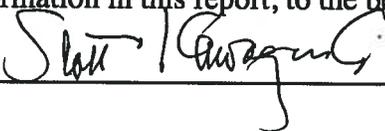
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,654,081</u>

6. Comments:

Facility was shutdown on 09-23-2015. Facility was restarted on 09-24-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-01-2015

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month September Year 2015
2. Date compliance sampling performed 09-01-2015
3. Weather Conditions:

Average air tempertaure (°C):	<u>22.07</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ SW</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Stell Kowalski Date: 10-07-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-20-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	147,261	3.2
W-413	544,296	12.2
Total:	<u>691,557</u>	<u>15.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>691,557</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-18-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	136,202	3.1
W-413	510,328	11.6
Total:	<u>646,530</u>	<u>14.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>646,530</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-21-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 385

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-11-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 22.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	71,347	2.9
W-413	263,441	10.9
Total:	<u>334,788</u>	<u>13.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>334,788</u>

6. Comments:

Facility was shutdown at 10:48 on 09-11-2015 to support Site 200 Drainage Maintenance Program. Facility was restarted at 09:40 on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-16-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 1 (PTU1)

AREA TFC-SE

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 760

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-08-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 22.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	77,746	2.0
W-2201	450,916	10.0
Total:	<u>528,662</u>	<u>12.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>528,662</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Stou Kawaguchi Date: 08-10-2015

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 754

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-03-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	88,273	2.0
W-2201	451,746	10.0
Total:	<u>540,019</u>	<u>12.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>540,019</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Stan Fairweather Date: 09-04-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 1 (PTU1)

AREA TFC-SE

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September **01** **02** **03** **04** 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 **29** **30**

Total monthly time facility operated (hours): 115

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-01-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 22.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	13,631	2.0
W-2201	68,957	10.1
Total:	<u>82,588</u>	<u>12.1</u>

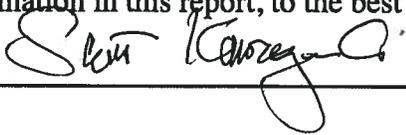
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>82,588</u>

6. Comments:

Facility was shutdown on 09-04-2015 for the drilling and installation of new PTU-1 extraction well W-3107, located immediately adjacent to the facility. Facility was restarted on 09-29-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-01-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

June	30														
July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	0	0.0
W-653	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
W-1206	0	0.0
W-1208	0	0.0
Total:	<u>0</u>	<u>0.0</u>

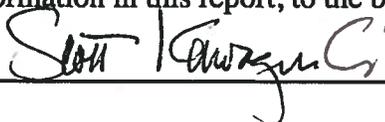
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-31-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July	31														
August	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured
 Influent pH:
 Effluent pH:
 Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	0	0.0
W-653	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
W-1206	0	0.0
W-1208	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-31-2015

Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August 31
September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	0	0.0
W-653	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
W-1206	0	0.0
W-1208	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

Facility was shutdown on 04-27-2015 for REVAL.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Ston King Date: 09-30-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** 05 **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 642

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-21-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	568	3.4
W-1301	28,055	0.9
W-1303	50,032	1.2
W-1306	2,830	2.8
W-1307	249,711	6.8
W-1550	6,286	1.8
W-2203	2,863	1.7
Total:	<u>340,345</u>	<u>18.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>340,345</u>

6. Comments:

Facility shutdown at 05:29 on 07-04-2015 due to low flow. Facility was restarted at 09:25 on 07-06-2015. Facility shutdown at 22:15 on 07-07-2015 due to possible analog data RIO problems. Facility was restarted at 15:02 on 07-08-2015. Facility was shutdown at 08:58 on 07-09-2015 to install new strategy and complete CSFT interlock checks. Facility was restarted at 15:50 on 07-09-2015. Facility was shutdown at 06:25 on 07-29-2015 to perform maintenance work at the facility. Facility was restarted at 11:01 on 07-30-2015.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kubit Date: 08-20-2015

Self-Monitoring Report LLNL Portable Treatment Unit 8 (PTU8) AREA TFD-E

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** 20 **21** 22 23 **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): **585**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **08-06-2015**
Influent pH: **7.5**
Effluent pH: **7.6**
Effluent Temperature (°C): **21.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	756	3.4
W-1301	25,543	0.8
W-1303	45,937	1.4
W-1306	3,566	2.8
W-1307	223,827	6.4
W-1550	5,533	1.8
W-2203	2,418	1.7
Total:	<u>307,580</u>	<u>18.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>307,580</u>

6. Comments:

Facility was shutdown on 08:24 08-04-2015 for ME maintenance. Facility was restarted at 12:16 on 08-05-2015. Facility was shutdown at 16:59 on 08-19-2015 for EE maintenance work. Facility was restarted at 13:42 on 08-21-2015. Facility shutdown at 14:50 due to mechanical problems with the discharge check valve on 08-21-2015. Facility was restarted at 08:55 on 08-24-2015. Facility was shutdown at 13:46 for EE testing on 08-26-2015. Facility was restarted at 09:55 on 08-27-2015.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty K. Kild Date: 09-21-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-11-2015
 Influent pH: 7.5
 Effluent pH: 7.6
 Effluent Temperature (°C): 26.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	812	1.7
W-1301	29,775	0.7
W-1303	51,354	1.1
W-1306	4,177	1.3
W-1307	332,187	8.7
W-1550	6,441	0.6
W-2203	2,559	1.3
Total:	<u>427,305</u>	<u>15.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>427,305</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Bobby L. Loh Date: 10-16-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 735

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-13-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	317,789	6.4
Total:	<u>317,789</u>	<u>6.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>317,789</u>

6. Comments:

Facility shutdown at 21:25 on 07-08-2015 due to air stripper high water level.
 Facility was restarted at 09:32 on 07-09-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 08-20-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 735

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-05-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	315,093	10.0
Total:	<u>315,093</u>	<u>10.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>315,093</u>

6. Comments:

Facility was shutdown at 14:00 on 08-12-2015 due to EE maintenance. Facility was restarted at 08:23 on 08-13-2015. Facility was shutdown at 09:33 on 08-20-2015 due to EE download of file . Facility was restarted at 10:30 on 08-20-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Luid Date: 09-21-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 388

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-11-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	144,852	5.9
Total:	<u>144,852</u>	<u>5.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>144,852</u>

6. Comments:

Facility was shut down at 09:57 on 09-11-2015 to support the Site 200 Drainage Maintenance Program. Facility was restarted at 09:16 on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kild Date: 10-16-2015

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** 23 **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 678

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	673	2.0
W-1653	528	1.2
W-1655	44	0.7
W-1657	0	0.0
Total:	<u>1,245</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>1,245</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 118 gallons of facility water were added to the pre-mixing tote on 7-27-15. The facility was down for approximately 66.48 hrs for a variety of reasons: Ethyl Lactate injection, pre-sampling setup, sampling, and filling the pre-mixing tote.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kubit Date: 08-20-2015

Self-Monitoring Report LLNL ISB01 (ISB01) AREA TFD-HPD

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** 19 **20** **21** **22** **23** **24** 25 **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 624

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	795	2.2
W-1653	530	1.5
W-1655	77	0.6
W-1657	0	0.0
Total:	<u>1,402</u>	<u>4.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>1,402</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 107 gallons offacility water were added to the pre-mixing tote on 8-11-15. Approximately 105 gallons of facility water were added tothe pre-mixing tote on 8-24-15.The facility was down for approximately 115 hrs. for a variety of reasons: Ethyl Lactate injection, filling the pre-mixing tote, downloading of new strategy software, CSFT and interlock checks, and facility repairwork.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL ISB01 (ISB01)
AREA TFD-HPD

Operator Signature: Billy Kutil Date: 10-07-2015

**Self-Monitoring Report
LLNL ISB01 (ISB01)
AREA TFD-HPD**

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** 12 13 14 **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** 25 26 27 **28** **29** **30**

Total monthly time facility operated (hours): 398

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	856	1.9
W-1653	390	1.8
W-1655	76	1.0
W-1657	0	0.0
Total:	<u>1,322</u>	<u>4.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>1,322</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. Approximately 122 gallons of facility water were added to the pre-mixing tote on 9-09-15. Approximately 75 gallons of facility water were added to the pre-mixing tote on 9-28-15. The facility was down for approximately 322.47 hrs. for a variety of reasons: Ethyl Lactate injection, setup the facility for sampling, sampling, filling the pre-mixing tote, hours of operation continued to increase even though the facility shut down when the TFL interlock broke (W-1653 and W-1655), and facility repair work.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL ISB01 (ISB01)
AREA TFD-HPD

Operator Signature: Billy Hill Date: 10-21-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 2 (PTU2)

AREA TFD-S

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 17 18 19 20 21 **22** **23** **24** 25 26 **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 480

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-22-2015
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 24.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	325,244	11.1
W-1504	198,494	7.7
W-1510	69,276	3.2
W-2601	123,522	9.2
Total:	<u>716,536</u>	<u>31.2</u>

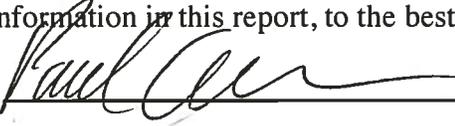
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>716,536</u>

6. Comments:

Facility was shutdown on 07-15-2015 to clear tree root blocking discharge pipe. Facility was restarted on 07-22-2015. Facility was shutdown on 07-24-2015 due to HMI issues caused by heat. Facility was restarted on 07-28-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

**Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **672**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **08-01-2015**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **23.7**

4. Wellfield Data:

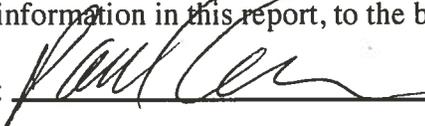
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	377,688	9.2
W-1504	272,353	6.7
W-1510	91,242	2.3
W-2601	158,726	4.1
 Total:	<hr/> <u>900,009</u>	<hr/> <u>22.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>900,009</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-18-2015**

Self-Monitoring Report

LLNL Portable Treatment Unit 2 (PTU2)

AREA TFD-S

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>																											
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>															
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>															

Total monthly time facility operated (hours): 792

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>09-03-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>24.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	439,180	9.3
W-1504	316,748	6.8
W-1510	102,779	2.3
W-2601	206,729	4.4
Total:	<u>1,065,436</u>	<u>22.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,065,436</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-08-2015**

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 688

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-09-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	202,375	4.5
W-2005	36,458	1.0
W-1308	53,006	1.3
W-1403	44,950	1.0
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>336,789</u>	<u>7.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>336,789</u>

6. Comments:

Facility was shutdown on 07-07-2015 at 08:11 to perform maintenance to W-1403 Flowmeter. Facility was restarted on 07-07-2015 at 11:10. Facility was shutdown on 07-10-2015 at 08:35 to conduct system interlock checks. Facility was restarted on 07-10-2015 at 14:10. Facility was shutdown on 07-21-2015 to facilitate MUSD electricians installing power outlets in the E-5 parking lot. Facility was restarted on 07-21-2015 at 14:58. Facility was shutdown on 07-27-2015 to install Y-check valve on effluent piping. Facility was restarted on 07-28-2015 at 10:57.

**LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE**

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-04-2015**

Self-Monitoring Report

LLNL Portable Treatment Unit 11 (PTU11)

AREA TFD-SE

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>08-04-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	194,965	5.2
W-2005	37,003	1.0
W-1308	50,190	1.3
W-1403	41,754	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>323,912</u>	<u>8.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>323,912</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-11-2015**

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>											
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 816

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-01-2015
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 20.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	216,830	4.1
W-2005	38,991	0.8
W-1308	57,597	1.2
W-1403	50,381	1.0
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>363,799</u>	<u>7.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>363,799</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-01-2015

**Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 740

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-15-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.7

4. Wellfield Data:

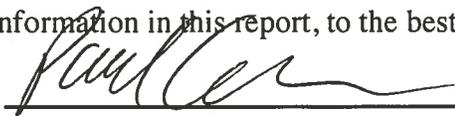
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	225,244	5.0
W-1601	40,005	0.9
W-1602	92,887	2.4
W-1603	616,403	13.9
Total:	<u>974,539</u>	<u>22.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>974,539</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

**Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-01-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.3

4. Wellfield Data:

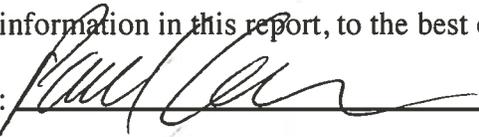
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	202,602	4.9
W-1601	34,925	0.0
W-1602	102,545	2.5
W-1603	562,861	13.9
Total:	<u>902,933</u>	<u>21.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>902,933</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-11-2015

Self-Monitoring Report LLNL Portable Treatment Unit 12 (PTU12) AREA TFD-SS

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>																											
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 792

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>09-03-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>25.2</u>

4. Wellfield Data:

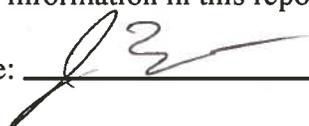
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	230,195	4.8
W-1601	40,821	0.9
W-1602	117,322	2.5
W-1603	644,039	13.9
Total:	<u>1,032,377</u>	<u>22.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,032,377</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  _____ Date: **10-08-2015**

**Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 750

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-09-2015
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 21.2

4. Wellfield Data:

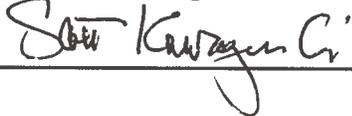
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	427,978	9.8
W-1216	454,098	10.2
W-1902	657,913	14.8
Total:	<u>1,539,989</u>	<u>34.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,539,989</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-03-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 6 (PTU6)

AREA TFD-W

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-06-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.5

4. Wellfield Data:

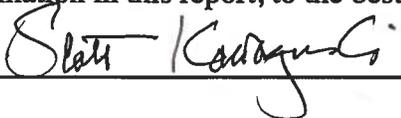
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	442,811	11.1
W-1216	454,166	10.0
W-1902	654,625	14.8
Total:	<u>1,551,602</u>	<u>36.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,551,602</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-01-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 6 (PTU6)

AREA TFD-W

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 382

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-03-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	241,405	11.0
W-1216	225,266	10.0
W-1902	330,917	14.6
Total:	<u>797,588</u>	<u>35.6</u>

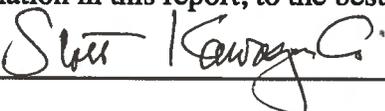
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>797,588</u>

6. Comments:

Facility was shutdown on 09-11-2015 for arroyo vegetation maintenance. Facility was restarted on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-02-2015

**Self-Monitoring Report
LLNL Vapor Extraction System 11 (VES11)
AREA VTFD-ETCS**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	353,976	8.1	-.54	60	722
W-ETC-2004A	87,687	1.9	-2.51	60	722
W-ETC-2004B	355,438	8.3	-1.18	60	722
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>797,101</u>	<u>18.3</u>			

4. Comments:

Facility was shutdown on 07-21-2015 at 08:09 for scheduled power outage.
Facility was restarted on 07-21-2015 at 14:53.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 11 (VES11)
AREA VTFD-ETCS

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treatment facility operated

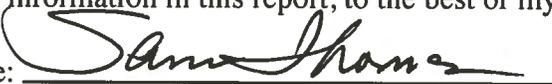
July 31
 August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	70	0.0	0	0	0
W-ETC-2003	333,959	8.2	-.52	70	678
W-ETC-2004A	83,500	1.9	-2.51	70	678
W-ETC-2004B	335,484	8.4	-1.17	70	678
SIP-ETC-201	14	0.0	0	0	0
Total:	<u>753,027</u>	<u>18.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-11-2015

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>											
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	62	0.0	0	0	1
W-ETC-2003	387,286	8.3	-.53	70	787
W-ETC-2004A	92,297	1.8	-2.51	70	787
W-ETC-2004B	388,920	8.4	-1.17	70	787
SIP-ETC-201	9	0.0	0	0	0
Total:	<u>868,574</u>	<u>18.5</u>			

4. Comments:

Facility shutdown 09-07-2015 at 09:20 due to high discharge separator level. Facility was restarted 09-08-2015 at 08:55. Facility shutdown on 09-17-2015 at 00:47 hrs. attributed to high discharge separator level. Facility was restarted on 09-17-2015 at 15:20. Quarterly vapor samples collected from idle and operating extraction wells 9-22-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-07-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 3 (PTU3)

AREA TFE-E

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	16	17	18	19	20	21	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 562

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>07-14-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	256,715	7.6
W-1109	38,086	1.1
W-1903	3,778	0.6
W-1909	0	0.0
W-2305	0	0.0
 Total:	<u>298,579</u>	<u>9.3</u>

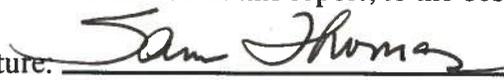
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>298,579</u>

6. Comments:

Facility was shutdown on 07-15-2015 at 13:27 to allow the drainage channel to dry out in order to clear vegetation obstructing the discharge line at PTU 2. Facility was restarted on 07-22-2015 at 10:03

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-05-2015**

Self-Monitoring Report

LLNL Portable Treatment Unit 3 (PTU3)

AREA TFE-E

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 679

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>08-03-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	316,245	8.0
W-1109	44,645	1.1
W-1903	7,211	0.3
W-1909	0	0.0
W-2305	0	0.0
 Total:	<u>368,101</u>	<u>9.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>368,101</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-10-2015**

Self-Monitoring Report

LLNL Portable Treatment Unit 3 (PTU3)

AREA TFE-E

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August 28 29 30 31
 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 824

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-09-2015
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 25.2

4. Wellfield Data:

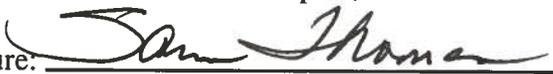
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	383,489	7.9
W-1109	53,340	1.1
W-1903	7,869	0.1
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>444,698</u>	<u>9.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>444,698</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-05-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 17 18 19 20 21 **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **566**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **07-14-2015**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **22.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	483	0.2
W-2801	32,192	1.0
Total:	<u>32,675</u>	<u>1.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>32,675</u>

6. Comments:

Facility shutdown 7-15-15 at 13:35 to facilitate removal of tree roots obstructing the discharge line at PTU 2.. Facility was restarted 7-22-15 at 09:10.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-05-2015**

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): **651**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>08-04-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2105	546	0.2
W-2801	35,882	0.9
Total:	<u>36,428</u>	<u>1.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>36,428</u>

6. Comments:

Facility secured 8/25/15 at 07:58 for GAC changeout. Facility was restarted 8/26/15 at 08:20

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-10-2015**

**Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 746

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-14-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22.3

4. Wellfield Data:

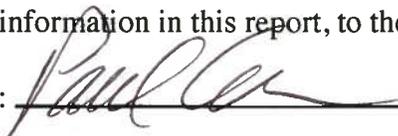
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	288,373	6.5
W-1409	73,128	1.6
Total:	<u>361,501</u>	<u>8.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>361,501</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

**Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **682**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **08-01-2015**
 Influent pH: **7.0**
 Effluent pH: **7.0**
 Effluent Temperature (°C): **21.4**

4. Wellfield Data:

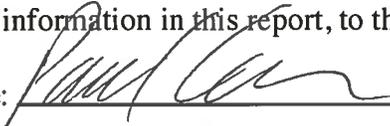
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	261,352	6.5
W-1409	66,208	1.6
Total:	<u>327,560</u>	<u>8.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>327,560</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-11-2015**

**Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW**

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>												
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	15
	16	17	18	19	20	21	22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 467

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>09-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	176,338	6.4
W-1409	45,896	1.6
Total:	<u>222,234</u>	<u>8.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>222,234</u>

6. Comments:

The facility was secured on 09-11-2015 to support tree and vegetation removal from Arroyo Las Positas and the Lake Hausmann outfall. The facility was restarted on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 576

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-09-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	292,701	8.4
Total:	<u>292,701</u>	<u>8.4</u>

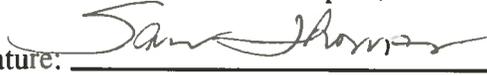
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>292,701</u>

6. Comments:

Facility was shutdown on 07-15-2015 at 13:10 because of tree root at facility PTU-2 drainage pipe. Facility was restarted on 07-22-2015 at 09:30.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-05-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 745

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-03-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	377,212	8.5
Total:	<u>377,212</u>	<u>8.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>377,212</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 719

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-09-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 24.8

4. Wellfield Data:

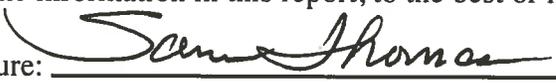
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	362,412	8.3
Total:	<u>362,412</u>	<u>8.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>362,412</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

Self-Monitoring Report

LLNL Mini Treatment Unit 03 (MTU03)

AREA TFE-SW

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 17 18 19 20 21 **22** **23** **24** **25** 26 27 28 **29** **30** **31**

Total monthly time facility operated (hours): **464**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **07-15-2015**
 Influent pH: **7.4**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **21.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	281,546	10.1
W-1518	0	0.0
W-1520	23,351	0.8
W-1522	32,089	1.1
Total:	<u>336,986</u>	<u>12.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>336,986</u>

6. Comments:

Facility shutdown 20:20 on 07-06-2015 due to facility low flow. Facility was restarted at 13:24 on 07-07-2015. Facility was shutdown at 11:55 on 07-15-2015 as requested by Paul Anderson for root removal at PTU2 culvert. Facility was restarted at 09:13 on 07-22-2015. Facility shutdown at 06:29 on 07-25-2015 due to facility low flow. Facility was restarted at 09:15 on 07-29-2015. W-1522 shutdown several times during the month due to high flow rate.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Bill Rutil* Date: **08-18-2015**

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-05-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	452,886	10.1
W-1518	0	0.0
W-1520	37,827	0.8
W-1522	51,836	1.1
Total:	<u>542,549</u>	<u>12.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>542,549</u>

6. Comments:
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Ridd Date: 09-21-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-14-2015
Influent pH: 7.4
Effluent pH: 7.5
Effluent Temperature (°C): 20.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	442,446	10.2
W-1518	0	0.0
W-1520	35,010	0.9
W-1522	44,453	1.1
Total:	<u>521,909</u>	<u>12.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>521,909</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy R. Hill Date: 10-16-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-16-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	272,870	6.1
W-305	534,263	12.1
Total:	<u>807,133</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>807,133</u>

6. Comments:

w-305 shut down several times during the month due to low flow.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Smith Date: 08-18-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-06-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	252,541	6.1
W-305	495,652	12.1
Total:	<u>748,193</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>748,193</u>

6. Comments:

Facility was shutdown at 14:13 on 08-12-2015 for repairs. Facility was restarted at 10:17 on 08-14-2015. Facility was shutdown at 08:32 on 08-17-2015 for repairs. Facility was restarted at 14:22 on 08-17-2015. W-305 shut down several times during the month due to flow flow interlock activations.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Rudd Date: 09-21-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-14-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 22.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	260,609	6.1
W-305	523,076	12.1
Total:	<u>783,685</u>	<u>18.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>783,685</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhn Date: 10-16-2015

Self-Monitoring Report
LLNL Vapor Extraction System 16 (VES16)
AREA VTFE-ELM

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1903	108,818	1.9	-23.63	82	524
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	65,224	1.9	-.5	82	524
W-543-1908	0	0.0	0	0	0
Total:	<u>174,042</u>	<u>3.8</u>			

4. Comments:

Facility was shutdown on 07-15-2015 in conjunction with PTU3 for drainage ditch maintenance. Facility was restarted on 07-22-2015 at 10:23. Facility shutdown on 07-25-2015 at 21:50 due to condensate collection tank high level alarm. Facility was restarted on 07-27-2015 at 10:30.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 16 (VES16)
AREA VTFF-ELM

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> Volume(cu. ft)	<u>Instantaneous</u> Flow Rate(scfm)	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> of Op.
W-1903	143,627	3.5	-22.31	68	669
W-1909	44	0.0	0	0	0
W-2305	10	0.0	0	0	0
W-543-001	14	0.0	0	0	0
W-543-003	83,268	2.1	-.4	68	669
W-543-1908	10	0.0	0	0	0
Total:	<u>226,973</u>	<u>5.6</u>			

4. Comments:

Quarterly vapor samples collected from operating and idle extraction wells
8-19-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 16 (VES16)
AREA VTFE-ELM

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>															
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	157,137	3.0	-22.43	70	144
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	101,056	2.0	-.04	70	144
W-543-1908	0	0.0	0	0	0
Total:	<u>258,193</u>	<u>5.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 12 (VES12)
AREA VTFE-HS

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	53,441	1.0	-13.19	60	717
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	480,727	10.8	-12.91	60	717
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>534,168</u>	<u>11.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thoma Date: 08-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 12 (VES12)
AREA VTFE-HS

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 31
 August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	51,502	1.3	-12.57	58	679
W-ETS-2008A	10	0.0	0	0	0
W-ETS-2008B	459,477	11.6	-12.39	58	679
W-ETS-2009	35	0.0	0	0	0
W-ETS-2010A	10	0.0	0	0	0
W-ETS-2010B	10	0.0	0	0	0
Total:	<u>511,044</u>	<u>12.8</u>			

4. Comments:

Quarterly wellhead samples collected from idle and operating extraction wells 8/19/15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 12 (VES12)
AREA VTFE-HS

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

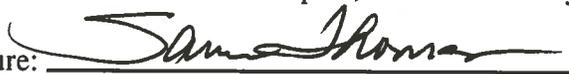
August 28 29 30 31
 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	61,694	1.3	-12.67	72	821
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	551,826	11.0	-12.42	72	821
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>613,520</u>	<u>12.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-23-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 21.7

4. Wellfield Data:

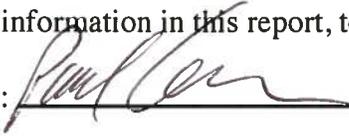
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	122,759	2.6
Total:	<u>122,759</u>	<u>2.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>122,759</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month July Year 2015

2. Date compliance sampling performed 07-23-2015

3. Weather Conditions:

Average air tempertaure (°C):	<u>21.09</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ WSW</u>

4. Receiving Data:

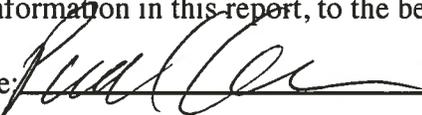
<u>Sample</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Location</u>		
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

Self-Monitoring Report

LLNL GAC Treatment Unit 01 (GTU01)

AREA TFG-1

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>		

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>07-31-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

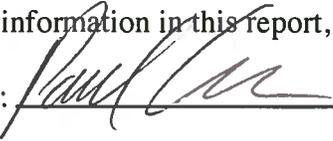
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	111,069	2.7
Total:	111,069	2.7

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>111,069</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-11-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month August Year 2015
2. Date compliance sampling performed 08-04-2015
3. Weather Conditions:

Average air tempertaure (°C):	<u>21.25</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

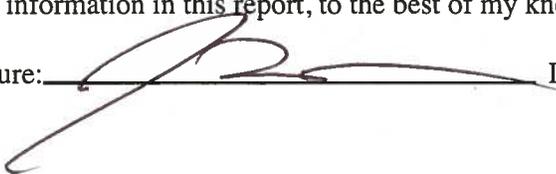
4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:
7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-21-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>																											
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 792

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>09-03-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	124,396	2.6
Total:	<u>124,396</u>	<u>2.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>124,396</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-08-2015

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month September Year 2015
2. Date compliance sampling performed 09-03-2015
3. Weather Conditions:

Average air tempertaure (°C):	<u>20.08</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

-
4. Receiving Data:

Sample <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:
7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-21-2015

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-15-2015
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 21.8

4. Wellfield Data:

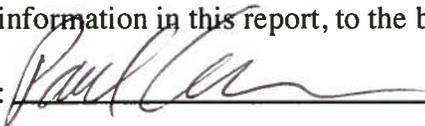
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	27,878	0.6
W-1807	172,346	3.9
Total:	<u>200,224</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>200,224</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

**Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>		

Total monthly time facility operated (hours): 706

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-31-2015
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 21.8

4. Wellfield Data:

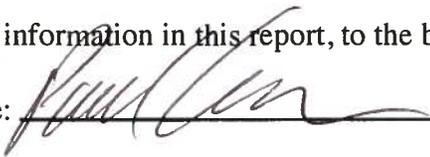
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	21,507	0.5
W-1807	162,672	3.9
Total:	<u>184,179</u>	<u>4.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>184,179</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-18-2015

Self-Monitoring Report

LLNL Mini Treatment Unit 02 (MTU02)

AREA TFG-N

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>												
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	15
	16	17	18	19	20	21	22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): **467**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>08-29-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	14,067	0.6
W-1807	108,182	3.8
Total:	<u>122,249</u>	<u>4.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>122,249</u>

6. Comments:

The facility was secured on 09-11-2015 to support tree and vegetation removal from Arroyo Las Positas and the Lake Haussmann outfall. The facility was restarted on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-08-2015**

**Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 750

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-16-2015
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 23.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	80	4.5
W-1310	398,435	9.0
Total:	<u>398,515</u>	<u>13.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>398,515</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Linn Date: 08-18-2015

**Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 08-05-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 22.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	384,728	8.9
Total:	<u>384,728</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>384,728</u>

6. Comments:

Facility was shutdown at 09:51 on 08-20-2015 for maintenance work. Facility was restarted at 15:48 on 08-21-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-21-2015

Self-Monitoring Report

LLNL Portable Treatment Unit 5 (PTU5)

AREA TF406

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 235

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-30-2015
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 22.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	122,932	9.2
Total:	<u>122,932</u>	<u>9.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>122,932</u>

6. Comments:

Facility shut down at 08:47 on 09-05-2015 due to low flow at W-1310. The pump had to be replaced in W-1310. Facility was restarted at 10:08 on 09-25-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Date: 10-16-2015

**Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 257

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 07-22-2015
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 22.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	120,008	7.8
Total:	<u>120,008</u>	<u>7.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>120,008</u>

6. Comments:

System secure from 6/24/15 to 7/20/15 due to drilling activities near W-1801.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-20-2015

**Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW**

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28**

Total monthly time facility operated (hours): **670**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **08-01-2015**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **22.1**

4. Wellfield Data:

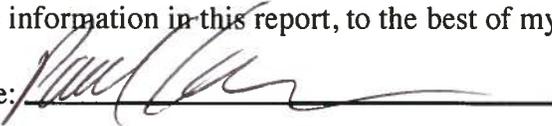
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	299,711	7.4
Total:	<u>299,711</u>	<u>7.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>299,711</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-11-2015**

**Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW**

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August	<u>29</u>	<u>30</u>	<u>31</u>												
September	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	15
	16	17	18	19	20	21	22	23	24	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): **460**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>09-02-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	179,712	7.1
Total:	<u>179,712</u>	<u>7.1</u>

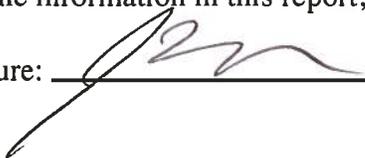
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>179,712</u>

6. Comments:

The facility was secured September 11th to support tree and vegetation removal from Arroyo Las Postias and the Lake Haussmann outfall. The facility was restarted September 25th.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-06-2015**

**Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

June	30														
July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-31-2015

Self-Monitoring Report

LLNL Solar Treatment Unit 09 (STU09)

AREA TF518-N

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July	31														
August	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

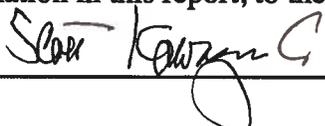
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-31-2015

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured
Influent pH:
Effluent pH:
Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	14	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	10	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>24</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>24</u>

6. Comments:

Groundwater from this facility is transferred to TFB Main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 08-05-2015

Self-Monitoring Report

LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)

AREA TF518-PZ

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** 18 19 20 21 22 23 **24** **25** **26** **27** **28** **29** **30** **31**

Total monthly time facility operated (hours): 572

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	18	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	5	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>23</u>	<u>0.0</u>

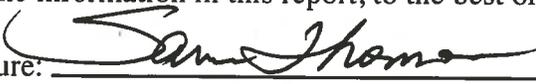
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>23</u>

6. Comments:

W-1615 and W-518-1915 pneumatic groundwater pumps secured 8/17/15 to 8/24/15 to allow groundwater levels to recover prior to collection of quarterly wellhead samples. Groundwater from this facility is treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

**Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ**

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 561

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	6	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	3	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>9</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>10</u>

6. Comments:

HDTank operations secured 9-14-15 to 9-21-15 to conduct Nitrogen Dissipation Tests on VTF518-PZ expansion wells. Groundwater from this facility is transferred to TFB Main for treatment.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuntz Date: 08-20-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kitch Date: 09-21-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold and underline**) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-16-2015

**Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

June	<u>30</u>														
July	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	26	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 710

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>07-22-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>26.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	111,716	3.8
W-1415	0	0.0
Total:	<u>111,716</u>	<u>3.8</u>

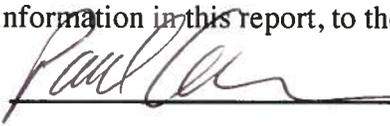
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>111,716</u>

6. Comments:

System secure from 7/25/15 to 7/27/15 due to flow meter fault alarm.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-11-2015

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	05	06	07	08	09	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>		

Total monthly time facility operated (hours): **513**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>07-31-2015</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>25.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	70,737	2.2
W-1415	17	0.0
Total:	<u>70,754</u>	<u>2.2</u>

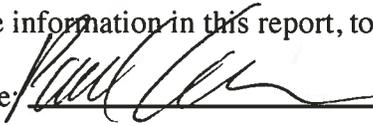
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>70,754</u>

6. Comments:

Facility shut down on 8/4/2015 due to a flow meter failure. Facility restarted 8/10/2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-18-2015**

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August 29 30 31
 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 345

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 09-02-2015
 Influent pH: 7.0
 Effluent pH: 7.0
 Effluent Temperature (°C): 23.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	42,702	2.0
W-1415	0	0.0
Total:	<u>42,702</u>	<u>2.0</u>

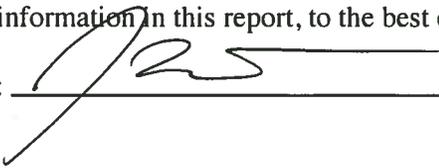
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>42,702</u>

6. Comments:

The facility was secured on 09-4-2015 to support tree and vegetation removal from Arroyo Las Positas and the Lake Haussmann outfall. The facility was restarted on 09-23-2015.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

July	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:		
	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-20-2015**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kula Date: 09-21-2015

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treated ground water was discharged

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-16-2015

Self-Monitoring Report
LLNL Vapor Extraction System 08 (VES08)
AREA VTF406-HS

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	558,666	13.1	-1.92	80	722
W-514-2007A	0	0.0	0	0	0
W-514-2007B	383,231	8.9	-2.23	80	722
Total:	<u>941,897</u>	<u>22.1</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 08 (VES08)
AREA VTF406-HS

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July	<u>31</u>														
August	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	515,723	13.0	-1.93	73	668
W-514-2007A	0	0.0	0	0	0
W-514-2007B	355,254	8.9	-2.19	73	668
Total:	<u>870,977</u>	<u>21.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-11-2015

Self-Monitoring Report
LLNL Vapor Extraction System 08 (VES08)
AREA VTF406-HS

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August 28 29 30 31
 September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	629,789	12.8	-1.86	79	820
W-514-2007A	0	0.0	0	0	0
W-514-2007B	429,678	8.8	-2.21	79	820
Total:	<u>1,059,467</u>	<u>21.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-07-2015

Self-Monitoring Report
LLNL Vapor Extraction System 05 (VES05)
AREA VTF511

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	804,448	18.8	-6.7	71	718
W-2208A	0	0.0	0	0	0
W-2208B	764,946	17.8	-6.2	71	718
Total:	<u>1,569,394</u>	<u>36.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 05 (VES05)
AREA VTF511

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 31
 August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	756,456	18.6	-6.6	70	675
W-2208A	0	0.0	0	0	0
W-2208B	724,920	18.0	-6.2	70	675
Total:	<u>1,481,376</u>	<u>36.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 05 (VES05)
AREA VTF511

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August 28 29 30 31
September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

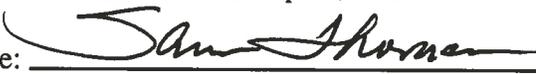
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	138
W-2205	0	0.0	0	0	138
W-2206	0	0.0	0	0	138
W-2207A	17	0.0	0	0	138
W-2207B	885,220	17.9	-7	78	138
W-2208A	26	0.0	0	0	138
W-2208B	895,346	17.9	-6.5	78	138
Total:	<u>1,780,609</u>	<u>35.8</u>			

4. Comments:

Quarterly vapor samples collected from VTF-511 idle and operating extraction wells 9-23-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-06-2015

**Self-Monitoring Report
LLNL Vapor Extraction System 13 (VES13)
AREA VTF518-PZ**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

Facility secured 6-18-15 and did not operate during this reporting month.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-08-2015

Self-Monitoring Report
LLNL Vapor Extraction System 13 (VES13)
AREA VTF518-PZ

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	0	0.0	0	0	0
W-2215B	0	0.0	0	0	0
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

Facility secured 6-18-15 and did not operate during this reporting month.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Horn Date: 10-07-2015

Self-Monitoring Report
LLNL Vapor Extraction System 13 (VES13)
AREA VTF518-PZ

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 **15**
16 **17** 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2214A	0	0.0	0	0	0
W-2214B	0	0.0	0	0	0
W-2215A	3,442	13.8	-21	70	5
W-2215B	15,376	55.5	-2	68	5
W-2217A	0	0.0	0	0	0
W-2217B	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>18,818</u>	<u>69.3</u>			

4. Comments:

Facility operations commenced 09-15-2015 at 09:30 to conduct Nitrogen Dissipation Tests on VTF518-PZ expansion wells. Facility was secured 09-15-2015 at 16:23. Facility restarted 9-16-15 at 09:02, facility was shutdown at 11:25. Facility restarted 9-16 at 13:19, secured at 16:43. Facility restarted 9-17-15 at 08:03, secured 9-17 at 11:10.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 10-07-2015

**Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ**

1. Reporting Period: Business Month July Week: 1 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

June **27** **28** **29** **30**
July **01** **02**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	31,981	3.7	-17.5	68	144
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	16,423	1.9	-18	68	144
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>48,404</u>	<u>5.6</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month July Week: **2** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

July **03** **04** **05** **06** **07** **08** **09** **10**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	44,895	3.9	-17.5	58	192
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	23,023	2.0	-18	58	192
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>67,918</u>	<u>5.9</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month July Week: 3 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July **11** **12** **13** **14** **15** **16** **17**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	37,420	3.7	-17.5	65	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	20,227	2.0	-18	65	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>57,647</u>	<u>5.7</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 08-05-2015

**Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ**

1. Reporting Period: Business Month July Week: **4** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

July **18** **19** **20** **21** **22** **23** **24**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,223	3.7	-17.5	56	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	21,126	2.1	-18	56	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>58,349</u>	<u>5.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **08-05-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month July Week: **5** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

July **25** **26** **27** **28** **29** **30** **31**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	35,677	3.6	-17.5	62	165
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	21,802	2.2	-17.7	62	165
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>57,479</u>	<u>5.8</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **08-05-2015**

**Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ**

1. Reporting Period: Business Month August Week: 1 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August **01** **02** **03** **04** **05** **06** **07**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,074	4.0	-15.5	65	171
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	23,617	2.3	-17.5	65	171
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>64,691</u>	<u>6.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month August Week: 2 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August **08** **09** **10** **11** **12** **13** **14**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	39,272	3.9	-15.5	64	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	24,168	2.4	-17.5	64	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>63,440</u>	<u>6.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 09-10-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month August **Week: 3** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

August **15** **16** **17** **18** **19** **20** **21**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	37,838	3.7	-15.5	76	170
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	25,566	2.5	-17	76	170
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>63,404</u>	<u>6.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-10-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month August **Week: 4** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

August **22** **23** **24** **25** **26** **27** **28**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	37,435	3.8	-15.5	62	164
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	25,614	2.6	-17	62	164
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>63,049</u>	<u>6.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **09-10-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month September Week: 1 Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August **29** **30** **31**
 September **01** **02** **03** **04**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	33,541	3.3	-18.5	63	169
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	27,443	2.7	-17	63	169
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>60,984</u>	<u>6.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: 10-05-2015

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month September Week: **2** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

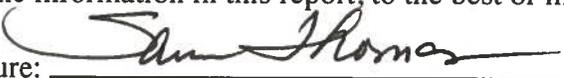
September **05** **06** **07** **08** **09** **10** **11**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	36,914	3.6	-15.5	75	171
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	26,660	2.6	-16.5	75	171
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>63,574</u>	<u>6.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-06-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month September Week: **3** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

September **12** **13** **14** 15 16 17 18

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	16,644	3.8	-15	72	73
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	11,826	2.7	-16.5	72	73
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>28,470</u>	<u>6.5</u>			

4. Comments:

Facility secured 9-14-15 at 12:00 to conduct Nitrogen Dissipation Tests on VTF518-PZ expansion wells.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-06-2015**

Self-Monitoring Report
LLNL Vapor Extraction System 19 (VES19)
AREA VTF518-PZ

1. Reporting Period: Business Month September Week: **4** Year **2015**

2. Dates (in **bold** and underline) treatment facility operated

September 19 20 **21** **22** **23** **24** **25**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	21,966	3.8	-15	60	96
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	15,607	2.7	-17	60	96
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>37,573</u>	<u>6.5</u>			

4. Comments:

VTF518-PZ and HDTank operations restarted 9-21-15.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **10-06-2015**

**Self-Monitoring Report
LLNL Vapor Extraction System 01 (VES01)
AREA VTF5475**

1. Reporting Period: Business Month July Year 2015

2. Dates (in **bold** and underline) treatment facility operated

July 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kulin Date: 08-20-2015

Self-Monitoring Report
LLNL Vapor Extraction System 01 (VES01)
AREA VTF5475

1. Reporting Period: Business Month August Year 2015

2. Dates (in **bold** and underline) treatment facility operated

August 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 09-21-2015

Self-Monitoring Report
LLNL Vapor Extraction System 01 (VES01)
AREA VTF5475

1. Reporting Period: Business Month September Year 2015

2. Dates (in **bold** and underline) treatment facility operated

September 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Ruler Date: 10-16-2015

Attachment C

Figures

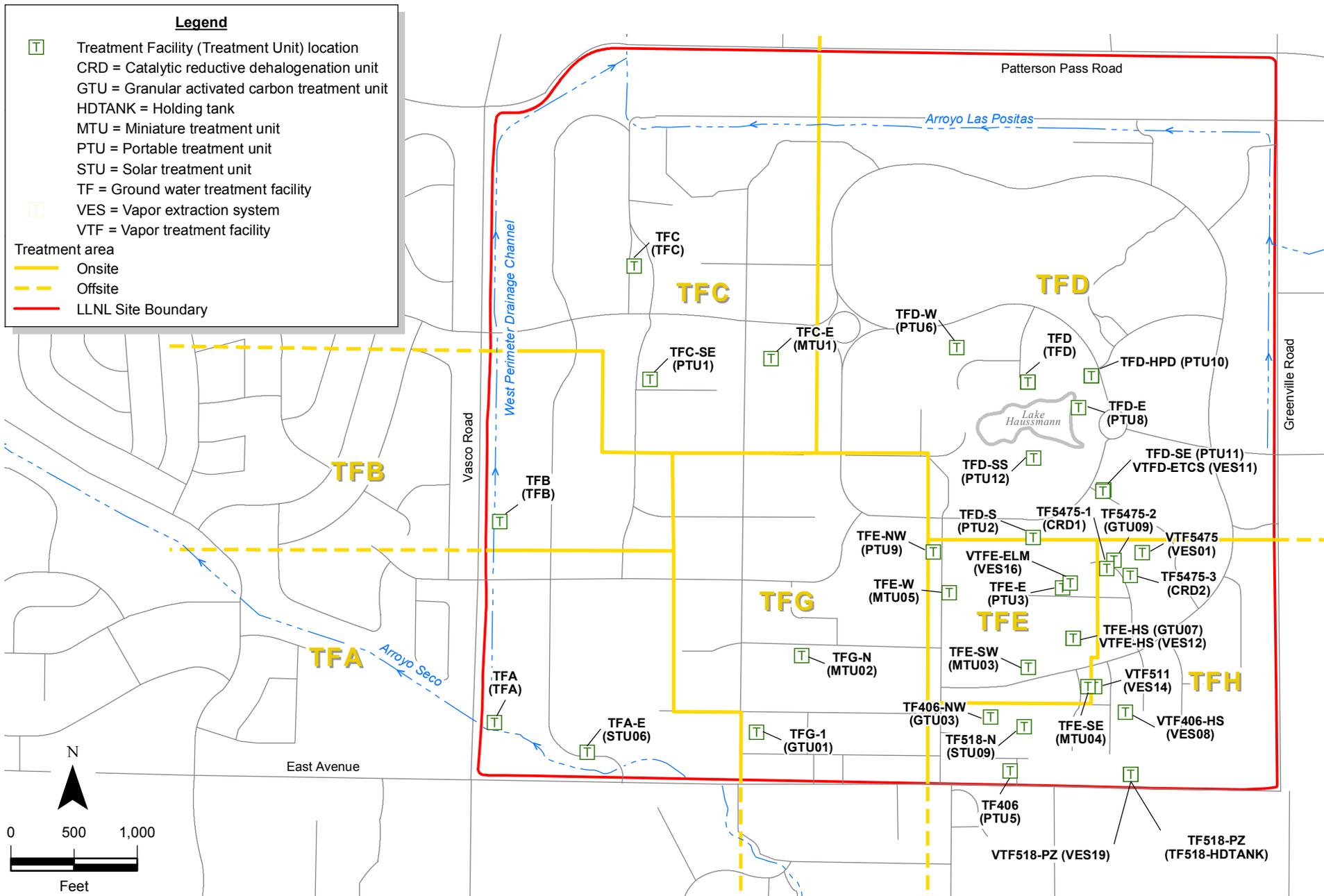


Figure 1. Livermore Site treatment areas and treatment facility locations.

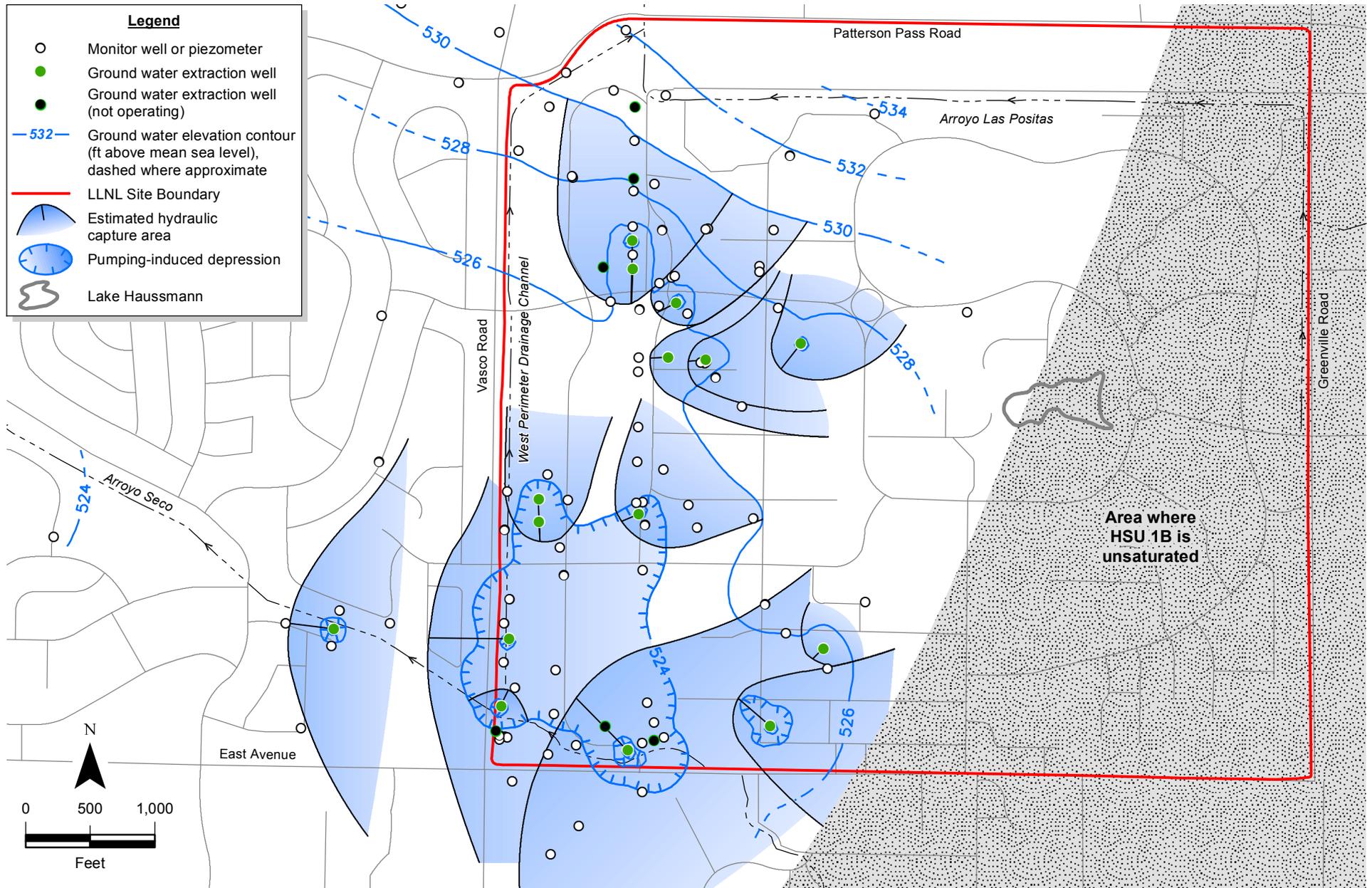


Figure 2. Ground water elevation contour map based on 110 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.

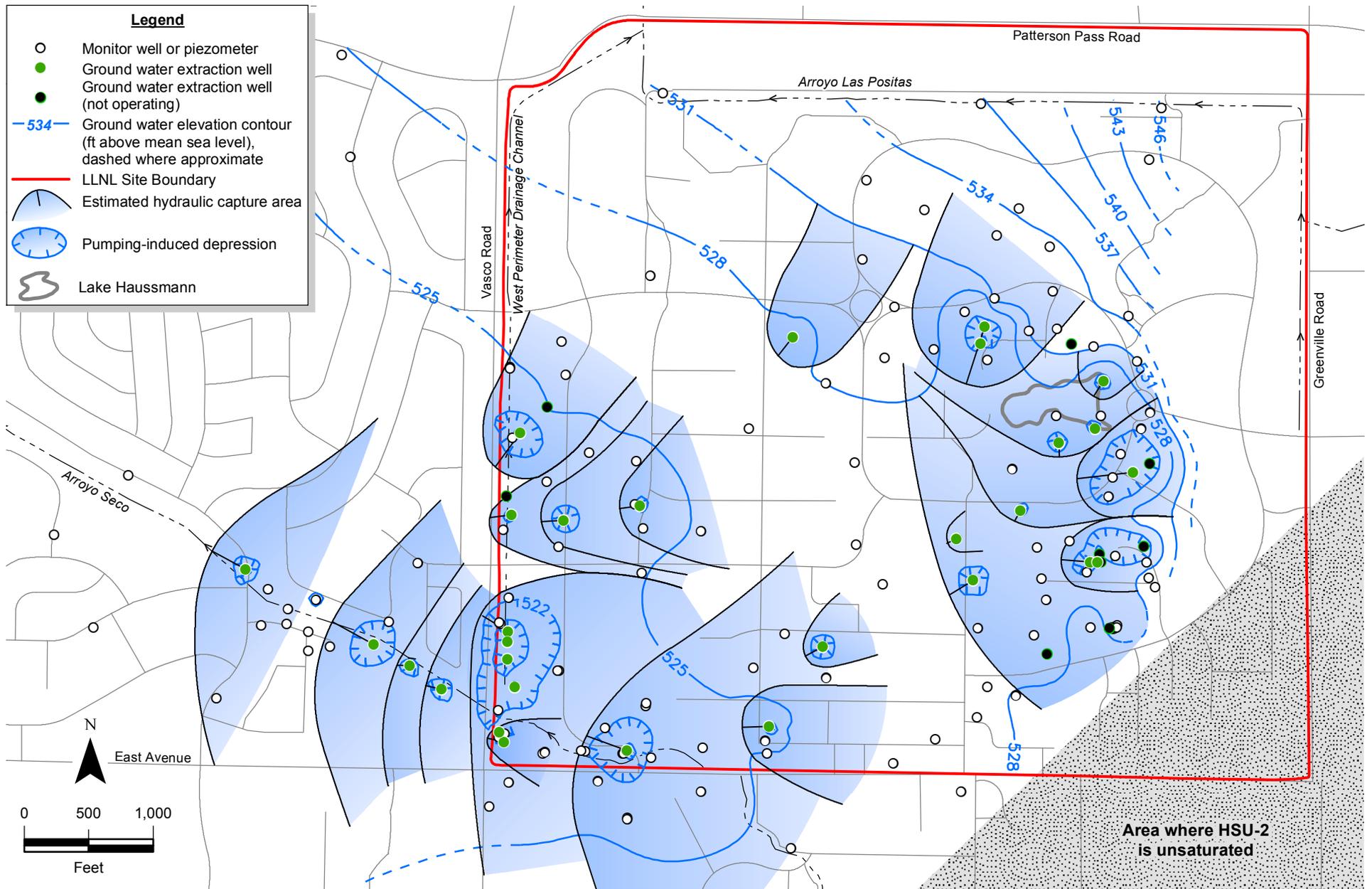


Figure 3. Ground water elevation contour map based on 164 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.

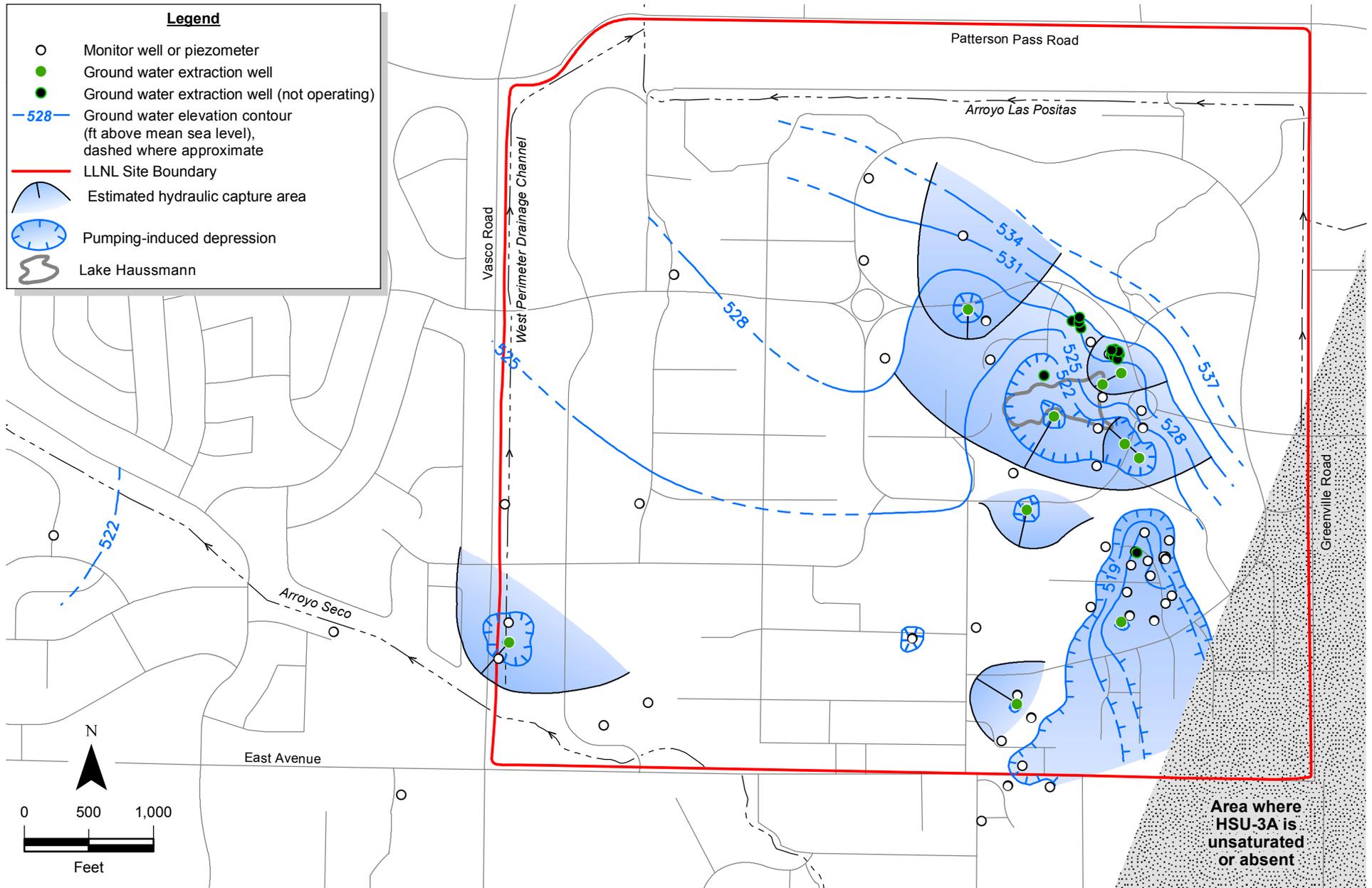


Figure 4. Ground water elevation contour map based on 75 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.

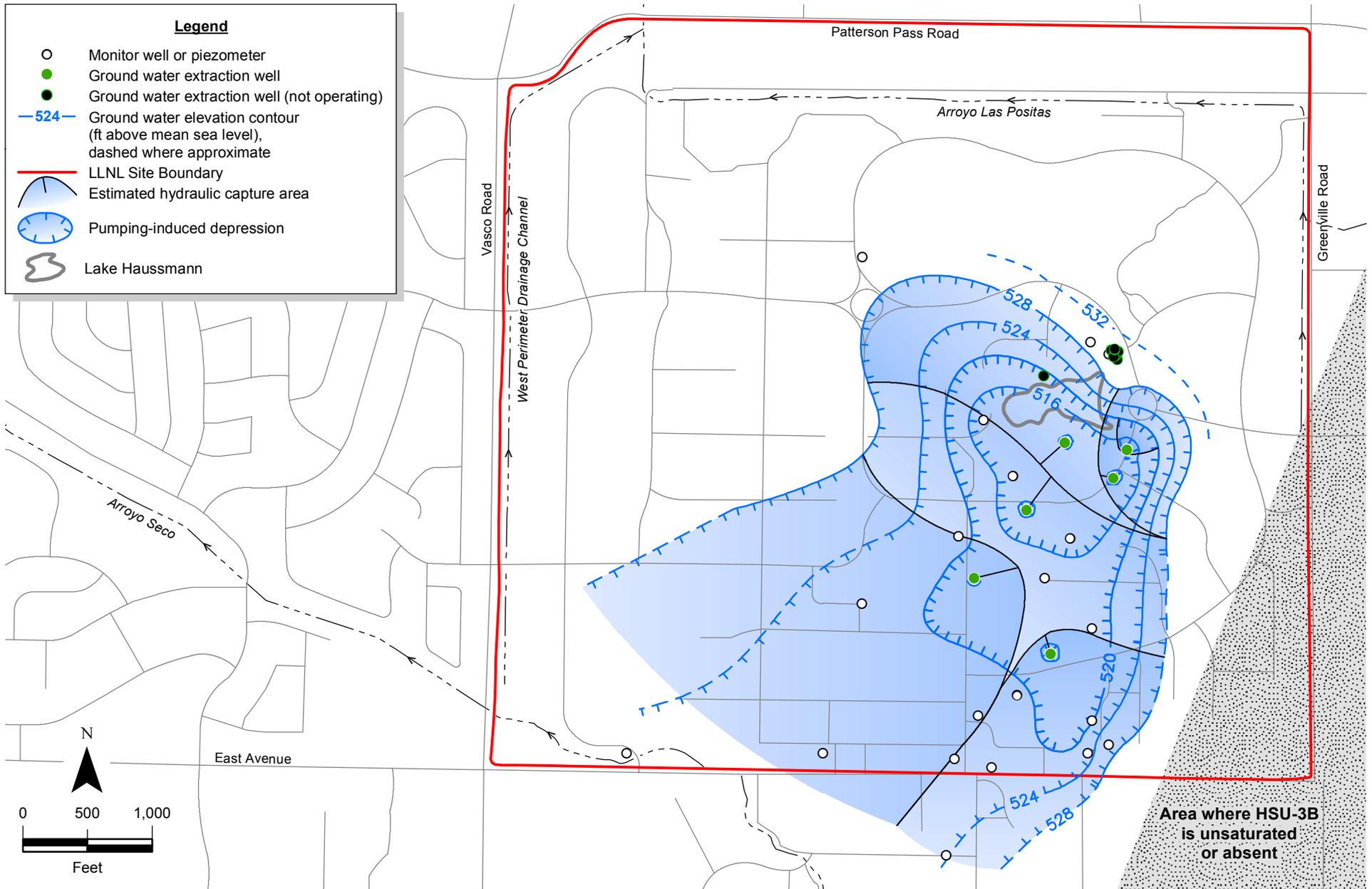


Figure 5. Ground water elevation contour map based on 33 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.

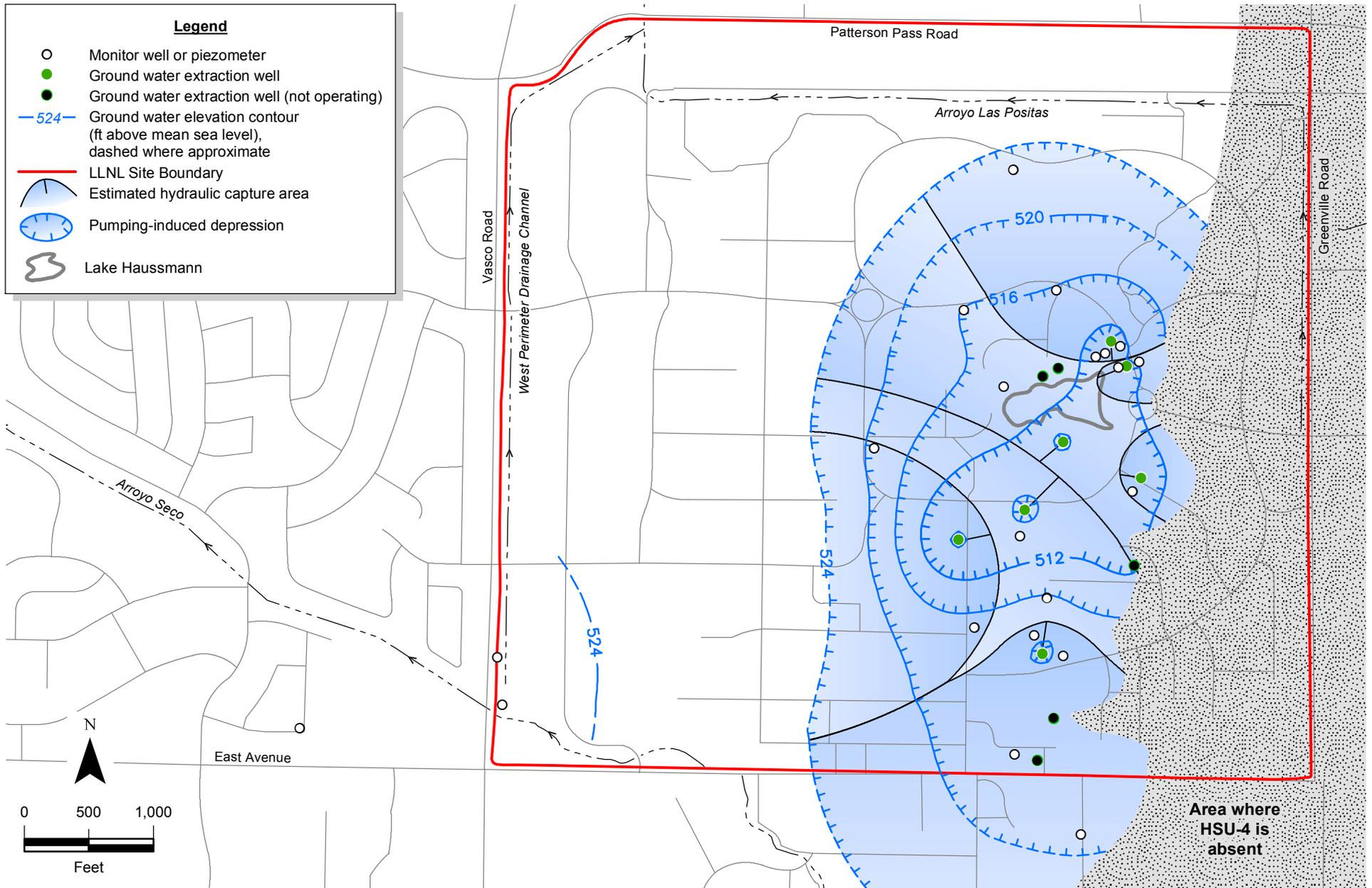


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.

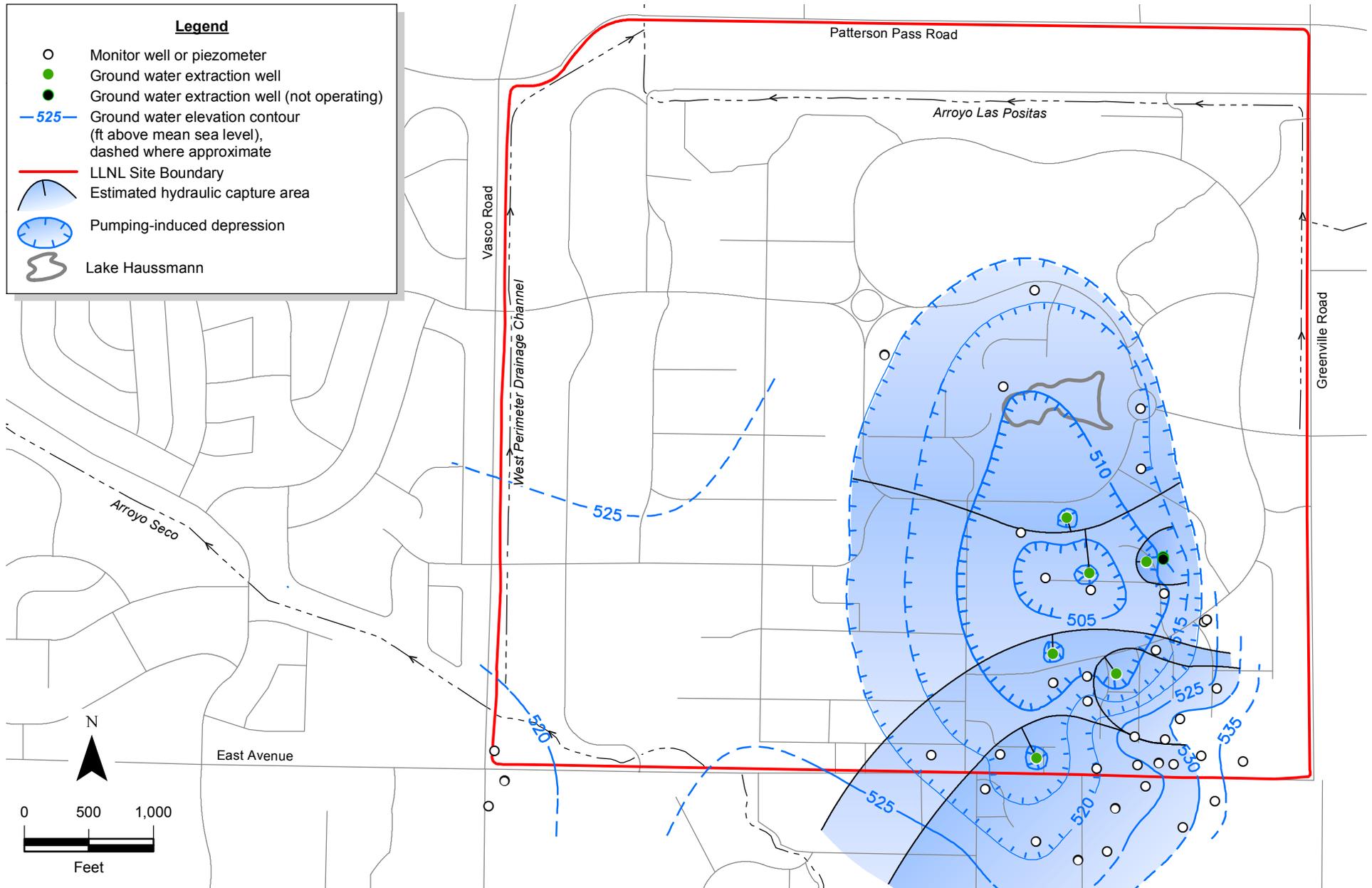


Figure 7. Ground water elevation contour map based on 48 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, third quarter 2015.