Table C-7 - Subarea 8 North Field Duplicate results

					Location	SL-141-SA8N	SL-141-SA8N	RPD	SL-002-SA8N	SL-002-SA8N	RPD	SL-076-SA8N	SL-076-SA8N	RPD
					Sample Name:	DUP08-SA8N-QC-050911	SL-141-SA8N-SB-4.0-5.0		DUP09-SA8N-QC-052611	SL-002-SA8N-SB-4.0-5.0		DUP10-SA8N-QC-060811	SL-076-SA8N-SB-4.0-5.0	
					Sample Date	05/09/2011	05/09/2011		05/26/2011	05/26/2011		06/08/2011	06/08/2011	
					Start Depth:	4	4		4	4		4	4	
					End Depth:	5	5		5	5		5	5	
					Area:	8N	8N		8N	8N		8N	8N	
					Matrix:	SO	SO		SO	SO		SO	SO	
					Sample Type:	FD	N		FD	N		FD	N	
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 UJ	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	590 U	600 U	--	590 U	600 U	--	560 U	560 U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C	ug/kg									
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.9 U	2.0 U	--	2.0 U	2.0 U	--	1.9 U	1.9 U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	0.91 J	2.0 UJ	200.00	2.0 U	2.0 U	--	1.2 J	0.94 J	24.30
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	1625C	ng/kg	23.5 J	401 UJ	200.00				19.3 J	37.4 UJ	200.00
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.9 U	2.0 U	--	2.0 U	2.0 U	--	1.9 U	1.9 U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 UJ	200.00
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	590 U	600 U	--	590 U	600 U	--	560 U	560 U	--
Semivolatiles	Phenanthrene	85-01-8	8270C	ug/kg									
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.9 U	2.0 U	--	2.0 U	2.0 U	--	1.9 U	1.9 U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	200 U	200 U	--	200 U	200 U	--	190 U	190 U	--
Semivolatiles	Pyrene	129-00-0	8270C	ug/kg									
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.9 U	2.0 U	--	2.0 U	2.0 U	--	1.9 U	1.9 U	--
Volatiles	1,1,1,2-Tetrachloroethane	630-20-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1,1-Trichloroethane	71-55-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1,2,2-Tetrachloroethane	79-34-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1,2-Trichloroethane	79-00-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1-Dichloroethane	75-34-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1-Dichloroethene	75-35-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,1-Dichloropropene	563-58-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2,3-Trichlorobenzene	87-61-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2,3-Trichloropropane	96-18-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2,4-Trichlorobenzene	120-82-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2,4-Trimethylbenzene	95-63-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2-Dibromo-3-chloropropane	96-12-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2-Dibromoethane	106-93-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2-Dichlorobenzene	95-50-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2-Dichloroethane	107-06-2	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,2-Dichloropropane	78-87-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,3,5-Trimethylbenzene	108-67-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,3-Dichlorobenzene	541-73-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,3-Dichloropropane	142-28-9	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,4-Dichlorobenzene	106-46-7	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	1,4-Dioxane	123-91-1	8260B SIM	ug/kg	17 U	15 U	--	17 U	17 U	--	14 U	14 U	--
Volatiles	2,2-Dichloropropane	594-20-7	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	2-Butanone	78-93-3	8260B	ug/kg	8.3 U	9.1 U	--	9.0 U	9.9 U	--	7.8 U	7.5 U	--
Volatiles	2-Chloroethyl Vinyl Ether	110-75-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	2-Chlorotoluene	95-49-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	2-Hexanone	591-78-6	8260B	ug/kg	8.3 U	9.1 U	--	9.0 U	9.9 U	--	7.8 U	7.5 U	--
Volatiles	4-Chlorotoluene	106-43-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	4-Methyl-2-Pentanone	108-10-1	8260B	ug/kg	8.3 U	9.1 U	--	9.0 U	9.9 U	--	7.8 U	7.5 U	--
Volatiles	Acetone	67-64-1	8260B	ug/kg	9.5 J	9.1 UJ	200.00	9.0 U	9.9 U	--	7.8 UJ	7.5 UJ	--
Volatiles	Benzene	71-43-2	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Bromobenzene	108-86-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Bromochloromethane	74-97-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Bromodichloromethane	75-27-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Bromoform	75-25-2	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Bromomethane	74-83-9	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Carbon tetrachloride	56-23-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Chlorobenzene	108-90-7	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Chloroethane	75-00-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Chloroform	67-66-3	8260B	ug/kg	4.2 UJ	0.16 J	200.00	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Chloromethane	74-87-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Chlorotrifluoroethene	79-38-9	8260B	ug/kg	5.2 U	5.7 U	--	5.6 U	6.2 U	--	4.9 U	4.7 U	--
Volatiles	cis-1,2-Dichloroethene	156-59-2	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	cis-1,3-Dichloropropene	10061-01-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Dibromochloromethane	124-48-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Dibromomethane	74-95-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Dichlorodifluoromethane	75-71-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	EFH (C12-C14)	PHCC12C14	8015M	mg/kg	1.4 U	1.4 U	--				1.4 U	1.4 U	--
Volatiles	EFH (C15-C20)	PHCC15C20	8015M	mg/kg	1.4 U	1.4 U	--				0.54 J	1.4 UJ	200.00
Volatiles	EFH (C21-C30)	PHCC21C30	8015M	mg/kg	1.4 U	1.4 U	--				2.5	2.1 J	17.39
Volatiles	EFH (C30-C40)	PHCC30C40	8015M	mg/kg	0.77 J	0.85 J	-9.88				5.4	4.8 J	11.76
Volatiles	EFH (C8-C11)	PHCC8C11	8015M	mg/kg	1.4 U	1.4 U	--				1.4 U	1.4 U	--
Volatiles	Ethylbenzene	100-41-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Freon 113	76-13-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Freon 113a	75-88-7	8260B	ug/kg	5.2 U	5.7 U	--	5.6 U	6.2 U	--	4.9 U	4.7 U	--
Volatiles	GRO (C5-C12)	GROC5C12	8015M	mg/kg	1 U	1.1 U	--				1 U	0.9 U	--
Volatiles	Hexachlorobutadiene	87-68-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Isopropylbenzene	98-82-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Isopropyltoluene	99-87-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	m,p-Xylene	179601-23-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Methyl tert-Butyl Ether	1634-04-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Methylene chloride	75-09-2	8260B	ug/kg	20	30 J	-40.00	4.5 U	5.0 U	--	3.9 UJ	3.7 UJ	--
Volatiles	N-Butylbenzene	104-51-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	N-Propylbenzene	103-65-1	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	o-Xylene	95-47-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--

Table C-7 - Subarea 8 North Field Duplicate results

					Location	SL-141-SA8N	SL-141-SA8N		SL-002-SA8N	SL-002-SA8N		SL-076-SA8N	SL-076-SA8N	
					Sample Name:	DUP08-SA8N-QC-050911	SL-141-SA8N-SB-4.0-5.0		DUP09-SA8N-QC-052611	SL-002-SA8N-SB-4.0-5.0		DUP10-SA8N-QC-060811	SL-076-SA8N-SB-4.0-5.0	
					Sample Date	05/09/2011	05/09/2011		05/26/2011	05/26/2011		06/08/2011	06/08/2011	
					Start Depth:	4	4	RPD	4	4	RPD	4	4	RPD
					End Depth:	5	5		5	5		5	5	
					Area:	8N	8N		8N	8N		8N	8N	
					Matrix:	SO	SO		SO	SO		SO	SO	
					Sample Type:	FD	N		FD	N		FD	N	
Volatiles	sec-Butylbenzene	135-98-8	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Styrene	100-42-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	tert-Butylbenzene	98-06-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Tetrachloroethene	127-18-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Toluene	108-88-3	8260B	ug/kg	4.2 U	4.5 U	--	4.5 UJ	0.11 J	200.00	3.9 U	3.7 U	--
Volatiles	trans-1,2-Dichloroethene	156-60-5	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	trans-1,3-Dichloropropene	10061-02-6	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Trichloroethene	79-01-6	8260B	ug/kg	6.3 J	17 J	-91.85	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Trichlorofluoromethane	75-69-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--
Volatiles	Vinyl Chloride	75-01-4	8260B	ug/kg	4.2 U	4.5 U	--	4.5 U	5.0 U	--	3.9 U	3.7 U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were nondetect or only one sample result is reported
200* - When one result is nondetect a 200% RPD is given and sample results are qualified as estimated "J" or "UJ" in the field duplicate samples only
Limit - 50% - If RPD is above 50% detected field duplicate results only were estimated "J"

Table C-8 - Subarea 8 South Field Duplicate Results

				Location	SL-003-SA8S		SL-003-SA8S		RPD	SL-018-SA8S		SL-018-SA8S		RPD	SL-019-SA8S		SL-019-SA8S		RPD
				Sample Name:	DUP01-SA8S-QC-092911		SL-003-SA8S-SS-0.0-0.5			DUP02-SA8S-QC-102111		SL-018-SA8S-SB-4.0-5.0			DUP02-SA8S-QC-120211		SL-019-SA8S-SB-4.0-5.0		
				Sample Date	09/29/2011		09/29/2011			10/21/2011		10/21/2011			12/02/2011		12/02/2011		
				Start Depth:	0		0			4		4			4		4		
				End Depth:	0.5		0.5			5		5			5		5		
				Area:	8S		8S			8S		8S			8S		8S		
				Matrix:	SO		SO			SO		SO			SO		SO		
				Sample Type:	FD		N			FD		N			FD		N		
MAG:	Chemical Name:	CAS No.:	Lab Method:	Result Unit															
Inorganic	Aluminum	7429-90-5	6010B	mg/kg	19400		17900		8.04	27400	J	30600	J	-11.03	11000		11500		-4.44
Inorganic	Antimony	7440-36-0	6020	mg/kg	0.253	J	0.206	J	20.48	0.1	J	0.115	J	-13.95	0.206	UJ	0.208	UJ	--
Inorganic	Arsenic	7440-38-2	6020	mg/kg	8.86	J	6.79	J	26.45	6.72	J	7.4	J	-9.63	4.83	J	6.63	J	-31.41
Inorganic	Barium	7440-39-3	6020	mg/kg	108	J	93.2	J	14.71	114		122		-6.78	63.6	J	87	J	-31.08
Inorganic	Beryllium	7440-41-7	6020	mg/kg	0.749		0.656		13.24	0.862	J	0.92	J	-6.51	0.475		0.599		-23.09
Inorganic	Boron	7440-42-8	6010B	mg/kg	10.4		11.2		-7.41	9.11		10.9		-17.89	5.14	U	5.26	U	-2.31
Inorganic	Cadmium	7440-43-9	6020	mg/kg	0.343	J	0.3	J	13.37	0.0919	J	0.0985	J	-6.93	0.103	UJ	0.0592	J	200.00
Inorganic	Calcium	7440-70-2	6010B	mg/kg	134000		144000		-7.19	26100	J	14300	J	58.42	3440	J	3680	J	-6.74
Inorganic	Chromium	7440-47-3	6020	mg/kg	32.6	J	29.9	J	8.64	26.8	J	28.6	J	-6.50	10.2	J	13.9	J	-30.71
Inorganic	Chromium VI	18540-29-9	7199	mg/kg	0.49	J	0.41	J	17.78	1.1	UJ	0.24	J	200.00	1	U	1.1	U	--
Inorganic	Cobalt	7440-48-4	6020	mg/kg	10.2	J	9.6	J	6.06	7.19	J	8.56	J	-17.40	5.17	J	7.7	J	-39.32
Inorganic	Copper	7440-50-8	6020	mg/kg	22.9	J	18.8	J	19.66	11.7	J	12.7	J	-8.20	5.24		7.4		-34.18
Inorganic	Fluoride	16984-48-8	300	mg/kg	1	UJ	1	UJ	--	1.2	J	1.5	J	-22.22	1.1	J	1.1	UJ	200.00
Inorganic	Iron	7439-89-6	6010B	mg/kg	21300		20900		1.90	27000		28600		-5.76	21300		22700		-6.36
Inorganic	Lead	7439-92-1	6020	mg/kg	22.9	J	20.8	J	9.61	7.48	J	8.34	J	-10.87	3.61	J	5.09	J	-34.02
Inorganic	Lithium	7439-93-2	6010B	mg/kg	18.9		18.5		2.14	27.4		29.1		-6.02	21.2		23.1		-8.58
Inorganic	Magnesium	7439-95-4	6010B	mg/kg	6510		6100		6.50	5210		5660		-8.28	4090		4390		-7.08
Inorganic	Manganese	7439-96-5	6010B	mg/kg	268		278		-3.66	363		315		14.16	280		321		-13.64
Inorganic	Mercury	7439-97-6	7471A	mg/kg	0.0137	J	0.0184	J	-29.28	0.11	U	0.111	U	--	0.104	U	0.0985	U	--
Inorganic	Molybdenum	7439-98-7	6020	mg/kg	0.44	J	0.322	J	30.97	0.55		0.596		-8.03	0.103	U	0.104	U	--
Inorganic	Nickel	7440-02-0	6020	mg/kg	19.8	J	17.1	J	14.63	15.5	J	17.1	J	-9.82	5.96		8.55		-35.70
Inorganic	Percent Moisture	MOIST	160.3M	%	3.1		3.3		-6.25	10.6		10.5		0.95	4.7		5		-6.19
Inorganic	Perchlorate	14797-73-0	314	ug/kg	31	U	31	U	--	33.6	U	33.5	U	--	31.5	U	31.6	U	--
Inorganic	pH	pH	9045M	pH unit	7.47		7.81		-4.45	8.25		7.87		4.71	7.56		7.91		-4.52
Inorganic	Phosphorus	7723-14-0	6010B	mg/kg	455		452		0.66	219		187		15.76	378		472		-22.12
Inorganic	Potassium	9/7/7440	6010B	mg/kg	3360	J	3130	J	7.09	3050	J	2950	J	3.33	2080		2470		-17.14
Inorganic	Selenium	7782-49-2	6020	mg/kg	0.284	J	0.252	J	11.94	0.162	J	0.0883	J	58.89	0.107	J	0.107	J	--
Inorganic	Silver	7440-22-4	6020	mg/kg	0.102	UJ	0.101	UJ	--	0.0444	J	0.0334	J	28.28	0.103	U	0.104	U	--
Inorganic	Sodium	7440-23-5	6010B	mg/kg	116		121		-4.22	83.1	J	84.3	J	-1.43	60.6	J	63.9	J	-5.30
Inorganic	Strontium	7440-24-6	6010B	mg/kg	151		156		-3.26	23.4		21.8		7.08	7.31		7.27		0.55
Inorganic	Thallium	7440-28-0	6020	mg/kg	0.303	J	0.257	J	16.43	0.285		0.357		-22.43	0.103	U	0.288		200.00
Inorganic	Tin	7440-31-5	6010B	mg/kg	10.2	U	10.2	U	--	10.8	U	11	U	--	10.3	U	10.5	U	--
Inorganic	Titanium	7440-32-6	6010B	mg/kg	834		832		0.24	1090		1190		-8.77	1120		1190		-6.06
Inorganic	Vanadium	7440-62-2	6020	mg/kg	61.4	J	51.6	J	17.35	51.7	J	55.5	J	-7.09	25.5	J	31.6	J	-21.37
Inorganic	Zinc	7440-66-6	6020	mg/kg	64.6		55.1		15.87	52.8		59.7		-12.27	52.8	J	67.2	J	-24.00
Inorganic	Zirconium	7440-67-7	6010B	mg/kg	3.54	J	3.4	J	4.03	5.19	J	5.59		-7.42	5.14	U	2.17	J	200.00
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDD	35822-46-9	1613B	ng/kg	3.04	J	2.71	J	11.48	5.48	U	5.56	U	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,4,6,7,8-HpCDF	67562-39-4	1613B	ng/kg	0.615	J	0.574	J	6.90	5.48	U	5.56	U	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,4,7,8,9-HpCDF	55673-89-7	1613B	ng/kg	5.15	U	5.09	U	--	5.48	U	5.56	U	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDD	39227-28-6	1613B	ng/kg	0.0704	J	0.0692	J	1.72	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,4,7,8-HxCDF	70648-26-9	1613B	ng/kg	0.361	J	0.22	J	48.54	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDD	57653-85-7	1613B	ng/kg	0.193	J	5.09	U	200.00	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,6,7,8-HxCDF	57117-44-9	1613B	ng/kg	0.148	J	5.09	U	200.00	5.48	U	5.56	U	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDD	19408-74-3	1613B	ng/kg	0.138	J	0.163	J	-16.61	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,7,8,9-HxCDF	72918-21-9	1613B	ng/kg	5.15	UJ	5.09	UJ	--	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDD	40321-76-4	1613B	ng/kg	0.0846	J	0.0765	J	10.06	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	1,2,3,7,8-PeCDF	57117-41-6	1613B	ng/kg	5.15	UJ	5.09	UJ	--	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	2,3,4,6,7,8-HxCDF	60851-34-5	1613B	ng/kg	5.15	U	5.09	U	--	5.48	UJ	5.56	UJ	--	5.18	U	5.25	U	--
PCBs and Dioxins	2,3,4,7,8-PeCDF	57117-31-4	1613B	ng/kg	5.15	U	0.317	J	200.00	5.48	U	5.56	U	--	5.18	U	5.25	U	--
PCBs and Dioxins	2,3,7,8-TCDD	1746-01-6	1613B	ng/kg	1.03	U	1.02	U	--	1.1	U	1.11	U	--	1.04	U	1.05	U	--
PCBs and Dioxins	2,3,7,8-TCDF	51207-31-9	1613B	ng/kg	0.265	J	0.196	J	29.93	1.1	U	1.11	U	--	1.04	UJ	1.05	UJ	--
PCBs and Dioxins	Aroclor 1016	12674-11-2	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1221	11104-28-2	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1232	11141-16-5	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1242	53469-21-9	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1248	12672-29-6	8082	ug/kg	1.7	U	1.8	U	--	1.9	UJ	0.51	J	200.00	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1254	11097-69-1	8082	ug/kg	1.7	U	1.8	U	--	1.9	UJ	1.9	J	200.00	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1260	11096-82-5	8082	ug/kg	0.54	J	1.8	UJ	200.00	1.9	UJ	0.8	J	200.00	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1262	37324-23-5	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 1268	11100-14-4	8082	ug/kg	1.7	U	1.8	U	--	1.9	U	1.9	U	--	1.8	U	1.8	U	--
PCBs and Dioxins	Aroclor 5432	63496-31-1	8082	ug/kg	3.4	U	3.4	U	--	3.7	UJ	3.7	UJ	--	3.4	U	3.5	U	--
PCBs and Dioxins	Aroclor 5442	12642-23-8	8082	ug/kg	3.4	U	3.4	U	--	3.7	UJ	3.7	UJ	--	3.4	U	3.5	U	--
PCBs and Dioxins	Aroclor 5460	11126-42-4	8082	ug/kg	3.4	U	3.4	U	--	3.7	UJ	3.7	UJ	--	3.4	U	3.5	U	--
PCBs and Dioxins	OCDD	3268-87-9	1613B	ng/kg	27.5		18.7		38.10	11	UJ	11.1	UJ	--	10.4	U	10.5	U	--
PCBs and Dioxins	OCDF	39001-02-0	1613B	ng/kg	1	J	10.2	U	200.00	11	U	11.1	U	--	10.4	U	10.5	U	--
Pesticides	2,2-Dichlor-Propionic Acid	75-99-0	8151A	ug/kg	9.3	U	9.3	R	--										
Pesticides	2,4 DB	94-82-6	8151A	ug/kg	1.9	J	1.8	UJ	200.00										
Pesticides	2,4,5-T	93-76-5	8151A	ug/kg	0.33	U	0.18	U	--										
Pesticides	2,4,5-TP	93-72-1	8151A	ug/kg	0.23	UJ	0.18	UJ	--										
Pesticides	2,4-D	94-75-7	8151A	ug/kg	3.7	U	3.7	U	--										

Table C-8 - Subarea 8 South Field Duplicate Results

					Location	SL-003-SA8S	SL-003-SA8S		SL-018-SA8S	SL-018-SA8S		SL-019-SA8S	SL-019-SA8S	
					Sample Name:	DUP01-SA8S-QC-092911	SL-003-SA8S-SS-0.0-0.5	RPD	DUP02-SA8S-QC-102111	SL-018-SA8S-SB-4.0-5.0	RPD	DUP02-SA8S-QC-120211	SL-019-SA8S-SB-4.0-5.0	RPD
					Sample Date	09/29/2011	09/29/2011		10/21/2011	10/21/2011		12/02/2011	12/02/2011	
					Start Depth:	0	0		4	4		4	4	
					End Depth:	0.5	0.5		5	5		5	5	
					Area:	8S	8S		8S	8S		8S	8S	
					Matrix:	SO	SO		SO	SO		SO	SO	
					Sample Type:	FD	N		FD	N		FD	N	
Pesticides	4,4'-DDD	72-54-8	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	4,4'-DDE	72-55-9	8081A	ug/kg		0.53 J	0.48 J	9.90						
Pesticides	4,4'-DDT	50-29-3	8081A	ug/kg		0.43 UJ	0.42 UJ	--						
Pesticides	Aldrin	309-00-2	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Alpha-BHC	319-84-6	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Beta-BHC	319-85-7	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Chlordane	57-74-9	8081A	ug/kg		1.6 J	3.5 UJ	200.00						
Pesticides	Delta-BHC	319-86-8	8081A	ug/kg		0.055 J	0.059 J	-7.02						
Pesticides	Dicamba	1918-00-9	8151A	ug/kg		1.2 UJ	1.2 R	--						
Pesticides	Dichlorprop	120-36-5	8151A	ug/kg		1.8 U	1.8 U	--						
Pesticides	Dieldrin	60-57-1	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	Dinitrobutyl Phenol	88-85-7	8151A	ug/kg		2.5 R	2.5 R	--						
Pesticides	Endosulfan I	959-98-8	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Endosulfan II	33213-65-9	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	Endosulfan Sulfate	1031-07-8	8081A	ug/kg		0.35 UJ	0.35 R	--						
Pesticides	Endrin	72-20-8	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	Endrin Aldehyde	7421-93-4	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	Endrin Ketone	53494-70-5	8081A	ug/kg		0.35 UJ	0.35 R	--						
Pesticides	Gamma-BHC (Lindane)	58-89-9	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Heptachlor	76-44-8	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	Heptachlor Epoxide	1024-57-3	8081A	ug/kg		0.17 UJ	0.17 UJ	--						
Pesticides	MCPA	94-74-6	8151A	ug/kg		260 UJ	260 UJ	--						
Pesticides	MCPP	93-65-2	8151A	ug/kg		260 UJ	280 J	200.00						
Pesticides	Methoxychlor	72-43-5	8081A	ug/kg		1.7 UJ	1.7 UJ	--						
Pesticides	Mirex	2385-85-5	8081A	ug/kg		0.35 UJ	0.35 UJ	--						
Pesticides	Toxaphene	8001-35-2	8081A	ug/kg		7.8 UJ	7.2 UJ	--						
Semivolatiles	1,2,4-Trichlorobenzene	120-82-1	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	1,2-Dichlorobenzene	95-50-1	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	1,2-Diphenylhydrazine	122-66-7	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	1,3-Dichlorobenzene	541-73-1	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	1,4-Dichlorobenzene	106-46-7	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	1-Methylnaphthalene	90-12-0	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	2,4,5-Trichlorophenol	95-95-4	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2,4,6-Trichlorophenol	88-06-2	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2,4-Dichlorophenol	120-83-2	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2,4-Dimethylphenol	105-67-9	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2,4-Dinitrophenol	51-28-5	8270C	ug/kg		1000 U	1000 R	--	1100 U	1100 U	--	1000 U	1100 U	--
Semivolatiles	2,4-Dinitrotoluene	121-14-2	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2,6-Dinitrotoluene	606-20-2	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2-Chloronaphthalene	91-58-7	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2-Chlorophenol	95-57-8	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2-Methylnaphthalene	91-57-6	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	2-Methylphenol	95-48-7	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2-Nitroaniline	88-74-4	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	2-Nitrophenol	88-75-5	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	3,3`-Dichlorobenzidine	91-94-1	8270C	ug/kg		340 U	340 U	--	370 U	370 U	--	350 U	350 U	--
Semivolatiles	3,5-Dimethylphenol	108-68-9	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	3-Nitroaniline	99-09-2	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4,6-Dinitro-2-Methylphenol	534-52-1	8270C	ug/kg		510 UJ	520 UJ	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	4-Bromophenyl Phenyl Ether	101-55-3	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Chloro-3-Methylphenol	59-50-7	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Chloroaniline	106-47-8	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Chlorophenyl Phenylether	7005-72-3	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Methylphenol	106-44-5	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Nitroaniline	100-01-6	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	4-Nitrophenol	100-02-7	8270C	ug/kg		510 U	520 U	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	Acenaphthene	83-32-9	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Acenaphthylene	208-96-8	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Aniline	62-53-3	8270C	ug/kg		510 U	520 U	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	Anthracene	120-12-7	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzidine	92-87-5	8270C	ug/kg		3400 U	3400 R	--	3700 U	3700 UJ	--	3500 U	3500 R	--
Semivolatiles	Benzo(a)anthracene	56-55-3	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzo(a)pyrene	50-32-8	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzo(b)fluoranthene	205-99-2	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzo(g,h,i)perylene	191-24-2	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzo(k)fluoranthene	207-08-9	8270C SIM	ug/kg		1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Benzoic Acid	65-85-0	8270C	ug/kg		510 UJ	520 UJ	--	560 U	550 U	--	520 U	530 R	--
Semivolatiles	Benzyl Alcohol	100-51-6	8270C	ug/kg		510 U	520 U	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	Bis(2-Chloroethoxy) methane	111-91-1	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Bis(2-Chloroethyl) ether	111-44-4	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	bis(2-Chloroisopropyl) ether	39638-32-9	8270C	ug/kg		170 U	170 U	--	190 U	180 U	--	170 U	180 U	--

Table C-8 - Subarea 8 South Field Duplicate Results

					Location	SL-003-SA8S	SL-003-SA8S	RPD	SL-018-SA8S	SL-018-SA8S	RPD	SL-019-SA8S	SL-019-SA8S	RPD
					Sample Name:	DUP01-SA8S-QC-092911	SL-003-SA8S-SS-0.0-0.5		DUP02-SA8S-QC-102111	SL-018-SA8S-SB-4.0-5.0		DUP02-SA8S-QC-120211	SL-019-SA8S-SB-4.0-5.0	
					Sample Date	09/29/2011	09/29/2011		10/21/2011	10/21/2011		12/02/2011	12/02/2011	
					Start Depth:	0	0		4	4		4	4	
					End Depth:	0.5	0.5		5	5		5	5	
					Area:	8S	8S		8S	8S		8S	8S	
					Matrix:	SO	SO		SO	SO		SO	SO	
					Sample Type:	FD	N		FD	N		FD	N	
Semivolatiles	Bis(2-Ethylhexyl) phthalate	117-81-7	8270C SIM	ug/kg	19 U	19 U	--	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Butylbenzylphthalate	85-68-7	8270C SIM	ug/kg	16 J	20	-22.22	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Carbazole	86-74-8	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Chrysene	218-01-9	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Dibenzo(a,h)anthracene	53-70-3	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Dibenzofuran	132-64-9	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Diethylphthalate	84-66-2	8270C SIM	ug/kg	19 U	19 U	--	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Dimethylphthalate	131-11-3	8270C SIM	ug/kg	19 U	19 U	--	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Di-n-Butylphthalate	84-74-2	8270C SIM	ug/kg	19 U	19 U	--	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Di-N-Octyl Phthalate	117-84-0	8270C SIM	ug/kg	19 U	19 U	--	20 U	20 U	--	19 U	19 U	--
Semivolatiles	Fluoranthene	206-44-0	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Fluorene	86-73-7	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Hexachlorobenzene	118-74-1	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Hexachlorobutadiene	87-68-3	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Hexachlorocyclopentadiene	77-47-4	8270C	ug/kg	510 U	520 U	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	Hexachloroethane	67-72-1	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Indeno(1,2,3-Cd)Pyrene	193-39-5	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Isophorone	78-59-1	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Naphthalene	91-20-3	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Nitrobenzene	98-95-3	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	N-Nitrosodimethylamine	62-75-9	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	N-Nitroso-Di-N-Propylamine	621-64-7	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	N-Nitrosodiphenylamine	86-30-6	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Pentachlorophenol	87-86-5	8270C	ug/kg	510 U	520 U	--	560 U	550 U	--	520 U	530 U	--
Semivolatiles	Phenanthrene	85-01-8	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--
Semivolatiles	Phenol	108-95-2	8270C	ug/kg	170 U	170 U	--	190 U	180 U	--	170 U	180 U	--
Semivolatiles	Pyrene	129-00-0	8270C SIM	ug/kg	1.7 U	1.7 U	--	1.9 U	1.9 U	--	1.7 U	1.8 U	--

Notes:
ug/kg - microgram per kilogram
mg/kg - milligram per kilogram
ng/g - nanogram per kilogram
FD - field duplicate sample
N - normal sample
RPD - relative percent difference
SO - soil
-- - RPD not calculated when both field duplicate and normal samples were
200* - When one result is nondetect a 200% RPD is given and sample
Limit - 50% - If RPD is above 50% detected field duplicate results only

Table C-9 Summary of Data Completeness Following Data Validation – Subarea 8 North

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins	242	1124		1864	34	3264	100
NDMA	24	31		35	5	95	100
Formaldehyde	2	8		82	3	95	100
Cyanide		6		89		95	100
Fluoride, Nitrate	111	162		5	9	287	100
Hexavalent Chromium	7	100		85		192	100
Mercury	4	85		100	3	192	100
Metals – 6010B	1922	511		254	1	2688	100
Metals – 6020	889	2120		28	35	3072	100
Perchlorate-314	2	1		189		192	100
Perchlorate-6850	2	3		16		21	100
Alcohols, terphenyls		2		557	11	570	100
Energetics				1877	13	1890	100
Total Petroleum Hydrocarbons, glycols	183	68		787	25	1063	100
PCBs/PCTs	91	119		2057	37	2304	100
Pesticides							
Semivolatiles	13	134	5	8970	128	9250	99.95
Semivolatiles SIM	273	506		3710	88	4577	100
Volatiles	60	49		5703	17	5829	100
Volatiles SIM				87		87	100
Completeness Total for All Subarea 8 North Samples Collected and Judged Valid							**99.99**

Table C-10 Summary of Data Completeness Following Data Validation – Subarea 8 South

	Number of Analyte Detections Without Qualifiers	Number of Estimated Results	Number of Rejected Results	Number of Nondetect Results	Number of Estimated Nondetect Results	Total Analytes Detect and Nondetect	Percent of Analyte Results Judged Valid Versus Total Analyte Results Collected
Dioxins	27	198		630	12	867	100
Fluoride, Nitrate	11	20		9	10	50	100
Hexavalent Chromium	6	32		13		51	100
Mercury		21		30		51	100
Metals – 6010B	528	134		52		714	100
Metals – 6020	183	579		29	25	816	100
Perchlorate-314				51		51	100
Perchlorate-6850				1		1	100
PCBs/PCTs	18	23		501	70	612	100
Pesticides	31	39	2	227	142	441	99.55
Herbicides	6	13	24	141	26	210	89
Semivolatiles	4	14	5	2355	35	2413	99.8
Semivolatiles SIM	53	101		1082	23	1259	100
Completeness Total for All Subarea 8 South Samples Collected and Judged Valid							**99.6**

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	DUP01-SA8N-QC-041111	DE124	SO	4/11/2011	FIELD
8N	SL-001-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-002-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-003-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-004-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-005-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-006-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-007-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-008-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-009-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-010-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-011-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-013-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-014-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-017-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	SL-049-SA8N-SS-0.0-0.5	DE124	SO	4/11/2011	FIELD
8N	EB01-SA8N-041211	DE125	WQ	4/12/2011	FIELD
8N	SL-012-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-015-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-016-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-018-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-019-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-020-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-021-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-022-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-023-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-036-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-047-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-048-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-050-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
8N	SL-131-SA8N-SS-0.0-0.5	DE125	SO	4/12/2011	FIELD
	TB-041211	DE125	WQ	4/12/2011	FIELD
8N	DUP02-SA8N-QC-041311	DE126	SO	4/13/2011	FIELD
8N	EB02-SA8N-SS-041311	DE126	WQ	4/13/2011	FIELD
8N	SL-027-SA8N-SS-0.0-0.5	DE126	SO	4/13/2011	FIELD
8N	SL-028-SA8N-SS-0.0-0.5	DE126	SO	4/13/2011	FIELD
8N	SL-032-SA8N-SS-0.0-0.5	DE126	SO	4/13/2011	FIELD
8N	SL-046-SA8N-SS-0.0-0.5	DE126	SO	4/13/2011	FIELD
	TB-041311	DE126	WQ	4/13/2011	FIELD
8N	DUP03-SA8N-QC-041411	DE127	SO	4/14/2011	FIELD
8N	EB04-SA8N-SS-041411	DE127	WQ	4/14/2011	FIELD
8N	SL-040-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-078-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-079-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-082-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-089-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-090-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-091-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-130-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-133-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD
8N	SL-134-SA8N-SS-0.0-0.5	DE127	SO	4/14/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-062-SA8N-SS-0.0-0.5	DE129	SO	4/15/2011	FIELD
8N	SL-067-SA8N-SS-0.0-0.5	DE129	SO	4/15/2011	FIELD
8N	SL-141-SA8N-SS-0.0-0.5	DE129	SO	4/15/2011	FIELD
	TB-041511	DE129	WQ	4/15/2011	FIELD
8N	EB05-SA8N-SS-041811	DE130	WQ	4/18/2011	FIELD
8N	SL-056-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-057-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-071-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-080-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-085-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-086-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
8N	SL-132-SA8N-SS-0.0-0.5	DE130	SO	4/18/2011	FIELD
	TB-041811	DE130	WQ	4/18/2011	FIELD
8N	DUP04-SA8N-QC-041911	DE131	SO	4/19/2011	FIELD
8N	EB06-SA8N-SS-041911	DE131	WQ	4/19/2011	FIELD
8N	SL-075-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-076-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-077-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-092-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-093-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-094-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-095-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-096-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-097-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-122-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-135-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-138-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-139-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
8N	SL-140-SA8N-SS-0.0-0.5	DE131	SO	4/19/2011	FIELD
	TB-041911	DE131	WQ	4/19/2011	FIELD
8N	DUP05-SA8N-QC-042011	DE132	SO	4/20/2011	FIELD
8N	EB07-SA8N-SS-042011	DE132	WQ	4/20/2011	FIELD
8N	SL-098-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-101-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-102-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-108-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-120-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-127-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-128-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-129-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-136-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	SL-137-SA8N-SS-0.0-0.5	DE132	SO	4/20/2011	FIELD
8N	DUP06-SA8N-QC-042111	DE134	SO	4/21/2011	FIELD
8N	SL-004-SA8N-SB-4.0-5.0	DE134	SO	4/21/2011	FIELD
8N	SL-004-SA8N-SB-9.0-10.0	DE134	SO	4/21/2011	FIELD
8N	SL-005-SA8N-SB-4.0-5.0	DE134	SO	4/21/2011	FIELD
8N	SL-005-SA8N-SB-8.0-9.0	DE134	SO	4/21/2011	FIELD
8N	SL-006-SA8N-SB-4.0-5.0	DE134	SO	4/21/2011	FIELD
8N	SL-006-SA8N-SB-8.0-9.0	DE134	SO	4/21/2011	FIELD
8N	SL-111-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-112-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-115-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-116-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-117-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-118-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-119-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-125-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
8N	SL-126-SA8N-SS-0.0-0.5	DE134	SO	4/21/2011	FIELD
	TB-042111	DE134	WQ	4/21/2011	FIELD
8N	SL-007-SA8N-SB-4.0-5.0	DE135	SO	4/22/2011	FIELD
8N	SL-007-SA8N-SB-9.0-10.0	DE135	SO	4/22/2011	FIELD
8N	SL-010-SA8N-SB-4.0-5.0	DE135	SO	4/22/2011	FIELD
8N	SL-010-SA8N-SB-9.0-10.0	DE135	SO	4/22/2011	FIELD
8N	SL-011-SA8N-SB-4.0-5.0	DE135	SO	4/22/2011	FIELD
8N	SL-011-SA8N-SB-9.0-10.0	DE135	SO	4/22/2011	FIELD
	TB-042211	DE135	WQ	4/22/2011	FIELD
8N	SL-036-SA8N-SB-4.0-5.0	DE136	SO	4/25/2011	FIELD
8N	SL-036-SA8N-SB-9.0-10.0	DE136	SO	4/25/2011	FIELD
	TB-042511	DE136	WQ	4/25/2011	FIELD
8N	SL-027-SA8N-SB-4.0-5.0	DE137	SO	4/26/2011	FIELD
8N	SL-027-SA8N-SB-9.0-10.0	DE137	SO	4/26/2011	FIELD
8N	SL-028-SA8N-SB-4.0-5.0	DE137	SO	4/26/2011	FIELD
8N	SL-028-SA8N-SB-9.0-10.0	DE137	SO	4/26/2011	FIELD
	TB-042611	DE137	WQ	4/26/2011	FIELD
8N	FB07-SA8N-QC-042711	DE138	WQ	4/27/2011	FIELD
8N	SL-032-SA8N-SB-4.0-5.0	DE138	SO	4/27/2011	FIELD
8N	SL-032-SA8N-SB-9.0-10.0	DE138	SO	4/27/2011	FIELD
	TB-042711	DE138	WQ	4/27/2011	FIELD
8N	EB05-SA8N-SB-042811	DE139	WQ	4/28/2011	FIELD
8N	SL-041-SA8N-SB-4.0-5.0	DE139	SO	4/28/2011	FIELD
8N	SL-041-SA8N-SB-9.0-10.0	DE139	SO	4/28/2011	FIELD
	TB-042811	DE139	WQ	4/28/2011	FIELD
8N	DUP06-SA8N-QC-042911	DE140	SO	4/29/2011	FIELD
8N	SL-013-SA8N-SB-2.0-3.0	DE140	SO	4/29/2011	FIELD
8N	SL-014-SA8N-SB-4.0-5.0	DE140	SO	4/29/2011	FIELD
8N	SL-017-SA8N-SB-4.0-5.0	DE140	SO	4/29/2011	FIELD
8N	SL-017-SA8N-SB-7.0-8.0	DE140	SO	4/29/2011	FIELD
8N	SL-040-SA8N-SB-4.0-5.0	DE140	SO	4/29/2011	FIELD
8N	SL-040-SA8N-SB-9.0-10.0	DE140	SO	4/29/2011	FIELD
8N	SL-049-SA8N-SB-4.0-5.0	DE140	SO	4/29/2011	FIELD
8N	SL-049-SA8N-SB-8.0-9.0	DE140	SO	4/29/2011	FIELD
	TB-042911	DE140	WQ	4/29/2011	FIELD
8N	SL-012-SA8N-SB-4.0-5.0	DE141	SO	5/2/2011	FIELD
8N	SL-022-SA8N-SB-4.0-5.0	DE141	SO	5/2/2011	FIELD
8N	SL-022-SA8N-SB-9.0-10.0	DE141	SO	5/2/2011	FIELD
8N	SL-023-SA8N-SB-4.0-5.0	DE141	SO	5/2/2011	FIELD
8N	SL-023-SA8N-SB-9.0-10.0	DE141	SO	5/2/2011	FIELD
8N	SL-050-SA8N-SB-4.0-5.0	DE141	SO	5/2/2011	FIELD
8N	SL-050-SA8N-SB-9.0-10.0	DE141	SO	5/2/2011	FIELD
	TB-050211	DE141	WQ	5/2/2011	FIELD
8N	DUP07-SA8N-QC-050311	DE142	SO	5/3/2011	FIELD
8N	EB08-SA8N-SB-050311	DE142	WQ	5/3/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-015-SA8N-SB-4.0-5.0	DE142	SO	5/3/2011	FIELD
8N	SL-016-SA8N-SB-3.0-4.0	DE142	SO	5/3/2011	FIELD
8N	SL-018-SA8N-SB-4.0-5.0	DE142	SO	5/3/2011	FIELD
8N	SL-019-SA8N-SB-4.0-5.0	DE142	SO	5/3/2011	FIELD
8N	SL-020-SA8N-SB-4.0-5.0	DE142	SO	5/3/2011	FIELD
8N	SL-020-SA8N-SB-9.0-10.0	DE142	SO	5/3/2011	FIELD
	TB-050311	DE142	AQ	5/3/2011	FIELD
8N	SL-021-SA8N-SB-4.0-5.0	DE143	SO	5/4/2011	FIELD
8N	SL-021-SA8N-SB-9.0-10.0	DE143	SO	5/4/2011	FIELD
8N	SL-067-SA8N-SB-4.0-5.0	DE143	SO	5/4/2011	FIELD
8N	SL-080-SA8N-SB-4.0-5.0	DE143	SO	5/4/2011	FIELD
	TB-050411	DE143	AQ	5/4/2011	FIELD
8N	SL-056-SA8N-SB-4.0-5.0	DE144	SO	5/5/2011	FIELD
8N	SL-056-SA8N-SB-7.0-8.0	DE144	SO	5/5/2011	FIELD
8N	SL-057-SA8N-SB-4.0-5.0	DE144	SO	5/5/2011	FIELD
8N	SL-057-SA8N-SB-7.0-8.0	DE144	SO	5/5/2011	FIELD
8N	SL-062-SA8N-SB-4.0-5.0	DE144	SO	5/5/2011	FIELD
	TB-050511	DE144	WQ	5/5/2011	FIELD
8N	SL-086-SA8N-SB-6.5-7.5	DE145	SO	5/6/2011	FIELD
	TB-050611	DE145	WQ	5/6/2011	FIELD
8N	DUP08-SA8N-QC-050911	DE146	SO	5/9/2011	FIELD
8N	SL-078-SA8N-SB-4.0-5.0	DE146	SO	5/9/2011	FIELD
8N	SL-087-SA8N-SB-4.0-5.0	DE146	SO	5/9/2011	FIELD
8N	SL-087-SA8N-SB-9.0-10.0	DE146	SO	5/9/2011	FIELD
8N	SL-088-SA8N-SB-3.0-4.0	DE146	SO	5/9/2011	FIELD
8N	SL-135-SA8N-SB-2.0-3.0	DE146	SO	5/9/2011	FIELD
8N	SL-141-SA8N-SB-4.0-5.0	DE146	SO	5/9/2011	FIELD
	TB-050911	DE146	WQ	5/9/2011	FIELD
8N	EB09-SA8N-SB-051011	DE147	WQ	5/10/2011	FIELD
8N	SL-105-SA8N-SB-4.0-5.0	DE147	SO	5/10/2011	FIELD
8N	SL-127-SA8N-SB-4.0-5.0	DE147	SO	5/10/2011	FIELD
8N	SL-128-SA8N-SB-2.5-3.5	DE147	SO	5/10/2011	FIELD
8N	SL-129-SA8N-SB-4.0-5.0	DE147	SO	5/10/2011	FIELD
8N	SL-137-SA8N-SB-4.0-5.0	DE147	SO	5/10/2011	FIELD
8N	SL-137-SA8N-SB-9.0-10.0	DE147	SO	5/10/2011	FIELD
	TB-051011	DE147	AQ	5/10/2011	FIELD
8N	EB10-SA8N-SB-051111	DE148	WQ	5/11/2011	FIELD
8N	SL-120-SA8N-SB-4.0-5.0	DE148	SO	5/11/2011	FIELD
8N	SL-120-SA8N-SB-9.0-10.0	DE148	SO	5/11/2011	FIELD
8N	SL-136-SA8N-SB-4.0-5.0	DE148	SO	5/11/2011	FIELD
8N	SL-136-SA8N-SB-9.0-10.0	DE148	SO	5/11/2011	FIELD
	TB-051111	DE148	AQ	5/11/2011	FIELD
8N	SL-097-SA8N-SB-4.0-5.0	DE149	SO	5/12/2011	FIELD
8N	SL-098-SA8N-SB-4.0-5.0	DE149	SO	5/12/2011	FIELD
8N	SL-098-SA8N-SB-9.0-10.0	DE149	SO	5/12/2011	FIELD
8N	SL-099-SA8N-SB-4.0-5.0	DE149	SO	5/12/2011	FIELD
8N	SL-101-SA8N-SB-4.0-5.0	DE149	SO	5/12/2011	FIELD
8N	SL-101-SA8N-SB-7.0-8.0	DE149	SO	5/12/2011	FIELD
8N	SL-103-SA8N-SB-3.0-4.0	DE149	SO	5/12/2011	FIELD
	TB-051211	DE149	AQ	5/12/2011	FIELD
8N	SL-094-SA8N-SB-4.0-5.0	DE150	SO	5/13/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-094-SA8N-SB-7.5-8.5	DE150	SO	5/13/2011	FIELD
8N	SL-095-SA8N-SB-4.0-5.0	DE150	SO	5/13/2011	FIELD
8N	SL-096-SA8N-SB-4.0-5.0	DE150	SO	5/13/2011	FIELD
8N	SL-096-SA8N-SB-9.0-10.0	DE150	SO	5/13/2011	FIELD
8N	SL-104-SA8N-SB-4.0-5.0	DE150	SO	5/13/2011	FIELD
8N	SL-104-SA8N-SB-9.0-10.0	DE150	SO	5/13/2011	FIELD
	TB-051311	DE150	AQ	5/13/2011	FIELD
8N	SL-001-SA8N-SB-4.0-5.0	DE165	SO	5/26/2011	FIELD
8N	SL-001-SA8N-SB-9.0-10.0	DE165	SO	5/26/2011	FIELD
8N	DUP09-SA8N-QC-052611	DE166	SO	5/26/2011	FIELD
8N	EB11-SA8N-SB-052611	DE166	WQ	5/26/2011	FIELD
8N	SL-002-SA8N-SB-4.0-5.0	DE166	SO	5/26/2011	FIELD
8N	SL-002-SA8N-SB-9.0-10.0	DE166	SO	5/26/2011	FIELD
8N	SL-008-SA8N-SB-4.0-5.0	DE166	SO	5/26/2011	FIELD
8N	SL-008-SA8N-SB-9.0-10.0	DE166	SO	5/26/2011	FIELD
	TB-052611	DE166	AQ	5/26/2011	FIELD
8N	SL-003-SA8N-SB-4.0-5.0	DE167	SO	5/27/2011	FIELD
8N	SL-003-SA8N-SB-9.0-10.0	DE167	SO	5/27/2011	FIELD
	TB-052711	DE167	AQ	5/27/2011	FIELD
8N	SL-079-SA8N-SB-4.0-5.0	DE174	SO	6/6/2011	FIELD
8N	SL-079-SA8N-SB-9.0-10.0	DE174	SO	6/6/2011	FIELD
8N	SL-133-SA8N-SB-4.0-5.0	DE174	SO	6/6/2011	FIELD
	TB-060611	DE174	AQ	6/6/2011	FIELD
8N	SL-071-SA8N-SB-2.0-3.0	DE175	SO	6/7/2011	FIELD
8N	SL-122-SA8N-SB-2.0-3.0	DE175	SO	6/7/2011	FIELD
8N	SL-133-SA8N-SB-7.0-8.0	DE175	SO	6/6/2011	FIELD
8N	SL-140-SA8N-SB-3.0-4.0	DE175	SO	6/7/2011	FIELD
	TB-060711	DE175	AQ	6/7/2011	FIELD
8N	DUP10-SA8N-QC-060811	DE176	SO	6/8/2011	FIELD
8N	EB16-SA8N-SB-060811	DE176	WQ	6/8/2011	FIELD
8N	SL-076-SA8N-SB-4.0-5.0	DE176	SO	6/8/2011	FIELD
8N	SL-076-SA8N-SB-7.5-8.5	DE176	SO	6/8/2011	FIELD
8N	SL-106-SA8N-SB-2.5-3.5	DE176	SO	6/8/2011	FIELD
8N	SL-109-SA8N-SB-4.0-5.0	DE176	SO	6/8/2011	FIELD
8N	SL-109-SA8N-SB-9.0-10.0	DE176	SO	6/8/2011	FIELD
	TB-060811	DE176	AQ	6/8/2011	FIELD
8N	EB17-SA8N-SB-060911	DE177	WQ	6/9/2011	FIELD
8N	SL-116-SA8N-SB-4.0-5.0	DE177	SO	6/9/2011	FIELD
	TB-060911	DE177	AQ	6/9/2011	FIELD
8N	SL-111-SA8N-SB-3.0-4.0	DE178	SO	6/10/2011	FIELD
	TB-061011	DE178	AQ	6/10/2011	FIELD
8N	SL-051-SA8N-SB-7.5-8.5	DE183	SO	6/17/2011	FIELD
8N	SL-054-SA8N-SB-7.0	DE183	SO	6/17/2011	FIELD
8N	SL-058-SA8N-SB-7.5	DE183	SO	6/17/2011	FIELD
8N	SL-059-SA8N-SB-9.0	DE183	SO	6/17/2011	FIELD
8N	SL-063-SA8N-SB-6.5	DE183	SO	6/17/2011	FIELD
	TB-061711	DE183	AQ	6/17/2011	FIELD
8N	DUP01-SA8N-QC-041111	DX068	SO	4/11/2011	FIELD
8N	SL-001-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-002-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-003-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-004-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-005-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-006-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-007-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-008-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-009-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-010-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-011-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-013-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-014-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-017-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	SL-049-SA8N-SS-0.0-0.5	DX068	SO	4/11/2011	FIELD
8N	EB01-SA8N-SS-041211	DX069	WQ	4/12/2011	FIELD
8N	SL-012-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-015-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-016-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-018-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-019-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-020-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-021-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-022-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-023-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-036-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-047-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-048-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-050-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	SL-131-SA8N-SS-0.0-0.5	DX069	SO	4/12/2011	FIELD
8N	DUP02-SA8N-QC-041311	DX070	SO	4/13/2011	FIELD
8N	EB02-SA8N-SS-041311	DX070	WQ	4/13/2011	FIELD
8N	EB05-SA8N-SS-041811	DX070	WQ	4/18/2011	FIELD
8N	SL-027-SA8N-SS-0.0-0.5	DX070	SO	4/13/2011	FIELD
8N	SL-028-SA8N-SS-0.0-0.5	DX070	SO	4/13/2011	FIELD
8N	SL-032-SA8N-SS-0.0-0.5	DX070	SO	4/13/2011	FIELD
8N	SL-046-SA8N-SS-0.0-0.5	DX070	SO	4/13/2011	FIELD
8N	SL-056-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-057-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-071-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-080-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-085-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-086-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-132-SA8N-SS-0.0-0.5	DX070	SO	4/18/2011	FIELD
8N	SL-040-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-075-SA8N-SS-0.0-0.5	DX071	SO	4/19/2011	FIELD
8N	SL-076-SA8N-SS-0.0-0.5	DX071	SO	4/19/2011	FIELD
8N	SL-077-SA8N-SS-0.0-0.5	DX071	SO	4/19/2011	FIELD
8N	SL-078-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-079-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-082-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-089-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-090-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-091-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-092-SA8N-SS-0.0-0.5	DX071	SO	4/19/2011	FIELD
8N	SL-093-SA8N-SS-0.0-0.5	DX071	SO	4/19/2011	FIELD
8N	SL-130-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-133-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-134-SA8N-SS-0.0-0.5	DX071	SO	4/14/2011	FIELD
8N	SL-062-SA8N-SS-0.0-0.5	DX072	SO	4/15/2011	FIELD
8N	SL-067-SA8N-SS-0.0-0.5	DX072	SO	4/15/2011	FIELD
8N	SL-094-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-095-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-096-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-097-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-122-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-135-SA8N-SS-0.0-0.5	DX072	SO	4/19/2011	FIELD
8N	SL-141-SA8N-SS-0.0-0.5	DX072	SO	4/15/2011	FIELD
8N	DUP04-SA8N-QC-041911	DX073	SO	4/19/2011	FIELD
8N	EB06-SA8N-SS-041911	DX073	WQ	4/19/2011	FIELD
8N	FB07-SA8N-QC-042711	DX073	WQ	4/27/2011	FIELD
8N	SL-027-SA8N-SB-4.0-5.0	DX073	SO	4/26/2011	FIELD
8N	SL-027-SA8N-SB-9.0-10.0	DX073	SO	4/26/2011	FIELD
8N	SL-028-SA8N-SB-4.0-5.0	DX073	SO	4/26/2011	FIELD
8N	SL-028-SA8N-SB-9.0-10.0	DX073	SO	4/26/2011	FIELD
8N	SL-032-SA8N-SB-4.0-5.0	DX073	SO	4/27/2011	FIELD
8N	SL-032-SA8N-SB-9.0-10.0	DX073	SO	4/27/2011	FIELD
8N	SL-036-SA8N-SB-4.0-5.0	DX073	SO	4/25/2011	FIELD
8N	SL-036-SA8N-SB-9.0-10.0	DX073	SO	4/25/2011	FIELD
8N	SL-138-SA8N-SS-0.0-0.5	DX073	SO	4/19/2011	FIELD
8N	SL-139-SA8N-SS-0.0-0.5	DX073	SO	4/19/2011	FIELD
8N	SL-140-SA8N-SS-0.0-0.5	DX073	SO	4/19/2011	FIELD
8N	DUP05-SA8N-QC-042011	DX074	SO	4/20/2011	FIELD
8N	EB05-SA8N-SB-042811	DX074	WQ	4/28/2011	FIELD
8N	EB07-SA8N-SS-042011	DX074	WQ	4/20/2011	FIELD
8N	SL-041-SA8N-SB-4.0-5.0	DX074	SO	4/28/2011	FIELD
8N	SL-041-SA8N-SB-9.0-10.0	DX074	SO	4/28/2011	FIELD
8N	SL-098-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-101-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-102-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-108-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-120-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-127-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-128-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-129-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-136-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	SL-137-SA8N-SS-0.0-0.5	DX074	SO	4/20/2011	FIELD
8N	DUP06-SA8N-QC-042111	DX076	SO	4/21/2011	FIELD
8N	SL-004-SA8N-SB-4.0-5.0	DX076	SO	4/21/2011	FIELD
8N	SL-004-SA8N-SB-9.0-10.0	DX076	SO	4/21/2011	FIELD
8N	SL-005-SA8N-SB-4.0-5.0	DX076	SO	4/21/2011	FIELD
8N	SL-005-SA8N-SB-8.0-9.0	DX076	SO	4/21/2011	FIELD
8N	SL-006-SA8N-SB-4.0-5.0	DX076	SO	4/21/2011	FIELD
8N	SL-006-SA8N-SB-8.0-9.0	DX076	SO	4/21/2011	FIELD
8N	SL-021-SA8N-SB-4.0-5.0	DX076	SO	5/4/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-021-SA8N-SB-9.0-10.0	DX076	SO	5/4/2011	FIELD
8N	SL-067-SA8N-SB-4.0-5.0	DX076	SO	5/4/2011	FIELD
8N	SL-080-SA8N-SB-4.0-5.0	DX076	SO	5/4/2011	FIELD
8N	SL-111-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-112-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-115-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-116-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-117-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-118-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-119-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-125-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-126-SA8N-SS-0.0-0.5	DX076	SO	4/21/2011	FIELD
8N	SL-007-SA8N-SB-4.0-5.0	DX077	SO	4/22/2011	FIELD
8N	SL-007-SA8N-SB-9.0-10.0	DX077	SO	4/22/2011	FIELD
8N	SL-010-SA8N-SB-4.0-5.0	DX077	SO	4/22/2011	FIELD
8N	SL-010-SA8N-SB-9.0-10.0	DX077	SO	4/22/2011	FIELD
8N	SL-011-SA8N-SB-4.0-5.0	DX077	SO	4/22/2011	FIELD
8N	SL-011-SA8N-SB-9.0-10.0	DX077	SO	4/22/2011	FIELD
8N	SL-012-SA8N-SB-4.0-5.0	DX077	SO	5/2/2011	FIELD
8N	SL-022-SA8N-SB-4.0-5.0	DX077	SO	5/2/2011	FIELD
8N	SL-022-SA8N-SB-9.0-10.0	DX077	SO	5/2/2011	FIELD
8N	SL-023-SA8N-SB-4.0-5.0	DX077	SO	5/2/2011	FIELD
8N	SL-023-SA8N-SB-9.0-10.0	DX077	SO	5/2/2011	FIELD
8N	SL-050-SA8N-SB-4.0-5.0	DX077	SO	5/2/2011	FIELD
8N	SL-050-SA8N-SB-9.0-10.0	DX077	SO	5/2/2011	FIELD
8N	DUP06-SA8N-QC-042911	DX078	SO	4/29/2011	FIELD
8N	SL-013-SA8N-SB-2.0-3.0	DX078	SO	4/29/2011	FIELD
8N	SL-014-SA8N-SB-4.0-5.0	DX078	SO	4/29/2011	FIELD
8N	SL-017-SA8N-SB-4.0-5.0	DX078	SO	4/29/2011	FIELD
8N	SL-017-SA8N-SB-7.0-8.0	DX078	SO	4/29/2011	FIELD
8N	SL-040-SA8N-SB-4.0-5.0	DX078	SO	4/29/2011	FIELD
8N	SL-040-SA8N-SB-9.0-10.0	DX078	SO	4/29/2011	FIELD
8N	SL-049-SA8N-SB-4.0-5.0	DX078	SO	4/29/2011	FIELD
8N	SL-049-SA8N-SB-8.0-9.0	DX078	SO	4/29/2011	FIELD
8N	DUP07-SA8N-QC-050311	DX079	SO	5/3/2011	FIELD
8N	EB08-SA8N-SB-050311	DX079	WQ	5/3/2011	FIELD
8N	EB09-SA8N-SB-051011	DX079	WQ	5/10/2011	FIELD
8N	SL-015-SA8N-SB-4.0-5.0	DX079	SO	5/3/2011	FIELD
8N	SL-016-SA8N-SB-3.0-4.0	DX079	SO	5/3/2011	FIELD
8N	SL-018-SA8N-SB-4.0-5.0	DX079	SO	5/3/2011	FIELD
8N	SL-019-SA8N-SB-4.0-5.0	DX079	SO	5/3/2011	FIELD
8N	SL-020-SA8N-SB-4.0-5.0	DX079	SO	5/3/2011	FIELD
8N	SL-020-SA8N-SB-9.0-10.0	DX079	SO	5/3/2011	FIELD
8N	SL-056-SA8N-SB-4.0-5.0	DX079	SO	5/5/2011	FIELD
8N	SL-056-SA8N-SB-7.0-8.0	DX079	SO	5/5/2011	FIELD
8N	SL-057-SA8N-SB-4.0-5.0	DX079	SO	5/5/2011	FIELD
8N	SL-057-SA8N-SB-7.0-8.0	DX079	SO	5/5/2011	FIELD
8N	SL-062-SA8N-SB-4.0-5.0	DX079	SO	5/5/2011	FIELD
8N	SL-086-SA8N-SB-6.5-7.5	DX079	SO	5/6/2011	FIELD
8N	SL-105-SA8N-SB-4.0-5.0	DX079	SO	5/10/2011	FIELD
8N	SL-127-SA8N-SB-4.0-5.0	DX079	SO	5/10/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-128-SA8N-SB-2.5-3.5	DX079	SO	5/10/2011	FIELD
8N	SL-129-SA8N-SB-4.0-5.0	DX079	SO	5/10/2011	FIELD
8N	SL-137-SA8N-SB-4.0-5.0	DX079	SO	5/10/2011	FIELD
8N	SL-137-SA8N-SB-9.0-10.0	DX079	SO	5/10/2011	FIELD
8N	DUP08-SA8N-QC-050911	DX080	SO	5/9/2011	FIELD
8N	SL-078-SA8N-SB-4.0-5.0	DX080	SO	5/9/2011	FIELD
8N	SL-087-SA8N-SB-4.0-5.0	DX080	SO	5/9/2011	FIELD
8N	SL-087-SA8N-SB-9.0-10.0	DX080	SO	5/9/2011	FIELD
8N	SL-088-SA8N-SB-3.0-4.0	DX080	SO	5/9/2011	FIELD
8N	SL-097-SA8N-SB-4.0-5.0	DX080	SO	5/12/2011	FIELD
8N	SL-098-SA8N-SB-4.0-5.0	DX080	SO	5/12/2011	FIELD
8N	SL-098-SA8N-SB-9.0-10.0	DX080	SO	5/12/2011	FIELD
8N	SL-099-SA8N-SB-4.0-5.0	DX080	SO	5/12/2011	FIELD
8N	SL-101-SA8N-SB-4.0-5.0	DX080	SO	5/12/2011	FIELD
8N	SL-101-SA8N-SB-7.0-8.0	DX080	SO	5/12/2011	FIELD
8N	SL-103-SA8N-SB-3.0-4.0	DX080	SO	5/12/2011	FIELD
8N	SL-120-SA8N-SB-4.0-5.0	DX080	SO	5/11/2011	FIELD
8N	SL-120-SA8N-SB-9.0-10.0	DX080	SO	5/11/2011	FIELD
8N	SL-135-SA8N-SB-2.0-3.0	DX080	SO	5/9/2011	FIELD
8N	SL-136-SA8N-SB-4.0-5.0	DX080	SO	5/11/2011	FIELD
8N	SL-136-SA8N-SB-9.0-10.0	DX080	SO	5/11/2011	FIELD
8N	SL-141-SA8N-SB-4.0-5.0	DX080	SO	5/9/2011	FIELD
8N	SL-094-SA8N-SB-4.0-5.0	DX081	SO	5/13/2011	FIELD
8N	SL-094-SA8N-SB-7.5-8.5	DX081	SO	5/13/2011	FIELD
8N	SL-095-SA8N-SB-4.0-5.0	DX081	SO	5/13/2011	FIELD
8N	SL-096-SA8N-SB-4.0-5.0	DX081	SO	5/13/2011	FIELD
8N	SL-096-SA8N-SB-9.0-10.0	DX081	SO	5/13/2011	FIELD
8N	SL-104-SA8N-SB-4.0-5.0	DX081	SO	5/13/2011	FIELD
8N	SL-104-SA8N-SB-9.0-10.0	DX081	SO	5/13/2011	FIELD
8N	SL-001-SA8N-SB-4.0-5.0	DX091	SO	5/26/2011	FIELD
8N	SL-001-SA8N-SB-9.0-10.0	DX091	SO	5/26/2011	FIELD
8N	DUP09-SA8N-QC-052611	DX093	SO	5/26/2011	FIELD
8N	EB11-SA8N-SB-052611	DX093	WQ	5/26/2011	FIELD
8N	SL-002-SA8N-SB-4.0-5.0	DX093	SO	5/26/2011	FIELD
8N	SL-002-SA8N-SB-9.0-10.0	DX093	SO	5/26/2011	FIELD
8N	SL-008-SA8N-SB-4.0-5.0	DX093	SO	5/26/2011	FIELD
8N	SL-008-SA8N-SB-9.0-10.0	DX093	SO	5/26/2011	FIELD
8N	SL-003-SA8N-SB-4.0-5.0	DX094	SO	5/27/2011	FIELD
8N	SL-003-SA8N-SB-9.0-10.0	DX094	SO	5/27/2011	FIELD
8N	SL-071-SA8N-SB-2.0-3.0	DX099	SO	6/7/2011	FIELD
8N	SL-079-SA8N-SB-4.0-5.0	DX099	SO	6/6/2011	FIELD
8N	SL-079-SA8N-SB-9.0-10.0	DX099	SO	6/6/2011	FIELD
8N	SL-122-SA8N-SB-2.0-3.0	DX099	SO	6/7/2011	FIELD
8N	SL-133-SA8N-SB-4.0-5.0	DX099	SO	6/6/2011	FIELD
8N	SL-133-SA8N-SB-7.0-8.0	DX099	SO	6/6/2011	FIELD
8N	SL-140-SA8N-SB-3.0-4.0	DX099	SO	6/7/2011	FIELD
8N	DUP10-SA8N-QC-060811	DX100	SO	6/8/2011	FIELD
8N	EB16-SA8N-SB-060811	DX100	WQ	6/8/2011	FIELD
8N	SL-076-SA8N-SB-4.0-5.0	DX100	SO	6/8/2011	FIELD
8N	SL-076-SA8N-SB-7.5-8.5	DX100	SO	6/8/2011	FIELD
8N	SL-106-SA8N-SB-2.5-3.5	DX100	SO	6/8/2011	FIELD

Appendix C. Samples by SDG for 8 North

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8N	SL-109-SA8N-SB-4.0-5.0	DX100	SO	6/8/2011	FIELD
8N	SL-109-SA8N-SB-9.0-10.0	DX100	SO	6/8/2011	FIELD
8N	SL-111-SA8N-SB-3.0-4.0	DX101	SO	6/10/2011	FIELD
8N	SL-116-SA8N-SB-4.0-5.0	DX101	SO	6/9/2011	FIELD
8N	SL-051-SA8N-SB-7.5-8.5	DX103	SO	6/17/2011	FIELD

Appendix C. Samples by SDG for 8 South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8S	DUP01-SA8S-QC-092911	DE258	SO	9/29/2011	FIELD
8S	SL-001-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-003-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-005-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-007-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-013-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-014-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-015-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
8S	SL-024-SA8S-SS-0.0-0.5	DE258	SO	9/29/2011	FIELD
	TB-092911	DE258	AQ	9/29/2011	FIELD
8S	SL-008-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-009-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-010-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-011-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-012-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-016-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-017-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-018-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-019-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-020-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-021-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-022-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
8S	SL-023-SA8S-SS-0.0-0.5	DE259	SO	9/30/2011	FIELD
	TB-092911	DE259	AQ	9/29/2011	FIELD
8S	SL-016-SA8S-SB-4.0-5.0	DE273	SO	10/20/2011	FIELD
	TB-102011	DE273	AQ	10/20/2011	FIELD
8S	DUP02-SA8S-QC-102111	DE277	SO	10/21/2011	FIELD
8S	SL-014-SA8S-SB-4.0-5.0	DE277	SO	10/21/2011	FIELD
8S	SL-014-SA8S-SB-7.0-8.0	DE277	SO	10/21/2011	FIELD
8S	SL-015-SA8S-SB-4.0-5.0	DE277	SO	10/21/2011	FIELD
8S	SL-015-SA8S-SB-9.0-10.0	DE277	SO	10/21/2011	FIELD
8S	SL-017-SA8S-SB-4.0-5.0	DE277	SO	10/21/2011	FIELD
8S	SL-018-SA8S-SB-4.0-5.0	DE277	SO	10/21/2011	FIELD
8S	SL-018-SA8S-SB-7.5-8.5	DE277	SO	10/21/2011	FIELD
8S	SL-013-SA8S-SB-4.0-5.0	DE286	SO	11/14/2011	FIELD
8S	SL-005-SA8S-SB-3.5-4.5	DE287	SO	11/15/2011	FIELD
8S	SL-007-SA8S-SB-4.0-5.0	DE287	SO	11/15/2011	FIELD
8S	SL-009-SA8S-SB-4.0-5.0	DE287	SO	11/16/2011	FIELD
8S	SL-009-SA8S-SB-7.0-8.0	DE287	SO	11/16/2011	FIELD
8S	SL-024-SA8S-SB-4.0-5.0	DE287	SO	11/16/2011	FIELD
8S	SL-024-SA8S-SB-7.0-8.0	DE287	SO	11/16/2011	FIELD
8S	EB-SA8S-SB-111711	DE288	WQ	11/17/2011	FIELD
8S	SL-008-SA8S-SB-2.0-3.0	DE288	SO	11/17/2011	FIELD
8S	SL-010-SA8S-SB-4.0-5.0	DE288	SO	11/16/2011	FIELD
8S	SL-010-SA8S-SB-8.5-9.5	DE288	SO	11/16/2011	FIELD
8S	SL-011-SA8S-SB-4.0-5.0	DE288	SO	11/17/2011	FIELD
8S	SL-001-SA8S-SB-4.0-5.0	DE289	SO	11/18/2011	FIELD
8S	SL-012-SA8S-SB-4.0-5.0	DE289	SO	11/18/2011	FIELD
8S	SL-022-SA8S-SB-4.0-5.0	DE291	SO	12/1/2011	FIELD
8S	SL-022-SA8S-SB-8.0-9.0	DE291	SO	12/1/2011	FIELD
8S	SL-023-SA8S-SB-4.0-5.0	DE291	SO	12/1/2011	FIELD
8S	SL-023-SA8S-SB-9.0-10.0	DE291	SO	12/1/2011	FIELD
8S	DUP02-SA8S-QC-120211	DE292	SO	12/2/2011	FIELD
8S	SL-019-SA8S-SB-4.0-5.0	DE292	SO	12/2/2011	FIELD

Appendix C. Samples by SDG for 8 South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8S	SL-020-SA8S-SB-4.0-5.0	DE292	SO	12/2/2011	FIELD
8S	SL-020-SA8S-SB-9.0-10.0	DE292	SO	12/2/2011	FIELD
8S	SL-021-SA8S-SB-4.0-5.0	DE292	SO	12/2/2011	FIELD
8S	SL-021-SA8S-SB-9.0-10.0	DE292	SO	12/2/2011	FIELD
8S	SL-008-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-009-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-010-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-011-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-012-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-016-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-017-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-018-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-019-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-020-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-021-SA8S-SS-0.0-0.5	DX145	SO	9/30/2011	FIELD
8S	SL-022-SA8S-SS-0.0-0.5	DX146	SO	9/30/2011	FIELD
8S	SL-023-SA8S-SS-0.0-0.5	DX146	SO	9/30/2011	FIELD
8S	DUP01-SA8S-QC-092911	DX147	SO	9/29/2011	FIELD
8S	SL-001-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-003-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-005-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-007-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-013-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-014-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-015-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-024-SA8S-SS-0.0-0.5	DX147	SO	9/29/2011	FIELD
8S	SL-016-SA8S-SB-4.0-5.0	DX150	SO	10/20/2011	FIELD
8S	DUP02-SA8S-QC-102111	DX152	SO	10/21/2011	FIELD
8S	SL-014-SA8S-SB-4.0-5.0	DX152	SO	10/21/2011	FIELD
8S	SL-014-SA8S-SB-7.0-8.0	DX152	SO	10/21/2011	FIELD
8S	SL-015-SA8S-SB-4.0-5.0	DX152	SO	10/21/2011	FIELD
8S	SL-015-SA8S-SB-9.0-10.0	DX152	SO	10/21/2011	FIELD
8S	SL-017-SA8S-SB-4.0-5.0	DX152	SO	10/21/2011	FIELD
8S	SL-018-SA8S-SB-4.0-5.0	DX152	SO	10/21/2011	FIELD
8S	SL-018-SA8S-SB-7.5-8.5	DX152	SO	10/21/2011	FIELD
8S	EB-SA8S-SB-111711	DX155	WQ	11/17/2011	FIELD
8S	SL-001-SA8S-SB-4.0-5.0	DX155	SO	11/18/2011	FIELD
8S	SL-005-SA8S-SB-3.5-4.5	DX155	SO	11/15/2011	FIELD
8S	SL-007-SA8S-SB-4.0-5.0	DX155	SO	11/15/2011	FIELD
8S	SL-008-SA8S-SB-2.0-3.0	DX155	SO	11/17/2011	FIELD
8S	SL-009-SA8S-SB-4.0-5.0	DX155	SO	11/16/2011	FIELD
8S	SL-009-SA8S-SB-7.0-8.0	DX155	SO	11/16/2011	FIELD
8S	SL-010-SA8S-SB-4.0-5.0	DX155	SO	11/16/2011	FIELD
8S	SL-010-SA8S-SB-8.5-9.5	DX155	SO	11/16/2011	FIELD
8S	SL-011-SA8S-SB-4.0-5.0	DX155	SO	11/17/2011	FIELD
8S	SL-012-SA8S-SB-4.0-5.0	DX155	SO	11/18/2011	FIELD
8S	SL-013-SA8S-SB-4.0-5.0	DX155	SO	11/14/2011	FIELD
8S	SL-024-SA8S-SB-4.0-5.0	DX155	SO	11/16/2011	FIELD
8S	SL-024-SA8S-SB-7.0-8.0	DX155	SO	11/16/2011	FIELD
8S	SL-022-SA8S-SB-4.0-5.0	DX156	SO	12/1/2011	FIELD
8S	SL-022-SA8S-SB-8.0-9.0	DX156	SO	12/1/2011	FIELD
8S	SL-023-SA8S-SB-4.0-5.0	DX156	SO	12/1/2011	FIELD
8S	SL-023-SA8S-SB-9.0-10.0	DX156	SO	12/1/2011	FIELD
8S	DUP02-SA8S-QC-120211	DX157	SO	12/2/2011	FIELD

Appendix C. Samples by SDG for 8 South

Task Code	System Sample Code	Lab SDG	Matrix Code	Sample Date	Sample Source
8S	SL-019-SA8S-SB-4.0-5.0	DX157	SO	12/2/2011	FIELD
8S	SL-020-SA8S-SB-4.0-5.0	DX157	SO	12/2/2011	FIELD
8S	SL-020-SA8S-SB-9.0-10.0	DX157	SO	12/2/2011	FIELD
8S	SL-021-SA8S-SB-4.0-5.0	DX157	SO	12/2/2011	FIELD
8S	SL-021-SA8S-SB-9.0-10.0	DX157	SO	12/2/2011	FIELD

SAMPLE DELIVERY GROUP

DE124

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3050B	6010B	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3050B	6020	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3060A	7199	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3550B	8082	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3550B	8270C	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	3550B	8270C SIM	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	Gen Prep	9045M	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	METHOD	300.0	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	METHOD	314.0	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	METHOD	7471A	III
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255783	N	METHOD	8015M	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3050B	6010B	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3050B	6020	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3060A	7199	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3550B	8082	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3550B	8270C	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	3550B	8270C SIM	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	Gen Prep	9045M	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	METHOD	300.0	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	METHOD	314.0	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	METHOD	6850	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	METHOD	7471A	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255784	N	METHOD	8015M	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5MSD	P255784M241143A	MSD	METHOD	6850	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5MS	P255784R241137A	MS	METHOD	6850	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3050B	6020	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3060A	7199	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3550B	8082	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3550B	8270C	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	3550B	8270C SIM	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	Gen Prep	9045M	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	METHOD	300.0	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	METHOD	314.0	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	METHOD	7471A	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255785	N	METHOD	8015M	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3050B	6010B	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3050B	6020	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3060A	7199	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3550B	8082	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3550B	8270C	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	3550B	8270C SIM	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	8330	8330A	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	Gen Prep	9045M	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	METHOD	300.0	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	METHOD	314.0	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	METHOD	7471A	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255786	N	METHOD	8015M	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3050B	6010B	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3050B	6020	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3060A	7199	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3550B	8270C	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	3550B	8270C SIM	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	8330	8330A	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	Gen Prep	9045M	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	METHOD	300.0	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	METHOD	314.0	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	METHOD	7471A	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255787	N	METHOD	8015M	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3050B	6010B	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3050B	6020	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3060A	7199	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3550B	8082	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3550B	8270C	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	3550B	8270C SIM	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	8330	8330A	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	Gen Prep	9045M	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	METHOD	300.0	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	METHOD	314.0	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	METHOD	7471A	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255788	N	METHOD	8015M	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3050B	6010B	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3050B	6020	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3060A	7199	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3550B	8082	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3550B	8270C	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	Gen Prep	9045M	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	METHOD	300.0	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	METHOD	314.0	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	METHOD	7471A	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255789	N	METHOD	8015M	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3050B	6010B	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3050B	6020	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3060A	7199	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3550B	8082	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3550B	8270C	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	3550B	8270C SIM	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	Gen Prep	9045M	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	METHOD	300.0	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	METHOD	314.0	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	METHOD	7471A	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255790	N	METHOD	8015M	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3050B	6010B	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3050B	6020	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3060A	7199	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3550B	8082	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3550B	8270C	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	3550B	8270C SIM	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	8330	8330A	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	Gen Prep	9045M	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	METHOD	300.0	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	METHOD	7471A	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255791	N	METHOD	8015M	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3050B	6010B	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3050B	6020	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3060A	7199	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3546	1625C	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3550B	8015B	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3550B	8015M	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3550B	8082	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3550B	8270C	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	3550B	8270C SIM	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	8330	8330A	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	Gen Prep	9045M	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	300.0	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	314.0	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	7471A	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	8015B	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	8015M	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	8315A	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255792	N	METHOD	9012B	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3050B	6010B	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3050B	6020	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3060A	7199	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3546	1625C	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3550B	8015B	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3550B	8015M	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3550B	8082	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3550B	8270C	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	3550B	8270C SIM	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	8330	8330A	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	Gen Prep	9045M	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	300.0	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	314.0	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	6850	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	7471A	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	8015B	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	8015M	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	8315A	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255793	N	METHOD	9012B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3050B	6010B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3050B	6020	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3060A	7199	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3546	1625C	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3550B	8015B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3550B	8015M	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3550B	8082	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3550B	8270C	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	3550B	8270C SIM	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	8330	8330A	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	Gen Prep	9045M	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	300.0	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	7471A	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	8015B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	8015M	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	8315A	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255800	N	METHOD	9012B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5DUP	P255800D271417A	DUP	METHOD	300.0	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5MS	P255800R271432A	MS	METHOD	300.0	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3050B	6010B	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3050B	6020	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3060A	7199	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3550B	8082	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3550B	8270C	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	3550B	8270C SIM	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	Gen Prep	9045M	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	METHOD	300.0	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	METHOD	314.0	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	METHOD	7471A	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255782	FD	METHOD	8015M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3050B	6010B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3050B	6020	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3060A	7199	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3550B	8082	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3550B	8270C	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	3550B	8270C SIM	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	Gen Prep	9045M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	METHOD	300.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	METHOD	314.0	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	METHOD	7471A	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255794	N	METHOD	8015M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3050B	6010B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3050B	6020	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3060A	7199	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3550B	8082	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3550B	8270C	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	3550B	8270C SIM	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	METHOD	300.0	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	METHOD	314.0	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	METHOD	7471A	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255795	MS	METHOD	8015M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	3050B	6010B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	3050B	6020	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	3550B	8082	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	3550B	8270C	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	3550B	8270C SIM	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	METHOD	7471A	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255796	MSD	METHOD	8015M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	3050B	6010B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	3050B	6020	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	3060A	7199	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	Gen Prep	9045M	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	METHOD	300.0	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	METHOD	314.0	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5DUP	6255797	DUP	METHOD	7471A	III
11-Apr-2011	DUP01-SA8N-QC-041111DUP	P255782D271301A	DUP	METHOD	300.0	III
11-Apr-2011	DUP01-SA8N-QC-041111MS	P255782R271315A	MS	METHOD	300.0	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3050B	6010B	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3050B	6020	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3060A	7199	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3550B	8082	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3550B	8270C	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	3550B	8270C SIM	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	Gen Prep	9045M	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	METHOD	300.0	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	METHOD	314.0	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	METHOD	7471A	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255798	N	METHOD	8015M	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5MSD	P255798M321716A	MSD	METHOD	8015M	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5MS	P255798R321641A	MS	METHOD	8015M	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3050B	6010B	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3050B	6020	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3060A	7199	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3550B	8082	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3550B	8270C	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	3550B	8270C SIM	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	Gen Prep	9045M	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	METHOD	300.0	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	METHOD	314.0	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255799	N	METHOD	8015M	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5DUP	P255799D270139A	DUP	METHOD	314.0	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5DUP	P255799D291415A	DUP	Gen Prep	9045M	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5MS	P255799R270201A	MS	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP01-SA8N-QC-041111 ***Collected:*** 4/11/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.99	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		1.0	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.84	U	0.84	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-006-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.97	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-008-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 11:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 12:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:20:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory:** LL

EDD Filename: DE124_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-049-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 1:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP01-SA8N-QC-041111 ***Collected:*** 4/11/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	428		0.641	MDL	11.5	PQL	mg/Kg	J	E
POTASSIUM	3320		20.6	MDL	57.3	PQL	mg/Kg	J	Q
SODIUM	84.0	J	42.7	MDL	115	PQL	mg/Kg	J	Z
TIN	2.62	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.49	J	0.962	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	698		0.685	MDL	12.2	PQL	mg/Kg	J	E
POTASSIUM	6590		22.0	MDL	61.1	PQL	mg/Kg	J	Q
SODIUM	99.4	J	45.6	MDL	122	PQL	mg/Kg	J	Z
TIN	2.91	J	1.22	MDL	12.2	PQL	mg/Kg	U	B
Zirconium	2.53	J	1.03	MDL	6.11	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	536		0.674	MDL	12.0	PQL	mg/Kg	J	E
POTASSIUM	5810		21.7	MDL	60.2	PQL	mg/Kg	J	Q
SODIUM	92.6	J	44.9	MDL	120	PQL	mg/Kg	J	Z
TIN	4.08	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	3.26	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-003-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 9:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	559		0.690	MDL	12.3	PQL	mg/Kg	J	E
POTASSIUM	5140		22.2	MDL	61.6	PQL	mg/Kg	J	Q
SODIUM	106	J	45.9	MDL	123	PQL	mg/Kg	J	Z
TIN	3.03	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	3.36	J	1.03	MDL	6.16	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 9:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	639		0.622	MDL	11.1	PQL	mg/Kg	J	E
POTASSIUM	4740		20.0	MDL	55.5	PQL	mg/Kg	J	Q
SODIUM	107	J	41.4	MDL	111	PQL	mg/Kg	J	Z
TIN	2.54	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.10	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 10:10:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	3620		1.15	MDL	20.5	PQL	mg/Kg	J	E

Sample ID: SL-005-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3140		18.5	MDL	51.3	PQL	mg/Kg	J	Q
TIN	2.59	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	0.929	J	0.861	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 10:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	410		0.620	MDL	11.1	PQL	mg/Kg	J	E
POTASSIUM	3040		19.9	MDL	55.3	PQL	mg/Kg	J	Q
SODIUM	85.8	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	2.90	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory:** LL

EDD Filename: DE124_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-007-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	664		0.662	MDL	11.8	PQL	mg/Kg	J	E
POTASSIUM	6380		21.3	MDL	59.1	PQL	mg/Kg	J	Q
SODIUM	88.0	J	44.1	MDL	118	PQL	mg/Kg	J	Z
TIN	3.03	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	2.67	J	0.993	MDL	5.91	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	441		0.596	MDL	10.6	PQL	mg/Kg	J	E
POTASSIUM	3900		19.2	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	91.3	J	39.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.95	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 12:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	306		0.658	MDL	11.8	PQL	mg/Kg	J	E
POTASSIUM	3850		21.2	MDL	58.8	PQL	mg/Kg	J	Q
TIN	2.91	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	3.49	J	0.988	MDL	5.88	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 12:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	461		0.650	MDL	11.6	PQL	mg/Kg	J	E
POTASSIUM	4690		20.9	MDL	58.1	PQL	mg/Kg	J	Q
SODIUM	83.8	J	43.3	MDL	116	PQL	mg/Kg	J	Z
TIN	3.00	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.39	J	0.976	MDL	5.81	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	574		0.648	MDL	11.6	PQL	mg/Kg	J	E
POTASSIUM	4760		20.8	MDL	57.9	PQL	mg/Kg	J	Q
SODIUM	100	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.93	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.21	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	533		0.644	MDL	11.5	PQL	mg/Kg	J	E
POTASSIUM	3140		20.7	MDL	57.5	PQL	mg/Kg	J	Q
SODIUM	90.9	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.86	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.966	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	388		0.644	MDL	11.5	PQL	mg/Kg	J	E
POTASSIUM	2130		20.7	MDL	57.5	PQL	mg/Kg	J	Q
SODIUM	91.1	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.73	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.58	J	0.966	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	294		0.599	MDL	10.7	PQL	mg/Kg	J	E
POTASSIUM	2980		19.3	MDL	53.5	PQL	mg/Kg	J	Q
SODIUM	102	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.95	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.79	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-049-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	326		0.622	MDL	11.1	PQL	mg/Kg	J	E
POTASSIUM	2640		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	3.07	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.81	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	29.3		0.113	MDL	0.454	PQL	mg/Kg	J	Q, E
SILVER	0.0613	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA2** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	331		1.59	MDL	8.51	PQL	mg/Kg	J	E, E

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15.5		0.0763	MDL	0.463	PQL	mg/Kg	J	A

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0937	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.41		0.0907	MDL	0.454	PQL	mg/Kg	J	Q, E
CADMIUM	0.609		0.0454	MDL	0.113	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP01-SA8N-QC-041111** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	23.4		0.136	MDL	0.454	PQL	mg/Kg	J	Q
COBALT	12.6		0.0227	MDL	0.113	PQL	mg/Kg	J	E
LEAD	13.0		0.0118	MDL	0.227	PQL	mg/Kg	J	Q
VANADIUM	42.4		0.0250	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: **SL-001-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:15:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	25.9		0.126	MDL	0.504	PQL	mg/Kg	J	Q, E
SILVER	0.0297	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z

Sample ID: **SL-001-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:15:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.437	J	0.0504	MDL	0.504	PQL	mg/Kg	J	Z

Sample ID: **SL-001-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:15:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	19.3		0.0815	MDL	0.494	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.409		0.0756	MDL	0.252	PQL	mg/Kg	J	Q
ARSENIC	13.1		0.101	MDL	0.504	PQL	mg/Kg	J	Q, E
CADMIUM	0.471		0.0504	MDL	0.126	PQL	mg/Kg	J	Q, E
CHROMIUM	38.1		0.151	MDL	0.504	PQL	mg/Kg	J	Q
COBALT	12.6		0.0252	MDL	0.126	PQL	mg/Kg	J	E
LEAD	33.6		0.0131	MDL	0.252	PQL	mg/Kg	J	Q
VANADIUM	79.4		0.0277	MDL	0.126	PQL	mg/Kg	J	Q
ZINC	86.1		0.705	MDL	3.78	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	21.9		0.124	MDL	0.496	PQL	mg/Kg	J	Q, E
SILVER	0.0326	J	0.0149	MDL	0.124	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0496	MDL	0.496	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	20.2		0.0810	MDL	0.491	PQL	mg/Kg	J	A

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.420		0.0743	MDL	0.248	PQL	mg/Kg	J	Q
ARSENIC	7.28		0.0991	MDL	0.496	PQL	mg/Kg	J	Q, E
CADMIUM	0.414		0.0496	MDL	0.124	PQL	mg/Kg	J	Q, E
CHROMIUM	31.7		0.149	MDL	0.496	PQL	mg/Kg	J	Q
COBALT	10.9		0.0248	MDL	0.124	PQL	mg/Kg	J	E
LEAD	48.7		0.0129	MDL	0.248	PQL	mg/Kg	J	Q
VANADIUM	56.1		0.0273	MDL	0.124	PQL	mg/Kg	J	Q
ZINC	78.2		0.694	MDL	3.72	PQL	mg/Kg	J	E, E

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	21.3		0.124	MDL	0.498	PQL	mg/Kg	J	Q, E
SILVER	0.0491	J	0.0149	MDL	0.124	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.0498	MDL	0.498	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-003-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:40:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.3		0.0813	MDL	0.493	PQL	mg/Kg	J	A

Sample ID: SL-003-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:40:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.350		0.0746	MDL	0.249	PQL	mg/Kg	J	Q
ARSENIC	6.89		0.0995	MDL	0.498	PQL	mg/Kg	J	Q, E
CADMIUM	0.318		0.0498	MDL	0.124	PQL	mg/Kg	J	Q, E
CHROMIUM	29.4		0.149	MDL	0.498	PQL	mg/Kg	J	Q
COBALT	10.6		0.0249	MDL	0.124	PQL	mg/Kg	J	E
LEAD	31.7		0.0129	MDL	0.249	PQL	mg/Kg	J	Q
VANADIUM	53.1		0.0274	MDL	0.124	PQL	mg/Kg	J	Q
ZINC	72.5		0.697	MDL	3.73	PQL	mg/Kg	J	E, E

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:55:00** **Analysis Type: REA** **Dilution: 5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	121		0.0294	MDL	0.566	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:55:00** **Analysis Type: REA2** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	18.2		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E
SILVER	0.0343	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:55:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.196	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:55:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	16.5		0.0733	MDL	0.444	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-004-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.957		0.0679	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	7.59		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
CADMIUM	0.304		0.0453	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	28.4		0.136	MDL	0.453	PQL	mg/Kg	J	Q
COBALT	9.94		0.0226	MDL	0.113	PQL	mg/Kg	J	E
VANADIUM	49.1		0.0249	MDL	0.113	PQL	mg/Kg	J	Q
ZINC	66.6		0.634	MDL	3.40	PQL	mg/Kg	J	E, E

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	13.2		0.104	MDL	0.414	PQL	mg/Kg	J	Q, E

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **500**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9920		2.69	MDL	51.8	PQL	mg/Kg	J	Q

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.226	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.7		0.0683	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	87.0		0.0621	MDL	0.207	PQL	mg/Kg	J	Q
ARSENIC	78.4		0.0828	MDL	0.414	PQL	mg/Kg	J	Q, E
CADMIUM	0.905		0.0414	MDL	0.104	PQL	mg/Kg	J	Q, E
CHROMIUM	20.0		0.124	MDL	0.414	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	11.1		0.0207	MDL	0.104	PQL	mg/Kg	J	E
VANADIUM	43.2		0.0228	MDL	0.104	PQL	mg/Kg	J	Q
ZINC	68.2		0.580	MDL	3.11	PQL	mg/Kg	J	E, E

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.368		0.0684	MDL	0.228	PQL	mg/Kg	J	Q
CADMIUM	0.231		0.0456	MDL	0.114	PQL	mg/Kg	J	Q, E
NICKEL	20.7		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E
SILVER	0.0193	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0851	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	17.3		0.0752	MDL	0.456	PQL	mg/Kg	J	A

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.59		0.0911	MDL	0.456	PQL	mg/Kg	J	Q, E
CHROMIUM	32.6		0.137	MDL	0.456	PQL	mg/Kg	J	Q
COBALT	10.7		0.0228	MDL	0.114	PQL	mg/Kg	J	E
LEAD	12.8		0.0118	MDL	0.228	PQL	mg/Kg	J	Q
VANADIUM	56.2		0.0251	MDL	0.114	PQL	mg/Kg	J	Q
ZINC	65.0		0.638	MDL	3.42	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.447		0.0487	MDL	0.122	PQL	mg/Kg	J	Q, E
NICKEL	20.8		0.122	MDL	0.487	PQL	mg/Kg	J	Q, E
SILVER	0.0394	J	0.0146	MDL	0.122	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.194	J	0.0487	MDL	0.487	PQL	mg/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	19.4		0.0773	MDL	0.468	PQL	mg/Kg	J	A

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.186	J	0.0731	MDL	0.244	PQL	mg/Kg	J	Z, Q
ARSENIC	6.53		0.0974	MDL	0.487	PQL	mg/Kg	J	Q, E
CHROMIUM	29.5		0.146	MDL	0.487	PQL	mg/Kg	J	Q
COBALT	10.2		0.0244	MDL	0.122	PQL	mg/Kg	J	E
LEAD	15.7		0.0127	MDL	0.244	PQL	mg/Kg	J	Q
VANADIUM	52.9		0.0268	MDL	0.122	PQL	mg/Kg	J	Q
ZINC	102		0.682	MDL	3.65	PQL	mg/Kg	J	E, E

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	16.4		0.110	MDL	0.439	PQL	mg/Kg	J	Q, E
SILVER	0.0385	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0905	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-008-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 11:00:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.3		0.0717	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: SL-008-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 11:00:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.110	J	0.0658	MDL	0.219	PQL	mg/Kg	J	Z, Q
ARSENIC	5.69		0.0877	MDL	0.439	PQL	mg/Kg	J	Q, E
CADMIUM	0.226		0.0439	MDL	0.110	PQL	mg/Kg	J	Q, E
CHROMIUM	23.3		0.132	MDL	0.439	PQL	mg/Kg	J	Q
COBALT	8.43		0.0219	MDL	0.110	PQL	mg/Kg	J	E
LEAD	12.6		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
VANADIUM	41.3		0.0241	MDL	0.110	PQL	mg/Kg	J	Q
ZINC	100		0.614	MDL	3.29	PQL	mg/Kg	J	E, E

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:45:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	23.4		0.114	MDL	0.457	PQL	mg/Kg	J	Q, E
SILVER	0.0497	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:45:00** **Analysis Type: REA2** **Dilution: 5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	240		1.60	MDL	8.56	PQL	mg/Kg	J	E, E

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:45:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0965	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:45:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.4		0.0776	MDL	0.470	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-009-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0685	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	7.00		0.0914	MDL	0.457	PQL	mg/Kg	J	Q, E
CADMIUM	0.406		0.0457	MDL	0.114	PQL	mg/Kg	J	Q, E
CHROMIUM	31.7		0.137	MDL	0.457	PQL	mg/Kg	J	Q
COBALT	12.2		0.0228	MDL	0.114	PQL	mg/Kg	J	E
LEAD	11.5		0.0119	MDL	0.228	PQL	mg/Kg	J	Q
VANADIUM	55.2		0.0251	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	18.8		0.117	MDL	0.469	PQL	mg/Kg	J	Q, E
SILVER	0.0339	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.2		0.0774	MDL	0.469	PQL	mg/Kg	J	A

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	6.62		0.0938	MDL	0.469	PQL	mg/Kg	J	Q, E
CADMIUM	0.248		0.0469	MDL	0.117	PQL	mg/Kg	J	Q, E
CHROMIUM	27.8		0.141	MDL	0.469	PQL	mg/Kg	J	Q
COBALT	9.96		0.0235	MDL	0.117	PQL	mg/Kg	J	E
LEAD	11.2		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
VANADIUM	49.2		0.0258	MDL	0.117	PQL	mg/Kg	J	Q
ZINC	94.3		0.657	MDL	3.52	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0530	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	19.1		0.116	MDL	0.463	PQL	mg/Kg	J	Q, E

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.191	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.3		0.0757	MDL	0.459	PQL	mg/Kg	J	A

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	6.92		0.0926	MDL	0.463	PQL	mg/Kg	J	Q, E
CADMIUM	0.343		0.0463	MDL	0.116	PQL	mg/Kg	J	Q, E
CHROMIUM	28.7		0.139	MDL	0.463	PQL	mg/Kg	J	Q
COBALT	10.1		0.0231	MDL	0.116	PQL	mg/Kg	J	E
LEAD	12.0		0.0120	MDL	0.231	PQL	mg/Kg	J	Q
VANADIUM	50.6		0.0255	MDL	0.116	PQL	mg/Kg	J	Q
ZINC	82.0		0.648	MDL	3.47	PQL	mg/Kg	J	E, E

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	28.6		0.113	MDL	0.451	PQL	mg/Kg	J	Q, E
SILVER	0.0679	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-013-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA2** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	260		1.58	MDL	8.46	PQL	mg/Kg	J	E, E

Sample ID: **SL-013-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: **SL-013-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15.0		0.0752	MDL	0.455	PQL	mg/Kg	J	A

Sample ID: **SL-013-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0677	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	5.33		0.0902	MDL	0.451	PQL	mg/Kg	J	Q, E
CADMIUM	0.854		0.0451	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	27.8		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	11.4		0.0226	MDL	0.113	PQL	mg/Kg	J	E
LEAD	12.3		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0248	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: **SL-014-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	14.0		0.114	MDL	0.455	PQL	mg/Kg	J	Q, E
SILVER	0.0284	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: **SL-014-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0838	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-014-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:30:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.6		0.0737	MDL	0.447	PQL	mg/Kg	J	A

Sample ID: SL-014-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0786	J	0.0683	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	4.70		0.0911	MDL	0.455	PQL	mg/Kg	J	Q, E
CADMIUM	0.168		0.0455	MDL	0.114	PQL	mg/Kg	J	Q, E
CHROMIUM	20.1		0.137	MDL	0.455	PQL	mg/Kg	J	Q
COBALT	6.37		0.0228	MDL	0.114	PQL	mg/Kg	J	E
LEAD	5.91		0.0118	MDL	0.228	PQL	mg/Kg	J	Q
VANADIUM	36.9		0.0251	MDL	0.114	PQL	mg/Kg	J	Q
ZINC	50.0		0.638	MDL	3.42	PQL	mg/Kg	J	E, E

Sample ID: SL-017-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:50:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.232		0.0432	MDL	0.108	PQL	mg/Kg	J	Q, E
NICKEL	18.2		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	0.0435	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:50:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:50:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	15.7		0.0706	MDL	0.428	PQL	mg/Kg	J	A

Sample ID: SL-017-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.211	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-017-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 2:50:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.46		0.0864	MDL	0.432	PQL	mg/Kg	J	Q, E
CHROMIUM	25.2		0.130	MDL	0.432	PQL	mg/Kg	J	Q
COBALT	9.94		0.0216	MDL	0.108	PQL	mg/Kg	J	E
LEAD	14.1		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
VANADIUM	45.8		0.0238	MDL	0.108	PQL	mg/Kg	J	Q
ZINC	65.5		0.605	MDL	3.24	PQL	mg/Kg	J	E, E

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:20:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	16.8		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E
SILVER	0.0373	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:20:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0872	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:20:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.8		0.0711	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:20:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0804	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	6.34		0.0888	MDL	0.444	PQL	mg/Kg	J	Q, E
CADMIUM	0.211		0.0444	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	24.9		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	8.17		0.0222	MDL	0.111	PQL	mg/Kg	J	E
LEAD	8.62		0.0115	MDL	0.222	PQL	mg/Kg	J	Q
VANADIUM	44.7		0.0244	MDL	0.111	PQL	mg/Kg	J	Q
ZINC	69.4		0.622	MDL	3.33	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP01-SA8N-QC-041111 ***Collected:*** 4/11/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.78	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.87	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 11:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.80	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 12:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 1:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-013-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.94	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-017-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 2:50:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.82	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:20:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP01-SA8N-QC-041111 **Collected: 4/11/2011 2:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.111	PQL	mg/Kg	UJ	FD

Sample ID: SL-008-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 11:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0052	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0293	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:55:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0099	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.112	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-013-SA8N-SS-0.0-0.5 *Collected:* 4/11/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0037	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, FD

Sample ID: SL-017-SA8N-SS-0.0-0.5 *Collected:* 4/11/2011 2:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0241	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-011-SA8N-SS-0.0-0.5 *Collected:* 4/11/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	380	J	197	MDL	394	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 6850 **Matrix: SO**

Sample ID: SL-011-SA8N-SS-0.0-0.5 *Collected:* 4/11/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.2	J	2.5	MDL	5.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-013-SA8N-SS-0.0-0.5 *Collected:* 4/11/2011 2:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	Q
Propylene glycol	5.8	U	5.8	MDL	15	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-049-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 1:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.48	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP01-SA8N-QC-041111 ***Collected:*** 4/11/2011 2:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
Aroclor 5460	10		1.2	MDL	3.9	PQL	ug/Kg	J	FD

Sample ID: SL-001-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.0	J	2.1	MDL	11	PQL	ug/Kg	J	Z
AROCLOR 1260	4.4	J	2.5	MDL	11	PQL	ug/Kg	J	Z
Aroclor 5460	8.4	J	6.3	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	4.7	J	2.0	MDL	11	PQL	ug/Kg	J	Z
AROCLOR 1260	4.9	J	2.4	MDL	11	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.1	J	2.1	MDL	11	PQL	ug/Kg	J	Z
AROCLOR 1260	3.7	J	2.4	MDL	11	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	9.5	J	3.8	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.6	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z
AROCLOR 1260	3.1	J	0.82	MDL	3.6	PQL	ug/Kg	J	Z
Aroclor 5460	4.0	J	2.1	MDL	7.0	PQL	ug/Kg	J	Z

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 1268	0.72	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.5	J	0.80	MDL	4.1	PQL	ug/Kg	J	Z
Aroclor 1268	3.1	J	0.80	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.0	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 1268	1.6	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-009-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 1268	1.4	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	4.9		0.78	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 1268	29		0.78	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 5460	30		2.4	MDL	7.8	PQL	ug/Kg	J	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	75		0.78	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 1268	11		0.78	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 5460	13		2.4	MDL	7.8	PQL	ug/Kg	J	S

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	FD
Aroclor 5460	20		1.2	MDL	3.8	PQL	ug/Kg	J	FD

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.56	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.7	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.99	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP01-SA8N-QC-041111 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-001-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 9:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	21	MDL	420	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-002-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	20	MDL	410	PQL	ug/Kg	J	Z

Sample ID: **SL-003-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	21	MDL	410	PQL	ug/Kg	J	Z

Sample ID: **SL-004-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 9:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z
N-NITROSODIPHENYLAMINE	26	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	79	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	42	J	19	MDL	390	PQL	ug/Kg	J	Z
CHRYSENE	28	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	25	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:30:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	51	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:20:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	19	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: DUP01-SA8N-QC-041111 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	3.9	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	6.2	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD
CHRYSENE	4.7	J	1.9	MDL	9.6	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	5.7	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD
PYRENE	5.8	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-001-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:15:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	0.87	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	0.87	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:30:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.8	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.41	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:40:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.84	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.8	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 9:55:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.96	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-005-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	6.3	MDL	19	PQL	ug/Kg	J	Z
PHENANTHRENE	0.92	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.5	J	6.8	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.84	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	7.3	MDL	22	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.87	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.90	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-008-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 11:00:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.86	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.96	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 12:55:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.87	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 1:10:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	7.9	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.7	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
PHENANTHRENE	7.9	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 2:00:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	3.8	U	3.8	MDL	9.6	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	3.8	U	3.8	MDL	9.6	PQL	ug/Kg	UJ	FD
CHRYSENE	1.9	U	1.9	MDL	9.6	PQL	ug/Kg	UJ	FD
FLUORANTHENE	3.8	U	3.8	MDL	9.6	PQL	ug/Kg	UJ	FD
PYRENE	3.8	U	3.8	MDL	9.6	PQL	ug/Kg	UJ	FD

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected: 4/11/2011 2:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: **SL-017-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.53	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-049-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 1:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.5	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.8	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE124 **Laboratory: LL**

EDD Filename: DE124_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE124

Method Blank Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P10408CB221600	4/22/2011 4:00:00 PM	CALCIUM PHOSPHORUS TIN	6.33 mg/Kg 1.92 mg/Kg 1.97 mg/Kg	DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP01-SA8N-QC-041111(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	TIN	4.08 mg/Kg	4.08U mg/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-005-SA8N-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-011-SA8N-SS-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-017-SA8N-SS-0.0-0.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MSD (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	VANADIUM	-	147	75.00-125.00	-	VANADIUM	J (all detects)
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	ANTIMONY	16	13	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects) Post Spike %R = 110%
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	ARSENIC CADMIUM CHROMIUM LEAD NICKEL ZINC	- - 55 - - -	241 68 - 56 49 1385	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	31 (20.00) - - - - 42 (20.00)	ARSENIC CADMIUM CHROMIUM LEAD NICKEL ZINC	J(all detects) UJ(all non-detects) Zn No Qual %R, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE124

EDD Filename: DE124_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	BARIUM	306	132	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	ALUMINUM IRON MAGNESIUM MANGANESE POTASSIUM	1995 1656 719 140 198	2742 2141 409 147 164	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM MANGANESE POTASSIUM	J(all detects) Al, Fe, Mg, Mn No Qual. >4x
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	CALCIUM PHOSPHORUS	-362 52	-374 -25	75.00-125.00 75.00-125.00	- -	CALCIUM PHOSPHORUS	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE124

EDD Filename: DE124_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MSD (SL-013-SA8N-SS-0.0-0.5)	2,4-DINITROPHENOL	-	-	20.00-143.00	34 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-013-SA8N-SS-0.0-0.5MS	4-CHLOROPHENYL-PHENYLET	78	-	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	J(all detects)
SL-013-SA8N-SS-0.0-0.5MSD (SL-013-SA8N-SS-0.0-0.5)	BENZIDINE	30	17	35.00-141.00	54 (30.00)	BENZIDINE	UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MS	ACENAPHTHENE	110	-	63.00-105.00	-	ACENAPHTHENE	No Qual, Diluted Out
SL-013-SA8N-SS-0.0-0.5MSD	BENZO(A)PYRENE	-	-	45.00-138.00	31 (30.00)	BENZO(A)PYRENE	
(SL-013-SA8N-SS-0.0-0.5)	BENZO(G,H,I)PERYLENE	-	-	33.00-141.00	33 (30.00)	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	-	-	42.00-144.00	40 (30.00)	BENZO(K)FLUORANTHENE	
	BIS(2-ETHYLHEXYL)PHTHALAT	173	-	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Di-n-octylphthalate	231	200	40.00-192.00	-	Di-n-octylphthalate	
	NAPHTHALENE	104	-	61.00-102.00	-	NAPHTHALENE	
SL-013-SA8N-SS-0.0-0.5MSD	Diethylphthalate	-	0	70.00-136.00	200 (30.00)	Diethylphthalate	No Qual Diluted Out
(SL-013-SA8N-SS-0.0-0.5)	Dimethylphthalate	-	0	74.00-118.00	200 (30.00)	Dimethylphthalate	

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MS	ETHYLENE GLYCOL	58	-	63.00-107.00	-	ETHYLENE GLYCOL	J(all detects) UJ(all non-detects)
SL-013-SA8N-SS-0.0-0.5MSD	Propylene glycol	62	-	63.00-107.00	23 (20.00)	Propylene glycol	
(SL-013-SA8N-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-013-SA8N-SS-0.0-0.5MS **SL-013-SA8N-SS-0.0-0.5MSD** (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	TITANIUM	224	225	75.00-125.00	-	TITANIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
DUP01-SA8N-QC-041111MS (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5)	FLUORIDE	65	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-013-SA8N-SS-0.0-0.5MS (SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-013-SA8N-SS-0.0-0.5DUP (SL-010-SA8N-SS-0.0-0.5 SL -011-SA8N-SS-0.0-0.5 SL -013-SA8N-SS-0.0-0.5 SL -014-SA8N-SS-0.0-0.5 SL -017-SA8N-SS-0.0-0.5 SL -049-SA8N-SS-0.0-0.5)	FLUORIDE	44	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-013-SA8N-SS-0.0-0.5DUP (DUP01 -SA8N-QC-041111 SL -001-SA8N-SS-0.0-0.5 SL -002-SA8N-SS-0.0-0.5 SL -003-SA8N-SS-0.0-0.5 SL -004-SA8N-SS-0.0-0.5 SL -005-SA8N-SS-0.0-0.5 SL -006-SA8N-SS-0.0-0.5 SL -007-SA8N-SS-0.0-0.5 SL -008-SA8N-SS-0.0-0.5 SL -009-SA8N-SS-0.0-0.5 SL -010-SA8N-SS-0.0-0.5 SL -011-SA8N-SS-0.0-0.5 SL -013-SA8N-SS-0.0-0.5 SL -014-SA8N-SS-0.0-0.5 SL -017-SA8N-SS-0.0-0.5 SL -049-SA8N-SS-0.0-0.5)	PHOSPHORUS Zirconium	25 63	20.00 20.00	J(all detects) UJ(all non-detects) Zr No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-013-SA8N-SS-0.0-0.5DUP (DUP01 -SA8N-QC-041111 SL -001-SA8N-SS-0.0-0.5 SL -002-SA8N-SS-0.0-0.5 SL -003-SA8N-SS-0.0-0.5 SL -004-SA8N-SS-0.0-0.5 SL -005-SA8N-SS-0.0-0.5 SL -006-SA8N-SS-0.0-0.5 SL -007-SA8N-SS-0.0-0.5 SL -008-SA8N-SS-0.0-0.5 SL -009-SA8N-SS-0.0-0.5 SL -010-SA8N-SS-0.0-0.5 SL -011-SA8N-SS-0.0-0.5 SL -013-SA8N-SS-0.0-0.5 SL -014-SA8N-SS-0.0-0.5 SL -017-SA8N-SS-0.0-0.5 SL -049-SA8N-SS-0.0-0.5)	ANTIMONY CADMIUM COBALT NICKEL ZINC	40 0.3113 39 39 23	20.00 0.2910 mg/Kg 20.00 20.00 20.00	J(all detects) UJ(all non-detects) Sb No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-013-SA8N-SS-0.0-0.5DUP (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	HEXAVALENT CHROMIUM	73	20.00	No Qual OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-013-SA8N-SS-0.0-0.5DUP (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	MERCURY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10426CQ221600A (DUP01-SA8N-QC-041111 SL-001-SA8N-SS-0.0-0.5 SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5 SL-017-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	ANTIMONY	62	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-010-SA8N-SS-0.0-0.5 SL-011-SA8N-SS-0.0-0.5 SL-049-SA8N-SS-0.0-0.5)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-004-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	121	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-010-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	274	45.00-120.00	All Target Analytes	J(all detects)
SL-011-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	148	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
MOISTURE	13.9	14.4	4		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
FLUORIDE	1.5	1.9	24	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
ALUMINUM	19000	18300	4	50.00	No Qualifiers Applied
BORON	12.0	11.2	7	50.00	
CALCIUM	16400	17800	8	50.00	
IRON	24000	22400	7	50.00	
LITHIUM	23.4	21.5	8	50.00	
MAGNESIUM	5320	5330	0	50.00	
MANGANESE	322	310	4	50.00	
PHOSPHORUS	533	428	22	50.00	
POTASSIUM	3140	3320	6	50.00	
SODIUM	90.9	84.0	8	50.00	
STRONTIUM	30.4	30.8	1	50.00	
TIN	2.86	2.62	9	50.00	
TITANIUM	1340	1270	5	50.00	
Zirconium	1.85	2.49	29	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
ANTIMONY	0.130	0.0937	32	50.00	No Qualifiers Applied
ARSENIC	5.33	5.41	1	50.00	
BARIUM	95.5	94.3	1	50.00	
BERYLLIUM	0.640	0.646	1	50.00	
CADMIUM	0.854	0.609	33	50.00	
CHROMIUM	27.8	23.4	17	50.00	
COBALT	11.4	12.6	10	50.00	
COPPER	15.0	15.5	3	50.00	
LEAD	12.3	13.0	6	50.00	
MOLYBDENUM	0.468	0.656	33	50.00	
NICKEL	28.6	29.3	2	50.00	
SELENIUM	0.142	0.131	8	50.00	
SILVER	0.0679	0.0613	10	50.00	
THALLIUM	0.274	0.289	5	50.00	
VANADIUM	41.7	42.4	2	50.00	
ZINC	260	331	24	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
HEXAVALENT CHROMIUM	0.94	0.78	19	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
MERCURY	0.0037	0.111 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
AROCLOR 1254	5.7	5.0	13	50.00	No Qualifiers Applied
AROCLOR 1260	22	20	10	50.00	
AROCLOR 1248	2.0 U	1.8	200	50.00	J(all detects) UJ(all non-detects)
Aroclor 5460	20	10	67	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
BENZO(A)PYRENE	9.6 U	3.9	200	50.00	J(all detects) UJ(all non-detects)
BENZO(B)FLUORANTHENE	9.6 U	6.2	200	50.00	
CHRYSENE	9.6 U	4.7	200	50.00	
FLUORANTHENE	9.6 U	5.7	200	50.00	
PYRENE	9.6 U	5.8	200	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
BIS(2-ETHYLHEXYL)PHTHALATE	31	23	30	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
PH	8.01	7.87	2	50.00	No Qualifiers Applied

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: ASTM D1498
Matrix: SO

Analyte	*Concentration (mV)*		*Sample RPD*	*eQAPP RPD*	*Flag*
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
Oxidation Reduction Potential	379	411	8		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	380	394	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA8N-SS-0.0-0.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	SODIUM	J	84.0	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	11.5	PQL	mg/Kg	
	Zirconium	J	2.49	5.73	PQL	mg/Kg	
SL-001-SA8N-SS-0.0-0.5	SODIUM	J	99.4	122	PQL	mg/Kg	J (all detects)
	TIN	J	2.91	12.2	PQL	mg/Kg	
	Zirconium	J	2.53	6.11	PQL	mg/Kg	
SL-002-SA8N-SS-0.0-0.5	SODIUM	J	92.6	120	PQL	mg/Kg	J (all detects)
	TIN	J	4.08	12.0	PQL	mg/Kg	
	Zirconium	J	3.26	6.02	PQL	mg/Kg	
SL-003-SA8N-SS-0.0-0.5	SODIUM	J	106	123	PQL	mg/Kg	J (all detects)
	TIN	J	3.03	12.3	PQL	mg/Kg	
	Zirconium	J	3.36	6.16	PQL	mg/Kg	
SL-004-SA8N-SS-0.0-0.5	SODIUM	J	107	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	11.1	PQL	mg/Kg	
	Zirconium	J	3.10	5.55	PQL	mg/Kg	
SL-005-SA8N-SS-0.0-0.5	TIN	J	2.59	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.929	5.13	PQL	mg/Kg	
SL-006-SA8N-SS-0.0-0.5	SODIUM	J	85.8	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.1	PQL	mg/Kg	
	Zirconium	J	3.69	5.53	PQL	mg/Kg	
SL-007-SA8N-SS-0.0-0.5	SODIUM	J	88.0	118	PQL	mg/Kg	J (all detects)
	TIN	J	3.03	11.8	PQL	mg/Kg	
	Zirconium	J	2.67	5.91	PQL	mg/Kg	
SL-008-SA8N-SS-0.0-0.5	SODIUM	J	91.3	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	10.6	PQL	mg/Kg	
	Zirconium	J	1.91	5.32	PQL	mg/Kg	
SL-009-SA8N-SS-0.0-0.5	TIN	J	2.91	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.49	5.88	PQL	mg/Kg	
SL-010-SA8N-SS-0.0-0.5	SODIUM	J	83.8	116	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	11.6	PQL	mg/Kg	
	Zirconium	J	3.39	5.81	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

EDD Filename: DE124_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SS-0.0-0.5	SODIUM	J	100	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.93	11.6	PQL	mg/Kg	
	Zirconium	J	3.21	5.79	PQL	mg/Kg	
SL-013-SA8N-SS-0.0-0.5	SODIUM	J	90.9	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.86	11.5	PQL	mg/Kg	
	Zirconium	J	1.85	5.75	PQL	mg/Kg	
SL-014-SA8N-SS-0.0-0.5	SODIUM	J	91.1	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.5	PQL	mg/Kg	
	Zirconium	J	1.58	5.75	PQL	mg/Kg	
SL-017-SA8N-SS-0.0-0.5	SODIUM	J	102	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.95	10.7	PQL	mg/Kg	
	Zirconium	J	2.79	5.35	PQL	mg/Kg	
SL-049-SA8N-SS-0.0-0.5	TIN	J	3.07	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.81	5.55	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	ANTIMONY	J	0.0937	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.454	PQL	mg/Kg	
	SILVER	J	0.0613	0.113	PQL	mg/Kg	
SL-001-SA8N-SS-0.0-0.5	SELENIUM	J	0.437	0.504	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0297	0.126	PQL	mg/Kg	
SL-002-SA8N-SS-0.0-0.5	SELENIUM	J	0.227	0.496	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0326	0.124	PQL	mg/Kg	
SL-003-SA8N-SS-0.0-0.5	SELENIUM	J	0.225	0.498	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0491	0.124	PQL	mg/Kg	
SL-004-SA8N-SS-0.0-0.5	SELENIUM	J	0.196	0.453	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0343	0.113	PQL	mg/Kg	
SL-005-SA8N-SS-0.0-0.5	SELENIUM	J	0.226	0.414	PQL	mg/Kg	J (all detects)
SL-006-SA8N-SS-0.0-0.5	SELENIUM	J	0.0851	0.456	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0193	0.114	PQL	mg/Kg	
SL-007-SA8N-SS-0.0-0.5	ANTIMONY	J	0.186	0.244	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.194	0.487	PQL	mg/Kg	
	SILVER	J	0.0394	0.122	PQL	mg/Kg	
SL-008-SA8N-SS-0.0-0.5	ANTIMONY	J	0.110	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0905	0.439	PQL	mg/Kg	
	SILVER	J	0.0385	0.110	PQL	mg/Kg	
SL-009-SA8N-SS-0.0-0.5	ANTIMONY	J	0.140	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0965	0.457	PQL	mg/Kg	
	SILVER	J	0.0497	0.114	PQL	mg/Kg	
SL-010-SA8N-SS-0.0-0.5	ANTIMONY	J	0.117	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.138	0.469	PQL	mg/Kg	
	SILVER	J	0.0339	0.117	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SS-0.0-0.5	ANTIMONY	J	0.157	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.191	0.463	PQL	mg/Kg	
	SILVER	J	0.0530	0.116	PQL	mg/Kg	
SL-013-SA8N-SS-0.0-0.5	ANTIMONY	J	0.130	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.451	PQL	mg/Kg	
	SILVER	J	0.0679	0.113	PQL	mg/Kg	
SL-014-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0786	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0838	0.455	PQL	mg/Kg	
	SILVER	J	0.0284	0.114	PQL	mg/Kg	
SL-017-SA8N-SS-0.0-0.5	ANTIMONY	J	0.211	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.151	0.432	PQL	mg/Kg	
	SILVER	J	0.0435	0.108	PQL	mg/Kg	
SL-049-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0804	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0872	0.444	PQL	mg/Kg	
	SILVER	J	0.0373	0.111	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SS-0.0-0.5	PERCHLORATE	J	3.2	5.9	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	HEXAVALENT CHROMIUM	J	0.78	1.2	PQL	mg/Kg	J (all detects)
SL-002-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-003-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.57	1.2	PQL	mg/Kg	J (all detects)
SL-006-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.87	1.2	PQL	mg/Kg	J (all detects)
SL-008-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.80	1.1	PQL	mg/Kg	J (all detects)
SL-010-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.46	1.2	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-013-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.94	1.2	PQL	mg/Kg	J (all detects)
SL-017-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.82	1.1	PQL	mg/Kg	J (all detects)
SL-049-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA8N-SS-0.0-0.5	MERCURY	J	0.0052	0.105	PQL	mg/Kg	J (all detects)
SL-009-SA8N-SS-0.0-0.5	MERCURY	J	0.0293	0.116	PQL	mg/Kg	J (all detects)
SL-010-SA8N-SS-0.0-0.5	MERCURY	J	0.0099	0.117	PQL	mg/Kg	J (all detects)
SL-011-SA8N-SS-0.0-0.5	MERCURY	J	0.112	0.115	PQL	mg/Kg	J (all detects)
SL-013-SA8N-SS-0.0-0.5	MERCURY	J	0.0037	0.112	PQL	mg/Kg	J (all detects)
SL-017-SA8N-SS-0.0-0.5	MERCURY	J	0.0241	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA8N-SS-0.0-0.5	EFH (C12-C14)	J	0.48	1.3	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	AROCLOR 1248	J	1.8	2.0	PQL	ug/Kg	J (all detects)
SL-001-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	8.0 4.4 8.4	11 11 21	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-002-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	4.7 4.9	11 11	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-003-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	7.1 3.7	11 11	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-004-SA8N-SS-0.0-0.5	AROCLOR 1254	J	9.5	20	PQL	ug/Kg	J (all detects)
SL-005-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.6 3.1 4.0	3.6 3.6 7.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-006-SA8N-SS-0.0-0.5	Aroclor 1268	J	0.72	2.0	PQL	ug/Kg	J (all detects)
SL-007-SA8N-SS-0.0-0.5	AROCLOR 1254 Aroclor 1268	J J	2.5 3.1	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-008-SA8N-SS-0.0-0.5	AROCLOR 1254 Aroclor 1268	J J	1.0 1.6	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-009-SA8N-SS-0.0-0.5	Aroclor 1268 Aroclor 5460	J J	1.4 1.7	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-014-SA8N-SS-0.0-0.5	AROCLOR 1260	J	0.56	2.0	PQL	ug/Kg	J (all detects)
SL-049-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.7 0.99	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	380	PQL	ug/Kg	J (all detects)
SL-001-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	420	PQL	ug/Kg	J (all detects)
SL-002-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	410	PQL	ug/Kg	J (all detects)
SL-003-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	410	PQL	ug/Kg	J (all detects)
SL-004-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE N-NITROSODIPHENYLAMINE	J J	25 26	380 190	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-005-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	79	350	PQL	ug/Kg	J (all detects)
SL-006-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-007-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	400	PQL	ug/Kg	J (all detects)
SL-008-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	360	PQL	ug/Kg	J (all detects)
SL-011-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE PYRENE	J J J	42 28 25	390 190 190	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-013-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	380	PQL	ug/Kg	J (all detects)
SL-014-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	51	380	PQL	ug/Kg	J (all detects)
SL-049-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA8N-QC-041111	BENZO(A)PYRENE BENZO(B)FLUORANTHENE CHRYSENE FLUORANTHENE PYRENE	J J J J J	3.9 6.2 4.7 5.7 5.8	9.6 9.6 9.6 9.6 9.6	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-001-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE CHRYSENE FLUORANTHENE NAPHTHALENE PHENANTHRENE PYRENE	J J J J J J	1.6 1.4 1.3 0.87 0.87 1.2	2.1 2.1 2.1 2.1 2.1 2.1	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-002-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE CHRYSENE NAPHTHALENE PHENANTHRENE PYRENE	J J J J J	1.8 1.5 1.1 1.4 1.6	2.1 2.1 2.1 2.1 2.1	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-003-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE CHRYSENE PHENANTHRENE PYRENE	J J J J J J	0.84 1.0 1.8 1.8 1.3 1.7	2.0 2.0 2.0 2.0 2.0 2.0	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
SL-005-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.7	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.0	1.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	19	PQL	ug/Kg	
	PHENANTHRENE	J	0.92	1.7	PQL	ug/Kg	
	PYRENE	J	1.4	1.7	PQL	ug/Kg	
SL-006-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.5	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.94	1.9	PQL	ug/Kg	
SL-007-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.87	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
SL-008-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.86	1.8	PQL	ug/Kg	
	PYRENE	J	0.96	1.8	PQL	ug/Kg	
SL-010-SA8N-SS-0.0-0.5	CHRYSENE	J	0.87	2.0	PQL	ug/Kg	J (all detects)
SL-011-SA8N-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	7.9	9.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	6.7	9.7	PQL	ug/Kg	
	PHENANTHRENE	J	7.9	9.7	PQL	ug/Kg	
SL-014-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.8	1.9	PQL	ug/Kg	
SL-017-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
SL-049-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.8	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE124

Laboratory: LL

EDD Filename: DE124_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag

LDC #: 25916F4
SDG #: DE124
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
ADR

Date: 8-3-11

Reviewer: OR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D(Al, Ba, Ca, Fe, Mg, Mn, P, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	Dup(Sb, Cd, Hg Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS ↳out by difference (0.3113 ≤ ~~0.05~~ 0.29 ~~0.07~~ 0)
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cu: 11% (J/UJ)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	DUP01-SA8N-QC-041111 D	11	SL-010-SA8N-SS-0.0-0.5	21		31	
2	SL-001-SA8N-SS-0.0-0.5	12	SL-011-SA8N-SS-0.0-0.5	22		32	
3	SL-002-SA8N-SS-0.0-0.5	13	SL-013-SA8N-SS-0.0-0.5 D	23		33	
4	SL-003-SA8N-SS-0.0-0.5	14	SL-014-SA8N-SS-0.0-0.5	24		34	
5	SL-004-SA8N-SS-0.0-0.5	15	SL-017-SA8N-SS-0.0-0.5	25		35	
6	SL-005-SA8N-SS-0.0-0.5	16	SL-049-SA8N-SS-0.0-0.5	26		36	
7	SL-006-SA8N-SS-0.0-0.5	17	SL-013-SA8N-SS-0.0-0.5MS	27		37	
8	SL-007-SA8N-SS-0.0-0.5	18	SL-013-SA8N-SS-0.0-0.5MSD	28		38	
9	SL-008-SA8N-SS-0.0-0.5	19	SL-013-SA8N-SS-0.0-0.5DUP	29		39	
10	SL-009-SA8N-SS-0.0-0.5	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE125

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	TB-041211	6256879	TB	5030B	8260B	IV
12-Apr-2011	TB-041211	6256879	TB	5030B	8260B SIM	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3050B	6010B	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3050B	6020	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3060A	7199	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8082	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8270C	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	3550B	8270C SIM	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	Gen Prep	9045M	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	300.0	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	314.0	IV
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256862	N	METHOD	7471A	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3050B	6010B	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3050B	6020	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3060A	7199	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8082	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8270C	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	3550B	8270C SIM	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	5035	8260B	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	5035	8260B SIM	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	Gen Prep	9045M	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	300.0	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	314.0	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	6850	IV
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256878	N	METHOD	7471A	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3050B	6020	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3060A	7199	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8082	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8270C	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	3550B	8270C SIM	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	Gen Prep	9045M	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	300.0	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	314.0	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	6850	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	7471A	IV
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256861	N	METHOD	8015M	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3050B	6010B	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3050B	6020	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3060A	7199	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8082	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8270C	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	3550B	8270C SIM	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	Gen Prep	9045M	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	300.0	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	314.0	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	7471A	IV
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256860	N	METHOD	8015M	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3050B	6010B	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3050B	6020	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3060A	7199	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8270C	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	3550B	8270C SIM	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	5035	8260B	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	5035	8260B SIM	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	Gen Prep	9045M	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	300.0	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	314.0	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256877	N	METHOD	7471A	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0DUP	P256877D271448A	DUP	3060A	7199	IV
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0MS	P256877R271040A	MS	3060A	7199	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3050B	6010B	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3050B	6020	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3060A	7199	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8082	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8270C	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	3550B	8270C SIM	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	Gen Prep	9045M	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	300.0	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	314.0	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	7471A	IV
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256870	N	METHOD	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3050B	6020	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3060A	7199	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3546	1625C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8015B	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	3550B	8270C SIM	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	8330	8330A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	Gen Prep	9045M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	300.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8015B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8015M	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	8315A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256859	N	METHOD	9012B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D220657	DUP	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D221029	DUP	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D271632A	DUP	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5DUP	P256859D271910A	DUP	METHOD	300.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M220659	MSD	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M221037	MSD	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M241644A	MSD	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M260032	MSD	3550B	8270C SIM	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MSD	P256859M262215	MSD	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R220658	MS	METHOD	7471A	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R221033	MS	3050B	6010B	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R241626A	MS	3550B	8082	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R260000	MS	3550B	8270C SIM	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R262151	MS	3550B	8270C	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R271654A	MS	METHOD	314.0	IV
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5MS	P256859R271924A	MS	METHOD	300.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3050B	6010B	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3050B	6020	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3060A	7199	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8082	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8270C	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	3550B	8270C SIM	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	Gen Prep	9045M	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	300.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	314.0	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	6850	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	7471A	IV
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256871	N	METHOD	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3050B	6010B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3050B	6020	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3060A	7199	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3546	1625C	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8015B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8082	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8270C	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	3550B	8270C SIM	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	8330	8330A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	Gen Prep	9045M	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	300.0	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	314.0	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	7471A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8015B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8015M	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	8315A	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256863	N	METHOD	9012B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5DUP	P256863D271833B	DUP	METHOD	9012B	IV
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5MS	P256863R271834B	MS	METHOD	9012B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3050B	6010B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3050B	6020	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3060A	7199	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3546	1625C	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8015B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8015M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8082	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8270C	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	3550B	8270C SIM	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	8330	8330A	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	Gen Prep	9045M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	300.0	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	314.0	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	7471A	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8015B	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8015M	IV
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	8315A	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256864	N	METHOD	9012B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3050B	6010B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3050B	6020	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3060A	7199	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8082	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8270C	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	3550B	8270C SIM	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	5035	8260B	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	5035	8260B SIM	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	Gen Prep	9045M	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	300.0	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	314.0	IV
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256876	N	METHOD	7471A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3050B	6010B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3060A	7199	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3546	1625C	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8015B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8015M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8082	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8270C	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	3550B	8270C SIM	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	8330	8330A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	Gen Prep	9045M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	300.0	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	314.0	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	6850	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	7471A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8015B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8015M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	8315A	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256865	N	METHOD	9012B	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845A	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845B	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D220845D	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D221324C	DUP	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5DUP	P256865D291630B	DUP	Gen Prep	9045M	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851A	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851B	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851C	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MSD	P256865M220851D	MSD	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848A	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848B	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848C	MS	3050B	6020	IV
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5MS	P256865R220848D	MS	3050B	6020	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3050B	6010B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3050B	6020	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3060A	7199	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3546	1625C	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8015B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8015M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8082	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8270C	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	3550B	8270C SIM	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	8330	8330A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	Gen Prep	9045M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	300.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	7471A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8015B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8015M	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	8315A	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256869	N	METHOD	9012B	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5DUP	P256869D272125B	DUP	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5DUP	P256869D272228B	DUP	METHOD	300.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5MS	P256869R272210B	MS	METHOD	314.0	IV
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5MS	P256869R272243B	MS	METHOD	300.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3050B	6010B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3050B	6020	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3060A	7199	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3546	1625C	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8015B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8015M	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8082	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8270C	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	3550B	8270C SIM	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	8330	8330A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	Gen Prep	9045M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	300.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	314.0	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	7471A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8015B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8015M	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	8315A	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256866	N	METHOD	9012B	IV
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5DUP	P256866D290915A	DUP	Gen Prep	9045M	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3050B	6010B	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3050B	6020	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3060A	7199	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8082	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8270C	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	3550B	8270C SIM	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	Gen Prep	9045M	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	300.0	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	314.0	IV
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256867	N	METHOD	7471A	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3050B	6010B	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3050B	6020	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3060A	7199	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8082	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8270C	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	3550B	8270C SIM	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	5035	8260B	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	5035	8260B SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	Gen Prep	9045M	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	300.0	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	314.0	IV
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256874	N	METHOD	7471A	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3050B	6010B	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3050B	6020	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3060A	7199	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8015M	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8082	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8270C	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	3550B	8270C SIM	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	Gen Prep	9045M	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	300.0	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	314.0	IV
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256868	N	METHOD	7471A	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3050B	6010B	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3050B	6020	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3060A	7199	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8082	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8270C	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	3550B	8270C SIM	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	Gen Prep	9045M	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	300.0	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	314.0	IV
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256872	N	METHOD	7471A	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3050B	6020	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3060A	7199	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8082	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8270C	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	3550B	8270C SIM	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	5035	8260B	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	5035	8260B SIM	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	Gen Prep	9045M	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	300.0	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	314.0	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	6850	IV
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256875	N	METHOD	7471A	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3005A	6010B	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3020A	6020	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8082	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8270C	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	3510C	8270C SIM	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	300.0	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	314.0	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	7199	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	Gen Prep	9040B	IV
12-Apr-2011	EB01-SA8N-041211	6256873	EB	METHOD	7470A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: EM

Method: 9040B **Matrix: AQ**

Sample ID: EB01-SA8N-041211 *Collected:* 4/12/2011 4:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.7		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-015-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-016-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-018-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 11:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-021-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 2:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	426		0.0867	MDL	0.556	PQL	mg/Kg	J	A
SODIUM	98.9	J	41.5	MDL	111	PQL	mg/Kg	J	Z
STRONTIUM	42.9		0.0689	MDL	0.556	PQL	mg/Kg	J	A
TIN	2.54	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.73	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	485		0.0886	MDL	0.568	PQL	mg/Kg	J	A
SODIUM	102	J	42.4	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	37.6		0.0704	MDL	0.568	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory:** LL

EDD Filename: DE125_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:35:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.58	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.23	J	0.954	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	399		0.0857	MDL	0.549	PQL	mg/Kg	J	A
SODIUM	100	J	41.0	MDL	110	PQL	mg/Kg	J	Z
STRONTIUM	26.6		0.0681	MDL	0.549	PQL	mg/Kg	J	A
TIN	2.56	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.69	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	414		0.0901	MDL	0.578	PQL	mg/Kg	J	A
STRONTIUM	64.9		0.0716	MDL	0.578	PQL	mg/Kg	J	A
TIN	2.54	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.13	J	0.970	MDL	5.78	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	463		0.0896	MDL	0.574	PQL	mg/Kg	J	A
SODIUM	112	J	42.8	MDL	115	PQL	mg/Kg	J	Z
STRONTIUM	36.9		0.0712	MDL	0.574	PQL	mg/Kg	J	A
TIN	2.45	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.76	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	428		0.0903	MDL	0.579	PQL	mg/Kg	J	A
SODIUM	104	J	43.2	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	48.3		0.0718	MDL	0.579	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 11:25:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.71	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:15:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	374		0.0856	MDL	0.549	PQL	mg/Kg	J	A
STRONTIUM	41.7		0.0680	MDL	0.549	PQL	mg/Kg	J	A
TIN	2.43	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:50:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	406		0.0904	MDL	0.580	PQL	mg/Kg	J	A
SODIUM	92.9	J	43.2	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	37.5		0.0719	MDL	0.580	PQL	mg/Kg	J	A
TIN	2.71	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.90	J	0.974	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:10:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	491		0.0892	MDL	0.572	PQL	mg/Kg	J	A
SODIUM	88.1	J	42.7	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	29.0		0.0709	MDL	0.572	PQL	mg/Kg	J	A
TIN	2.59	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.19	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:25:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	477		0.0940	MDL	0.602	PQL	mg/Kg	J	A
SODIUM	85.3	J	44.9	MDL	120	PQL	mg/Kg	J	Z
STRONTIUM	33.3		0.0747	MDL	0.602	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.85	J	1.20	MDL	12.0	PQL	mg/Kg	U	B
Zirconium	3.14	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	416		0.0902	MDL	0.578	PQL	mg/Kg	J	A
STRONTIUM	71.3		0.0717	MDL	0.578	PQL	mg/Kg	J	A
TIN	2.62	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.971	MDL	5.78	PQL	mg/Kg	J	Z

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	445		0.0991	MDL	0.635	PQL	mg/Kg	J	A
STRONTIUM	36.6		0.0788	MDL	0.635	PQL	mg/Kg	J	A
TIN	2.75	J	1.27	MDL	12.7	PQL	mg/Kg	U	B
Zirconium	3.40	J	1.07	MDL	6.35	PQL	mg/Kg	J	Z

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	440		0.0946	MDL	0.607	PQL	mg/Kg	J	A
SODIUM	109	J	45.3	MDL	121	PQL	mg/Kg	J	Z
STRONTIUM	48.4		0.0752	MDL	0.607	PQL	mg/Kg	J	A
TIN	2.69	J	1.21	MDL	12.1	PQL	mg/Kg	U	B
Zirconium	2.73	J	1.02	MDL	6.07	PQL	mg/Kg	J	Z

Sample ID: **SL-131-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 3:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	452		0.0882	MDL	0.565	PQL	mg/Kg	J	A
SODIUM	93.2	J	42.2	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	31.7		0.0701	MDL	0.565	PQL	mg/Kg	J	A
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory:** LL

EDD Filename: DE125_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.98	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	370		0.0882	MDL	0.565	PQL	mg/Kg	J	A
STRONTIUM	22.4		0.0701	MDL	0.565	PQL	mg/Kg	J	A
TIN	2.84	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	354		0.0867	MDL	0.556	PQL	mg/Kg	J	A
STRONTIUM	23.5		0.0690	MDL	0.556	PQL	mg/Kg	J	A
TIN	2.87	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	215		0.0831	MDL	0.533	PQL	mg/Kg	J	A
STRONTIUM	16.3		0.0661	MDL	0.533	PQL	mg/Kg	J	A
TIN	2.82	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-227-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 10:13:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	238		0.0861	MDL	0.552	PQL	mg/Kg	J	A
STRONTIUM	20.5		0.0684	MDL	0.552	PQL	mg/Kg	J	A
TIN	2.66	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-228-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 9:06:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	116		0.0888	MDL	0.569	PQL	mg/Kg	J	A
STRONTIUM	16.1		0.0706	MDL	0.569	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-228-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 9:06:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.75	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.187	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.23		0.0889	MDL	0.445	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.133	MDL	0.445	PQL	mg/Kg	J	A
COPPER	14.7		0.0734	MDL	0.445	PQL	mg/Kg	J	A
LEAD	11.7		0.0116	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	16.6		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0554	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	52.7		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	77.9		0.622	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: SL-012-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:35:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.182	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.88		0.0891	MDL	0.446	PQL	mg/Kg	J	Q
CHROMIUM	29.2		0.134	MDL	0.446	PQL	mg/Kg	J	A
COPPER	15.7		0.0735	MDL	0.446	PQL	mg/Kg	J	A
LEAD	11.1		0.0116	MDL	0.223	PQL	mg/Kg	J	A
NICKEL	16.5		0.111	MDL	0.446	PQL	mg/Kg	J	A
SILVER	0.0593	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	51.8		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	69.3		0.624	MDL	3.34	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-015-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:35:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: **SL-016-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:15:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0815	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.11		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	26.5		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	13.4		0.0747	MDL	0.453	PQL	mg/Kg	J	A
LEAD	13.1		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	15.1		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0593	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	46.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	68.1		0.634	MDL	3.39	PQL	mg/Kg	J	A

Sample ID: **SL-016-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:15:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.191	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: **SL-018-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:00:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0903	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.87		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	29.3		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	14.0		0.0748	MDL	0.453	PQL	mg/Kg	J	A
LEAD	12.9		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	16.2		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0421	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	51.0		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	68.6		0.634	MDL	3.40	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-018-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:00:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: **SL-019-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:05:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.50		0.0937	MDL	0.469	PQL	mg/Kg	J	Q
CHROMIUM	31.4		0.141	MDL	0.469	PQL	mg/Kg	J	A
COPPER	13.8		0.0773	MDL	0.469	PQL	mg/Kg	J	A
LEAD	12.2		0.0122	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	17.7		0.117	MDL	0.469	PQL	mg/Kg	J	A
SILVER	0.0541	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	55.4		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	71.9		0.656	MDL	3.51	PQL	mg/Kg	J	A

Sample ID: **SL-019-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:05:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.196	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: **SL-020-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.220	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.43		0.0926	MDL	0.463	PQL	mg/Kg	J	Q
CHROMIUM	30.9		0.139	MDL	0.463	PQL	mg/Kg	J	A
COPPER	15.4		0.0764	MDL	0.463	PQL	mg/Kg	J	A
LEAD	11.9		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	17.5		0.116	MDL	0.463	PQL	mg/Kg	J	A
SILVER	0.0536	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	54.0		0.0255	MDL	0.116	PQL	mg/Kg	J	A
ZINC	74.6		0.648	MDL	3.47	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-020-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:25:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.242	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.84		0.0895	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	26.7		0.134	MDL	0.448	PQL	mg/Kg	J	A
COPPER	13.5		0.0738	MDL	0.448	PQL	mg/Kg	J	A
LEAD	9.14		0.0116	MDL	0.224	PQL	mg/Kg	J	A
NICKEL	15.6		0.112	MDL	0.448	PQL	mg/Kg	J	A
SILVER	0.0370	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	48.3		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	80.9		0.627	MDL	3.36	PQL	mg/Kg	J	A

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.271	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.45		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
CHROMIUM	32.1		0.141	MDL	0.468	PQL	mg/Kg	J	A
COPPER	17.2		0.0773	MDL	0.468	PQL	mg/Kg	J	A
LEAD	12.1		0.0122	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	17.9		0.117	MDL	0.468	PQL	mg/Kg	J	A
SILVER	0.0456	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	56.1		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	82.2		0.656	MDL	3.51	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:50:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:10:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.37		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	31.7		0.136	MDL	0.453	PQL	mg/Kg	J	A
COPPER	17.0		0.0748	MDL	0.453	PQL	mg/Kg	J	A
LEAD	13.9		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	18.1		0.113	MDL	0.453	PQL	mg/Kg	J	A
SILVER	0.0501	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	55.0		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	83.7		0.634	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:10:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.257	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:25:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.248		0.0709	MDL	0.236	PQL	mg/Kg	J	Q, E
ARSENIC	6.63		0.0945	MDL	0.472	PQL	mg/Kg	J	Q
CHROMIUM	33.0		0.142	MDL	0.472	PQL	mg/Kg	J	A
COPPER	16.7		0.0780	MDL	0.472	PQL	mg/Kg	J	A
LEAD	14.7		0.0123	MDL	0.236	PQL	mg/Kg	J	A
NICKEL	18.9		0.118	MDL	0.472	PQL	mg/Kg	J	A
SILVER	0.0529	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	59.2		0.0260	MDL	0.118	PQL	mg/Kg	J	A
ZINC	83.4		0.661	MDL	3.54	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 2:25:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.227	J	0.0472	MDL	0.472	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0701	MDL	0.234	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.56		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.140	MDL	0.467	PQL	mg/Kg	J	A
COPPER	14.1		0.0771	MDL	0.467	PQL	mg/Kg	J	A
LEAD	9.97		0.0121	MDL	0.234	PQL	mg/Kg	J	A
NICKEL	16.6		0.117	MDL	0.467	PQL	mg/Kg	J	A
SILVER	0.0228	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	55.6		0.0257	MDL	0.117	PQL	mg/Kg	J	A
ZINC	76.6		0.654	MDL	3.50	PQL	mg/Kg	J	A

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.184	J	0.0755	MDL	0.252	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.27		0.101	MDL	0.503	PQL	mg/Kg	J	Q
CHROMIUM	28.3		0.151	MDL	0.503	PQL	mg/Kg	J	A
COPPER	14.6		0.0830	MDL	0.503	PQL	mg/Kg	J	A
LEAD	11.0		0.0131	MDL	0.252	PQL	mg/Kg	J	A
NICKEL	15.2		0.126	MDL	0.503	PQL	mg/Kg	J	A
SILVER	0.0411	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z
VANADIUM	50.0		0.0277	MDL	0.126	PQL	mg/Kg	J	A
ZINC	66.8		0.705	MDL	3.77	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.238	J	0.0503	MDL	0.503	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.200	J	0.0707	MDL	0.236	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.39		0.0943	MDL	0.471	PQL	mg/Kg	J	Q
CHROMIUM	32.2		0.141	MDL	0.471	PQL	mg/Kg	J	A
COPPER	15.7		0.0778	MDL	0.471	PQL	mg/Kg	J	A
LEAD	11.8		0.0123	MDL	0.236	PQL	mg/Kg	J	A
NICKEL	17.7		0.118	MDL	0.471	PQL	mg/Kg	J	A
SILVER	0.0288	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	56.3		0.0259	MDL	0.118	PQL	mg/Kg	J	A
ZINC	74.3		0.660	MDL	3.54	PQL	mg/Kg	J	A

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:45:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.244	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.95		0.0905	MDL	0.452	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.136	MDL	0.452	PQL	mg/Kg	J	A
COPPER	16.1		0.0746	MDL	0.452	PQL	mg/Kg	J	A
LEAD	17.7		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	17.4		0.113	MDL	0.452	PQL	mg/Kg	J	A
SILVER	0.0658	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	52.8		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	90.8		0.633	MDL	3.39	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-131-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 3:00:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.221	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: **SL-202-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 2:14:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0882	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.06		0.0922	MDL	0.461	PQL	mg/Kg	J	Q
CADMIUM	0.0912	J	0.0461	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	25.7		0.138	MDL	0.461	PQL	mg/Kg	J	A
COPPER	11.5		0.0761	MDL	0.461	PQL	mg/Kg	J	A
LEAD	8.45		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	17.1		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0517	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	48.1		0.0254	MDL	0.115	PQL	mg/Kg	J	A
ZINC	68.5		0.645	MDL	3.46	PQL	mg/Kg	J	A

Sample ID: **SL-202-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 2:14:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: **SL-206-SA5A-SB-4.0-5.0** ***Collected:*** **4/12/2011 3:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.103	J	0.0687	MDL	0.229	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.02		0.0916	MDL	0.458	PQL	mg/Kg	J	Q
CADMIUM	0.0474	J	0.0458	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	24.1		0.137	MDL	0.458	PQL	mg/Kg	J	A
COPPER	9.63		0.0756	MDL	0.458	PQL	mg/Kg	J	A
LEAD	6.40		0.0119	MDL	0.229	PQL	mg/Kg	J	A
NICKEL	13.4		0.115	MDL	0.458	PQL	mg/Kg	J	A
SILVER	0.0606	J	0.0137	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0252	MDL	0.115	PQL	mg/Kg	J	A
ZINC	52.9		0.641	MDL	3.44	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected: 4/12/2011 3:25:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0852	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 12:03:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	8.07		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
CADMIUM	0.0820	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	25.3		0.132	MDL	0.439	PQL	mg/Kg	J	A
COPPER	10.6		0.0724	MDL	0.439	PQL	mg/Kg	J	A
LEAD	11.0		0.0114	MDL	0.220	PQL	mg/Kg	J	A
NICKEL	14.0		0.110	MDL	0.439	PQL	mg/Kg	J	A
SILVER	0.0540	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	46.8		0.0241	MDL	0.110	PQL	mg/Kg	J	A
ZINC	57.8		0.615	MDL	3.29	PQL	mg/Kg	J	A

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 12:03:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 10:13:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0825	J	0.0689	MDL	0.230	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.56		0.0918	MDL	0.459	PQL	mg/Kg	J	Q
CADMIUM	0.102	J	0.0459	MDL	0.115	PQL	mg/Kg	J	Z
CHROMIUM	23.3		0.138	MDL	0.459	PQL	mg/Kg	J	A
COPPER	8.29		0.0758	MDL	0.459	PQL	mg/Kg	J	A
LEAD	5.48		0.0119	MDL	0.230	PQL	mg/Kg	J	A
NICKEL	14.3		0.115	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0515	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	41.1		0.0253	MDL	0.115	PQL	mg/Kg	J	A
ZINC	53.5		0.643	MDL	3.44	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 10:13:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0478	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 9:06:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0676	U	0.0676	MDL	0.225	PQL	mg/Kg	R	Q
ARSENIC	5.66		0.0902	MDL	0.451	PQL	mg/Kg	J	Q
CADMIUM	0.0660	J	0.0451	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	18.7		0.135	MDL	0.451	PQL	mg/Kg	J	A
COPPER	6.85		0.0744	MDL	0.451	PQL	mg/Kg	J	A
LEAD	4.81		0.0117	MDL	0.225	PQL	mg/Kg	J	A
NICKEL	9.37		0.113	MDL	0.451	PQL	mg/Kg	J	A
SILVER	0.0469	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	35.2		0.0248	MDL	0.113	PQL	mg/Kg	J	A
ZINC	38.0		0.631	MDL	3.38	PQL	mg/Kg	J	A

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 9:06:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0453	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 9:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 9:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.1	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory:** LL

EDD Filename: DE125_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.53	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 1:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.75	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 12:03:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.56	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 9:06:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 10:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0249	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 9:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0250	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 9:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0408	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 11:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0499	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 11:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0375	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-021-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0475	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:50:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0452	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0223	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 2:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0163	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 1:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0430	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 10:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0036	MDL	0.124	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 10:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0174	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 3:00:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0326	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 2:14:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0061	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected: 4/12/2011 3:25:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 12:03:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-227-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 10:13:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected: 4/12/2011 9:06:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0065	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected: 4/12/2011 11:25:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	368	J	193	MDL	386	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 6850 **Matrix: SO**

Sample ID: SL-021-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	3.8	J	2.4	MDL	5.6	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix: SO**

Sample ID: SL-020-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 11:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 1:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.3	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.5	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 9:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.2	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.7	J	2.3	MDL	7.7	PQL	ug/Kg	J	Z

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 1268	0.61	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.5	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	1.1	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	3.6	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z, C

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.6	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, C

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.1	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	C

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.48	MDL	2.1	PQL	ug/Kg	J	Z
Aroclor 5460	2.7	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z, C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	31		0.76	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 1268	9.4		0.76	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 5432	2.3	U	2.3	MDL	7.6	PQL	ug/Kg	UJ	C
Aroclor 5460	14		2.3	MDL	7.6	PQL	ug/Kg	J	S, C

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: SL-227-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 10:13:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-228-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 9:06:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-012-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-CHLOROANILINE	76	U	76	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-015-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-016-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-018-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-019-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: **SL-020-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 11:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	160	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	36	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	21	U	21	MDL	210	PQL	ug/Kg	UJ	L

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	410	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-131-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 3:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	96	U	96	MDL	960	PQL	ug/Kg	UJ	L

Sample ID: **SL-202-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-206-SA5A-SB-4.0-5.0** ***Collected:*** **4/12/2011 3:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-207-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 12:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-227-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 10:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: **SL-228-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 9:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: **EB01-SA8N-041211** ***Collected:*** **4/12/2011 4:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.011	U	0.011	MDL	0.053	PQL	ug/L	UJ	C
Diethylphthalate	0.13	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.51	J	0.053	MDL	1.1	PQL	ug/L	J	Z
Di-n-octylphthalate	4.7		0.053	MDL	1.1	PQL	ug/L	J	L, C

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-012-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.0		0.75	MDL	1.9	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.84	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.3	J	6.8	MDL	20	PQL	ug/Kg	UJ	F, C
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-015-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z, C
Di-n-octylphthalate	9.7	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
FLUORANTHENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.90	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-016-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 9:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.83	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	5.2		0.76	MDL	1.9	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.9	J	6.9	MDL	21	PQL	ug/Kg	UJ	F, C
INDENO(1,2,3-CD)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory:** LL

EDD Filename: DE125_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-016-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:15:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 9:00:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, C
Di-n-octylphthalate	9.6	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.96	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:05:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1		0.79	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	7.1	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA8N-SS-0.0-0.5 **Collected:** 4/12/2011 11:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	60		0.76	MDL	1.9	PQL	ug/Kg	J	C
Di-n-butylphthalate	8.5	J	6.9	MDL	21	PQL	ug/Kg	U	F
Di-n-octylphthalate	9.7	J	6.9	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-021-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.51	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	11		0.75	MDL	1.9	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	28		6.7	MDL	20	PQL	ug/Kg	U	F, Z
Di-n-octylphthalate	9.5	J	6.7	MDL	20	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-022-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	34		0.78	MDL	2.0	PQL	ug/Kg	J	C
DIBENZO(A,H)ANTHRACENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	12	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
NAPHTHALENE	0.96	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-023-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.1	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	12		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	13	J	7.0	MDL	21	PQL	ug/Kg	UJ	F, C
INDENO(1,2,3-CD)PYRENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.43	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.6		0.81	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.4	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	U	7.3	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.1	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-036-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 2:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.8	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-047-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 1:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.65	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.1		0.78	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.81	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-048-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z, C
CHRYSENE	2.0	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.6	U	7.6	MDL	23	PQL	ug/Kg	UJ	C
FLUORANTHENE	1.6	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.6	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.1		0.82	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	0.88	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.4	U	7.4	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	0.90	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-131-SA8N-SS-0.0-0.5** ***Collected:*** **4/12/2011 3:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.0	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	140		0.76	MDL	1.9	PQL	ug/Kg	J	C
BIS(2-ETHYLHEXYL)PHTHALATE	34		6.9	MDL	21	PQL	ug/Kg	U	F, Z
Butylbenzylphthalate	18	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C

Sample ID: **SL-202-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 2:14:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	3.0		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C
NAPHTHALENE	0.82	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-206-SA5A-SB-4.0-5.0** ***Collected:*** **4/12/2011 3:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: **SL-207-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 12:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: **SL-227-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 10:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory:** LL

EDD Filename: DE125_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C SIM **Matrix:** SO

Sample ID: SL-228-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 9:06:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.8	U	6.8	MDL	20	PQL	ug/Kg	UJ	C

Method Category: VOA **Method:** 8260B **Matrix:** AQ

Sample ID: TB-041211 **Collected:** 4/12/2011 12:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	2	U	2	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-202-SA5A-SB-3.0-4.0 **Collected:** 4/12/2011 2:14:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.71	U	0.71	MDL	4.1	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
ETHYLBENZENE	0.10	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.9	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
N-BUTYLBENZENE	2.2	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
N-PROPYLBENZENE	0.24	J	0.07	MDL	4.1	PQL	ug/Kg	J	Z
SEC-BUTYLBENZENE	2.1	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-206-SA5A-SB-4.0-5.0 **Collected:** 4/12/2011 3:25:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.72	U	0.72	MDL	4.1	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-206-SA5A-SB-4.0-5.0** ***Collected:*** **4/12/2011 3:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.56	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-207-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 12:03:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.77	U	0.77	MDL	4.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	8.8	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.43	U	0.43	MDL	8.8	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.36	U	0.36	MDL	4.4	PQL	ug/Kg	UJ	C
ISOPROPYLBENZENE	0.21	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.60	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-227-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 10:13:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.97**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.78	U	0.78	MDL	4.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.8	U	1.8	MDL	8.9	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	8.9	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.37	U	0.37	MDL	4.5	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	1.3	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-228-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 9:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DIBROMO-3-CHLOROPROPANE	0.69	U	0.69	MDL	3.9	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	7.9	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.9	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.33	U	0.33	MDL	3.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	4.2		0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE125

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE125
EDD Filename: DE125_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 9040B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB01-SA8N-041211 (RES)	Sampling To Analysis	54.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL -

Method Blank Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11008BB221923	4/22/2011 7:23:00 PM	PHOSPHORUS TIN	1.41 mg/Kg 1.40 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-015-SA8N-SS-0.0-0.5(REA)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-016-SA8N-SS-0.0-0.5(REA)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-018-SA8N-SS-0.0-0.5(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-019-SA8N-SS-0.0-0.5(REA)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-020-SA8N-SS-0.0-0.5(REA)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-021-SA8N-SS-0.0-0.5(REA)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-022-SA8N-SS-0.0-0.5(REA)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-023-SA8N-SS-0.0-0.5(REA)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-036-SA8N-SS-0.0-0.5(REA)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-047-SA8N-SS-0.0-0.5(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-048-SA8N-SS-0.0-0.5(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-050-SA8N-SS-0.0-0.5(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-131-SA8N-SS-0.0-0.5(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-202-SA5A-SB-3.0-4.0(REA)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-206-SA5A-SB-4.0-5.0(REA)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-207-SA5A-SB-3.0-4.0(REA)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-227-SA5A-SB-3.0-4.0(REA)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-228-SA5A-SB-3.0-4.0(REA)	TIN	2.75 mg/Kg	2.75U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11026AB220833A	4/21/2011 8:33:00 AM	COPPER	0.276 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09092AB320241A	4/28/2011 2:41:00 AM	EFH (C21-C30) EFH (C30-C40)	0.93 mg/Kg 0.92 mg/Kg	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB23B211418A	4/13/2011 2:18:00 PM	METHYLENE CHLORIDE	1.3 ug/Kg	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-202-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	4.1U ug/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.1U ug/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.4U ug/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.5U ug/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	4.2 ug/Kg	4.2U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB01-SA8N-041211(RES)	4/12/2011 4:00:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	4.9 ug/L	SL-012-SA8N-SS-0.0-0.5
		Diethylphthalate	0.13 ug/L	SL-015-SA8N-SS-0.0-0.5
		Di-n-butylphthalate	0.51 ug/L	SL-016-SA8N-SS-0.0-0.5
		Di-n-octylphthalate	4.7 ug/L	SL-018-SA8N-SS-0.0-0.5
				SL-019-SA8N-SS-0.0-0.5
				SL-020-SA8N-SS-0.0-0.5
				SL-021-SA8N-SS-0.0-0.5
				SL-022-SA8N-SS-0.0-0.5
				SL-023-SA8N-SS-0.0-0.5
				SL-036-SA8N-SS-0.0-0.5
				SL-047-SA8N-SS-0.0-0.5
				SL-048-SA8N-SS-0.0-0.5
				SL-050-SA8N-SS-0.0-0.5
				SL-131-SA8N-SS-0.0-0.5
				SL-202-SA5A-SB-3.0-4.0
				SL-206-SA5A-SB-4.0-5.0
				SL-207-SA5A-SB-3.0-4.0
				SL-227-SA5A-SB-3.0-4.0
				SL-228-SA5A-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.3 ug/Kg	20U ug/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-016-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.9 ug/Kg	21U ug/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.6 ug/Kg	21U ug/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	10 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	Di-n-butylphthalate	8.5 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	28 ug/Kg	28U ug/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	9.5 ug/Kg	20U ug/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	12 ug/Kg	21U ug/Kg
SL-023-SA8N-SS-0.0-0.5(RES)	Di-n-octylphthalate	13 ug/Kg	21U ug/Kg
SL-131-SA8N-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	34U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MSD (SL-012-SA8N-SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE	-	-	16.00-119.00	43 (30.00)	3,3'-DICHLOROBENZIDINE	J (all detects)
	ANILINE	-	-	35.00-95.00	46 (30.00)	ANILINE	
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5)	4-CHLOROANILINE	-	19	23.00-95.00	93 (30.00)	4-CHLOROANILINE	J(all detects) UJ(all non-detects)
	BENZIDINE	33	-	35.00-141.00	-	BENZIDINE	

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5)	ACENAPHTHENE	106	-	63.00-105.00	-	ACENAPHTHENE	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	VANADIUM	131	145	75.00-125.00	-	VANADIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ANTIMONY	26	18	75.00-125.00	26 (20.00)	ANTIMONY	J(all detects) R(all non-detects)
SL-021-SA8N-SS-0.0-0.5MS **SL-021-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	ARSENIC ZINC	- 56	70 61	75.00-125.00 75.00-125.00	- -	ARSENIC ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-021-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0)	BARIUM	21	-	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	2690 1265 378 - 151 367	2738 1019 270 140 135 323	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	No Qual, >4x
SL-012-SA8N-SS-0.0-0.5MS **SL-012-SA8N-SS-0.0-0.5MSD** (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	CALCIUM	-226	168	75.00-125.00	-	CALCIUM	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5)	FLUORIDE	60	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE125 **Laboratory: LL**

EDD Filename: DE125_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA8N-SS-0.0-0.5DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	SELENIUM	32	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-012-SA8N-SS-0.0-0.5DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	Zirconium	28	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-012-SA8N-SS-0.0-0.5DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	MERCURY	92	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-227-SA5A-SB-3.0-4.0DUP (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125
EDD Filename: DE125_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WDLCSQ262022 (EB01-SA8N-041211)	ACENAPHTHENE	116	-	74.00-109.00	-	ACENAPHTHENE	J(all detects)
	Di-n-octylphthalate	154	-	57.00-145.00	-	Di-n-octylphthalate	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WCLCSY261402 (EB01-SA8N-041211)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11047AQ240032A P11047AY240013A (EB01-SA8N-041211)	Aroclor 5442	90	92	35.00-84.00	-	Aroclor 5432, 5442, 5460	J(all detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A LCS1Y14Y210309A (TB-041211)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125
EDD Filename: DE125_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6LALCSQ262101 (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	1,2-DICHLOROBENZENE	78	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11026AQ220836A (SL-012-SA8N-SS-0.0-0.5 SL -015-SA8N-SS-0.0-0.5 SL -016-SA8N-SS-0.0-0.5 SL -018-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -022-SA8N-SS-0.0-0.5 SL -023-SA8N-SS-0.0-0.5 SL -036-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5 SL -048-SA8N-SS-0.0-0.5 SL -050-SA8N-SS-0.0-0.5 SL -131-SA8N-SS-0.0-0.5 SL -202-SA5A-SB-3.0-4.0 SL -206-SA5A-SB-4.0-5.0 SL -207-SA5A-SB-3.0-4.0 SL -227-SA5A-SB-3.0-4.0 SL -228-SA5A-SB-3.0-4.0)	ANTIMONY	65	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (SL-012-SA8N-SS-0.0-0.5 SL -019-SA8N-SS-0.0-0.5 SL -020-SA8N-SS-0.0-0.5 SL -021-SA8N-SS-0.0-0.5 SL -047-SA8N-SS-0.0-0.5)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11164AQ240658A (SL-022-SA8N-SS-0.0-0.5)	NITROBENZENE PETN	124 124	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-022-SA8N-SS-0.0-0.5	N-Nitrosodimethylamine-d6	183	50.00-150.00	All Target Analytes	J (all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-131-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA8N-041211	Diethylphthalate	J	0.13	1.1	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.51	1.1	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	368	386	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	SODIUM	J	98.9	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	11.1	PQL	mg/Kg	
	Zirconium	J	2.73	5.56	PQL	mg/Kg	
SL-015-SA8N-SS-0.0-0.5	SODIUM	J	102	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.4	PQL	mg/Kg	
	Zirconium	J	3.23	5.68	PQL	mg/Kg	
SL-016-SA8N-SS-0.0-0.5	SODIUM	J	100	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.0	PQL	mg/Kg	
	Zirconium	J	2.69	5.49	PQL	mg/Kg	
SL-018-SA8N-SS-0.0-0.5	TIN	J	2.54	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.13	5.78	PQL	mg/Kg	
SL-019-SA8N-SS-0.0-0.5	SODIUM	J	112	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	11.5	PQL	mg/Kg	
	Zirconium	J	3.76	5.74	PQL	mg/Kg	
SL-020-SA8N-SS-0.0-0.5	SODIUM	J	104	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.6	PQL	mg/Kg	
	Zirconium	J	3.19	5.79	PQL	mg/Kg	
SL-021-SA8N-SS-0.0-0.5	TIN	J	2.43	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.49	PQL	mg/Kg	
SL-022-SA8N-SS-0.0-0.5	SODIUM	J	92.9	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.6	PQL	mg/Kg	
	Zirconium	J	2.90	5.80	PQL	mg/Kg	
SL-023-SA8N-SS-0.0-0.5	SODIUM	J	88.1	114	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	11.4	PQL	mg/Kg	
	Zirconium	J	3.19	5.72	PQL	mg/Kg	
SL-036-SA8N-SS-0.0-0.5	SODIUM	J	85.3	120	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	12.0	PQL	mg/Kg	
	Zirconium	J	3.14	6.02	PQL	mg/Kg	
SL-047-SA8N-SS-0.0-0.5	TIN	J	2.62	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.33	5.78	PQL	mg/Kg	
SL-048-SA8N-SS-0.0-0.5	TIN	J	2.75	12.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.40	6.35	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA8N-SS-0.0-0.5	SODIUM	J	109	121	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	12.1	PQL	mg/Kg	
	Zirconium	J	2.73	6.07	PQL	mg/Kg	
SL-131-SA8N-SS-0.0-0.5	SODIUM	J	93.2	113	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.3	PQL	mg/Kg	
	Zirconium	J	2.98	5.65	PQL	mg/Kg	
SL-202-SA5A-SB-3.0-4.0	TIN	J	2.84	11.3	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	TIN	J	2.87	11.1	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	TIN	J	2.82	10.7	PQL	mg/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	TIN	J	2.66	11.0	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	TIN	J	2.75	11.4	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	ANTIMONY	J	0.187	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.229	0.445	PQL	mg/Kg	
	SILVER	J	0.0554	0.111	PQL	mg/Kg	
SL-015-SA8N-SS-0.0-0.5	ANTIMONY	J	0.182	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.227	0.446	PQL	mg/Kg	
	SILVER	J	0.0593	0.111	PQL	mg/Kg	
SL-016-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0815	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.191	0.453	PQL	mg/Kg	
	SILVER	J	0.0593	0.113	PQL	mg/Kg	
SL-018-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0903	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.236	0.453	PQL	mg/Kg	
	SILVER	J	0.0421	0.113	PQL	mg/Kg	
SL-019-SA8N-SS-0.0-0.5	ANTIMONY	J	0.142	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.196	0.469	PQL	mg/Kg	
	SILVER	J	0.0541	0.117	PQL	mg/Kg	
SL-020-SA8N-SS-0.0-0.5	ANTIMONY	J	0.220	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.242	0.463	PQL	mg/Kg	
	SILVER	J	0.0536	0.116	PQL	mg/Kg	
SL-021-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.271	0.448	PQL	mg/Kg	
	SILVER	J	0.0370	0.112	PQL	mg/Kg	
SL-022-SA8N-SS-0.0-0.5	ANTIMONY	J	0.115	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.468	PQL	mg/Kg	
	SILVER	J	0.0456	0.117	PQL	mg/Kg	
SL-023-SA8N-SS-0.0-0.5	ANTIMONY	J	0.109	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.257	0.453	PQL	mg/Kg	
	SILVER	J	0.0501	0.113	PQL	mg/Kg	
SL-036-SA8N-SS-0.0-0.5	SELENIUM	J	0.227	0.472	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0529	0.118	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.216	0.467	PQL	mg/Kg	
	SILVER	J	0.0228	0.117	PQL	mg/Kg	
SL-048-SA8N-SS-0.0-0.5	ANTIMONY	J	0.184	0.252	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.238	0.503	PQL	mg/Kg	
	SILVER	J	0.0411	0.126	PQL	mg/Kg	
SL-050-SA8N-SS-0.0-0.5	ANTIMONY	J	0.200	0.236	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.244	0.471	PQL	mg/Kg	
	SILVER	J	0.0288	0.118	PQL	mg/Kg	
SL-131-SA8N-SS-0.0-0.5	ANTIMONY	J	0.155	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.221	0.452	PQL	mg/Kg	
	SILVER	J	0.0658	0.113	PQL	mg/Kg	
SL-202-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0882	0.231	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0912	0.115	PQL	mg/Kg	
	SELENIUM	J	0.160	0.461	PQL	mg/Kg	
	SILVER	J	0.0517	0.115	PQL	mg/Kg	
SL-206-SA5A-SB-4.0-5.0	ANTIMONY	J	0.103	0.229	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0474	0.115	PQL	mg/Kg	
	SELENIUM	J	0.0852	0.458	PQL	mg/Kg	
	SILVER	J	0.0606	0.115	PQL	mg/Kg	
SL-207-SA5A-SB-3.0-4.0	ANTIMONY	J	0.139	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0820	0.110	PQL	mg/Kg	
	SELENIUM	J	0.181	0.439	PQL	mg/Kg	
	SILVER	J	0.0540	0.110	PQL	mg/Kg	
SL-227-SA5A-SB-3.0-4.0	ANTIMONY	J	0.0825	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.115	PQL	mg/Kg	
	SELENIUM	J	0.0478	0.459	PQL	mg/Kg	
	SILVER	J	0.0515	0.115	PQL	mg/Kg	
SL-228-SA5A-SB-3.0-4.0	CADMIUM	J	0.0660	0.113	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0453	0.451	PQL	mg/Kg	
	SILVER	J	0.0469	0.113	PQL	mg/Kg	

Method: 6850

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA8N-SS-0.0-0.5	PERCHLORATE	J	3.8	5.6	PQL	ug/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	1.1	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.53	1.2	PQL	mg/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.2	PQL	mg/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.3	PQL	mg/Kg	J (all detects)
SL-131-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.2	PQL	mg/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.75	1.2	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	MERCURY	J	0.0249	0.112	PQL	mg/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	MERCURY	J	0.0250	0.116	PQL	mg/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	MERCURY	J	0.0408	0.114	PQL	mg/Kg	J (all detects)
SL-019-SA8N-SS-0.0-0.5	MERCURY	J	0.0499	0.116	PQL	mg/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	MERCURY	J	0.0375	0.107	PQL	mg/Kg	J (all detects)
SL-021-SA8N-SS-0.0-0.5	MERCURY	J	0.0475	0.109	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	MERCURY	J	0.0452	0.116	PQL	mg/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	MERCURY	J	0.0223	0.113	PQL	mg/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	MERCURY	J	0.0163	0.115	PQL	mg/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	MERCURY	J	0.0430	0.116	PQL	mg/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	MERCURY	J	0.0143	0.124	PQL	mg/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	MERCURY	J	0.0174	0.115	PQL	mg/Kg	J (all detects)
SL-131-SA8N-SS-0.0-0.5	MERCURY	J	0.0326	0.114	PQL	mg/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	MERCURY	J	0.0061	0.114	PQL	mg/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	MERCURY	J	0.0091	0.107	PQL	mg/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	MERCURY	J	0.0059	0.107	PQL	mg/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	MERCURY	J	0.0109	0.107	PQL	mg/Kg	J (all detects)
SL-228-SA5A-SB-3.0-4.0	MERCURY	J	0.0065	0.112	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	1.3	1.4	PQL	mg/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	1.3	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	Aroclor 5460	J	1.9	3.7	PQL	ug/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.5	3.9	PQL	ug/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.2	3.9	PQL	ug/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	Aroclor 5460	J	3.7	7.7	PQL	ug/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	AROCLOR 1254 Aroclor 1268	J J	1.8 0.61	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.5 1.1 3.6	2.1 2.1 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	Aroclor 5460	J	1.6	3.9	PQL	ug/Kg	J (all detects)
SL-048-SA8N-SS-0.0-0.5	AROCLOR 1254	J	1.1	2.2	PQL	ug/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 2.7	2.1 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-202-SA5A-SB-3.0-4.0	ETHYLBENZENE METHYLENE CHLORIDE N-BUTYLBENZENE N-PROPYLBENZENE SEC-BUTYLBENZENE	J J J J J	0.10 2.9 2.2 0.24 2.1	4.1 4.1 4.1 4.1 4.1	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.56	4.1	PQL	ug/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	ISOPROPYLBENZENE METHYLENE CHLORIDE	J J	0.21 0.60	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-227-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.3	4.5	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	380	PQL	ug/Kg	J (all detects)
SL-015-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-018-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	390	PQL	ug/Kg	J (all detects)
SL-019-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	400	PQL	ug/Kg	J (all detects)
SL-020-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-022-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-023-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)
SL-036-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	160	400	PQL	ug/Kg	J (all detects)
SL-047-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	36	390	PQL	ug/Kg	J (all detects)
SL-050-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	410	PQL	ug/Kg	J (all detects)
SL-202-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	390	PQL	ug/Kg	J (all detects)
SL-206-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-207-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.3	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-015-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.7	21	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	0.90	1.9	PQL	ug/Kg	
SL-016-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.5	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.9	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-018-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.6	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

Laboratory: LL

EDD Filename: DE125_v1

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-019-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	2.0	PQL	ug/Kg	
SL-020-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.5	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.7	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
SL-021-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.51	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.5	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	
SL-022-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.8	2.0	PQL	ug/Kg	
	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	2.0	PQL	ug/Kg	
SL-023-SA8N-SS-0.0-0.5	ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	13	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
SL-036-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.43	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.8	2.0	PQL	ug/Kg	
SL-047-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.65	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	2.0	PQL	ug/Kg	
SL-048-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.6	2.1	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	2.0	2.1	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	2.1	PQL	ug/Kg	
	PYRENE	J	1.5	2.1	PQL	ug/Kg	
SL-050-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.88	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.91	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.90	2.0	PQL	ug/Kg	
SL-131-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.8	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.0	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	18	21	PQL	ug/Kg	
SL-202-SA5A-SB-3.0-4.0	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.82	1.9	PQL	ug/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE125

EDD Filename: DE125_v1

Laboratory: LL

eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
TB-041211

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/13/11 (ba13c02)	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	26 33 30	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 VBLKB23	J (all detects) UJ (all non-detects)	A
4/18/11 (ya18c01)	Dichlorodifluoromethane Trichlorofluoromethane	28 30	TB-041211 VBLKY14	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
4/18/11 (ya18c02)	Freon-133a	26	TB-041211 VBLKY14	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11 (bm01v02)	Bromochloromethane	36	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 VBLKB23	J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v20)	Dichlorodifluoromethane Acetone	30 28	TB-041211 VBLKY14	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB23	4/13/11	Methylene chloride	1.3 ug/Kg	All soil samples in SDG DE125

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-202-SA5A-SB-3.0-4.0	Methylene chloride	2.9 ug/Kg	4.1U ug/Kg
SL-206-SA5A-SB-4.0-5.0	Methylene chloride	0.56 ug/Kg	4.1U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-207-SA5A-SB-3.0-4.0	Methylene chloride	0.60 ug/Kg	4.4U ug/Kg
SL-227-SA5A-SB-3.0-4.0	Methylene chloride	1.3 ug/Kg	4.5U ug/Kg
SL-228-SA5A-SB-3.0-4.0	Methylene chloride	4.2 ug/Kg	4.2U ug/Kg

Sample TB-041211 was identified as a trip blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/DY14 (TB-041211 VBLKY14)	Freon-133a	123 (77-120)	124 (77-120)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	4-Methyl-2-pentanone 2-Hexanone 1,2-Dibromo-3-chloropropane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	TB-041211	Dichlorodifluoromethane Trichlorofluoromethane Freon-133a	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	TB-041211	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	TB-041211	Freon-133a	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 TB-041211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE125

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE125	SL-202-SA5A-SB-3.0-4.0	Methylene chloride	4.1U ug/Kg	A	B
DE125	SL-206-SA5A-SB-4.0-5.0	Methylene chloride	4.1U ug/Kg	A	B
DE125	SL-207-SA5A-SB-3.0-4.0	Methylene chloride	4.4U ug/Kg	A	B
DE125	SL-227-SA5A-SB-3.0-4.0	Methylene chloride	4.5U ug/Kg	A	B
DE125	SL-228-SA5A-SB-3.0-4.0	Methylene chloride	4.2U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G1a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MG
2nd Reviewer: A

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30 % rr
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25 %
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client Spec
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation ~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-202-SA5A-SB-3.0-4.0 S	11	VBLKB23	21		31	
2	SL-206-SA5A-SB-4.0-5.0	12	VBLKY14	22		32	
3	SL-207-SA5A-SB-3.0-4.0	13		23		33	
4	SL-227-SA5A-SB-3.0-4.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6	TB-041211 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25916 G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JW
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) > 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓	.		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	lll. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN. Freon 133a
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/01/11	bm01v02 (ICV)	PP	36		All S, VBLKB23	J/UJ/A (C)
	4/13/11	ba13c02 (CCV)	Y	26			
			Z	33			
			mp	30			
	4/18/11	ya18c01 (CCV)	JJ	28		6, VBLKY14	
			KK	30			
		ya18c02 (CCV)	NNN	26			
	2/10/11	yf10v20 (ICV)	JJ	30			
			F	28			

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JVG
2nd Reviewer: CA

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 4/13/11
Conc. units: ug/kg Associated Samples: All S Code: B

Compound	Blank ID	Sample Identification								
	VBLKB23	1	2	3	4	5				
Methylene chloride	1.3	2.9/4.1U	0.50/4.1U	0.60/4.4U	1.3/4.5U	4.2/U				
Acetone										
CRQL										

Blank analysis date:
Conc. units: Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a LCS required?
Y (N) N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D Y14	NNNN	123 (77-120)	124 (77-120)	( )	6, VBLK Y14	J det/p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25916 G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/01/11	Methylene chloride (FBZ)	0.3130	0.3130	0.3108	0.3108	9	9
	HP09953		Toluene (CBZ)	0.8498	0.8498	0.8282	0.8282	7	7
			1,1,2,2-TCA (DCB)	0.6532	0.6532	0.6201	0.6201	8	8

Cis/Cx	Ax	Ais
50/50	386013	1233308
50/50	744690	876328
50/50	348637	533776

Conc	MeCl2	Toluene	1,1,2,2-TCA
4	0.3324	0.7056	0.5983
10	0.3397	0.8565	0.6441
20	0.3240	0.8626	0.6605
50	0.3130	0.8498	0.6532
100	0.2960	0.8430	0.6335
300	0.2596	0.8516	0.5312
S =	0.3108	0.8282	0.6201
X =	0.0294	0.0604	0.0487

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G1Q

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound
S= Standard deviation of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	Acetone (FBZ)	0.0410	0.0410	0.0429	0.0429	14	14
	HP09355		Toluene (CBZ)	1.0041	1.0041	0.9969	0.9969	3	3
			1,1,2,2-TCA (DCB)	0.9767	0.9767	0.9569	0.9569	7	7

Cis/Cx	Ax	Ais
50/100	89674	1092991
50/50	801855	798571
50/50	469555	480763

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0509	0.9810	0.9274
10	0.0498	1.0449	1.0560
20	0.0411	0.9670	0.9796
50	0.0410	1.0041	0.9767
100	0.0392	0.9917	0.9563
300	0.0352	0.9929	0.8454
S =	0.0429	0.9969	0.9569
X =	0.0062	0.0266	0.0693

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	ba13c02	4/13/11	Methylene chloride (FBZ)	0.3108	0.3366	0.3366	8	8
	HP09953		Toluene (CBZ)	0.8282	0.8466	0.8466	2	2
			1,1,2,2-TCA (DCB)	0.6201	0.6871	0.6871	11	11
2	ya18c01	4/18/11	Acetone (FBZ)	0.0429	0.0399	0.0399	7	7
	HP09355		Toluene (CBZ)	0.9969	1.0134	1.0134	2	2
			1,1,2,2-TCA (DCB)	0.9569	0.9601	0.9601	0	0

CCV1

Cis/Cx	Compound	Ax	Ais
50/50	Methylene chloride (FBZ)	434840	1291701
50/50	Toluene (CBZ)	804188	949877
50/50	1,1,2,2-TCA (DCB)	394431	574053

CCV2

Cis/Cx	Compound	Ax	Ais
50/100	Acetone (FBZ)	86267	1080675
50/50	Toluene (CBZ)	809545	798862
50/50	1,1,2,2-TCA (DCB)	496805	517465

LDC #: 25916 61A

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	50	50.23	100	100	0
Bromofluorobenzene		47.09	94	94	
1,2-Dichloroethane-d4		48.85	98	98	
Dibromofluoromethane		46.7	93	93	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25916 G19

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: JV6
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS B23

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	20.58	20.37	103	103	103	103	1	1
Trichloroethene			20.81	20.35	104	104	102	102	2	2
Benzene			20.87	20.74	104	104	104	104	1	1
Toluene			20.16	20.22	101	101	101	101	0	0
Chlorobenzene			20.89	20.59	104	104	103	103	1	1

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G1Q

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #5 , E :

Conc. = $\frac{(34835)(50)(5\ ml)}{(1303279)(0.3108)(5.84g)(0.87)}$

= ~~3.68~~ 4.23 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
TB-041211

Introduction

This data review covers 5 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-041211 was identified as a trip blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 TB-041211	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G1b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV6
2nd Reviewer:

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	MD	TB = 6

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil + Water

1	SL-202-SA5A-SB-3.0-4.0 S	11	VBLKE9Y	21		31	
2	SL-206-SA5A-SB-4.0-5.0	12	VBLKE91	22		32	
3	SL-207-SA5A-SB-3.0-4.0	13		23		33	
4	SL-227-SA5A-SB-3.0-4.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6	TB-041211 W	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25916 G16

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) > 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 G16

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

LDC # 25916 6L

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC # 25916 G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/10	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25916 G1L

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ea13c51	4/13/11	1,4-Dioxane (1,4-D-d8)	1.3219	1.3567	1.3567	3	3
	HP15648							
2	ea14c01	4/14/11	1,4-Dioxane (1,4-D-d8)	1.3396	1.4732	1.4732	10	10
	HP15648							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	1,4-Dioxane (1,4-D-d8)	10/10	21091	15546
CCV2	1,4-Dioxane (1,4-D-d8)	10/10	29681	20147

LDC #: 25916 GLb

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8	10	9.641	96	96	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25916 G1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JV6
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D E 9✓

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane	125	125	141.63	137.61	113	113	110	110	3	3
1,1-Dichloroethene										
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , MD

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0

SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	Aniline	-	-	46 (≤30)	J (all detects)	A
	3,3'-Dichlorobenzidine	-	-	43 (≤30)	J (all detects)	
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	4-Chloroaniline	-	19 (23-95)	93 (≤30)	J (all detects) UJ (all non-detects)	A
	Benzidine	33 (35-141)	-	-	J (all detects) UJ (all non-detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
106LALCS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0 SBLKLA106)	1,2-Dichlorobenzene	78 (79-102)	-	-	J (all detects) UJ (all non-detects)	P

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
108WCLCS/D (EB01-SA8N-041211 SBLKWC108)	1,2-Diphenyl hydrazine	-	118 (78-116)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5	Aniline 3,3'-Dichlorobenzidine	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5	4-Chloroaniline	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5	Benzidine	J (all detects) UJ (all non-detects)		Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	1,2-Dichlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE125	EB01-SA8N-041211	1,2-Diphenyl hydrazine	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G2a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JM
2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30% rr
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-012-SA8N-SS-0.0-0.5 S	11	SL-047-SA8N-SS-0.0-0.5 S	21	1 MS	31	SBLKLA106	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	1 MSD	32	SBLKWG108	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23		33		
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24		34		
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211 W	25		35		
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0 S	26		36		
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37		
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38		
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39		
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40		

LDC #: 25916 G2a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $>$ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 45916G29

VALIDATION FINDINGS CHECKLIST

Reviewer: JV6
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1,2-Diphenylhydrazine
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25916 G 2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JW
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		21/22	NNN	( )	( )	46 (30)	1	J dets/A (Q)
			T	( )	19 (23-95)	93 ( )		J/UJ/A
			SSS	33 (35-141)	( )	( )		
			BBB	( )	( )	43 ( )		J dets/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25916 G 2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: JB
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	106LALCS	F	78 (79-102)	( )	( )	All soils, SBLKLA106	J/UJ/p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	108WC LCS/D	TTT	( )	118 (78-116)	( )	15, SBLKWC108	J dets/p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 25916 62a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 40 std)	Recalculated RRF (RRF 40 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/05/11	Phenol (IS1)	2.906	2.906	2.808	2.808	8	8
			2,4-Dichlorophenol (IS2)	0.335	0.335	0.323	0.323	7	7
	HP09572		2,4,5-Trichlorophenol (IS3)	0.400	0.400	0.390	0.390	7	7
			Pentachlorophenol (IS4)	0.128	0.128	0.119	0.119	12	11
			Benzidine (IS5)	0.858	0.858	0.780	0.780	11	11

Cis/Cx	Ax	Ais
40/50	780259	214805
40/50	404436	966036
40/50	345153	691030
40/50	193159	1207144
40/150	3846865	1196118

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Benzidine
5	2.398	0.280	0.338	0.098	0.608
15	2.798	0.317	0.387	0.107	0.772
30	2.863	0.334	0.403	0.118	0.817
50	2.906	0.335	0.400	0.128	0.858
80	2.994	0.340	0.408	0.129	0.828
120	2.891	0.333	0.404	0.131	0.798
X =	2.808	0.323	0.390	0.119	0.780
S =	0.211	0.023	0.026	0.013	0.089

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 05916 G2c

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/01/11	Phenol (IS1)	3.124	3.124	3.056	3.056	6	6
			2,4-Dichlorophenol (IS2)	0.305	0.305	0.298	0.298	5	5
	HP11165		2,4,5-Trichlorophenol (IS3)	0.389	0.389	0.378	0.379	6	6
			Pentachlorophenol (IS4)	0.158	0.158	0.156	0.156	12	6
			Bis(2-ethex)phthalate (IS5)	0.747	0.747	0.715	0.715	7	7

Cis/Cx	Ax	Ais
40/50	580122	148556
40/50	281006	738203
40/50	222855	458423
40/50	155692	789411
40/50	730092	781794

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Bis(2-eh)phtha
5	2.732	0.270	0.334	0.142	0.633
15	3.093	0.302	0.377	0.151	0.682
30	3.195	0.308	0.384	0.154	0.736
50	3.124	0.305	0.389	0.158	0.747
80	3.173	0.310	0.398	0.163	0.746
120	3.018	0.295	0.389	0.167	0.743
X =	3.056	0.298	0.379	0.156	0.715
S =	0.171	0.015	0.023	0.009	0.047

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ed0881	04/20/11	Phenol (IS1)	2.808	2.844	2.844	1	1
			2,4-Dichlorophenol (IS2)	0.323	0.330	0.330	2	2
	HP09572		2,4,5-Trichlorophenol (IS3)	0.390	0.400	0.400	3	3
			Pentachlorophenol (IS4)	0.119	0.133	0.133	12	12
			Benzidine (IS5)	0.780	0.874	0.874	12	12

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/80	1078250	189547
2,4-Dichlorophenol (IS2)	40/80	569650	862959
2,4,5-Trichlorophenol (IS3)	40/80	485230	606184
Pentachlorophenol (IS4)	40/80	281373	1058314
Benzidine (IS5)	40/240	5013772	956480

LDC # 45916 G2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	gd0741	04/18/11	Phenol (IS1)	3.056	3.199	3.199	5	5
			2,4-Dichlorophenol (IS2)	0.298	0.299	0.299	0	0
	HP11165		2,4,5-Trichlorophenol (IS3)	0.378	0.383	0.383	1	1
			Pentachlorophenol (IS4)	0.156	0.137	0.137	12	12
			Bis(2-ethex)phthalate (IS5)	0.715	0.817	0.817	14	14

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/50	768756	192224
2,4-Dichlorophenol (IS2)	40/50	348445	930805
2,4,5-Trichlorophenol (IS3)	40/50	267376	559115
Pentachlorophenol (IS4)	40/50	166510	973603
Bis(2-ethex)phthalate (IS5)	40/50	1015611	994726

LDC #: 25916 G2A

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	87.66	88	88	0
2-Fluorobiphenyl	↓	88.34	88	88	
Terphenyl-d14	↓	85.88	86	86	
Phenol-d5	200	177.95	89	89	
2-Fluorophenol	↓	188.95	94	94	
2,4,6-Tribromophenol	↓	175.15	88	88	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25916 G2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 21/27

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	1666.67	0	1360.88	1443.29	87	87	87	87	6	6
N-Nitroso-di-n-propylamine				1388.44	1458.53	83	83	88	88	5	5
4-Chloro-3-methylphenol				1415.3	1455.89	85	85	88	88	3	3
~~Acenaphthene~~											
Pentachlorophenol				1150.08	1210.85	69	69	73	73	5	5
~~Pyrene~~											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: YS916G2q

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: JVC
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 106 LA LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1666.67	NA	1324.94	NA	79	79				
N-Nitroso-di-n-propylamine			1349.09		81	81				
4-Chloro-3-methylphenol			1380.97		83	83				
~~Acenaphthene~~										
Pentachlorophenol			1158.54		70	90				
~~Pyrene~~										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 62a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1 , EEE

Conc. = $\frac{(10140)(40)(1\ ml)(1000)(\quad)}{(757830)(0.715)(30\ g)(0.85)(\quad)}$

= 28 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/15/11	Di-n-octylphthalate	26	All samples in SDG DE125	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	30		J (all detects) UJ (all non-detects)	

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatiles were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No semivolatiles were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB01-SA8N-041211	4/12/11	Di-n-butylphthalate Diethylphthalate Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	0.51 ug/L 0.13 ug/L 4.7 ug/L 4.9 ug/L	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-012-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.3 ug/Kg	20U ug/Kg
SL-015-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.7 ug/Kg	21U ug/Kg
SL-016-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.9 ug/Kg	21U ug/Kg
SL-018-SA8N-SS-0.0-0.5	Di-n-octylphthalate	9.6 ug/Kg	21U ug/Kg
SL-019-SA8N-SS-0.0-0.5	Di-n-octylphthalate	10 ug/Kg	21U ug/Kg
SL-020-SA8N-SS-0.0-0.5	Di-n-butylphthalate Di-n-octylphthalate	8.5 ug/Kg 9.7 ug/Kg	21U ug/Kg 21U ug/Kg
SL-021-SA8N-SS-0.0-0.5	Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	9.5 ug/Kg 28 ug/Kg	20U ug/Kg 28U ug/Kg
SL-022-SA8N-SS-0.0-0.5	Di-n-octylphthalate	12 ug/Kg	21U ug/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-023-SA8N-SS-0.0-0.5	Di-n-octylphthalate	13 ug/Kg	21U ug/Kg
SL-131-SA8N-SS-0.0-0.5	Bis(2-ethylhexyl)phthalate	34 ug/Kg	34U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS/MSD (SL-012-SA8N-SS-0.0-0.5)	Acenaphthene	106 (63-105)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
106WDLCS/D (EB01-SA8N-041211 5BLKWD106)	Acenaphthene Di-n-octylphthalate	116 (74-109) 154 (57-145)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Di-n-octylphthalate Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE125	SL-012-SA8N-SS-0.0-0.5	Acenaphthene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	EB01-SA8N-041211	Acenaphthene Di-n-octylphthalate	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All TCL compounds	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE125

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE125	SL-012-SA8N-SS-0.0-0.5	Di-n-octylphthalate	20U ug/Kg	A	F
DE125	SL-015-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-016-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-018-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-019-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-020-SA8N-SS-0.0-0.5	Di-n-butylphthalate Di-n-octylphthalate	21U ug/Kg 21U ug/Kg	A	F
DE125	SL-021-SA8N-SS-0.0-0.5	Di-n-octylphthalate Bis(2-ethylhexyl)phthalate	20U ug/Kg 28U ug/Kg	A	F
DE125	SL-022-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-023-SA8N-SS-0.0-0.5	Di-n-octylphthalate	21U ug/Kg	A	F
DE125	SL-131-SA8N-SS-0.0-0.5	Bis(2-ethylhexyl)phthalate	34U ug/Kg	A	F

LDC #: 25916G2b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: DV6
SVOA 2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons (EPA~~ SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	2 RSD ≤ 30% rr
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + Water

1	SL-012-SA8N-SS-0.0-0.5 S	11	SL-047-SA8N-SS-0.0-0.5 S	21	1 MS	31	SBLK LD108	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	1 MSD	32	SBLK WD106	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23		33		
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24		34		
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211 W	25		35		
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0 S	26		36		
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37		
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38		
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39		
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40		

LDC #: 25916 G 26

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?				

LDC #: 25916 G 26

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: MG
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?
Y (N) N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	4/15/11	id0341i (ICV)	FFF	26		All	J/UJ/A (c)
			GGG	30			

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of
Reviewer: JV
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug /L **Associated sample units:** ug /kg

Sampling date: 9/12/11

Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: ~~All Soils~~ 1 - 14 Code : F

Compound	Blank ID	Sample Identification										
	15	1	2	3	4	5	6	7	8	9	~~14~~	14
XX	0.51						8.5/21 U					
LL	0.13											
FFF	4.7	9.3/20U	9.7/21 U	9.9/21 U	9.6/21 U	10/21 U	9.7/21 U	9.5/20U	12/21 U	13/21 U		
EEE	4.9							28/U				34/U

Blank units: ug /L **Associated sample units:** ug /kg

Sampling date: 9/12/11

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: ~~7, 14, 18, 19, 20~~ Code: ~~F~~

Compound	Blank ID	Sample Identification								
	~~15~~	~~7~~	~~14~~							
~~EEE~~	~~4.9~~	~~28/U~~ cl	~~34/U~~							

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: JV6
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		21/22	GG	106 (63-105)	( )	( )	1	5 dets/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25916 G26

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: DM
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Was a LCS required?

Y (N) N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	106WDLCS/D	GG	116 (74-109)	( )	( )	15, SBLKWD106	J dets/p (L)
		FFF	154 (57-145)	( )	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )	

LDC #: 25916 G 26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of Compound
C_x = Concentration of compound,
S= Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	04/15/11	NDMA (IS1)	0.885	0.719	0.844	0.844	4	4
			Naphthalene (IS2)	1.061	0.758	1.029	1.029	4	4
	HP10976		Diethylphthalate (IS3)	1.313	0.829	1.401	1.401	12	12
			Phenanthrene (IS4)	1.115	0.772	1.106	1.106	6	6
			Chrysene (IS5)	1.188	0.779	1.146	1.146	4	4
			Benzo(a)pyrene (IS6)	1.092	0.680	1.034	1.034	12	11

Cis/Cx	Ax	Ais
1/1	84069	116860
1/1	343632	453172
1/1	230725	278432
1/1	371146	480903
1/1	404794	519775
1/1	356552	524029

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	Benzo(a)py
0.05	0.778	0.995		1.029	1.090	0.848
0.20	0.842	1.024	1.466	1.106	1.153	0.973
0.50	0.831	0.969	1.660	1.038	1.085	1.002
1.00	0.885	1.061	1.313	1.115	1.188	1.092
5.00	0.857	1.034	1.245	1.131	1.148	1.101
10.00	0.870	1.092	1.320	1.216	1.210	1.187
X =	0.8438	1.029	1.401	1.106	1.146	1.034
S =	0.038	0.044	0.166	0.068	0.051	0.119

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 S26

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	id0401	04/18/11	NDMA (IS1)	0.844	0.876	0.876	4	4
			Naphthalene (IS2)	1.029	1.016	1.016	1	1
	HP10976		Diethylphthalate (IS3)	1.401	1.229	1.229	12	12
			Phenanthrene (IS4)	1.106	1.104	1.104	0	0
			Chrysene (IS5)	1.146	1.146	1.146	0	0
			Benzo(a)pyrene (IS6)	1.034	1.116	1.116	8	8
2	id0451	04/19/11	NDMA (IS1)	0.844	0.906	0.906	7	7
			Naphthalene (IS2)	1.029	1.054	1.054	2	2
	HP10976		Diethylphthalate (IS3)	1.401	1.396	1.396	0	0
			Phenanthrene (IS4)	1.106	1.115	1.115	1	1
			Chrysene (IS5)	1.146	1.189	1.189	4	4
			Benzo(a)pyrene (IS6)	1.034	1.108	1.108	7	7
3	id0491	04/20/11	NDMA (IS1)	0.844	0.847	0.847	0	0
			Naphthalene (IS2)	1.029	1.014	1.014	1	1
	HP10976		Diethylphthalate (IS3)	1.401	1.197	1.197	15	15
			Phenanthrene (IS4)	1.106	1.115	1.115	1	1
			Chrysene (IS5)	1.146	1.113	1.113	3	3
			Benzo(a)pyrene (IS6)	1.034	1.087	1.087	5	5

	CCV1 (1/5)		CCV2 (1/1)		CCV3 (1/5)	
Compound (IS)	Ax	Ais	Ax	Ais	Ax	Ais
NDMA	357715	81660	81447	89907	366458	86572
Naphthalene	1620263	318912	377208	357764	1727888	340859
Diethylphthalate	1173273	190854	304982	218521	1233878	206237
Phenanthrene	1817213	329262	413741	370986	1970370	353325
Chrysene	2236994	390382	467770	393351	2212246	397471
Benzo(a)pyrene	2170848	389195	431224	389118	2103711	387038

LDC #: 25916 G26

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JM
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.00	1.044	104	104	0
2-Fluorobiphenyl	↓	0.986	99	99	↓
Terphenyl-d14	↓	1.05 ✓	105	105	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 59165G26

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: SVG
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 111085LD026

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	36.36	NA	109	109				
Pentachlorophenol		↓		↓						
Pyrene	33.33	↓	35.4	↓	106	106				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G26

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JM
2nd reviewer: AP

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, DDD

Conc. = $\frac{(53821)(1.0)(1.0\ ml)(1\ml)(\quad)}{(451045)(1.146)(30.1g)(0.88\ r)(\quad)}$

= 3.9 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration all compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-022-SA8N-SS-0.0-0.5	N-nitrosodimethylamine-d6	183 (50-150)	N-nitrosodimethylamine	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason
DE125	SL-022-SA8N-SS-0.0-0.5	N-nitrosodimethylamine	J (all detects)	P	Surrogate spikes (%R) (S)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G2c **VALIDATION COMPLETENESS WORKSHEET** Date: 8/02/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	~~CCAL~~ %D ≤ 30% CCV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	SBLK LA 1081	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25716 G2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?			✓	
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $>$ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 62C

VALIDATION FINDINGS CHECKLIST

Reviewer: JV6
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G2c

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Reviewer: OV6
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were percent recoveries (%R) for surrogates within QC limits?

Y (N) N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?

Y N (N/A) If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		5	NDMA -d6	183 (50-150)	J det+ / p (5)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116
S3 (TPH) = Terphenyl-d14	18-137	33-141
S4 (PHL) = Phenol-d5	24-113	10-94
S5 (2FP)= 2-Fluorophenol	25-121	21-100
S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #25916 6 2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 25 std)	Recalculated RRF (RRF 25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/20/2011	NDMA (NDMA-d6)	1.489	1.489	1.5197	1.5197	9	9
	TE16311								

Cis/Cx	Ax	Ax
25/25	203162	136472

Conc	RRF
1.0	1.788
5.0	1.424
10.0	1.502
25.0	1.489
50.0	1.484
100.0	1.431
X =	1.5197
S =	0.1353

LDC #: 25916 G2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: CA

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C)~~ 1625C

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration; SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: _____

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	NA	751.66	NA	90	90				
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916G2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JM
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 3, ND MA

Conc. = $\frac{(8267)(25)(1ml)(10)(\quad)}{(142524)(1.5197)(30.0g)(0.86\%)(\quad)}$

= 0.368 mg/kg (1000)

= 370 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
4/20/11	3C20104B.30R	ZB-MR2	Aroclor-5460	27.8	SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Aroclor-5460	J (all detects) UJ (all non-detects)	A
4/21/11	4C20104B.05R	ZB-MR2	Aroclor-5432 Aroclor-5460	22.1 24.1	SL-131-SA8N-SS-0.0-0.5	Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-131-SA8N-SS-0.0-0.5	Decachlorobiphenyl	129 (45-120)	All TCL compounds	J (all detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compounds	Flag	A or P
LCS/D07104 (EB01-SA8N-041211 PBLK07104)	Aroclor-5442	90 (35-84)	92 (35-84)	-	Aroclor-5460 Aroclor-5432 Aroclor-5442	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria.

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-036-SA8N-SS-0.0-0.5	Aroclor-1254	61.22	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-131-SA8N-SS-0.0-0.5	Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE125	SL-131-SA8N-SS-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE125	EB01-SA8N-041211	Aroclor-5460 Aroclor-5432 Aroclor-5442	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-036-SA8N-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G3b **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVC
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	%RSD ≤ 20%
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 20%
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation and reported ~~CRQLs~~ RL's	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil + Water

1	SL-012-SA8N-SS-0.0-0.5 S	11	SL-047-SA8N-SS-0.0-0.5 S	21	1 MS	31	PBLK 12108	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	1 MSD	32	PBLK 07104	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23		33		
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5 W	24		34		
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25		35		
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0 S	26		36		
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37		
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38		
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39		
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40		

Notes: _____

LDC #: 25916 636

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____%D or ____%R	✓			
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓		✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15%.0 for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recovieries 80-120%?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?	✓			
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	

LDC #: 25916G3b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions, dry weight factors, and clean-up activities applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Arochlor 1262
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Arochlor 1268
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. oxy Chlordane
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL. trans-Nonachlor
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM. cis-Nonachlor
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN. Aroclor-5460

OO. Aroclor-5432

PP. Aroclor-5442

Notes:_____

_____

_____

LDC #: 25916 G36

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: JV6
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N (N/A) Were Evaluation mix standards run before initial calibration and before samples?
Y N (N/A) Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
(Y) N N/A Was at least one standard run daily to verify the working curve?
Y (N) N/A Did the continuing calibration standards meet the percent difference (%D) / relative percent difference (RPD) criteria of ≤20.0%?
Level IV/D Only
(Y) N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	4/20/11	3C20104B.30R	ZB-MR2	NN	27.8	( )	9-13, 16-20	J/UJ/A (c)
						( )		
						( )		
						( )		
	4/21/11	4C20104B.05R	ZB-MR2	00	22.1	( )	14	
				NN	24.1	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

A. alpha-BHC	E. Heptachlor	I. Dieldrin	M. 4,4'-DDD	Q. Endrin ketone	U. Toxaphene	Y. Aroclor-1242	CC. DB 608	GG.____
B. beta-BHC	F. Aldrin	J. 4,4'-DDE	N. Endosulfan sulfate	R. Endrin aldehyde	V. Aroclor-1016	Z. Aroclor-1248	DD. DB 1701	HH.____
C. delta-BHC	G. Heptachlor epoxide	K. Endrin	O. 4,4'-DDT	S. alpha-Chlordane	W. Aroclor-1221	AA. Aroclor-1254	EE. Hexachlobenzene	II.____
D. gamma-BHC	H. Endosulfan I	L. Endosulfan II	P. Methoxychlor	T. gamma-Chlordane	X. Aroclor-1232	BB. Aroclor-1260	FF.____	JJ.____

LDC #: 25916 G 36

VALIDATION FINDINGS WORKSHEET
Surrogate Spikes

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples, standards and blanks?
Y N N/A Did all surrogate percent recoveries (%R) meet the QC limits?

#	Date	Sample ID	Column	Surrogate Compound	%R (Limits)	Qualifications
		14		B	129 (45-120)	J dets/A (5)
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	
					( )	

Letter Designation	Surrogate Compound	Recovery QC Limits (Soil)	Recovery QC Limits (Water)	Comments
A	Tetrachloro-m-xylene			
B	Decachlorobiphenyl			

LDC #: 25916 G36
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples

Page: 1 of 1
Reviewer: JV6
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

(Y) N N/A Was a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS/D 07104	Aroclor 5442	90 (35-84)	92 (35-84)	( )	15, PBLK07104	J det / p (L)
				( )	( )	( )		(and, NN, OO, PP)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25916 G35

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: MC
2nd Reviewer: A

METHOD: / GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	AA	10	61.22	J dets/A (##) (*x111)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 35916 G3b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC / HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (500 std)	Recalculated (500 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/14/2011	1260-4 (ZB-MR1)	77.09	77.1	77.2	77.2	7.8	7.8
	17342A		1260-4 (ZB-MR2)	340.49	340.5	341.1	341.1	5.6	5.6

C	H
500	38546
500	170246

Conc	1260-4 MR1	1260-4 MR2
50.0	86.80	366.98
100.0	74.36	341.91
200.0	77.13	343.25
500.0	77.09	340.49
1000.0	70.47	313.01
X=	77.17	341.13
S=	6.032	19.133

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G35

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC / HPLC

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc (from Ave)	Recalculated Conc	Reported % D (from Ave)	Recalculated %D (from peak4)
1	2C20104.28R	4/18/2011	1260-4 (ZB-MR1)	200.00	205.97	205.37	3.0	2.7
			1260-4 (ZB-MR2)	200.00	224.57	228.88	12.3	14.4
2	3C20104.04R	4/20/2011	1260-4 (ZB-MR1)	200.00	194.18	199.81	2.9	0.1
			1260-4 (ZB-MR2)	200.00	216.15	226.01	8.1	13.0
3	3C20104.29R	4/20/2011	1260-4 (ZB-MR1)	200.00	196.67	198.95	1.7	0.5
			1260-4 (ZB-MR2)	200.00	221.95	229.90	11.0	15.0
4	4C20104.04R	4/21/2011	1260-4 (ZB-MR1)	200.00	195.29	200.90	1.7	0.4
			1260-4 (ZB-MR2)	200.00	227.48	230.37	11.0	15.2

		CCV1	CCV2	CCV3	CCV4
Compound	CF	Height	Height	Height	Height
1260-4 (ZB-MR1)	77.17	15848.02	15419.32	15352.64	15503.26
1260-4 (ZB-MR2)	341.129	78079.08	77097.30	78427.23	78586.34

LDC #: 25916G35

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	ZB-MR2	1.04	1.204	116	116	0
Tetrachloro-m-xylene	↓	↓				↓
Decachlorobiphenyl	↓	↓	1.061	102	102	↓
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 25916 636

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I MS - MSD I * 2/(MS + MSD)

MS = Matrix spike percent recovery

MSD = Matrix spike duplicate percent recovery

MS/MSD samples: 31 ✓

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
gamma-BHC											
4,4'-DDT											
Aroclor 1260	16.67	16.67	3.3	18.59	20.3	9 ✓	9 ✓	10 ✓	10 ✓	9	7

Comments: Refer ot Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 63b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: OV6
2nd Reviewer: [signature]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboratory control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS/D 07104

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	5.0	5.0	4.7	4.9	94	94	98	98	K	K

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 63b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVC
2nd reviewer: [signature]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. #1 PCB-1260 MRL
PCB 1260-4

Conc. = $\frac{(700\ 6.9297)(2.0\ ml)}{(77.17)(60\ g)}$

= 3.0266

PCB 1260 Ave.

= $\frac{3.0266 + 4.788761 + 2.095884}{3}$

= 3.30378

final conc. = $\frac{3.30378}{(0.882)}$

= 3.7 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 2, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0

SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5MSD
SL-012-SA8N-SS-0.0-0.5DUP
SL-021-SA8N-SS-0.0-0.5MS
SL-021-SA8N-SS-0.0-0.5MSD
SL-021-SA8N-SS-0.0-0.5DUP

Introduction

This data review covers 25 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Copper Phosphorus Tin	0.276 mg/Kg 1.406 mg/Kg 1.404 mg/Kg	All soil samples in SDG DE125
ICB/CCB	Magnesium	39.6 ug/L	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5
ICB/CCB	Titanium	0.54 ug/L	SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
ICB/CCB	Titanium	0.41 ug/L	SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Vanadium	0.11 ug/L	SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5
ICB/CCB	Vanadium	0.13 ug/L	SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-012-SA8N-SS-0.0-0.5	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-015-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-016-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-018-SA8N-SS-0.0-0.5	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-019-SA8N-SS-0.0-0.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-020-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-021-SA8N-SS-0.0-0.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-022-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-023-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-036-SA8N-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-047-SA8N-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-048-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-050-SA8N-SS-0.0-0.5	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-131-SA8N-SS-0.0-0.5	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-202-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-206-SA5A-SB-4.0-5.0	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-207-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-227-SA5A-SB-3.0-4.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-228-SA5A-SB-3.0-4.0	Tin	2.8 mg/Kg	2.8U mg/Kg

Sample EB01-SA8N-041211 was identified as an equipment blank. No metal contaminants were found.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Antimony	26 (75-125)	18 (75-125)	-	J (all detects) R (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Arsenic	-	70 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5MS/MSD (All soil samples in SDG DE125)	Antimony	-	-	26 (≤20)	J (all detects) UJ (all non-detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-012-SA8N-SS-0.0-0.5	Manganese Strontium	12 (≤10) 11 (≤10)	All soil samples in SDG DE125	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
SL-021-SA8N-SS-0.0-0.5	Chromium Copper Lead Nickel Vanadium Zinc	28 (≤10) 29 (≤10) 15 (≤10) 36 (≤10) 30 (≤10) 12 (≤10)	All soil samples in SDG DE125	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE125	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Antimony	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Arsenic	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (RPD) (E)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	Manganese Strontium Chromium Copper Lead Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE125	SL-012-SA8N-SS-0.0-0.5	Tin	2.5U mg/Kg	A	B
DE125	SL-015-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-016-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-018-SA8N-SS-0.0-0.5	Tin	2.5U mg/Kg	A	B
DE125	SL-019-SA8N-SS-0.0-0.5	Tin	2.4U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE125	SL-020-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-021-SA8N-SS-0.0-0.5	Tin	2.4U mg/Kg	A	B
DE125	SL-022-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-023-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-036-SA8N-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE125	SL-047-SA8N-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE125	SL-048-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-050-SA8N-SS-0.0-0.5	Tin	2.7U mg/Kg	A	B
DE125	SL-131-SA8N-SS-0.0-0.5	Tin	2.8U mg/Kg	A	B
DE125	SL-202-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B
DE125	SL-206-SA5A-SB-4.0-5.0	Tin	2.9U mg/Kg	A	B
DE125	SL-207-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B
DE125	SL-227-SA5A-SB-3.0-4.0	Tin	2.7U mg/Kg	A	B
DE125	SL-228-SA5A-SB-3.0-4.0	Tin	2.8U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-2-11

SDG #: DE125 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	A	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	None in SDG
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	ND	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 15=water

1	SL-012-SA8N-SS-0.0-0.5	11	SL-047-SA8N-SS-0.0-0.5	21	(#1) MS	31	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	MSD	32	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23	DUP	33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24	(#7) MS	34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25	MSD	35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0	26	DUP	36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

Notes: _____

LDC #: 25911664

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: QR
2nd Reviewer: [illegible]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were ≤ 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

DC #: 25911664

VALIDATION FINDINGS CHECKLIST

Reviewer: AR
2nd Reviewer: W

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			✓	
Do all applicable analysies have duplicate injections? (Level IV only)			✓	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			✓	
Were analytical spike recoveries within the 85-115% QC limits?			✓	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	✓			
Were all percent differences (%Ds) < 10%?	✓	✓		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.		✓		
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	✓			
If the %Rs were outside the criteria, was a reanalysis performed?	✓			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓	✓	
Were the performance evaluation (PE) samples within the acceptance limits?				
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Overall assessment of data	✓			
Overall assessment of data was found to be acceptable.				
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓	✓		
Target analytes were detected in the field blanks.				

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: W

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-20		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
21-23		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
24-26		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: OR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10
Cu	0.276			1.38										
P	1.406			7.03										
Sn	1.404			7.02	2.5	2.6	2.6	2.5	2.4	2.7	2.4	2.7	2.6	2.9

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	11	12	13	14	16	17	18	19	20	
Cu	0.276			1.38										
P	1.406			7.03										
Sn	1.404			7.02	2.6	2.7	2.7	2.8	2.8	2.9	2.8	2.7	2.8	

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Mg			39.6	19.8										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 13, 14, 16-20

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.54	0.27										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.41	0.205										

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer:
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x (MS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 3-7, 9-13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.11	0.06										

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 14, 16-20

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
V			0.13	0.07										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer: ✓

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?
(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	4/22/11	ICSA (19:07)	Mn	5	0.78	All Soil	No Qual (<10x)
	4/22/11	ICSA (21:33)	Mn	5	↓	↓	↓

Comments: _____

ICSA.wpd

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: QC
2nd Reviewer:

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y (N) N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	24/25	S	Sb	26	18	~~26~~	all soil	J/R/A (Q) CPS=-32%
			As		70			J/UJ/A (Q)
			Sb			26	↓	J/UJ/A (E)

Comments:

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y (N) N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y (N) N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		1	S	Mn	17	All Soil	J/UJ/A (A)
				Sr	11		
		7	S	Cr	28		
				Cu	29		
				Pb	15		
				Ni	36		
				V	30		
				Zn	12		

Comments: _____

SDILICPMS.wpd

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: CS
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Sn	579.18	600	96.5	96.5	Y
ICV	ICP/MS (Initial calibration)	Co	487	500	97.4	97.4	
ICV	CVAA (Initial calibration)	Hg	2.48	2.5	99.2	99.2	
CCV(20:04)	ICP (Continuing calibration)	Li	494.53	500	98.9	98.9	
CCV(09:41)	ICP/MS (Continuing calibration)	Tl	25.04	25	100.2	100.2	
CCV	CVAA (Continuing calibration)	Hg	1.03	1	103	103	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916G4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result). True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration, D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L), SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Zn	18.3	20	91.5	91.5	Y
LCS	Laboratory control sample	P	949.4	1000	100	100	
24	Matrix spike	Tl	(SSR-SR) 0.4332	0.4346	100	100	
23	Duplicate	Li	22.0922	21.0929	5	5	
1	ICP serial dilution	Ti	10066.89	9536.8	9	9	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 2591664

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{100mL\ (215.88699\ mg/L)}{0.882\ (1.02)} = 23977\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	24000	24000	Y
		Sb	0.19	0.19	
		As	6.2	6.2	
		Ba	116	116	
		Be	0.76	0.76	
		B	16.1	16.1	
		Cd	033	0.33	
		Ca	19100	19100	
		Cr	30.4	30.4	
		Co	9.9	9.9	
		Cu	14.7	14.7	
		Fe	26600	26600	
		Pb	11.7	11.7	
		Li	22.1	22.1	
		Mg	6690	6690	
		Mn	426	426	
		Hg	0.025	0.025	
		Mo	0.50	0.56	
		Ni	16.6	16.6	
		P	465	465	

Note:

LDC #: 25916G 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Cr were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$20 = \frac{(100\,mL)(2)(82.83\,ug/L)}{0.87\,(1.02\,g)(1000)} = 18.7\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration mg/kg	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	5480	5480	✓
		Se	0.23	0.23	
		Ag	0.055	0.055	
		Na	98.9	98.9	
		Sr	42.9	42.9	
		Tl	0.32	0.32	
		Sn	2.5	2.5	
		Ti	1120	1120	
		V	52.7	52.7	
		Zn	77.9	77.9	
		Zr	2.7	2.7	
	20	Al	14900	14900	
		As	5.7	5.7	
		Ba	66.4	66.4	
		Be	0.65	0.65	
		B	8.6	8.6	
		Cd	0.066	0.066	
		Ca	2150	2150	
		Cr	18.7	18.7	
		Co	3.6	3.6	
		Cu	6.9	6.9	
		Fe	19500	19500	✓

LDC #: 25916G 4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see Previous Page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	20	Pb	4.8	4.8	Y
		Li	21.1	21.1	
		Mg	3650	3650	
		Mn	116	116	
		Hg	0.0065	0.0065	
		Mo	0.34	0.34	
		Ni	9.4	9.4	
		P	179	179	
		K	1300	1300	
		Se	0.045	0.045	
		Ag	0.047	0.047	
		Na	179	179	
		Sr	16.1	16.1	
		Tl	0.23	0.23	
		Sn	2.8	2.8	
		Ti	903	903	
		V	35.2	35.2	
		Zr	38.0	38.0	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 2, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-018-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-023-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-131-SA8N-SS-0.0-0.5
EB01-SA8N-041211
SL-202-SA5A-SB-3.0-4.0
SL-206-SA5A-SB-4.0-5.0
SL-207-SA5A-SB-3.0-4.0
SL-227-SA5A-SB-3.0-4.0
SL-228-SA5A-SB-3.0-4.0
SL-012-SA8N-SS-0.0-0.5MS
SL-012-SA8N-SS-0.0-0.5DUP
SL-019-SA8N-SS-0.0-0.5MS
SL-019-SA8N-SS-0.0-0.5DUP
SL-227-SA5A-SB-3.0-4.0MS
SL-227-SA5A-SB-3.0-4.0DUP

Introduction

This data review covers 25 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Methods 9045C and 9040B for pH, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
EB01-SA8N-041211	pH	54.25 hours	48 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB01-SA8N-041211 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-012-SA8N-SS-0.0-0.5MS (SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5)	Fluoride	60 (80-120)	J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE125	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE125

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE125	EB01-SA8N-041211	pH	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 EB01-SA8N-041211 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G6 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-21
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
2nd Reviewer: V

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-~~N~~, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C/9040B), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 4/12/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	DUP
VI.	Laboratory control samples	A	LCS/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	ND	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: all soil except 15=water

1	SL-012-SA8N-SS-0.0-0.5	11	SL-047-SA8N-SS-0.0-0.5	21	(~~X~~1) MS	31	
2	SL-015-SA8N-SS-0.0-0.5	12	SL-048-SA8N-SS-0.0-0.5	22	↓ DUP	32	
3	SL-016-SA8N-SS-0.0-0.5	13	SL-050-SA8N-SS-0.0-0.5	23	(~~X~~5) MS	33	
4	SL-018-SA8N-SS-0.0-0.5	14	SL-131-SA8N-SS-0.0-0.5	24	↓ DUP	34	
5	SL-019-SA8N-SS-0.0-0.5	15	EB01-SA8N-041211	25	(~~X~~9) MS	35	
6	SL-020-SA8N-SS-0.0-0.5	16	SL-202-SA5A-SB-3.0-4.0	26	↓ DUP	36	
7	SL-021-SA8N-SS-0.0-0.5	17	SL-206-SA5A-SB-4.0-5.0	27		37	
8	SL-022-SA8N-SS-0.0-0.5	18	SL-207-SA5A-SB-3.0-4.0	28		38	
9	SL-023-SA8N-SS-0.0-0.5	19	SL-227-SA5A-SB-3.0-4.0	29		39	
10	SL-036-SA8N-SS-0.0-0.5	20	SL-228-SA5A-SB-3.0-4.0	30		40	

Notes:

LDC #: 2591666

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: W

Method: Inorganics (EPA Method See Cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.				
Cooler temperature criteria was met.				
II. Calibration				
Were all instruments calibrated daily, each set-up time?				
Were the proper number of standards used?				
Were all initial calibration correlation coefficients > 0.995?				
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?				
Were titrant checks performed as required? (Level IV only)				
Were balance checks performed as required? (Level IV only)				
III. Blanks				
Was a method blank associated with every sample in this SDG?				
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.				
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.				
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.				
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.				
V. Laboratory control samples				
Was an LCS anaylzed for this SDG?				
Was an LCS analyzed per extraction batch?				
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?				
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?				
Were the performance evaluation (PE) samples within the acceptance limits?				

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target analytes were detected in the field duplicates.			✓	
X. Field blanks				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.		✓		

LDC #: 25916G6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CC
2nd reviewer: V

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1,5-8,11		(pH) TDS Cl (F) (NO3) (NO2) SO4 PO4 ALK (CN-) NH3 TKN TOC (Cr6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC Cr6+ ClO4
2-4,9,10,12-20		(pH) TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (Cr6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC Cr6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC Cr6+ ClO4
		pH TDS Cl F (NO3) NO2 SO4 PO4 ALK CN- NH3 TKN TOC Cr6+ (ClO4)
21,22		pH TDS Cl F NO3 NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC Cr6+ ClO4
23,24		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (Cr6+) ClO4
25,26		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC Cr6+ ClO4

LDC #: 2591666

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: OR
2nd reviewer: [illegible]

All circled dates have exceeded the technical holding time.
Y N N/A Were all samples preserved as applicable to each method ?
Y N N/A Were all cooler temperatures within validation criteria?

Method:		9040B					
Parameters:		pH					
Technical holding time:		48hrs					
Sample ID	Sampling date	Analysis date	Analysis date ✓	Analysis date	Analysis date	Analysis date	Qualifier
15	4/12/11 16:00	4/14/11 20:30	(7days) (54, 25 hr)				J/OJ/P (H)

LDC #: 25116G6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: QR
2nd Reviewer:

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125 (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		21	S	F	60 (80-120)	1-10	J/UJ/A (Q)

Comments:

LDC #: 2591666

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of Cd was recalculated. Calibration date: 3/28/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	Cd	s1	2	0.004	*0.9999*	0.9999	
		s2	4.00	0.01			
		s3	10.00	0.025			
		s4	25.00	0.072			
		s5	100.00	0.292			
Calibration verification	F	CCV	1.5	1.4895	99	99	
Calibration verification	CN	↓	0.15	0.13570	90	90	
Calibration verification	C_6^{6+}	↓	200	198.6892	99	99	

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25911068

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	Cl04	22.4	25	90	—	Y
19	Matrix spike sample	Cl04	(SSR-SR) 41.3	40	103	103	
22	Duplicate sample	F	3.1	3.0	3	3	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25966

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer:

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for NO_3/F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

Recalculation: 1: $NO_3 = \frac{\left(\frac{0.2+0.014}{0.7008} \times 50mL\right)}{4.92g(0.852)} = 3.5 mg/kg$

NO_3: $y = 0.7008x - 0.0140$

F: $y = 0.3444x - 0.0005$

2: $F = \left(\frac{0.086+0.0005}{0.3444} \times 50\right) / 4.92g(0.855) = 3.0 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.852	1	F	2.7	2.7	Y
		NO_3	3.5	3.5	
		pH	7.90	7.90	
0.855	2	F	3.0	~~2.4~~ 3.0	
		Cr^{6+}	0.50	0.50	
		pH	7.99	7.99	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-036-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK22109	4/20/11	EFH (C30-C40) EFH (C21-C30)	0.92 mg/Kg 0.93 mg/Kg	All samples in SDG DE125

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G8 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer:

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20 %
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 %
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 22109	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-036-SA8N-SS-0.0-0.5	16		26		36	
7	SL-047-SA8N-SS-0.0-0.5	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G8

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G8

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓	✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G8

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: VV
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 4/20/11 **Blank analysis date:** 4/28/11 **Associated samples:** All

Conc. units: mg/kg

	Compound	Blank ID	Sample Identification						
5x		PBLK22109	1						
4.6	EFH (C_{30}-C_{40})	0.92		All results > 5x blk					
4.7	EFH (C_{21}-C_{30})	0.93							

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___

Conc. units: ___

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 25916 G 8

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/27/2011	EFH (C8-C40)	23757.59	23757.59	23827.72	23827.72	1.8	1.8
	H4623A								

C	A
288	6842185

Conc	EFH (C8-C40)
72.0	24287.83
144.0	24100.96
288.0	23757.59
576.0	23851.75
720.0	23140.47
X=	23827.72
S=	437.084

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G8

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	J116.69R	4/28/2011	EFH (C8-C40)	287.98	310.37	310.37	7.8	7.8

	Compound	Area	CF
CCV1	EFH (C8-C40)	7395387	23827.72

LDC #: 25916 G8

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVC
2nd reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
CBZ	ZB-5	2.0	1.10	56	56	0
O-TPH	"	"	1.38	69	69	"

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916G8

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: / GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS/LCSD samples: LCS 22109

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C_{30}-C_{40})	5.01	NA	4.28	NA	85	85	—		—	

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916G8

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JLG
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. # 1 Compound Name EFH (C_{30}- C_{40}) (13.470 min - 15.420 min)

Concentration = $\frac{(41639090)\ (0.5\ ml)\ \cancel{(2)}}{(23827.72)\ (30.4g)\ (0.882)}$ = 32.6

≈ 33 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS10108 (SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 PBLK10108)	PETN	126 (80-120)	-	-	J (all detects)	P
LCS04116 (SL-022-SA8N-SS-0.0-0.5 PBLK04116)	Nitrobenzene PETN	124 (80-120) 124 (80-120)	- -	- -	J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	PETN	J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-022-SA8N-SS-0.0-0.5	Nitrobenzene PETN	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G40 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV6
2nd Reviewer: C

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20 % r
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client spec
VII.	Laboratory control samples	SW	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 10108	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12	PBLK 04116	22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: (All results reported from chrompack.xls)

LDC #: 25916 640

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: C

Method: ____ GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916G40

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ___/HPLC

8310	8330	8151	8141	8141 (Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2.4.6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotoluene	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Famphur	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Phosmet	
O. Phenanthrene	O. Nitroglycerin		O. Chlorpyrifos	JJ. Tetrachlorvinphos	
P. Pyrene	P. PETN		P. Fenthion	KK. Demeton (total)	
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichlornate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes: _____

LDC #: 25916G40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: SVG
2nd Reviewer:

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS 10108	P	126 (80-120)	( )	( )	1-4, 6, PBLK 10108	J dets/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS04116	F	124 (80-120)	( )	( )	5, PBLK04116	
		P	124 ( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25916 G40

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC _____ HPLC ✓

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/3/2011	RDX	86.39	86.39	92.776	92.776	12.3	12.3
	X6329A		2,4,6-TNT	194.06	194.07	195.53	195.53	3.2	3.2

C	A
498.5	43066.9
500.5	97129.6

Conc	RDX
29.6	112.02
99.7	94.49
498.5	86.39
997.0	85.92
1994.0	85.06
X=	92.78
S=	11.408

	2,4,6-TNT
30.03	187.99
100.10	205.59
500.50	194.06
1001.00	194.93
2002.00	195.09
X=	195.53
S=	6.340

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G40

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC____HPLC✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	2E12119.39R	5/3/2011	RDX	987.00	914.98	914.98	7.3	7.3
			2,4,6-TNT	1001.00	996.77	996.78	0.4	0.4
2	2E12119.51R	5/3/2011	RDX	493.50	461.76	461.76	6.4	6.4
			2,4,6-TNT	500.50	495.32	495.33	1.0	1.0
3	2E12119.63R	5/4/2011	RDX	987.00	926.36	926.36	6.1	6.1
			2,4,6-TNT	1001.00	1008.00	1008.00	0.7	0.7

		CCV1	CCV2	CCV3
Compound	CF	Area	Area	Area
RDX	92.776	84888	42840	85944
2,4,6-TNT	195.53	194902	96852	197097

LDC #: 25916 G 40

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: ___ GC / HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	Chrompack	2000	2322.4	116	116	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G40

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: SV6
2nd Reviewer:

METHOD: ___ GC _/_ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 10108

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2002.25	NA	2179.66	NA	109	109				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	2370.83	↓	119	119				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G 40

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVC
2nd Reviewer: A

METHOD: __ GC / __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name MD

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 12, 2011
LDC Report Date:	August 9, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G41 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVC
2nd Reviewer: C

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification ~~ICV~~	A	CCV ~~ICV~~ ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 22104	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G41

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G41

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (15.52 std)	Recalculated (15.52 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/18/2011	m-Terphenyl	34216.47	34216.47	33038.04	33038.04	2.4	2.4
	H6611B								

C	A
15.52	531039.6

Conc	m-Terphenyl
3.88	32598.79
7.76	32453.61
15.52	34216.47
31.04	33538.43
38.80	32382.91
X=	33038.04
S=	806.657

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 G41

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	R104.41R	4/19/2011	m-Terphenyl	31.04	31.66	31.66	2.0	2.0
2	R104.52R	4/20/2011	m-Terphenyl	31.04	32.09	32.09	3.4	3.4
3	R104.63R	4/20/2011	m-Terphenyl	31.04	32.13	32.13	3.5	3.5

	Compound	Area	CF
CCV1	m-Terphenyl	1045923	33038.04
CCV2	m-Terphenyl	1060351	33038.04
CCV3	m-Terphenyl	1061568	33038.04

LDC #: 25916 G4)

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: CA

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Tricontane-d62 ✓	ZB-5	0.33	0.296	89	89	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25 916 G4

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: SG
2nd Reviewer: CK

METHOD: ___ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 22104

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl (8015)	1.68	NA	1.38	NA	82	82				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G 41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: / **GC** __ **HPLC**

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name VD

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 9, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G43 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer: A

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RL	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK 32103	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G43

VALIDATION FINDINGS CHECKLIST

Reviewer: JV6
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916 G93

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/18/2011	Methanol	3.054	3.054	3.268	3.268	9.3	9.3
	H2739B								

C	H
5000	15272.39

Conc	Methanol
1000	3.325
2500	3.169
5000	3.054
10000	3.021
2.37	3.769
X=	3.268
S=	0.305

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 29169G93

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0003	4/13/2011	Methanol	2500	2382.57	2252.49	9.9	9.9
	H2739B							
2	0012	4/13/2011	Methanol	2500	2538.03	2538.03	1.5	1.5
	H2739B							
3	0025	4/13/2011	Methanol	2500	2382.57	2553.33	2.1	2.1
	H2739B							

	Compound	Height	CF
CCV1	Methanol	7360	3.268
CCV2	Methanol	8293	3.268
CCV3	Methanol	8343	3.268

LDC #: 25916G43

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	RTX-1	2500	1762.1	70	70	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G43

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: SV6
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: ECS3221/03

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol (8015)	2500	NA	2103.6	NA	84	84	—			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 916 643

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-015-SA8N-SS-0.0-0.5
SL-016-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5
SL-048-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5

Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 916 25786G45 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV
2nd Reviewer: A

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RL	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK21105	21		31	
2	SL-015-SA8N-SS-0.0-0.5	12	PBLK01109	22		32	
3	SL-016-SA8N-SS-0.0-0.5	13	PBLK03110	23		33	
4	SL-019-SA8N-SS-0.0-0.5	14		24		34	
5	SL-020-SA8N-SS-0.0-0.5	15		25		35	
6	SL-021-SA8N-SS-0.0-0.5	16		26		36	
7	SL-022-SA8N-SS-0.0-0.5	17		27		37	
8	SL-047-SA8N-SS-0.0-0.5	18		28		38	
9	SL-048-SA8N-SS-0.0-0.5	19		29		39	
10	SL-050-SA8N-SS-0.0-0.5	20		30		40	

Notes: _____

LDC #: 25916 G45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVL
2nd Reviewer: C

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				

LDC #: 25916G45

VALIDATION FINDINGS CHECKLIST

Reviewer: JMB
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC / HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (211.111 std)	Recalculated (211.111 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/18/2011	Ethylene glycol	285.9390	285.9389	286.1358	286.1358	14.2	14.2
	H6612A	(GLF108A)							
2	ICAL	4/19/2011	Ethylene glycol	263.403	263.403	268.077	268.077	15.50	15.50
	H6612B	(GLF109A)							
3	ICAL	4/20/2011	Ethylene glycol	270.764	270.764	268.751	268.751	17.70	17.70
	H6612A	(GLF110A)							

	C	H
ICAL 1	211.111	60364.84
ICAL 2	211.111	55607.25
ICAL 3	211.111	57161.27

	ICAL1	ICAL2	ICAL3
Conc	Ethylene glycol	Ethylene glycol	Ethylene glycol
52.778	229.670	213.977	204.675
105.556	266.975	248.010	242.796
211.111	285.939	263.403	270.764
316.667	314.273	293.111	299.586
527.778	333.822	321.883	325.935
X=	286.1358	268.077	268.7512
S=	40.685	41.452	47.445

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916G45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	F108.0022	4/18/2011	Ethylene glycol	105.56	106.34	106.34	0.7	0.7
2	F109B.0012	4/19/2011	Ethylene glycol	302.10	333.75	333.75	10.5	10.5
3	F110.0013	4/20/2011	Ethylene glycol	302.10	340.94	340.94	12.9	12.9

	Height	CF
CCV1	30428	286.14
CCV2	89471	268.08
CCV3	91628	268.75

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	ZB-Wax	192	177	92	92 ✓	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 G45

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS21105

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
E. glycol (8015)	198.16	NA	206.24	NA	104	104				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916G 95

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: __/GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name MD

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 10, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-012-SA8N-SS-0.0-0.5
SL-019-SA8N-SS-0.0-0.5
SL-020-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-022-SA8N-SS-0.0-0.5
SL-047-SA8N-SS-0.0-0.5

Introduction

This data review covers 6 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-012-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G71 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/08/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SW6
2nd Reviewer:

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/~~ICV~~	A	CW/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and ~~CRQLs~~ RLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1	SL-012-SA8N-SS-0.0-0.5	11	PBLK04115	21		31	
2	SL-019-SA8N-SS-0.0-0.5	12		22		32	
3	SL-020-SA8N-SS-0.0-0.5	13		23		33	
4	SL-021-SA8N-SS-0.0-0.5	14		24		34	
5	SL-022-SA8N-SS-0.0-0.5	15		25		35	
6	SL-047-SA8N-SS-0.0-0.5	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25916 G 71

VALIDATION FINDINGS CHECKLIST

Reviewer: JB
2nd Reviewer: A

Method: ____GC / ____HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	/			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		/		
Did the initial calibration meet the curve fit acceptance criteria?			/	
Were the RT windows properly established?	/			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ___/%D or ___%R	/			
Was a continuing calibration analyzed daily?	/			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	/			
Were all the retention times within the acceptance windows?	/			
V. Blanks				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	/			
If the percent recovery (%R) of one or more surrogates was outside QC limits, was a reanalysis performed to confirm %R?			/	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			/	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		/		
Was a MS/MSD analyzed every 20 samples of each matrix?		/		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			/	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25916 G71

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

METHOD: GC _____ HPLC ✓

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (2002 std)	Recalculated (2002 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	4/26/2011	Formaldehyde	62.42	62.42	59.00	59.00	4.0	4.0
	F6259A								

C	H
2002	124960.8

Conc	Ethylene glycol
500.5	56.45
1001.0	57.48
2002.0	62.42
6006.0	60.29
10010.0	58.38
X=	59.00
S=	2.375

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC # 25916 671

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC____HPLC✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where:
N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	1F4117.20R	4/28/2011	Formaldehyde	2002.00	2148.13	2148.13	7.3	7.3

CCV1

Compound	Height	CF
Formaldehyde	126748	59.00

LDC #: 25916 G71

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: CA

METHOD: __ GC ✓ __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	SVP-PAH	4000	3536.5	89	88.4	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 25916 & 71

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS/LCSD samples: LCS 04 115

Compound	Spike Added (ug/Kg)		Spike Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde (8315A)	5010	NA	490 & 1V	NA	98	98				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G7)

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: MC
2nd Reviewer: A

METHOD: N/A GC / HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound In the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 12, 2011

LDC Report Date: August 11, 2011

Matrix: Soil

Parameters: Perchlorate

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE125

Sample Identification

SL-016-SA8N-SS-0.0-0.5
SL-021-SA8N-SS-0.0-0.5
SL-050-SA8N-SS-0.0-0.5
SL-206-SA5A-SB-4.0-5.0
SL-228-SA5A-SB-3.0-4.0

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required by the method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE125	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE125

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE125	SL-016-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-206-SA5A-SB-4.0-5.0 SL-228-SA5A-SB-3.0-4.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE125

No Sample Data Qualified in this SDG

LDC #: 25916G87 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/09/11
SDG #: DE125 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SVG
2nd Reviewer: A

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/12/11
II.	GC/MS Instrument performance check	N	
III.	Initial calibration	A	r
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15% unlabeled ≤ 50% labeled LCDV ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/~~CRQLs~~ RL's	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Soil

1	SL-016-SA8N-SS-0.0-0.5	11	PBLK18108	21		31	
2	SL-021-SA8N-SS-0.0-0.5	12		22		32	
3	SL-050-SA8N-SS-0.0-0.5	13		23		33	
4	SL-206-SA5A-SB-4.0-5.0	14		24		34	
5	SL-228-SA5A-SB-3.0-4.0	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25 916 G87

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: C

Method: ~~Semivolatiles~~ CLP4 (EPA SW 846 Method ~~8270C~~ 6850)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?		✓		
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ ~~25%~~ 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		✓		
Was a MS/MSD analyzed every 20 samples of each matrix?		✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25916 G87

VALIDATION FINDINGS CHECKLIST

Reviewer: JV
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?		✓		
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?		✓		
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 24916 G87

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JV6
2nd Reviewer:

METHOD: EPA SW 846 Method 6850

Parameter: Perchlorate

Order of regression: Linear

Date	Instrument	Compound	Points	y area ratio	x conc ratio	RF
18-Feb-11	LCMS A5	Perchlorate	Point 1	0.019476	0.02	0.9738
			Point 2	0.040512	0.04	1.0128
			Point 3	0.100518	0.10	1.0052
			Point 4	0.202802	0.20	1.0140
			Point 5	0.394227	0.40	0.9856
			Point 6	1.023635	1.00	1.0236
			Point 7	2.552726	2.50	1.0211
						1.0052

Regression Output: Regression Output:		Reported WLR	
Constant	-0.00304	c =	-0.00300
Std Err of Y Est	0.04		
R Squared	0.99997	r^2 =	0.999970
No. of Observations	6.00		
Degrees of Freedom	4.00		
		m =	0.1022
X Coefficient(s)	1.02234		
Std Err of Coef.	0.01		

LDC # 28 916 687

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: CA

METHOD:LCMS Perchlorate (EPA SW 846 Method 6850)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	ms5p11010121	4/21/2011	Perchlorate (CLO4-18)	0.4	0.435	0.434	9	9
2	ms5p11010121	4/21/2011	Perchlorate (CLO4-18)	4	3.990	3.994	0	0

	y=mx+b Response(y)	m	b	Conc(x)	Final conc
Sample #2	0.031239831	0.102234	-0.003	0.3349	3.3492
CCV1	0.041414732	0.102234	-0.003	0.4344	
CCV2	0.405337113	0.102234	-0.003	3.9941	

LDC #: 25916 687

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JH
2nd Reviewer: [illegible]

ClO4 6850
METHOD: GC/MS ~~BNA~~ (EPA SW 846 Method ~~8270C~~)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 18108

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ ClO4	100	NA	103	NA	103	103				
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25916 G87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS ~~BNA~~ CLO4 (EPA SW 846 Method ~~8270C)~~ 6850

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 2, CLO4:

Conc = $\frac{(288)(\cancel{10})(\quad)(\quad)(\quad)}{(9219)(\quad) + 0.1003)(\quad)(\quad)}$

$\frac{(0.102224)}{(10)}$

= 3.3492

final conc. = $\frac{(3.3492)}{(0.885)}$ = 3.8 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

RECALC.2S

SAMPLE DELIVERY GROUP

DE126

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	TB-041311	6257888	TB	5030B	8015M	III
13-Apr-2011	TB-041311	6257888	TB	5030B	8260B	III
13-Apr-2011	TB-041311	6257888	TB	5030B	8260B SIM	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3050B	6010B	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3050B	6020	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3060A	7199	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8015M	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8082	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8270C	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	3550B	8270C SIM	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	Gen Prep	9045M	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	300.0	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	314.0	III
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257880	N	METHOD	7471A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3050B	6010B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3050B	6020	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3060A	7199	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3546	1625C	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8015B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8082	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8270C	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	3550B	8270C SIM	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8260B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	8330	8330A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	Gen Prep	9045M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	300.0	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	314.0	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	6850	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	7471A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8015B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8015M	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	8315A	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257885	N	METHOD	9012B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8015M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8270C	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	Gen Prep	9045M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257874	N	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257875	MS	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8082	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8270C	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	3550B	8270C SIM	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257876	MSD	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3050B	6010B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3050B	6020	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	3060A	7199	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	300.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	314.0	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5DUP	6257877	DUP	METHOD	7471A	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	P257874M320922A	MSD	3550B	8015M	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	P257874R320857A	MS	3550B	8015M	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3050B	6010B	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3050B	6020	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3060A	7199	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8082	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8270C	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	3550B	8270C SIM	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	300.0	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	314.0	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257873	FD	METHOD	7471A	III
13-Apr-2011	DUP02-SA8N-QC-041311DUP	P257873D290915B	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3050B	6010B	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3050B	6020	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3060A	7199	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8015M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8082	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8270C	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	3550B	8270C SIM	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	Gen Prep	9045M	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	300.0	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	314.0	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257878	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3050B	6010B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3050B	6020	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3060A	7199	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8082	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8270C	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	3550B	8270C SIM	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	5035	8260B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	5035	8260B SIM	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257886	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3050B	6010B	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3050B	6020	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3060A	7199	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8082	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8270C	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	3550B	8270C SIM	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	314.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257887	N	METHOD	7471A	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D270604B	DUP	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D271850B	DUP	METHOD	314.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0DUP	P257887D291010B	DUP	Gen Prep	9045M	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0MS	P257887R270618B	MS	METHOD	300.0	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0MS	P257887R271912B	MS	METHOD	314.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3005A	6010B	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3020A	6020	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8082	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8270C	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	3510C	8270C SIM	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	300.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	314.0	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	7199	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	8015M	III
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	Gen Prep	9040B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	EB02-SA8N-SS-041311	6257881	EB	METHOD	7470A	III
13-Apr-2011	EB02-SA8N-SS-041311MSD	P257881M322309A	MSD	Gen Prep	8015M	III
13-Apr-2011	EB02-SA8N-SS-041311MS	P257881R322234A	MS	Gen Prep	8015M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3050B	6010B	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3050B	6020	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3060A	7199	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8015M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8082	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8270C	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	3550B	8270C SIM	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	Gen Prep	9045M	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	300.0	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	314.0	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	6850	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257879	N	METHOD	7471A	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3050B	6010B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3050B	6020	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3060A	7199	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8082	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8270C	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	3550B	8270C SIM	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	5035	8260B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	5035	8260B SIM	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	Gen Prep	9045M	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	300.0	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257884	N	METHOD	7471A	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3050B	6010B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3050B	6020	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3060A	7199	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8082	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8270C	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	3550B	8270C SIM	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	5035	8260B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	5035	8260B SIM	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	Gen Prep	9045M	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	300.0	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	314.0	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257882	N	METHOD	7471A	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3050B	6010B	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3050B	6020	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3060A	7199	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8082	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8270C	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	3550B	8270C SIM	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	Gen Prep	9045M	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	300.0	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	314.0	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	6850	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257883	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected: 4/13/2011 10:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 12:55:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 4:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 4:11:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 2:28:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-204-SA5A-SB-4.0-5.0 *Collected:* 4/13/2011 9:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	21.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-205-SA5A-SB-4.0-5.0 *Collected:* 4/13/2011 11:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-205-SA5A-SB-8.0-9.0 *Collected:* 4/13/2011 11:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 *Collected:* 4/13/2011 10:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.46	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-027-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.09	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Sample ID: SL-028-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.91	J	1.01	MDL	5.99	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 10:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.74	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.82	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.71	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	96.1	J	40.9	MDL	110	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.22	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.26	J	0.977	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA2 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.57	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z
TIN	3.50	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	95.8	J	40.4	MDL	108	PQL	mg/Kg	J	Z
Zirconium	3.07	J	0.910	MDL	5.41	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 4:11:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	0.964	MDL	5.41	PQL	mg/Kg	J	Z
TIN	2.60	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 2:28:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	113	J	42.6	MDL	114	PQL	mg/Kg	J	Z
Zirconium	3.33	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 2:28:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.20	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
TIN	2.84	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 9:19:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.72	J	0.949	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 9:19:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.68	J	1.01	MDL	5.65	PQL	mg/Kg	J	Z
TIN	2.73	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	95.0	J	42.7	MDL	114	PQL	mg/Kg	J	Z
Zirconium	3.57	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.53	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	106	J	41.9	MDL	112	PQL	mg/Kg	J	Z
Zirconium	2.86	J	0.943	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.78	J	0.999	MDL	5.62	PQL	mg/Kg	J	Z
TIN	2.70	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected: 4/13/2011 10:15:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.738		0.0698	MDL	0.233	PQL	mg/Kg	J	Q
ARSENIC	6.75		0.0931	MDL	0.465	PQL	mg/Kg	J	Q
BERYLLIUM	0.895		0.0186	MDL	0.116	PQL	mg/Kg	J	E
CADMIUM	1.31		0.0465	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	36.1		0.140	MDL	0.465	PQL	mg/Kg	J	Q, E, A
COBALT	11.4		0.0233	MDL	0.116	PQL	mg/Kg	J	Q, E
COPPER	54.9		0.0768	MDL	0.465	PQL	mg/Kg	J	E
LEAD	29.3		0.0121	MDL	0.233	PQL	mg/Kg	J	E
NICKEL	26.0		0.116	MDL	0.465	PQL	mg/Kg	J	Q, E
SILVER	0.502		0.0140	MDL	0.116	PQL	mg/Kg	J	FD
THALLIUM	0.359		0.0349	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	63.0		0.0256	MDL	0.116	PQL	mg/Kg	J	E
ZINC	188		0.652	MDL	3.49	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP02-SA8N-QC-041311** ***Collected:*** **4/13/2011 10:15:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.200	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: **DUP02-SA8N-QC-041311** ***Collected:*** **4/13/2011 10:15:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.630		0.0582	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: **DUP02-SA8N-QC-041311** ***Collected:*** **4/13/2011 10:15:00** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	195		0.126	MDL	0.465	PQL	mg/Kg	J	E

Sample ID: **SL-027-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.678		0.0674	MDL	0.225	PQL	mg/Kg	J	Q
ARSENIC	7.19		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.970		0.0180	MDL	0.112	PQL	mg/Kg	J	E
CADMIUM	1.30		0.0449	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	39.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	10.7		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	57.3		0.0741	MDL	0.449	PQL	mg/Kg	J	E
LEAD	31.2		0.0117	MDL	0.225	PQL	mg/Kg	J	E
NICKEL	28.5		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.298		0.0135	MDL	0.112	PQL	mg/Kg	J	FD
THALLIUM	0.340		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	65.4		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	182		0.629	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: **SL-027-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:10:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-027-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:10:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.779		0.0562	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-027-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:10:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	198		0.121	MDL	0.449	PQL	mg/Kg	J	E

Sample ID: SL-028-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.240		0.0692	MDL	0.231	PQL	mg/Kg	J	Q
ARSENIC	5.05		0.0922	MDL	0.461	PQL	mg/Kg	J	Q
BERYLLIUM	0.630		0.0184	MDL	0.115	PQL	mg/Kg	J	E
CADMIUM	1.14		0.0461	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.138	MDL	0.461	PQL	mg/Kg	J	Q, E, A
COBALT	7.61		0.0231	MDL	0.115	PQL	mg/Kg	J	Q, E
COPPER	27.0		0.0761	MDL	0.461	PQL	mg/Kg	J	E
LEAD	22.8		0.0120	MDL	0.231	PQL	mg/Kg	J	E
NICKEL	17.5		0.115	MDL	0.461	PQL	mg/Kg	J	Q, E
SILVER	0.0961	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
THALLIUM	0.278		0.0346	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	43.2		0.0254	MDL	0.115	PQL	mg/Kg	J	E
ZINC	125		0.646	MDL	3.46	PQL	mg/Kg	J	E

Sample ID: SL-028-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:30:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:30:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.495		0.0577	MDL	0.115	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-028-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:30:00** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.125	MDL	0.461	PQL	mg/Kg	J	E

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	7.70		0.0855	MDL	0.428	PQL	mg/Kg	J	Q
BERYLLIUM	0.894		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CHROMIUM	28.9		0.128	MDL	0.428	PQL	mg/Kg	J	Q, E, A
COBALT	11.2		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	20.1		0.0706	MDL	0.428	PQL	mg/Kg	J	E
LEAD	15.2		0.0111	MDL	0.214	PQL	mg/Kg	J	E
NICKEL	19.8		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E
SILVER	0.0537	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.475		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	52.9		0.0235	MDL	0.107	PQL	mg/Kg	J	E
ZINC	99.9		0.599	MDL	3.21	PQL	mg/Kg	J	E

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.274		0.0428	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.687		0.0535	MDL	0.107	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 12:55:00** **Analysis Type: REA8** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	137		0.115	MDL	0.428	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.472		0.0639	MDL	0.213	PQL	mg/Kg	J	Q
ARSENIC	6.22		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.880		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.450		0.0426	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	35.1		0.128	MDL	0.426	PQL	mg/Kg	J	Q, E, A
COBALT	11.7		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E
COPPER	22.1		0.0703	MDL	0.426	PQL	mg/Kg	J	E
LEAD	14.9		0.0111	MDL	0.213	PQL	mg/Kg	J	E
NICKEL	23.6		0.107	MDL	0.426	PQL	mg/Kg	J	Q, E
SILVER	0.0697	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.428		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	61.9		0.0234	MDL	0.107	PQL	mg/Kg	J	E
ZINC	93.7		0.597	MDL	3.20	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.263	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: REA7** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.665		0.0533	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: REA8** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.115	MDL	0.426	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0866	J	0.0691	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	16.9		0.0921	MDL	0.461	PQL	mg/Kg	J	Q
BERYLLIUM	1.40		0.0184	MDL	0.115	PQL	mg/Kg	J	E
CADMIUM	0.0696	J	0.0461	MDL	0.115	PQL	mg/Kg	J	Z, Q
CHROMIUM	41.5		0.138	MDL	0.461	PQL	mg/Kg	J	Q, E, A
COBALT	8.20		0.0230	MDL	0.115	PQL	mg/Kg	J	Q, E
COPPER	33.2		0.0760	MDL	0.461	PQL	mg/Kg	J	E
LEAD	16.4		0.0120	MDL	0.230	PQL	mg/Kg	J	E
NICKEL	27.0		0.115	MDL	0.461	PQL	mg/Kg	J	Q, E
SILVER	0.0443	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
THALLIUM	0.487		0.0345	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	62.4		0.0253	MDL	0.115	PQL	mg/Kg	J	E
ZINC	106		0.645	MDL	3.45	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.171	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.04		0.0576	MDL	0.115	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	134		0.124	MDL	0.461	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0868	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q
ARSENIC	8.20		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
BERYLLIUM	0.886		0.0173	MDL	0.108	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.172		0.0433	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	30.3		0.130	MDL	0.433	PQL	mg/Kg	J	Q, E, A
COBALT	9.45		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	17.7		0.0715	MDL	0.433	PQL	mg/Kg	J	E
LEAD	8.50		0.0113	MDL	0.217	PQL	mg/Kg	J	E
NICKEL	25.1		0.108	MDL	0.433	PQL	mg/Kg	J	Q, E
SILVER	0.0442	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
THALLIUM	0.389		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	48.8		0.0238	MDL	0.108	PQL	mg/Kg	J	E
ZINC	72.0		0.606	MDL	3.25	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.869		0.0541	MDL	0.108	PQL	mg/Kg	J	E

Sample ID: SL-060-SA5A-SB-8.0-9.0 **Collected:** 4/13/2011 4:11:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.117	MDL	0.433	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0897	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	8.78		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
BERYLLIUM	1.03		0.0176	MDL	0.110	PQL	mg/Kg	J	E
CADMIUM	0.0835	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, Q
CHROMIUM	33.5		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	8.50		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	18.0		0.0725	MDL	0.440	PQL	mg/Kg	J	E
LEAD	9.84		0.0114	MDL	0.220	PQL	mg/Kg	J	E
NICKEL	24.9		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0526	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.351		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	52.0		0.0242	MDL	0.110	PQL	mg/Kg	J	E
ZINC	71.2		0.615	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.558		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.119	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0691	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	7.68		0.0886	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.892		0.0177	MDL	0.111	PQL	mg/Kg	J	E
CADMIUM	0.0509	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z, Q
CHROMIUM	25.7		0.133	MDL	0.443	PQL	mg/Kg	J	Q, E, A
COBALT	7.86		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	9.83		0.0731	MDL	0.443	PQL	mg/Kg	J	E
LEAD	7.92		0.0115	MDL	0.222	PQL	mg/Kg	J	E
NICKEL	17.1		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.297		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	50.0		0.0244	MDL	0.111	PQL	mg/Kg	J	E
ZINC	54.9		0.620	MDL	3.32	PQL	mg/Kg	J	E

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0982	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **REA7** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.371		0.0554	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **REA8** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	93.7		0.120	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: **SL-205-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 11:14:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	8.97		0.0897	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	1.19		0.0179	MDL	0.112	PQL	mg/Kg	J	E
CADMIUM	0.0767	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z, Q
CHROMIUM	29.7		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	19.1		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	15.9		0.0740	MDL	0.449	PQL	mg/Kg	J	E
LEAD	10.9		0.0117	MDL	0.224	PQL	mg/Kg	J	E
NICKEL	25.3		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.0751	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.365		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	56.0		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	69.4		0.628	MDL	3.37	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0597	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA7** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.995		0.0561	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: REA8** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.121	MDL	0.449	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0776	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	6.57		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.735		0.0180	MDL	0.112	PQL	mg/Kg	J	E
CHROMIUM	17.9		0.135	MDL	0.449	PQL	mg/Kg	J	Q, E, A
COBALT	5.45		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	10.7		0.0741	MDL	0.449	PQL	mg/Kg	J	E
LEAD	6.12		0.0117	MDL	0.225	PQL	mg/Kg	J	E
NICKEL	11.6		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E
SILVER	0.0462	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.268		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	37.1		0.0247	MDL	0.112	PQL	mg/Kg	J	E
ZINC	43.7		0.629	MDL	3.37	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA6** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0524	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 6020 **Matrix: SO**

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA7** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.446		0.0562	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: REA8** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	68.3		0.121	MDL	0.449	PQL	mg/Kg	J	E

Method Category: METALS
Method: 7199 **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected: 4/13/2011 10:15:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	U	0.24	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:30:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 4:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7199 **Matrix: SO**

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS
Method: 7471A **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected:** 4/13/2011 10:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0795	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0873	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0341	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0494	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0155	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0078	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS
Method: 7471A **Matrix: SO**

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 9:19:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5A-SB-8.0-9.0 **Collected: 4/13/2011 11:22:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8015M **Matrix: AQ**

Sample ID: EB02-SA8N-SS-041311 **Collected: 4/13/2011 12:15:00** **Analysis Type: REA** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q
Propylene glycol	10	U	10	MDL	100	PQL	mg/L	UJ	Q

Method Category: SVOA
Method: 8015M **Matrix: SO**

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:10:00** **Analysis Type: REA2** **Dilution: 5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.6	J	2.3	MDL	7.0	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 9:19:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.86	J	0.45	MDL	1.3	PQL	mg/Kg	U	B
EFH (C30-C40)	3.6		0.45	MDL	1.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 8:40:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.8	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.5	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected: 4/13/2011 11:14:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.7	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP02-SA8N-QC-041311 **Collected: 4/13/2011 10:15:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	55	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	66	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	98	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	51	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	37	J	20	MDL	200	PQL	ug/Kg	J	Z
CHRYSENE	91	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	45	J	20	MDL	200	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	47	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	67	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SL-027-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:10:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	Q

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected: 4/13/2011 10:30:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	24	J	20	MDL	200	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-028-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	400	PQL	ug/Kg	J	Z
CHRYSENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z
FLUORANTHENE	34	J	20	MDL	200	PQL	ug/Kg	J	Z
PYRENE	28	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-046-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 8:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-060-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 4:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-060-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 4:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-205-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 11:22:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: **EB02-SA8N-SS-041311** ***Collected:*** **4/13/2011 12:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	0.13	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.53	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	3.0		0.051	MDL	1.0	PQL	ug/L	J	L
NAPHTHALENE	0.034	J	0.030	MDL	0.051	PQL	ug/L	J	Z
PHENANTHRENE	0.018	J	0.010	MDL	0.051	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **DUP02-SA8N-QC-041311** ***Collected:*** **4/13/2011 10:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.63	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	260		7.0	MDL	21	PQL	ug/Kg	J	FD
Butylbenzylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	230		7.0	MDL	21	PQL	ug/Kg	J	FD

Sample ID: **SL-027-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.8	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.51	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	0.82	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD
BIS(2-ETHYLHEXYL)PHTHALATE	41		7.1	MDL	21	PQL	ug/Kg	J	FD
Butylbenzylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	0.98	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-028-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.56	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
ANTHRACENE	1.7	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 12:55:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.51	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-046-SA8N-SS-0.0-0.5 **Collected:** 4/13/2011 8:40:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.59	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-060-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 4:05:00 **Analysis Type:** RES **Dilution:** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-061-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 2:28:00 **Analysis Type:** RES **Dilution:** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-204-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 9:19:00 **Analysis Type:** RES **Dilution:** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	3.6	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-205-SA5A-SB-4.0-5.0 **Collected:** 4/13/2011 11:14:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE126

Method Blank Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11108BB220014	4/26/2011 12:14:00 AM	PHOSPHORUS	1.32 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0
P11108BB220410	4/27/2011 4:10:00 AM	LITHIUM TIN	0.30 mg/Kg 1.42 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP02-SA8N-QC-041311(REA2)	TIN	3.46 mg/Kg	3.46U mg/Kg
SL-027-SA8N-SS-0.0-0.5(REA2)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-028-SA8N-SS-0.0-0.5(REA2)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-032-SA8N-SS-0.0-0.5(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-046-SA8N-SS-0.0-0.5(REA2)	TIN	2.22 mg/Kg	2.22U mg/Kg
SL-060-SA5A-SB-4.0-5.0(REA2)	TIN	3.50 mg/Kg	3.50U mg/Kg
SL-060-SA5A-SB-8.0-9.0(REA2)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-061-SA5A-SB-4.0-5.0(REA2)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-204-SA5A-SB-4.0-5.0(REA2)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-205-SA5A-SB-4.0-5.0(REA2)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-205-SA5A-SB-8.0-9.0(REA2)	TIN	2.70 mg/Kg	2.70U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11126AB220909A	4/22/2011 9:09:00 AM	COPPER	0.119 mg/Kg	DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09092AB320241A	4/28/2011 2:41:00 AM	EFH (C21-C30) EFH (C30-C40)	0.93 mg/Kg 0.92 mg/Kg	SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-204-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-204-SA5A-SB-4.0-5.0(REA2)	EFH (C21-C30)	0.86 mg/Kg	1.3U mg/Kg
SL-204-SA5A-SB-4.0-5.0(REA2)	EFH (C30-C40)	3.6 mg/Kg	3.6U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB29B211235A	4/19/2011 12:35:00 PM	METHYLENE CHLORIDE TOLUENE	3.4 ug/Kg 0.11 ug/Kg	SL-060-SA5A-SB-4.0-5.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-060-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	3.9U ug/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.8U ug/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.6 ug/Kg	3.9U ug/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
EB02-SA8N-SS-041311MS EB02-SA8N-SS-041311MSD (EB02-SA8N-SS-041311)	ETHYLENE GLYCOL Propylene glycol	80 90	85 90	89.00-125.00 91.00-128.00	- -	ETHYLENE GLYCOL Propylene glycol	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	BENZIDINE	30	-	35.00-141.00	41 (30.00)	BENZIDINE	J (all detects) UJ (all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	ACENAPHTHENE Butylbenzylphthalate	106 -	106 448	63.00-105.00 57.00-173.00	- 116 (30.00)	ACENAPHTHENE Butylbenzylphthalate	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	0 0	0 0	29.00-146.00 39.00-149.00	- -	AROCLOR 1016 AROCLOR 1260	No Qual Diluted Out

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	-11 -1743	-128 -1815	49.00-123.00 49.00-123.00	21 (20.00) -	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS	ARSENIC	133	134	75.00-125.00	-	ARSENIC	
SL-027-SA8N-SS-0.0-0.5MSD	CADMIUM	151	-	75.00-125.00	-	CADMIUM	
(DUP02-SA8N-QC-041311	CHROMIUM	-	158	75.00-125.00	-	CHROMIUM	
SL-027-SA8N-SS-0.0-0.5	COBALT	129	-	75.00-125.00	-	COBALT	
SL-028-SA8N-SS-0.0-0.5	LEAD	196	-	75.00-125.00	-	LEAD	
SL-032-SA8N-SS-0.0-0.5	NICKEL	146	159	75.00-125.00	-	NICKEL	
SL-046-SA8N-SS-0.0-0.5	THALLIUM	-	127	75.00-125.00	-	THALLIUM	J(all detects)
SL-060-SA5A-SB-4.0-5.0	VANADIUM	140	-	75.00-125.00	-	VANADIUM	
SL-060-SA5A-SB-8.0-9.0	ZINC	313	214	75.00-125.00	-	ZINC	Pb, V, Zn
SL-061-SA5A-SB-4.0-5.0							No Qual, >4x
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							
SL-027-SA8N-SS-0.0-0.5MS	ANTIMONY	34	37	75.00-125.00	-	ANTIMONY	
SL-027-SA8N-SS-0.0-0.5MSD	COPPER	63	-	75.00-125.00	-	COPPER	
(DUP02-SA8N-QC-041311							
SL-027-SA8N-SS-0.0-0.5							
SL-028-SA8N-SS-0.0-0.5							
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							J(all detects)
SL-060-SA5A-SB-4.0-5.0							UJ(all non-detects)
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							Cu No Qual, >4x
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							
SL-027-SA8N-SS-0.0-0.5MS	BARIUM	-142	11	75.00-125.00	-	BARIUM	
SL-027-SA8N-SS-0.0-0.5MSD							
(DUP02-SA8N-QC-041311							
SL-027-SA8N-SS-0.0-0.5							
SL-028-SA8N-SS-0.0-0.5							
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							No Qual, >4x
SL-060-SA5A-SB-4.0-5.0							
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS	ALUMINUM	2687	2319	75.00-125.00	-	ALUMINUM	
SL-027-SA8N-SS-0.0-0.5MSD	CALCIUM	588	612	75.00-125.00	-	CALCIUM	
(DUP02-SA8N-QC-041311	IRON	1156	1231	75.00-125.00	-	IRON	
SL-027-SA8N-SS-0.0-0.5	MAGNESIUM	345	329	75.00-125.00	-	MAGNESIUM	
SL-028-SA8N-SS-0.0-0.5	POTASSIUM	131	148	75.00-125.00	-	POTASSIUM	
SL-032-SA8N-SS-0.0-0.5							
SL-046-SA8N-SS-0.0-0.5							No Qual, >4x
SL-060-SA5A-SB-4.0-5.0							
SL-060-SA5A-SB-8.0-9.0							
SL-061-SA5A-SB-4.0-5.0							
SL-204-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-4.0-5.0							
SL-205-SA5A-SB-8.0-9.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS **SL-027-SA8N-SS-0.0-0.5MSD** (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	PHOSPHORUS	-36	136	75.00-125.00	-	PHOSPHORUS	No Qual, >4x
SL-027-SA8N-SS-0.0-0.5MSD (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	MANGANESE	-	70	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0)	FLUORIDE	62	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-205-SA5A-SB-8.0-9.0MS (SL-205-SA5A-SB-8.0-9.0)	FLUORIDE	55	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-027-SA8N-SS-0.0-0.5MS **SL-027-SA8N-SS-0.0-0.5MSD** (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	TITANIUM	369	342	75.00-125.00	-	TITANIUM	No Qual, >4x

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-205-SA5A-SB-8.0-9.0DUP (SL-205-SA5A-SB-8.0-9.0)	FLUORIDE	54	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	BARIUM	29	20.00	
	BERYLLIUM	21	20.00	
	CHROMIUM	26	20.00	
	COBALT	28	20.00	
	COPPER	30	20.00	
	LEAD	32	20.00	J(all detects) UJ(all non-detects)
	MOLYBDENUM	27	20.00	
	NICKEL	25	20.00	
	SELENIUM	25	20.00	Se, Tl No Qual OK by difference
	THALLIUM	21	20.00	
	VANADIUM	24	20.00	
	ZINC	21	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	HEXAVALENT CHROMIUM	45	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-027-SA8N-SS-0.0-0.5DUP (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	MERCURY	71	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P6WDLCSQ262022 (EB02-SA8N-SS-041311)	ACENAPHTHENE Di-n-octylphthalate	116 154	- -	74.00-109.00 57.00-145.00	- -	ACENAPHTHENE Di-n-octylphthalate	J (all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WCLCSY261402 (EB02-SA8N-SS-041311)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11096AQ241416A P11096AY241357A (EB02-SA8N-SS-041311)	Aroclor 5442	86	94	35.00-84.00	-	Aroclor 5432, 5442, 5460	J(all detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A LCS1Y14Y210309A (TB-041311)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11080AQ242114A (SL-204-SA5A-SB-4.0-5.0)	PETN	126	-	80.00-120.00	-	PETN	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11126AQ220912A (DUP02-SA8N-QC-041311 SL-027-SA8N-SS-0.0-0.5 SL-028-SA8N-SS-0.0-0.5 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0)	ANTIMONY	73	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Field Duplicate RPD Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
MOISTURE	15.2	14.9	2		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
FLUORIDE	2.6	1.6	48	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
ALUMINUM	27200	23600	14	50.00	No Qualifiers Applied
BORON	23.6	15.2	43	50.00	
CALCIUM	26900	25400	6	50.00	
IRON	29600	48200	48	50.00	
LITHIUM	25.1	21.6	15	50.00	
MAGNESIUM	7940	7060	12	50.00	
MANGANESE	444	459	3	50.00	
PHOSPHORUS	1580	1430	10	50.00	
POTASSIUM	6680	6340	5	50.00	
SODIUM	219	219	0	50.00	
STRONTIUM	111	112	1	50.00	
TIN	3.09	3.46	11	50.00	
TITANIUM	1360	1350	1	50.00	
Zirconium	7.09	6.37	11	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
ANTIMONY	0.678	0.738	8	50.00	No Qualifiers Applied
ARSENIC	7.19	6.75	6	50.00	
BARIUM	198	195	2	50.00	
BERYLLIUM	0.970	0.895	8	50.00	
CADMIUM	1.30	1.31	1	50.00	
CHROMIUM	39.7	36.1	9	50.00	
COBALT	10.7	11.4	6	50.00	
COPPER	57.3	54.9	4	50.00	
LEAD	31.2	29.3	6	50.00	
MOLYBDENUM	0.779	0.630	21	50.00	
NICKEL	28.5	26.0	9	50.00	
SELENIUM	0.216	0.200	8	50.00	
THALLIUM	0.340	0.359	5	50.00	
VANADIUM	65.4	63.0	4	50.00	
ZINC	182	188	3	50.00	
SILVER	0.298	0.502	51	50.00	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
HEXAVALENT CHROMIUM	0.65	1.2 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
MERCURY	0.0873	0.0795	9	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
1-METHYLNAPHTHALENE	1.3	1.4	7	50.00	No Qualifiers Applied
2-METHYLNAPHTHALENE	1.8	2.5	33	50.00	
ACENAPHTHYLENE	0.51	0.63	21	50.00	
DIBENZO(A,H)ANTHRACENE	0.98	1.3	28	50.00	
NAPHTHALENE	3.9	4.6	16	50.00	
PHENANTHRENE	4.9	7.3	39	50.00	
ANTHRACENE	0.82	1.5	59	50.00	J(all detects) UJ(all non-detects)
BIS(2-ETHYLHEXYL)PHTHALATE	41	260	146	50.00	
Butylbenzylphthalate	21 U	8.8	200	50.00	
Di-n-octylphthalate	21 U	230	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
PH	8.27	8.21	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
Oxidation Reduction Potential	312	329	5		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA8N-SS-041311	Diethylphthalate	J	0.13	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.53	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.034	0.051	PQL	ug/L	
	PHENANTHRENE	J	0.018	0.051	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	TIN	J	3.46	11.5	PQL	mg/Kg	J (all detects)
SL-027-SA8N-SS-0.0-0.5	TIN	J	3.09	11.8	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	TIN	J	2.74	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.91	5.99	PQL	mg/Kg	
SL-032-SA8N-SS-0.0-0.5	TIN	J	2.71	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.82	5.35	PQL	mg/Kg	
SL-046-SA8N-SS-0.0-0.5	SODIUM	J	96.1	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.22	11.0	PQL	mg/Kg	
SL-060-SA5A-SB-4.0-5.0	BORON	J	1.57	5.81	PQL	mg/Kg	J (all detects)
	TIN	J	3.50	11.6	PQL	mg/Kg	
	Zirconium	J	3.26	5.81	PQL	mg/Kg	
SL-060-SA5A-SB-8.0-9.0	BORON	J	2.16	5.41	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.8	108	PQL	mg/Kg	
	TIN	J	2.60	10.8	PQL	mg/Kg	
	Zirconium	J	3.07	5.41	PQL	mg/Kg	
SL-061-SA5A-SB-4.0-5.0	BORON	J	2.20	5.71	PQL	mg/Kg	J (all detects)
	SODIUM	J	113	114	PQL	mg/Kg	
	TIN	J	2.84	11.4	PQL	mg/Kg	
	Zirconium	J	3.33	5.71	PQL	mg/Kg	
SL-204-SA5A-SB-4.0-5.0	BORON	J	2.68	5.65	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	11.3	PQL	mg/Kg	
	Zirconium	J	3.72	5.65	PQL	mg/Kg	
SL-205-SA5A-SB-4.0-5.0	BORON	J	2.53	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.0	114	PQL	mg/Kg	
	TIN	J	2.62	11.4	PQL	mg/Kg	
	Zirconium	J	3.57	5.72	PQL	mg/Kg	
SL-205-SA5A-SB-8.0-9.0	BORON	J	1.78	5.62	PQL	mg/Kg	J (all detects)
	SODIUM	J	106	112	PQL	mg/Kg	
	TIN	J	2.70	11.2	PQL	mg/Kg	
	Zirconium	J	2.86	5.62	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	SELENIUM	J	0.200	0.465	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	SELENIUM	J	0.216	0.449	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	SELENIUM	J	0.177	0.461	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0961	0.115	PQL	mg/Kg	
SL-032-SA8N-SS-0.0-0.5	ANTIMONY	J	0.113	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.151	0.428	PQL	mg/Kg	
	SILVER	J	0.0537	0.107	PQL	mg/Kg	
SL-046-SA8N-SS-0.0-0.5	SELENIUM	J	0.263	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0697	0.107	PQL	mg/Kg	
SL-060-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0866	0.230	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0696	0.115	PQL	mg/Kg	
	SELENIUM	J	0.171	0.461	PQL	mg/Kg	
	SILVER	J	0.0443	0.115	PQL	mg/Kg	
SL-060-SA5A-SB-8.0-9.0	ANTIMONY	J	0.0868	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.433	PQL	mg/Kg	
	SILVER	J	0.0442	0.108	PQL	mg/Kg	
SL-061-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0897	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0835	0.110	PQL	mg/Kg	
	SELENIUM	J	0.144	0.440	PQL	mg/Kg	
	SILVER	J	0.0526	0.110	PQL	mg/Kg	
SL-204-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0691	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0509	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0982	0.443	PQL	mg/Kg	
SL-205-SA5A-SB-4.0-5.0	ANTIMONY	J	0.114	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0767	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0597	0.449	PQL	mg/Kg	
	SILVER	J	0.0751	0.112	PQL	mg/Kg	
SL-205-SA5A-SB-8.0-9.0	ANTIMONY	J	0.0776	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0524	0.449	PQL	mg/Kg	
	SILVER	J	0.0462	0.112	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.65	1.2	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.2	PQL	mg/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-061-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	MERCURY	J	0.0795	0.115	PQL	mg/Kg	J (all detects)
SL-027-SA8N-SS-0.0-0.5	MERCURY	J	0.0873	0.111	PQL	mg/Kg	J (all detects)
SL-028-SA8N-SS-0.0-0.5	MERCURY	J	0.0341	0.113	PQL	mg/Kg	J (all detects)
SL-032-SA8N-SS-0.0-0.5	MERCURY	J	0.0494	0.107	PQL	mg/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	MERCURY	J	0.0155	0.108	PQL	mg/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	MERCURY	J	0.0078	0.115	PQL	mg/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	MERCURY	J	0.0058	0.105	PQL	mg/Kg	J (all detects)
SL-205-SA5A-SB-4.0-5.0	MERCURY	J	0.0035	0.112	PQL	mg/Kg	J (all detects)
SL-205-SA5A-SB-8.0-9.0	MERCURY	J	0.0060	0.112	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	3.6	7.0	PQL	mg/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	EFH (C21-C30)	J	0.86	1.3	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-046-SA8N-SS-0.0-0.5	AROCLOR 1254	J	1.8	1.9	PQL	ug/Kg	
	AROCLOR 1260	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.2	3.6	PQL	ug/Kg	
SL-205-SA5A-SB-4.0-5.0	Aroclor 5460	J	1.7	3.8	PQL	ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-060-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	3.9	PQL	ug/Kg	J (all detects)
SL-061-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	3.8	PQL	ug/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.6	3.9	PQL	ug/Kg	J (all detects)
SL-205-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	4.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	BENZO(A)ANTHRACENE	J	55	200	PQL	ug/Kg	
	BENZO(A)PYRENE	J	66	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	98	200	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	51	200	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	37	200	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	91	200	PQL	ug/Kg	
	FLUORANTHENE	J	45	200	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	47	200	PQL	ug/Kg	
	PYRENE	J	67	200	PQL	ug/Kg	
SL-028-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	22	200	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	24	200	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	400	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	28	200	PQL	ug/Kg	
	FLUORANTHENE	J	34	200	PQL	ug/Kg	
	PYRENE	J	28	200	PQL	ug/Kg	
SL-032-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	360	PQL	ug/Kg	J (all detects)
SL-046-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	360	PQL	ug/Kg	J (all detects)
SL-060-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)
SL-060-SA5A-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-204-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-205-SA5A-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	1-METHYLNAPHTHALENE	J	1.4	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.63	2.0	PQL	ug/Kg	
	ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	2.0	PQL	ug/Kg	
SL-027-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	2.0	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.8	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.51	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.82	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.98	2.0	PQL	ug/Kg	
SL-028-SA8N-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.1	2.0	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.56	2.0	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.7	2.0	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
SL-032-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.51	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE126 **Laboratory: LL**

EDD Filename: DE126_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-046-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.59	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.92	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	

LDC #: 25916H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE126 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Co, Fe, Pb, Mg, Mn, P, K, Ti, V, Zn, %x)
VII.	Duplicate Sample Analysis	N	D (Hg, Se, TI (SxRL) No.
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	%R: 16% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	DUP02-SA8N-QC-041311 D	11	SL-205-SA5A-SB-4.0-5.0	21		31	
2	SL-027-SA8N-SS-0.0-0.5 D	12	SL-205-SA5A-SB-8.0-9.0	22		32	
3	SL-028-SA8N-SS-0.0-0.5	13	SL-027-SA8N-SS-0.0-0.5MS	23		33	
4	SL-032-SA8N-SS-0.0-0.5	14	SL-027-SA8N-SS-0.0-0.5MSD	24		34	
5	SL-046-SA8N-SS-0.0-0.5	15	SL-027-SA8N-SS-0.0-0.5DUP	25		35	
6	EB02-SA8N-SS-041311	16		26		36	
7	SL-060-SA5A-SB-4.0-5.0	17		27		37	
8	SL-060-SA5A-SB-8.0-9.0	18		28		38	
9	SL-061-SA5A-SB-4.0-5.0	19		29		39	
10	SL-204-SA5A-SB-4.0-5.0	20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE127

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3050B	6010B	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3050B	6020	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3060A	7199	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3550B	8082	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3550B	8270C	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	3550B	8270C SIM	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	Gen Prep	9045M	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	METHOD	300.0	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	METHOD	314.0	III
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259053	N	METHOD	7471A	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3050B	6010B	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3050B	6020	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3060A	7199	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3550B	8015M	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3550B	8082	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3550B	8270C	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	3550B	8270C SIM	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	Gen Prep	9045M	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	METHOD	300.0	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	METHOD	314.0	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259046	N	METHOD	7471A	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3050B	6010B	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3050B	6020	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3060A	7199	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3546	1625C	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3550B	8015M	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3550B	8082	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3550B	8270C	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	3550B	8270C SIM	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	8330	8330A	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	Gen Prep	9045M	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	300.0	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	314.0	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	7471A	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	8015B	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	8015M	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	8315A	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259047	N	METHOD	9012B	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	3510C	8015B	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	3510C	8015M	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	3520C	1625C	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	8330	8330A	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	Gen Prep	300.0	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	Gen Prep	8015B	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	Gen Prep	8015M	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	Gen Prep	9040B	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	METHOD	8315A	III
14-Apr-2011	EB04-SA8N-SS-041411	6259059	EB	METHOD	9012B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3050B	6010B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3050B	6020	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3546	1625C	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3550B	8015B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3550B	8015M	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3550B	8082	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3550B	8270C	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	3550B	8270C SIM	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	8330	8330A	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	Gen Prep	9045M	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	300.0	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	314.0	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	7471A	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	8015B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	8015M	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	8315A	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259058	N	METHOD	9012B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5DUP	P259058D271124B	DUP	METHOD	300.0	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5MSD	P259058M322138A	MSD	METHOD	8015M	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5MS	P259058R271139B	MS	METHOD	300.0	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5MS	P259058R322103A	MS	METHOD	8015M	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3050B	6010B	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3050B	6020	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3060A	7199	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3550B	8082	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3550B	8270C	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	3550B	8270C SIM	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	Gen Prep	9045M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	METHOD	300.0	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	METHOD	314.0	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259052	N	METHOD	7471A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3050B	6010B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3050B	6020	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3060A	7199	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3546	1625C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3550B	8015B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3550B	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3550B	8082	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3550B	8270C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	3550B	8270C SIM	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	8330	8330A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	Gen Prep	9045M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	300.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	314.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	7471A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	8015B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	8315A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259054	N	METHOD	9012B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3050B	6010B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3050B	6020	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3060A	7199	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3546	1625C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3550B	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3550B	8082	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3550B	8270C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	3550B	8270C SIM	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	8330	8330A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	300.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	314.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	7471A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	8015B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	8315A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259055	MS	METHOD	9012B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3050B	6010B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3050B	6020	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3546	1625C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3550B	8015B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3550B	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3550B	8082	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3550B	8270C	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	3550B	8270C SIM	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	8330	8330A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	METHOD	7471A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	METHOD	8015B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	METHOD	8015M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259056	MSD	METHOD	8315A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	3050B	6020	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	3060A	7199	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	Gen Prep	9045M	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	METHOD	300.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	METHOD	314.0	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	METHOD	7471A	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5DUP	6259057	DUP	METHOD	9012B	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	3546	1625C	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	3550B	8015B	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	3550B	8015M	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	8330	8330A	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	METHOD	300.0	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	METHOD	8015B	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	METHOD	8015M	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	METHOD	8315A	III
14-Apr-2011	DUP03-SA8N-QC-041411	6259045	FD	METHOD	9012B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3050B	6010B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3050B	6020	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3060A	7199	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3546	1625C	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3550B	8015B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3550B	8015M	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3550B	8082	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3550B	8270C	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	3550B	8270C SIM	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	Gen Prep	9045M	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	300.0	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	314.0	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	7471A	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	8015B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	8015M	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	8315A	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259049	N	METHOD	9012B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3050B	6010B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3050B	6020	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3060A	7199	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3546	1625C	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3550B	8015B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3550B	8015M	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3550B	8082	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3550B	8270C	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	3550B	8270C SIM	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	8330	8330A	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	Gen Prep	9045M	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	300.0	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	314.0	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	7471A	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	8015B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	8015M	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	8315A	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259050	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3050B	6010B	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3050B	6020	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3060A	7199	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3546	1625C	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3550B	8015B	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3550B	8015M	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3550B	8082	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3550B	8270C	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	3550B	8270C SIM	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	8330	8330A	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	Gen Prep	9045M	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	300.0	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	314.0	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	7471A	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	8015B	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	8015M	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	8315A	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259048	N	METHOD	9012B	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3050B	6010B	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3050B	6020	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3060A	7199	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3550B	8082	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3550B	8270C	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	3550B	8270C SIM	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	Gen Prep	9045M	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	METHOD	314.0	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259051	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory:** LL

EDD Filename: DE127_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: EM
Method: 9040B **Matrix:** AQ

Sample ID: EB04-SA8N-SS-041411 *Collected:* 4/14/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	6.0		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM
Method: 300.0 **Matrix:** SO

Sample ID: DUP03-SA8N-QC-041411 *Collected:* 4/14/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	4.9		0.92	MDL	1.7	PQL	mg/Kg	J	Q, FD

Sample ID: SL-040-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 11:10:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	51.6		4.6	MDL	8.7	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-079-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 4:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.97	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	9.4		0.97	MDL	1.8	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 3:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-082-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	5.5		0.89	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.95	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	3.3		0.95	MDL	1.8	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.95	U	0.95	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-130-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	9.0		0.94	MDL	1.8	PQL	mg/Kg	J	Q, FD

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 9012B **Matrix: SO**

Sample ID: SL-079-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.30	J	0.22	MDL	0.62	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 10:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.98	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
SODIUM	90.6	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.49	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.26	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.83	J	1.04	MDL	5.87	PQL	mg/Kg	J	Z
SODIUM	75.2	J	43.8	MDL	117	PQL	mg/Kg	J	Z
TIN	2.59	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.986	MDL	5.87	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 3:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.22	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
SODIUM	80.0	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.76	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-089-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.39	J	1.05	MDL	5.92	PQL	mg/Kg	J	Z
SODIUM	98.3	J	44.2	MDL	118	PQL	mg/Kg	J	Z
TIN	2.65	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	2.36	J	0.995	MDL	5.92	PQL	mg/Kg	J	Z

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.73	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
SODIUM	71.7	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.25	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: **SL-091-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.16	J	1.03	MDL	5.78	PQL	mg/Kg	J	Z
SODIUM	73.5	J	43.1	MDL	116	PQL	mg/Kg	J	Z
TIN	2.30	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: **SL-130-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	108	J	43.3	MDL	116	PQL	mg/Kg	J	Z
TIN	2.83	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.15	J	0.975	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	108	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.89	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.34	J	0.974	MDL	5.80	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.17	J	0.964	MDL	5.42	PQL	mg/Kg	J	Z
SODIUM	90.6	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.65	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.52	J	0.910	MDL	5.42	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 10:00:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.321		0.0410	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 10:00:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 10:00:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.458		0.0513	MDL	0.103	PQL	mg/Kg	J	E

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 10:00:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.111	MDL	0.410	PQL	mg/Kg	J	A

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 10:00:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0615	U	0.0615	MDL	0.205	PQL	mg/Kg	UJ	Q
ARSENIC	4.07		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
CHROMIUM	19.2		0.123	MDL	0.410	PQL	mg/Kg	J	E, A
COBALT	6.80		0.0205	MDL	0.103	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 10:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.0		0.0677	MDL	0.410	PQL	mg/Kg	J	Q, A
LEAD	9.16		0.0107	MDL	0.205	PQL	mg/Kg	J	E, A
NICKEL	13.8		0.103	MDL	0.410	PQL	mg/Kg	J	Q, A
SILVER	0.0338	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z
THALLIUM	0.223		0.0308	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	35.5		0.0226	MDL	0.103	PQL	mg/Kg	J	A
ZINC	61.5		0.574	MDL	3.08	PQL	mg/Kg	J	A

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.425	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.472		0.0578	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.8		0.125	MDL	0.462	PQL	mg/Kg	J	A

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0753	J	0.0694	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.51		0.0925	MDL	0.462	PQL	mg/Kg	J	Q
CADMIUM	0.238		0.0462	MDL	0.116	PQL	mg/Kg	J	Q, E
CHROMIUM	30.5		0.139	MDL	0.462	PQL	mg/Kg	J	E, A
COBALT	9.51		0.0231	MDL	0.116	PQL	mg/Kg	J	A
COPPER	15.5		0.0763	MDL	0.462	PQL	mg/Kg	J	Q, A
LEAD	9.26		0.0120	MDL	0.231	PQL	mg/Kg	J	E, A
NICKEL	17.7		0.116	MDL	0.462	PQL	mg/Kg	J	Q, A
SILVER	0.0243	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-078-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 11:10:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.328		0.0347	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	56.4		0.0254	MDL	0.116	PQL	mg/Kg	J	A
ZINC	64.9		0.647	MDL	3.47	PQL	mg/Kg	J	A

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:30:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.182	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:30:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.596		0.0581	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:30:00** **Analysis Type: REA5** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	114		0.126	MDL	0.465	PQL	mg/Kg	J	A

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:30:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0698	MDL	0.233	PQL	mg/Kg	J	Z, Q
ARSENIC	3.52		0.0930	MDL	0.465	PQL	mg/Kg	J	Q
CADMIUM	0.225		0.0465	MDL	0.116	PQL	mg/Kg	J	Q, E
CHROMIUM	19.5		0.140	MDL	0.465	PQL	mg/Kg	J	E, A
COBALT	7.20		0.0233	MDL	0.116	PQL	mg/Kg	J	A
COPPER	12.1		0.0767	MDL	0.465	PQL	mg/Kg	J	Q, A
LEAD	17.2		0.0121	MDL	0.233	PQL	mg/Kg	J	E, A
NICKEL	13.6		0.116	MDL	0.465	PQL	mg/Kg	J	Q, A
SILVER	0.0384	J	0.0140	MDL	0.116	PQL	mg/Kg	J	Z
THALLIUM	0.278		0.0349	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	35.8		0.0256	MDL	0.116	PQL	mg/Kg	J	A
ZINC	58.8		0.651	MDL	3.49	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.236	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.736		0.0551	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	116		0.119	MDL	0.441	PQL	mg/Kg	J	A

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0985	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	4.77		0.0882	MDL	0.441	PQL	mg/Kg	J	Q
CADMIUM	0.289		0.0441	MDL	0.110	PQL	mg/Kg	J	Q, E
CHROMIUM	22.9		0.132	MDL	0.441	PQL	mg/Kg	J	E, A
COBALT	7.11		0.0221	MDL	0.110	PQL	mg/Kg	J	A
COPPER	12.8		0.0728	MDL	0.441	PQL	mg/Kg	J	Q, A
LEAD	26.9		0.0115	MDL	0.221	PQL	mg/Kg	J	E, A
NICKEL	14.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q, A
THALLIUM	0.374		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	43.8		0.0243	MDL	0.110	PQL	mg/Kg	J	A
ZINC	93.5		0.617	MDL	3.31	PQL	mg/Kg	J	A

Sample ID: **SL-089-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.302		0.0465	MDL	0.116	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.217	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.573		0.0581	MDL	0.116	PQL	mg/Kg	J	E

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.125	MDL	0.465	PQL	mg/Kg	J	A

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0697	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	4.61		0.0929	MDL	0.465	PQL	mg/Kg	J	Q
CHROMIUM	26.0		0.139	MDL	0.465	PQL	mg/Kg	J	E, A
COBALT	9.44		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	14.7		0.0767	MDL	0.465	PQL	mg/Kg	J	Q, A
LEAD	11.5		0.0121	MDL	0.232	PQL	mg/Kg	J	E, A
NICKEL	16.6		0.116	MDL	0.465	PQL	mg/Kg	J	Q, A
SILVER	0.0491	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
THALLIUM	0.313		0.0348	MDL	0.116	PQL	mg/Kg	J	Q
VANADIUM	48.4		0.0256	MDL	0.116	PQL	mg/Kg	J	A
ZINC	63.6		0.650	MDL	3.48	PQL	mg/Kg	J	A

Sample ID: SL-090-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:45:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.265		0.0355	MDL	0.118	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0473	MDL	0.473	PQL	mg/Kg	J	Z

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.680		0.0592	MDL	0.118	PQL	mg/Kg	J	E

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	98.4		0.128	MDL	0.473	PQL	mg/Kg	J	A

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0875	J	0.0710	MDL	0.237	PQL	mg/Kg	J	Z, Q
ARSENIC	3.60		0.0947	MDL	0.473	PQL	mg/Kg	J	Q
CADMIUM	0.189		0.0473	MDL	0.118	PQL	mg/Kg	J	Q, E
CHROMIUM	17.6		0.142	MDL	0.473	PQL	mg/Kg	J	E, A
COBALT	6.31		0.0237	MDL	0.118	PQL	mg/Kg	J	A
COPPER	9.77		0.0781	MDL	0.473	PQL	mg/Kg	J	Q, A
LEAD	9.93		0.0123	MDL	0.237	PQL	mg/Kg	J	E, A
NICKEL	11.4		0.118	MDL	0.473	PQL	mg/Kg	J	Q, A
SILVER	0.0293	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	34.2		0.0260	MDL	0.118	PQL	mg/Kg	J	A
ZINC	56.9		0.663	MDL	3.55	PQL	mg/Kg	J	A

Sample ID: **SL-091-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:50:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.155	J	0.0476	MDL	0.476	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.670		0.0595	MDL	0.119	PQL	mg/Kg	J	E

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	84.0		0.129	MDL	0.476	PQL	mg/Kg	J	A

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0714	MDL	0.238	PQL	mg/Kg	J	Z, Q
ARSENIC	3.51		0.0952	MDL	0.476	PQL	mg/Kg	J	Q
CADMIUM	0.134		0.0476	MDL	0.119	PQL	mg/Kg	J	Q, E
CHROMIUM	17.5		0.143	MDL	0.476	PQL	mg/Kg	J	E, A
COBALT	5.88		0.0238	MDL	0.119	PQL	mg/Kg	J	A
COPPER	9.14		0.0786	MDL	0.476	PQL	mg/Kg	J	Q, A
LEAD	14.3		0.0124	MDL	0.238	PQL	mg/Kg	J	E, A
NICKEL	11.4		0.119	MDL	0.476	PQL	mg/Kg	J	Q, A
SILVER	0.0488	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z
THALLIUM	0.345		0.0357	MDL	0.119	PQL	mg/Kg	J	Q
VANADIUM	34.7		0.0262	MDL	0.119	PQL	mg/Kg	J	A
ZINC	61.5		0.667	MDL	3.57	PQL	mg/Kg	J	A

Sample ID: SL-130-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 9:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0455	MDL	0.455	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 9:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.837		0.0569	MDL	0.114	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-130-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 9:45:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.123	MDL	0.455	PQL	mg/Kg	J	A

Sample ID: **SL-130-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0973	J	0.0683	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	5.19		0.0911	MDL	0.455	PQL	mg/Kg	J	Q
CADMIUM	0.393		0.0455	MDL	0.114	PQL	mg/Kg	J	Q, E
CHROMIUM	31.8		0.137	MDL	0.455	PQL	mg/Kg	J	E, A
COBALT	10.2		0.0228	MDL	0.114	PQL	mg/Kg	J	A
COPPER	17.5		0.0751	MDL	0.455	PQL	mg/Kg	J	Q, A
LEAD	14.0		0.0118	MDL	0.228	PQL	mg/Kg	J	E, A
NICKEL	20.1		0.114	MDL	0.455	PQL	mg/Kg	J	Q, A
SILVER	0.0500	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
THALLIUM	0.327		0.0341	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	58.9		0.0250	MDL	0.114	PQL	mg/Kg	J	A
ZINC	84.5		0.637	MDL	3.41	PQL	mg/Kg	J	A

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	166		0.0304	MDL	0.585	PQL	mg/Kg	J	E, A

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.169	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.901		0.0585	MDL	0.117	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:20:00** **Analysis Type: REA5** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.126	MDL	0.468	PQL	mg/Kg	J	A

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:20:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0703	MDL	0.234	PQL	mg/Kg	J	Z, Q
ARSENIC	5.37		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
CADMIUM	0.559		0.0468	MDL	0.117	PQL	mg/Kg	J	Q, E
CHROMIUM	57.1		0.141	MDL	0.468	PQL	mg/Kg	J	E, A
COBALT	9.52		0.0234	MDL	0.117	PQL	mg/Kg	J	A
COPPER	20.3		0.0773	MDL	0.468	PQL	mg/Kg	J	Q, A
NICKEL	44.8		0.117	MDL	0.468	PQL	mg/Kg	J	Q, A
THALLIUM	0.253		0.0351	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	48.4		0.0258	MDL	0.117	PQL	mg/Kg	J	A
ZINC	211		0.656	MDL	3.51	PQL	mg/Kg	J	A

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.274		0.0331	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: REA4** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.462		0.0552	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: REA5** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.119	MDL	0.442	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.294		0.0663	MDL	0.221	PQL	mg/Kg	J	Q
ARSENIC	5.08		0.0884	MDL	0.442	PQL	mg/Kg	J	Q
CADMIUM	0.278		0.0442	MDL	0.110	PQL	mg/Kg	J	Q, E
CHROMIUM	27.7		0.133	MDL	0.442	PQL	mg/Kg	J	E, A
COBALT	8.27		0.0221	MDL	0.110	PQL	mg/Kg	J	A
COPPER	14.1		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, A
LEAD	11.9		0.0115	MDL	0.221	PQL	mg/Kg	J	E, A
NICKEL	17.3		0.110	MDL	0.442	PQL	mg/Kg	J	Q, A
SILVER	0.0573	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	49.1		0.0243	MDL	0.110	PQL	mg/Kg	J	A
ZINC	72.4		0.619	MDL	3.31	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-078-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 11:10:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:50:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-130-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 9:45:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.68	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0202	J	0.0034	MDL	0.117	PQL	mg/Kg	J	Z, Q

Sample ID: SL-082-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 3:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.167		0.0031	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-090-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 4:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0185	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z, Q

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0235	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z, Q

Sample ID: SL-130-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 9:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.139		0.0032	MDL	0.113	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:20:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.313		0.0032	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-134-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 2:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0527	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z, Q

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB04-SA8N-SS-041411 **Collected: 4/14/2011 12:30:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.962	U	0.962	MDL	1.92	PQL	ng/L	UJ	L

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: DUP03-SA8N-QC-041411 **Collected: 4/14/2011 3:25:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	39.2		19.1	MDL	38.3	PQL	ng/Kg	J	FD

Sample ID: SL-082-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:35:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	19.2	J	18.3	MDL	36.6	PQL	ng/Kg	J	Z

Sample ID: SL-133-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 3:20:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 10**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	300	J	192	MDL	384	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 10:00:00** **Analysis Type: REA2** **Dilution: 20**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	14	J	8.6	MDL	26	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 11:10:00** **Analysis Type: REA2** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.70	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-079-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:30:00** **Analysis Type: REA2** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.2	J	0.97	MDL	2.9	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 10:00:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.65	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 11:10:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.0	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-090-SA8N-SS-0.0-0.5 **Collected: 4/14/2011 4:45:00** **Analysis Type: RES-BASE/NEUTRAL** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.89	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	0.65	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-091-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.8	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-040-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 4:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 3:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-089-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 4:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-090-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 4:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	20	MDL	390	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-091-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: **SL-130-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	R	Q
BENZO(A)ANTHRACENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	67	J	19	MDL	390	PQL	ug/Kg	J	Z
Butylbenzylphthalate	25	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
Di-n-butylphthalate	22	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: **SL-134-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-040-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 10:00:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.9	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
NAPHTHALENE	4.7	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-078-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 11:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.67	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
PHENANTHRENE	0.95	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-079-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.49	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.46	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.1	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.83	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-089-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.41	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-090-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: **SL-091-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	4.0	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
CHRYSENE	3.3	J	2.0	MDL	9.8	PQL	ug/Kg	J	Z
FLUORANTHENE	4.0	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z
NAPHTHALENE	6.1	J	3.9	MDL	9.8	PQL	ug/Kg	J	Z

Sample ID: **SL-130-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 9:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	2.5	J	1.9	MDL	9.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	4.2	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	7.4	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.3	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z
Di-n-octylphthalate	48	J	35	MDL	100	PQL	ug/Kg	J	Z
NAPHTHALENE	5.0	J	3.9	MDL	9.7	PQL	ug/Kg	J	Z

Sample ID: **SL-133-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.66	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.99	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
FLUORENE	0.95	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.93	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-134-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 2:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: AQ**

Sample ID: EB04-SA8N-SS-041411 ***Collected:*** 4/14/2011 12:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Tetryl	0.40	U	0.40	MDL	0.60	PQL	ug/L	UJ	L

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-079-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.8	U	1.8	MDL	4.2	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.8	U	1.8	MDL	4.2	PQL	mg/Kg	UJ	S
p-Terphenyl	1.8	U	1.8	MDL	4.2	PQL	mg/Kg	UJ	S

Sample ID: SL-082-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 3:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S
p-Terphenyl	1.7	U	1.7	MDL	3.9	PQL	mg/Kg	UJ	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE127

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: 3510C**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB04-SA8N-SS-041411 (RES)	Sampling To Analysis	103.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11208CB221812	4/27/2011 6:12:00 PM	ALUMINUM	5.43 mg/Kg	SL-040-SA8N-SS-0.0-0.5
		CALCIUM	10.0 mg/Kg	SL-078-SA8N-SS-0.0-0.5
		LITHIUM	0.41 mg/Kg	SL-079-SA8N-SS-0.0-0.5
		PHOSPHORUS	1.22 mg/Kg	SL-082-SA8N-SS-0.0-0.5
		TIN	1.33 mg/Kg	SL-089-SA8N-SS-0.0-0.5
				SL-090-SA8N-SS-0.0-0.5
				SL-091-SA8N-SS-0.0-0.5
				SL-130-SA8N-SS-0.0-0.5
				SL-133-SA8N-SS-0.0-0.5
				SL-134-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-040-SA8N-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-079-SA8N-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-082-SA8N-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-090-SA8N-SS-0.0-0.5(RES)	TIN	2.25 mg/Kg	2.25U mg/Kg
SL-091-SA8N-SS-0.0-0.5(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-130-SA8N-SS-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-133-SA8N-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-134-SA8N-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11226AB221105A	4/25/2011 11:05:00 AM	VANADIUM	0.0708 mg/Kg	SL-040-SA8N-SS-0.0-0.5
				SL-078-SA8N-SS-0.0-0.5
				SL-079-SA8N-SS-0.0-0.5
				SL-082-SA8N-SS-0.0-0.5
				SL-089-SA8N-SS-0.0-0.5
				SL-090-SA8N-SS-0.0-0.5
				SL-091-SA8N-SS-0.0-0.5
				SL-130-SA8N-SS-0.0-0.5
				SL-133-SA8N-SS-0.0-0.5
				SL-134-SA8N-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	-7	17	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J (all detects) R (all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	N-NITROSODIMETHYLAMINE	0	0	70.00-130.00	-	N-NITROSODIMETHYLAMINE	No Qual Diluted Out

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	1932 1953	2507 1165	29.00-146.00 39.00-149.00	- 51 (50.00)	AROCLOR 1016 AROCLOR 1260	No Qual, Diluted Out

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	EFH (C12-C14)	124	169	49.00-123.00	30 (20.00)	EFH (C12-C14)	No Qual, Diluted Out
SL-133-SA8N-SS-0.0-0.5MS SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	-63 -161 -738	-59 1080 1327	49.00-123.00 49.00-123.00 49.00-123.00	- 55 (20.00) 42 (20.00)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	No Qual No Qual, Diluted

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	CHROMIUM COPPER NICKEL THALLIUM VANADIUM	231 - 173 128 -	338 158 274 - 135	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	CHROMIUM COPPER NICKEL THALLIUM VANADIUM	J(all detects) Cr, V No Qual, >4x
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	ANTIMONY LEAD ZINC	26 -3906 -68	21 -4107 -88	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ANTIMONY LEAD ZINC	J(all detects) UJ(all non-detects) Sb Post Spike = 94% Pb, Zn No Qual, >4x
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	ARSENIC CADMIUM	74 -	- 919	75.00-125.00 75.00-125.00	- 141 (20.00)	ARSENIC CADMIUM	J(all detects) UJ(all non-detects)
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	BARIUM	61	61	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL -078-SA8N-SS-0.0-0.5 SL -079-SA8N-SS-0.0-0.5 SL -082-SA8N-SS-0.0-0.5 SL -089-SA8N-SS-0.0-0.5 SL -090-SA8N-SS-0.0-0.5 SL -091-SA8N-SS-0.0-0.5 SL -130-SA8N-SS-0.0-0.5 SL -133-SA8N-SS-0.0-0.5 SL -134-SA8N-SS-0.0-0.5)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	2549 144 2282 315 - 171 325	2444 127 2292 437 175 181 326	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	No Qual, >4x
SL-133-SA8N-SS-0.0-0.5MS **SL-133-SA8N-SS-0.0-0.5MSD** (SL-040-SA8N-SS-0.0-0.5 SL -078-SA8N-SS-0.0-0.5 SL -079-SA8N-SS-0.0-0.5 SL -082-SA8N-SS-0.0-0.5 SL -089-SA8N-SS-0.0-0.5 SL -090-SA8N-SS-0.0-0.5 SL -091-SA8N-SS-0.0-0.5 SL -130-SA8N-SS-0.0-0.5 SL -133-SA8N-SS-0.0-0.5 SL -134-SA8N-SS-0.0-0.5)	PHOSPHORUS	33	62	75.00-125.00	-	PHOSPHORUS	No Qual, >4x

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MSD (SL-040-SA8N-SS-0.0-0.5 SL -078-SA8N-SS-0.0-0.5 SL -079-SA8N-SS-0.0-0.5 SL -082-SA8N-SS-0.0-0.5 SL -089-SA8N-SS-0.0-0.5 SL -090-SA8N-SS-0.0-0.5 SL -091-SA8N-SS-0.0-0.5 SL -130-SA8N-SS-0.0-0.5 SL -133-SA8N-SS-0.0-0.5 SL -134-SA8N-SS-0.0-0.5)	MERCURY	-	138	65.00-135.00	-	MERCURY	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA8N-SS-0.0-0.5MS (DUP03-SA8N-QC-041411 SL -040-SA8N-SS-0.0-0.5 SL -078-SA8N-SS-0.0-0.5 SL -079-SA8N-SS-0.0-0.5 SL -082-SA8N-SS-0.0-0.5 SL -089-SA8N-SS-0.0-0.5 SL -090-SA8N-SS-0.0-0.5 SL -091-SA8N-SS-0.0-0.5 SL -130-SA8N-SS-0.0-0.5 SL -133-SA8N-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	65 69	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-134-SA8N-SS-0.0-0.5MS (SL-134-SA8N-SS-0.0-0.5)	FLUORIDE	47	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA8N-SS-0.0-0.5DUP (DUP03-SA8N-QC-041411 SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5)	FLUORIDE	24	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA8N-SS-0.0-0.5DUP (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	Zirconium	87	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA8N-SS-0.0-0.5DUP (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	CHROMIUM	28	20.00	J(all detects) UJ(all non-detects)
	LEAD	168	20.00	
	MOLYBDENUM	40	20.00	
	SILVER	29	20.00	Ag No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WFLCSQ261308 (EB04-SA8N-SS-041411)	N-NITROSODIMETHYLAMINE	60	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11092AQ240556A **P11092AY240638A** (EB04-SA8N-SS-041411)	Tetryl	50	56	72.00-141.00	-	Tetryl	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LCLCSQ262231 (SL-040-SA8N-SS-0.0-0.5 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-090-SA8N-SS-0.0-0.5 SL-091-SA8N-SS-0.0-0.5 SL-130-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	1,2-Diphenylhydrazine/Azobenzen	114	-	77.00-111.00	-	1,2-Diphenylhydrazine/Azobenz	J (all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11081AQ241745A (DUP03-SA8N-QC-041411 SL-078-SA8N-SS-0.0-0.5 SL-079-SA8N-SS-0.0-0.5 SL-082-SA8N-SS-0.0-0.5 SL-089-SA8N-SS-0.0-0.5 SL-133-SA8N-SS-0.0-0.5 SL-134-SA8N-SS-0.0-0.5)	2,6-DINITROTOLUENE PETN	121 127	- -	80.00-120.00 80.00-120.00	- -	2,6-DINITROTOLUENE PETN	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P11226AQ221108A (SL-040-SA8N-SS-0.0-0.5 SL -078-SA8N-SS-0.0-0.5 SL -079-SA8N-SS-0.0-0.5 SL -082-SA8N-SS-0.0-0.5 SL -089-SA8N-SS-0.0-0.5 SL -090-SA8N-SS-0.0-0.5 SL -091-SA8N-SS-0.0-0.5 SL -130-SA8N-SS-0.0-0.5 SL -133-SA8N-SS-0.0-0.5 SL -134-SA8N-SS-0.0-0.5)	ANTIMONY	66	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-079-SA8N-SS-0.0-0.5	n-Triacontane-d62	47	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-082-SA8N-SS-0.0-0.5	n-Triacontane-d62	45	50.00-150.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-090-SA8N-SS-0.0-0.5	Nitrobenzene-d5	153	40.00-130.00	No Affected Compounds	No Qualifiers

Field Duplicate RPD Report

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-133-SA8N-SS-0.0-0.5	DUP03-SA8N-QC-041411			
MOISTURE	14.6	13.5	8		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-133-SA8N-SS-0.0-0.5	DUP03-SA8N-QC-041411			
N-NITROSODIMETHYLAMINE	300	39.2	154	50.00	J(all detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-133-SA8N-SS-0.0-0.5	DUP03-SA8N-QC-041411			
Nitrate-NO3	9.0	4.9	59	50.00	J(all detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-133-SA8N-SS-0.0-0.5	DUP03-SA8N-QC-041411			
EFH (C15-C20)	9.8	10	2	50.00	
EFH (C21-C30)	44	50	13	50.00	No Qualifiers Applied
EFH (C30-C40)	140	140	0	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	19.2	36.6	PQL	ng/Kg	J (all detects)
SL-133-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	300	384	PQL	ng/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	BORON	J	2.98	5.33	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.6	107	PQL	mg/Kg	
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	2.48	5.33	PQL	mg/Kg	
SL-078-SA8N-SS-0.0-0.5	TIN	J	2.49	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.26	5.67	PQL	mg/Kg	
SL-079-SA8N-SS-0.0-0.5	BORON	J	4.83	5.87	PQL	mg/Kg	J (all detects)
	SODIUM	J	75.2	117	PQL	mg/Kg	
	TIN	J	2.59	11.7	PQL	mg/Kg	
	Zirconium	J	2.71	5.87	PQL	mg/Kg	
SL-082-SA8N-SS-0.0-0.5	BORON	J	2.22	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.0	110	PQL	mg/Kg	
	TIN	J	2.76	11.0	PQL	mg/Kg	
SL-089-SA8N-SS-0.0-0.5	BORON	J	4.39	5.92	PQL	mg/Kg	J (all detects)
	SODIUM	J	98.3	118	PQL	mg/Kg	
	TIN	J	2.65	11.8	PQL	mg/Kg	
	Zirconium	J	2.36	5.92	PQL	mg/Kg	
SL-090-SA8N-SS-0.0-0.5	BORON	J	2.73	5.74	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.7	115	PQL	mg/Kg	
	TIN	J	2.25	11.5	PQL	mg/Kg	
SL-091-SA8N-SS-0.0-0.5	BORON	J	2.16	5.78	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.5	116	PQL	mg/Kg	
	TIN	J	2.30	11.6	PQL	mg/Kg	
SL-130-SA8N-SS-0.0-0.5	SODIUM	J	108	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.83	11.6	PQL	mg/Kg	
	Zirconium	J	4.15	5.80	PQL	mg/Kg	
SL-133-SA8N-SS-0.0-0.5	SODIUM	J	108	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	11.6	PQL	mg/Kg	
	Zirconium	J	4.34	5.80	PQL	mg/Kg	
SL-134-SA8N-SS-0.0-0.5	BORON	J	4.17	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.6	108	PQL	mg/Kg	
	TIN	J	2.65	10.8	PQL	mg/Kg	
	Zirconium	J	3.52	5.42	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	SELENIUM	J	0.124	0.410	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0338	0.103	PQL	mg/Kg	
SL-078-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0753	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.425	0.462	PQL	mg/Kg	
	SILVER	J	0.0243	0.116	PQL	mg/Kg	
SL-079-SA8N-SS-0.0-0.5	ANTIMONY	J	0.130	0.233	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.182	0.465	PQL	mg/Kg	
	SILVER	J	0.0384	0.116	PQL	mg/Kg	
SL-082-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0985	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.236	0.441	PQL	mg/Kg	
SL-089-SA8N-SS-0.0-0.5	ANTIMONY	J	0.127	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.217	0.465	PQL	mg/Kg	
	SILVER	J	0.0491	0.116	PQL	mg/Kg	
SL-090-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0875	0.237	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.473	PQL	mg/Kg	
	SILVER	J	0.0293	0.118	PQL	mg/Kg	
SL-091-SA8N-SS-0.0-0.5	ANTIMONY	J	0.136	0.238	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.155	0.476	PQL	mg/Kg	
	SILVER	J	0.0488	0.119	PQL	mg/Kg	
SL-130-SA8N-SS-0.0-0.5	ANTIMONY	J	0.0973	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.273	0.455	PQL	mg/Kg	
	SILVER	J	0.0500	0.114	PQL	mg/Kg	
SL-133-SA8N-SS-0.0-0.5	ANTIMONY	J	0.117	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.169	0.468	PQL	mg/Kg	
SL-134-SA8N-SS-0.0-0.5	SELENIUM	J	0.166	0.442	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0573	0.110	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-078-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.2	PQL	mg/Kg	J (all detects)
SL-082-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.57	1.1	PQL	mg/Kg	J (all detects)
SL-091-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-130-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.2	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.67	1.2	PQL	mg/Kg	J (all detects)
SL-134-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.68	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SS-0.0-0.5	MERCURY	J	0.0202	0.117	PQL	mg/Kg	J (all detects)
SL-090-SA8N-SS-0.0-0.5	MERCURY	J	0.0185	0.118	PQL	mg/Kg	J (all detects)
SL-091-SA8N-SS-0.0-0.5	MERCURY	J	0.0235	0.116	PQL	mg/Kg	J (all detects)
SL-134-SA8N-SS-0.0-0.5	MERCURY	J	0.0527	0.106	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	14	26	PQL	mg/Kg	J (all detects)
SL-078-SA8N-SS-0.0-0.5	EFH (C21-C30)	J	0.70	1.4	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SS-0.0-0.5	EFH (C15-C20)	J	2.2	2.9	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.3 0.65	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-078-SA8N-SS-0.0-0.5	AROCLOR 1260	J	1.0	2.0	PQL	ug/Kg	J (all detects)
SL-090-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	0.89 0.65 1.3	2.0 2.0 3.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-091-SA8N-SS-0.0-0.5	AROCLOR 1260	J	1.8	2.0	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	BENZO(G,H,I)PERYLENE BIS(2-ETHYLHEXYL)PHTHALATE	J J	28 18	180 360	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-078-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-079-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	400	PQL	ug/Kg	J (all detects)
SL-082-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-089-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	390	PQL	ug/Kg	J (all detects)
SL-090-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)
SL-091-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	400	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-130-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	390	PQL	ug/Kg	J (all detects)
SL-133-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	20	190	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	21	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	67	390	PQL	ug/Kg	
	Butylbenzylphthalate	J	25	190	PQL	ug/Kg	
	CARBAZOLE	J	21	190	PQL	ug/Kg	
	CHRYSENE	J	26	190	PQL	ug/Kg	
	Di-n-butylphthalate	J	22	190	PQL	ug/Kg	
	FLUORANTHENE	J	41	190	PQL	ug/Kg	
	PHENANTHRENE	J	21	190	PQL	ug/Kg	
	PYRENE	J	37	190	PQL	ug/Kg	
SL-134-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-040-SA8N-SS-0.0-0.5	CHRYSENE	J	1.9	8.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	4.7	8.9	PQL	ug/Kg	
SL-078-SA8N-SS-0.0-0.5	CHRYSENE	J	0.67	1.9	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.1	21	PQL	ug/Kg	
	PHENANTHRENE	J	0.95	1.9	PQL	ug/Kg	
SL-079-SA8N-SS-0.0-0.5	CHRYSENE	J	0.49	2.0	PQL	ug/Kg	J (all detects)
SL-082-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.88	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.46	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.1	20	PQL	ug/Kg	
	FLUORENE	J	0.83	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-089-SA8N-SS-0.0-0.5	CHRYSENE	J	0.41	2.0	PQL	ug/Kg	J (all detects)
SL-090-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.7	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	2.0	PQL	ug/Kg	
	PYRENE	J	1.4	2.0	PQL	ug/Kg	
SL-091-SA8N-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	4.0	9.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.3	9.8	PQL	ug/Kg	
	FLUORANTHENE	J	4.0	9.8	PQL	ug/Kg	
	NAPHTHALENE	J	6.1	9.8	PQL	ug/Kg	
SL-130-SA8N-SS-0.0-0.5	ANTHRACENE	J	2.5	9.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	4.2	9.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	7.4	9.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.3	9.7	PQL	ug/Kg	
	Di-n-octylphthalate	J	48	100	PQL	ug/Kg	
	NAPHTHALENE	J	5.0	9.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE127 **Laboratory: LL**

EDD Filename: DE127_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SS-0.0-0.5	ACENAPHTHENE	J	1.2	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.66	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.99	1.9	PQL	ug/Kg	
	FLUORENE	J	0.95	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.93	1.9	PQL	ug/Kg	
SL-134-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	

Method: 9012B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SS-0.0-0.5	CYANIDE	J	0.30	0.62	PQL	mg/Kg	J (all detects)

LDC #: 25916I4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-1

SDG #: DE127 ADR

Laboratory: Lancaster Laboratories

Reviewer: VR

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD(Al, Ba, Ca, Cr, Fe, Pb, Mg, Mn, P, K, Ti, V, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup(Ag, Zr <5x)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-040-SA8N-SS-0.0-0.5	11	SL-133-SA8N-SS-0.0-0.5MS	21		31	
2	SL-078-SA8N-SS-0.0-0.5	12	SL-133-SA8N-SS-0.0-0.5MSD	22		32	
3	SL-079-SA8N-SS-0.0-0.5	13	SL-133-SA8N-SS-0.0-0.5DUP	23		33	
4	SL-082-SA8N-SS-0.0-0.5	14		24		34	
5	SL-089-SA8N-SS-0.0-0.5	15		25		35	
6	SL-090-SA8N-SS-0.0-0.5	16		26		36	
7	SL-091-SA8N-SS-0.0-0.5	17		27		37	
8	SL-130-SA8N-SS-0.0-0.5	18		28		38	
9	SL-133-SA8N-SS-0.0-0.5	19		29		39	
10	SL-134-SA8N-SS-0.0-0.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE127
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6259054BKG Serial Dilution Lab Sample ID: 6259054L
Batch ID(s): P11208C, P11226A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		198614.2100		205118.4500		3		P
Antimony	121	0.5008	B	1.5000	U	100		MS
Arsenic	75	22.9400		31.8550		39		MS
Barium	137	565.3000		679.5000		20	E	MS
Beryllium	9	2.9770		3.4810		17		MS
Boron		59.7000		85.4000	B	43		P
Cadmium	111	2.3860		1.5985	B	33		MS
Calcium		68913.0700		72616.6000		5		P
Chromium	52	243.8000		286.8000		18	E	MS
Cobalt	59	40.6600		49.1800		21	E	MS
Copper	63	86.4700		97.3500		13	E	MS
Iron		236747.9100		239662.5000		1		P
Lead	208	282.9000		780.5000		176	E	MS
Lithium		196.3300		204.2000		4		P
Magnesium		53411.2800		54965.3000		3		P
Manganese		3602.0100		3835.0000		6		P
Molybdenum	98	3.8490		4.8785		27		MS
Nickel	60	191.2000		224.8000		18	E	MS
Phosphorus		4836.7800		4957.3000		2		P
Potassium		45057.6200		45932.3000		2		P
Selenium	78	0.7215	B	1.0000	U	100		MS
Silver	107	1.2360		1.5195	B	23		MS
Sodium		927.3500	B	1865.0000	U	100		P
Strontium		238.1000		244.4000		3		P
Thallium	203	1.0790		1.2345	B	14		MS
Tin		24.9000	B	50.0000	U	100		P
Titanium		11035.1200		11644.7500		6		P
Vanadium	51	206.6000		241.6500		17	E	MS
Zinc	66	898.9000		1009.0000		12	E	MS
Zirconium		37.4600	B	46.1000	B	23		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE129

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	TB-041511	6260138	TB	5030B	8015M	III
15-Apr-2011	TB-041511	6260138	TB	5030B	8260B	III
15-Apr-2011	TB-041511	6260138	TB	5030B	8260B SIM	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3050B	6010B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3050B	6020	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3060A	7199	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3546	1625C	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8015B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8015M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8082	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8270C	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	3550B	8270C SIM	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	8330	8330A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	Gen Prep	9045M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	300.0	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	314.0	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	7471A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8015B	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8015M	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	8315A	III
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260133	N	METHOD	9012B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3050B	6010B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3050B	6020	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3060A	7199	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3546	1625C	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8015M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8082	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8270C	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	3550B	8270C SIM	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	8330	8330A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	Gen Prep	9045M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	314.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	7471A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8015B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8015M	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	8315A	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260131	N	METHOD	9012B	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5DUP	P260131D271804B	DUP	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5DUP	P260131D271931B	DUP	METHOD	314.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5MS	P260131R271819B	MS	METHOD	300.0	III
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5MS	P260131R271953B	MS	METHOD	314.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3050B	6010B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3050B	6020	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3060A	7199	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3546	1625C	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8015B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8082	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8270C	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8260B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	5035	8260B SIM	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	8330	8330A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	Gen Prep	9045M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	300.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	314.0	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	7471A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8015B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8015M	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	8315A	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260136	N	METHOD	9012B	III
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0DUP	P260136D291100A	DUP	Gen Prep	9045M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3050B	6010B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3050B	6020	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3060A	7199	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3546	1625C	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8015B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8015M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8082	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8270C	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	3550B	8270C SIM	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	8330	8330A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	Gen Prep	9045M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	300.0	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	7471A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8015B	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8015M	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	8315A	III
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260132	N	METHOD	9012B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3050B	6010B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3050B	6020	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3060A	7199	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3546	1625C	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8015B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8082	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8270C	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	3550B	8270C SIM	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8260B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	5035	8260B SIM	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	8330	8330A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	Gen Prep	9045M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	300.0	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	314.0	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	7471A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8015B	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8015M	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	8315A	III
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260137	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3050B	6010B	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3050B	6020	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3060A	7199	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8082	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8270C	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	3550B	8270C SIM	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	5035	8260B	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	5035	8260B SIM	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	Gen Prep	9045M	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	300.0	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	314.0	III
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260135	N	METHOD	7471A	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3050B	6010B	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3050B	6020	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3060A	7199	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8082	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8270C	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	3550B	8270C SIM	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	5035	8260B	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	5035	8260B SIM	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	Gen Prep	9045M	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	300.0	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	314.0	III
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260134	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 3:38:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.90	U	0.90	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected: 4/15/2011 12:27:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 9:34:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-062-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 9:05:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 10:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.98	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-141-SA8N-SS-0.0-0.5 **Collected: 4/15/2011 8:35:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 10:46:00** **Analysis Type: RES** **Dilution: 1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.0	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-041-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 3:38:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	68.0	J	41.2	MDL	111	PQL	mg/Kg	J	Z
TIN	2.86	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: **SL-044-SA5A-SB-3.0-4.0** ***Collected:*** **4/15/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.39	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
SODIUM	92.1	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.87	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: **SL-052-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 9:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.00	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.38	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.46	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.46	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.37	J	0.979	MDL	5.83	PQL	mg/Kg	J	Z

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.48	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.49	J	0.924	MDL	5.50	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.11	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
SODIUM	97.4	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	2.91	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.04	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.402		0.0558	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.8		0.121	MDL	0.446	PQL	mg/Kg	J	A

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	5.89		0.0893	MDL	0.446	PQL	mg/Kg	J	Q
CADMIUM	0.0446	U	0.0446	MDL	0.112	PQL	mg/Kg	UJ	E
CHROMIUM	20.7		0.134	MDL	0.446	PQL	mg/Kg	J	E, A
COBALT	5.61		0.0223	MDL	0.112	PQL	mg/Kg	J	A
COPPER	7.66		0.0737	MDL	0.446	PQL	mg/Kg	J	Q, A
LEAD	5.97		0.0116	MDL	0.223	PQL	mg/Kg	J	E, A
NICKEL	11.8		0.112	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0366	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 **Collected: 4/15/2011 3:38:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.232		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	39.2		0.0246	MDL	0.112	PQL	mg/Kg	J	A
ZINC	52.0		0.625	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected: 4/15/2011 12:27:00** **Analysis Type: REA** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0903	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected: 4/15/2011 12:27:00** **Analysis Type: REA2** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.373		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected: 4/15/2011 12:27:00** **Analysis Type: REA3** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.1		0.119	MDL	0.440	PQL	mg/Kg	J	A

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected: 4/15/2011 12:27:00** **Analysis Type: RES** **Dilution: 2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q
ARSENIC	6.76		0.0879	MDL	0.440	PQL	mg/Kg	J	Q
CADMIUM	0.0779	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z, E, Q
CHROMIUM	22.7		0.132	MDL	0.440	PQL	mg/Kg	J	E, A
COBALT	7.57		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	12.5		0.0725	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	7.10		0.0114	MDL	0.220	PQL	mg/Kg	J	E, A
NICKEL	16.0		0.110	MDL	0.440	PQL	mg/Kg	J	Q, A
SILVER	0.0729	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.318		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	42.3		0.0242	MDL	0.110	PQL	mg/Kg	J	A
ZINC	62.6		0.615	MDL	3.30	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-052-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 9:34:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z
SILVER	0.0347	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: **SL-052-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 9:34:00** ***Analysis Type:*** **REA6** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0808	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.275	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.326		0.0556	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.0		0.120	MDL	0.445	PQL	mg/Kg	J	A

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	5.23		0.0890	MDL	0.445	PQL	mg/Kg	J	Q
CADMIUM	0.226		0.0445	MDL	0.111	PQL	mg/Kg	J	E, Q
CHROMIUM	31.3		0.134	MDL	0.445	PQL	mg/Kg	J	E, A
COBALT	10.3		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	16.4		0.0734	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	9.74		0.0116	MDL	0.223	PQL	mg/Kg	J	E, A
NICKEL	19.3		0.111	MDL	0.445	PQL	mg/Kg	J	Q, A
SILVER	0.0290	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.356		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	59.6		0.0245	MDL	0.111	PQL	mg/Kg	J	A
ZINC	75.9		0.623	MDL	3.34	PQL	mg/Kg	J	A

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.298	J	0.0480	MDL	0.480	PQL	mg/Kg	J	Z

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.320		0.0600	MDL	0.120	PQL	mg/Kg	J	E

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.130	MDL	0.480	PQL	mg/Kg	J	A

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.172	J	0.0720	MDL	0.240	PQL	mg/Kg	J	Z, Q
ARSENIC	5.15		0.0960	MDL	0.480	PQL	mg/Kg	J	Q
CADMIUM	0.270		0.0480	MDL	0.120	PQL	mg/Kg	J	E, Q
CHROMIUM	31.8		0.144	MDL	0.480	PQL	mg/Kg	J	E, A
COBALT	9.63		0.0240	MDL	0.120	PQL	mg/Kg	J	A
COPPER	16.5		0.0792	MDL	0.480	PQL	mg/Kg	J	Q, A
LEAD	10.9		0.0125	MDL	0.240	PQL	mg/Kg	J	E, A
NICKEL	19.1		0.120	MDL	0.480	PQL	mg/Kg	J	Q, A
SILVER	0.0214	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
THALLIUM	0.347		0.0360	MDL	0.120	PQL	mg/Kg	J	Q
VANADIUM	59.3		0.0264	MDL	0.120	PQL	mg/Kg	J	A
ZINC	72.9		0.672	MDL	3.60	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.262	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.297		0.0566	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.4		0.122	MDL	0.453	PQL	mg/Kg	J	A

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	U	0.0680	MDL	0.227	PQL	mg/Kg	UJ	Q
ARSENIC	4.73		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CADMIUM	0.173		0.0453	MDL	0.113	PQL	mg/Kg	J	E, Q
CHROMIUM	26.7		0.136	MDL	0.453	PQL	mg/Kg	J	E, A
COBALT	8.46		0.0227	MDL	0.113	PQL	mg/Kg	J	A
COPPER	13.9		0.0748	MDL	0.453	PQL	mg/Kg	J	Q, A
LEAD	8.63		0.0118	MDL	0.227	PQL	mg/Kg	J	E, A
NICKEL	15.8		0.113	MDL	0.453	PQL	mg/Kg	J	Q, A
SILVER	0.0311	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.290		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	50.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A
ZINC	64.1		0.634	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: **SL-243-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 10:46:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0567	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.518		0.0545	MDL	0.109	PQL	mg/Kg	J	E

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.8		0.118	MDL	0.436	PQL	mg/Kg	J	A

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0655	U	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q
ARSENIC	5.17		0.0873	MDL	0.436	PQL	mg/Kg	J	Q
CADMIUM	0.0436	U	0.0436	MDL	0.109	PQL	mg/Kg	UJ	E
CHROMIUM	19.0		0.131	MDL	0.436	PQL	mg/Kg	J	E, A
COBALT	5.76		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	7.59		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, A
LEAD	6.04		0.0113	MDL	0.218	PQL	mg/Kg	J	E, A
NICKEL	12.1		0.109	MDL	0.436	PQL	mg/Kg	J	Q, A
SILVER	0.0492	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
THALLIUM	0.190		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	37.9		0.0240	MDL	0.109	PQL	mg/Kg	J	A
ZINC	41.9		0.611	MDL	3.27	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-044-SA5A-SB-3.0-4.0 *Collected:* 4/15/2011 12:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.85	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z, Q

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0166	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z, Q

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	28.9	J	18.9	MDL	37.9	PQL	ng/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.2	J	18.9	MDL	37.8	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.80	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-243-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 10:46:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.76	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.5	J	1.9	MDL	9.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA
Method: 8082 **Matrix: SO**

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.4	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	0.58	J	0.47	MDL	2.1	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-044-SA5A-SB-3.0-4.0 *Collected:* 4/15/2011 12:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	20	MDL	410	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8270C SIM **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-062-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 10:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.47	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.45	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-141-SA8N-SS-0.0-0.5 *Collected:* 4/15/2011 8:35:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S
O-TERPHENYL	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S
p-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	S

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.50	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-044-SA5A-SB-3.0-4.0 **Collected:** 4/15/2011 12:27:00 **Analysis Type:** RES **Dilution:** 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.42	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-052-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 9:34:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.34	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-243-SA5A-SB-4.0-5.0 **Collected:** 4/15/2011 10:46:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE129

Method Blank Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11208CB221812	4/27/2011 6:12:00 PM	ALUMINUM CALCIUM LITHIUM PHOSPHORUS TIN	5.43 mg/Kg 10.0 mg/Kg 0.41 mg/Kg 1.22 mg/Kg 1.33 mg/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0
P11608AB220149	4/28/2011 1:49:00 AM	PHOSPHORUS TIN	1.26 mg/Kg 1.48 mg/Kg	SL-052-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-052-SA5A-SB-4.0-5.0(REA2)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11226AB221105A	4/25/2011 11:05:00 AM	VANADIUM	0.0708 mg/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0
P11626AB220808A	4/27/2011 8:08:00 AM	VANADIUM	0.0532 mg/Kg	SL-052-SA5A-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-243-SA5A-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.1U ug/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-044-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.0U ug/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.34 ug/Kg	4.0U ug/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-062-SA8N-SS-0.0-0.5MS (SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-243-SA5A-SB-4.0-5.0)	FLUORIDE	77	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-062-SA8N-SS-0.0-0.5DUP (SL-041-SA5A-SB-4.0-5.0 SL -044-SA5A-SB-3.0-4.0 SL -052-SA5A-SB-4.0-5.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	FLUORIDE	25	20.00	No Qual OK by difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1Y14Q210248A **LCS1Y14Y210309A** (TB-041511)	2-Chloro-1,1,1-trifluoroethane	123	124	77.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11081AQ241745A (SL-052-SA5A-SB-4.0-5.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	2,6-DINITROTOLUENE PETN	121 127	- -	80.00-120.00 80.00-120.00	- -	2,6-DINITROTOLUENE PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11226AQ221108A (SL-041-SA5A-SB-4.0-5.0 SL -044-SA5A-SB-3.0-4.0 SL -062-SA8N-SS-0.0-0.5 SL -067-SA8N-SS-0.0-0.5 SL -141-SA8N-SS-0.0-0.5 SL -243-SA5A-SB-4.0-5.0)	ANTIMONY	66	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits
P11626AQ220811A (SL-052-SA5A-SB-4.0-5.0)	ANTIMONY	121	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015B**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-141-SA8N-SS-0.0-0.5	n-Triacontane-d62	48	50.00-150.00	All Target Analytes	J (all detects) UJ (all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	28.9	37.9	PQL	ng/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	37.2	37.8	PQL	ng/Kg	J (all detects)

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	Nitrate-NO3	J	1.0	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	SODIUM	J	68.0	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.86	11.1	PQL	mg/Kg	
SL-044-SA5A-SB-3.0-4.0	BORON	J	1.39	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.1	109	PQL	mg/Kg	
	TIN	J	2.87	10.9	PQL	mg/Kg	
	Zirconium	J	1.83	5.44	PQL	mg/Kg	
SL-052-SA5A-SB-4.0-5.0	TIN	J	3.00	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.38	5.70	PQL	mg/Kg	
SL-062-SA8N-SS-0.0-0.5	TIN	J	2.46	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.42	5.46	PQL	mg/Kg	
SL-067-SA8N-SS-0.0-0.5	TIN	J	2.46	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.37	5.83	PQL	mg/Kg	
SL-141-SA8N-SS-0.0-0.5	TIN	J	2.48	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.49	5.50	PQL	mg/Kg	
SL-243-SA5A-SB-4.0-5.0	BORON	J	1.11	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	97.4	109	PQL	mg/Kg	
	TIN	J	2.91	10.9	PQL	mg/Kg	
	Zirconium	J	2.04	5.45	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	SELENIUM	J	0.102	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0366	0.112	PQL	mg/Kg	
SL-044-SA5A-SB-3.0-4.0	CADMIUM	J	0.0779	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0903	0.440	PQL	mg/Kg	
	SILVER	J	0.0729	0.110	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	ANTIMONY	J	0.136	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0808	0.456	PQL	mg/Kg	
	SILVER	J	0.0347	0.114	PQL	mg/Kg	
SL-062-SA8N-SS-0.0-0.5	ANTIMONY	J	0.141	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.275	0.445	PQL	mg/Kg	
	SILVER	J	0.0290	0.111	PQL	mg/Kg	
SL-067-SA8N-SS-0.0-0.5	ANTIMONY	J	0.172	0.240	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.298	0.480	PQL	mg/Kg	
	SILVER	J	0.0214	0.120	PQL	mg/Kg	
SL-141-SA8N-SS-0.0-0.5	SELENIUM	J	0.262	0.453	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0311	0.113	PQL	mg/Kg	
SL-243-SA5A-SB-4.0-5.0	SELENIUM	J	0.0567	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0492	0.109	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-044-SA5A-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-052-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-062-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.85	1.1	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	MERCURY	J	0.0049	0.109	PQL	mg/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	MERCURY	J	0.0054	0.119	PQL	mg/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	MERCURY	J	0.0166	0.112	PQL	mg/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	MERCURY	J	0.0102	0.109	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.80	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-243-SA5A-SB-4.0-5.0	EFH (C30-C40)	J	0.76	1.4	PQL	mg/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	AROCLOR 1254	J	2.5	9.6	PQL	ug/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.4 0.58	2.1 2.1	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	4.1	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.42	4.0	PQL	ug/Kg	J (all detects)
SL-052-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.34	4.0	PQL	ug/Kg	J (all detects)
SL-243-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.51	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-044-SA5A-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	370	PQL	ug/Kg	J (all detects)
SL-062-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	380	PQL	ug/Kg	J (all detects)
SL-067-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	410	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	21	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE129 **Laboratory: LL**

EDD Filename: DE129_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.2	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.92	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
	PYRENE	J	1.3	1.9	PQL	ug/Kg	
SL-067-SA8N-SS-0.0-0.5	CHRYSENE	J	0.47	2.0	PQL	ug/Kg	J (all detects)
SL-141-SA8N-SS-0.0-0.5	CHRYSENE	J	0.45	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25916K4 **VALIDATION COMPLETENESS WORKSHEET** Date: 8-3-11

SDG #: DE129 ADR

Laboratory: Lancaster Laboratories

Reviewer: AR

2nd Reviewer: C

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	A	No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (#1-5,7 associated w/ SDG: DE127)(#6: client specific
VII.	Duplicate Sample Analysis	N	DUP ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	—	(1-5,7 associated w/ DE127)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-062-SA8N-SS-0.0-0.5	11		21		31	
2	SL-067-SA8N-SS-0.0-0.5	12		22		32	
3	SL-141-SA8N-SS-0.0-0.5	13		23		33	
4	SL-041-SA5A-SB-4.0-5.0	14		24		34	
5	SL-044-SA5A-SB-3.0-4.0	15		25		35	
6	SL-052-SA5A-SB-4.0-5.0	16		26		36	
7	SL-243-SA5A-SB-4.0-5.0	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE130

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	TB-041811	6261706	TB	5030B	8015M	IV
18-Apr-2011	TB-041811	6261706	TB	5030B	8260B	IV
18-Apr-2011	TB-041811	6261706	TB	5030B	8260B SIM	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3050B	6010B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3050B	6020	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3060A	7199	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3546	1625C	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8015B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8015M	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8082	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8270C	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	3550B	8270C SIM	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	8330	8330A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	300.0	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	314.0	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	7471A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8015B	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8015M	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	8315A	IV
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261698	N	METHOD	9012B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3050B	6010B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3050B	6020	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3060A	7199	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3546	1625C	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8015B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8015M	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8082	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8270C	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	3550B	8270C SIM	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	8330	8330A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	300.0	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	314.0	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	7471A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8015B	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8015M	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	8315A	IV
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261696	N	METHOD	9012B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3050B	6010B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3050B	6020	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3060A	7199	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8082	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8270C	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	3550B	8270C SIM	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	5035	8260B	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	5035	8260B SIM	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	300.0	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	314.0	IV
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261702	N	METHOD	7471A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3050B	6010B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3050B	6020	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3060A	7199	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3546	1625C	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8015B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8015M	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8082	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8270C	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	3550B	8270C SIM	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	8330	8330A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	300.0	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	314.0	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	7471A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8015B	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8015M	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	8315A	IV
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261695	N	METHOD	9012B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3050B	6010B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3050B	6020	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3060A	7199	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3546	1625C	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8015M	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8082	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8270C	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	3550B	8270C SIM	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	8330	8330A	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	300.0	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	314.0	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	7471A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8015M	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	8315A	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261697	N	METHOD	9012B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5MSD	P261697M322219A	MSD	METHOD	8015B	IV
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5MS	P261697R322204A	MS	METHOD	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3050B	6010B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3050B	6020	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3060A	7199	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3546	1625C	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8015M	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8082	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8270C	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	3550B	8270C SIM	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	8330	8330A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	300.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	7471A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8015B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8015M	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	8315A	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261694	N	METHOD	9012B	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5DUP	P261694D270153A	DUP	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5DUP	P261694D271245A	DUP	METHOD	300.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MSD	P261694M241837A	MSD	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R241818A	MS	3550B	8082	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R270215A	MS	METHOD	314.0	IV
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5MS	P261694R271259A	MS	METHOD	300.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3005A	6010B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3020A	6020	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8015B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8015M	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8082	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8270C	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3510C	8270C SIM	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	3520C	1625C	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	8330	8330A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	300.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	314.0	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	7199	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	8015B	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	Gen Prep	8015M	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	7470A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	8315A	IV
18-Apr-2011	EB05-SA8N-SS-041811	6261701	EB	METHOD	9012B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3050B	6010B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3050B	6020	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3060A	7199	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8082	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8270C	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	3550B	8270C SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	5035	8260B	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	5035	8260B SIM	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	300.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	314.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261705	N	METHOD	7471A	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5DUP	P261705D271604B	DUP	METHOD	300.0	IV
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5MS	P261705R271646B	MS	METHOD	300.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3050B	6010B	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3050B	6020	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3060A	7199	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8082	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8270C	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	3550B	8270C SIM	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	300.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	314.0	IV
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261699	N	METHOD	7471A	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3005A	6010B	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3020A	6020	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8082	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8270C	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	3510C	8270C SIM	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	5030B	8260B	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	5030B	8260B SIM	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	300.0	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	314.0	IV
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	Gen Prep	7199	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	EB13-SA5A-SB-041811	6261707	EB	METHOD	7470A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3050B	6010B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3050B	6020	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3060A	7199	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3546	1625C	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8015B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8015M	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8082	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8270C	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	3550B	8270C SIM	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	8330	8330A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	300.0	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	314.0	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	7471A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8015B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8015M	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	8315A	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261700	N	METHOD	9012B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5DUP	P261700D271504B	DUP	METHOD	9012B	IV
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5MS	P261700R271506B	MS	METHOD	9012B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3050B	6010B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3050B	6020	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3060A	7199	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8082	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8270C	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	3550B	8270C SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	5035	8260B	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	5035	8260B SIM	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	300.0	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	314.0	IV
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261704	N	METHOD	7471A	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3050B	6010B	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3050B	6020	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3060A	7199	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8082	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8270C	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	3550B	8270C SIM	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	5035	8260B	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	5035	8260B SIM	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	300.0	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	314.0	IV
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261703	N	METHOD	7471A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **GENCHEM**

Method: **300.0** ***Matrix:*** **SO**

Sample ID: **SL-032-SA5A-SB-3.0-4.0** ***Collected:*** **4/18/2011 9:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.93	U	0.93	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: **SL-056-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-057-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-071-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-080-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-085-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 8:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-086-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.87	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.96	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.89	U	0.89	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 9012B **Matrix: SO**

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CYANIDE	0.23	J	0.21	MDL	0.58	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0221	J	0.0138	MDL	0.0500	PQL	mg/L	U	B
CALCIUM	0.0949	J	0.0702	MDL	0.200	PQL	mg/L	J	Z

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.0151	J	0.0138	MDL	0.0500	PQL	mg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory:** LL

EDD Filename: PrepDE130_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-032-SA5A-SB-3.0-4.0 **Collected:** 4/18/2011 9:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2700		20.7	MDL	57.4	PQL	mg/Kg	J	Q
SODIUM	86.0	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	3.04	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.18	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 10:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	6.50		1.02	MDL	5.72	PQL	mg/Kg	U	F
POTASSIUM	6360		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.66	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.59	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 10:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.34		0.971	MDL	5.45	PQL	mg/Kg	U	F
POTASSIUM	7080		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.62	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.22	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 8:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.62	J	1.03	MDL	5.80	PQL	mg/Kg	U	F
POTASSIUM	3630		20.9	MDL	58.0	PQL	mg/Kg	J	Q
SODIUM	82.1	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.79	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-080-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	6.98		1.07	MDL	6.01	PQL	mg/Kg	U	F
POTASSIUM	5910		21.6	MDL	60.1	PQL	mg/Kg	J	Q
TIN	2.47	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-080-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 10:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.01	J	1.01	MDL	6.01	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 8:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.36	J	1.02	MDL	5.72	PQL	mg/Kg	U	F
POTASSIUM	4160		20.6	MDL	57.2	PQL	mg/Kg	J	Q
SODIUM	85.5	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	2.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.960	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 12:55:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	8.31		1.01	MDL	5.66	PQL	mg/Kg	U	F
POTASSIUM	7200		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.52	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 **Collected:** 4/18/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.01	J	0.962	MDL	5.40	PQL	mg/Kg	U	F
POTASSIUM	5620		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.58	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.97	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 **Collected:** 4/18/2011 3:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2600		21.2	MDL	58.9	PQL	mg/Kg	J	Q
SODIUM	91.8	J	44.0	MDL	118	PQL	mg/Kg	J	Z
TIN	2.84	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.990	MDL	5.89	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3480		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.93	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1230		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	2.99	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.17	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.217	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.121	J	0.0682	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.79		0.0909	MDL	0.454	PQL	mg/Kg	J	Q
CHROMIUM	12.7		0.136	MDL	0.454	PQL	mg/Kg	J	A
COBALT	5.89		0.0227	MDL	0.114	PQL	mg/Kg	J	A
COPPER	6.81		0.0750	MDL	0.454	PQL	mg/Kg	J	A
LEAD	5.11		0.0118	MDL	0.227	PQL	mg/Kg	J	A
NICKEL	8.94		0.114	MDL	0.454	PQL	mg/Kg	J	A
SILVER	0.0243	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	27.7		0.0250	MDL	0.114	PQL	mg/Kg	J	A, Q

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.231	J	0.0693	MDL	0.231	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory:** LL

EDD Filename: PrepDE130_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.18		0.0924	MDL	0.462	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.139	MDL	0.462	PQL	mg/Kg	J	A
COBALT	10.3		0.0231	MDL	0.116	PQL	mg/Kg	J	A
COPPER	16.9		0.0763	MDL	0.462	PQL	mg/Kg	J	A
LEAD	10.7		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	19.1		0.116	MDL	0.462	PQL	mg/Kg	J	A
SILVER	0.0468	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	57.9		0.0254	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.376	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	5.87		0.0890	MDL	0.445	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.133	MDL	0.445	PQL	mg/Kg	J	A
COBALT	10.7		0.0222	MDL	0.111	PQL	mg/Kg	J	A
COPPER	17.8		0.0734	MDL	0.445	PQL	mg/Kg	J	A
LEAD	10.0		0.0116	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	19.8		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0356	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	59.9		0.0245	MDL	0.111	PQL	mg/Kg	J	A, Q

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.224	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory:** LL

EDD Filename: PrepDE130_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	4.32		0.0927	MDL	0.464	PQL	mg/Kg	J	Q
CHROMIUM	14.3		0.139	MDL	0.464	PQL	mg/Kg	J	A
COBALT	5.44		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	8.95		0.0765	MDL	0.464	PQL	mg/Kg	J	A
LEAD	12.6		0.0121	MDL	0.232	PQL	mg/Kg	J	A
NICKEL	10.5		0.116	MDL	0.464	PQL	mg/Kg	J	A
SILVER	0.0362	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	29.6		0.0255	MDL	0.116	PQL	mg/Kg	J	A, Q

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0721	MDL	0.240	PQL	mg/Kg	J	Z, Q
ARSENIC	5.83		0.0961	MDL	0.481	PQL	mg/Kg	J	Q
CHROMIUM	27.7		0.144	MDL	0.481	PQL	mg/Kg	J	A
COBALT	8.71		0.0240	MDL	0.120	PQL	mg/Kg	J	A
COPPER	16.1		0.0793	MDL	0.481	PQL	mg/Kg	J	A
LEAD	9.10		0.0125	MDL	0.240	PQL	mg/Kg	J	A
NICKEL	17.3		0.120	MDL	0.481	PQL	mg/Kg	J	A
SILVER	0.0269	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
VANADIUM	52.2		0.0264	MDL	0.120	PQL	mg/Kg	J	A, Q

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.202	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	4.88		0.0906	MDL	0.453	PQL	mg/Kg	J	Q
CHROMIUM	19.0		0.136	MDL	0.453	PQL	mg/Kg	J	A
COBALT	6.61		0.0226	MDL	0.113	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.6		0.0747	MDL	0.453	PQL	mg/Kg	J	A
LEAD	14.4		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	13.4		0.113	MDL	0.453	PQL	mg/Kg	J	A
VANADIUM	35.3		0.0249	MDL	0.113	PQL	mg/Kg	J	A, Q

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.323	J	0.0461	MDL	0.461	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.205	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.81		0.0923	MDL	0.461	PQL	mg/Kg	J	Q
CHROMIUM	30.2		0.138	MDL	0.461	PQL	mg/Kg	J	A
COBALT	9.89		0.0231	MDL	0.115	PQL	mg/Kg	J	A
COPPER	17.3		0.0761	MDL	0.461	PQL	mg/Kg	J	A
LEAD	10.8		0.0120	MDL	0.231	PQL	mg/Kg	J	A
NICKEL	19.6		0.115	MDL	0.461	PQL	mg/Kg	J	A
SILVER	0.0278	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	58.9		0.0254	MDL	0.115	PQL	mg/Kg	J	A, Q

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.397	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.255		0.0636	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	5.17		0.0848	MDL	0.424	PQL	mg/Kg	J	Q
CHROMIUM	24.8		0.127	MDL	0.424	PQL	mg/Kg	J	A
COBALT	9.31		0.0212	MDL	0.106	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-132-SA8N-SS-0.0-0.5** ***Collected:*** **4/18/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	16.2		0.0700	MDL	0.424	PQL	mg/Kg	J	A
LEAD	8.70		0.0110	MDL	0.212	PQL	mg/Kg	J	A
NICKEL	15.6		0.106	MDL	0.424	PQL	mg/Kg	J	A
SILVER	0.0462	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	48.2		0.0233	MDL	0.106	PQL	mg/Kg	J	A, Q

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: **SL-172-SA5A-SB-4.0-5.0** ***Collected:*** **4/18/2011 3:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0766	J	0.0700	MDL	0.233	PQL	mg/Kg	J	Z, Q
ARSENIC	3.97		0.0934	MDL	0.467	PQL	mg/Kg	J	Q
CHROMIUM	19.4		0.140	MDL	0.467	PQL	mg/Kg	J	A
COBALT	5.02		0.0233	MDL	0.117	PQL	mg/Kg	J	A
COPPER	8.22		0.0770	MDL	0.467	PQL	mg/Kg	J	A
LEAD	5.21		0.0121	MDL	0.233	PQL	mg/Kg	J	A
NICKEL	12.1		0.117	MDL	0.467	PQL	mg/Kg	J	A
SILVER	0.0296	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0257	MDL	0.117	PQL	mg/Kg	J	A, Q

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.157	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	5.55		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
CHROMIUM	25.9		0.131	MDL	0.436	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.53		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	12.8		0.0720	MDL	0.436	PQL	mg/Kg	J	A
LEAD	7.37		0.0113	MDL	0.218	PQL	mg/Kg	J	A
NICKEL	14.4		0.109	MDL	0.436	PQL	mg/Kg	J	A
SILVER	0.0167	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	45.2		0.0240	MDL	0.109	PQL	mg/Kg	J	A, Q

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	5.10		0.0866	MDL	0.433	PQL	mg/Kg	J	Q
CHROMIUM	20.1		0.130	MDL	0.433	PQL	mg/Kg	J	A
COBALT	3.77		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	5.48		0.0714	MDL	0.433	PQL	mg/Kg	J	A
LEAD	5.67		0.0113	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	7.55		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0348	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	39.9		0.0238	MDL	0.108	PQL	mg/Kg	J	A, Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.61	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0057	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0111	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0449	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0249	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0896	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0179	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0119	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0143	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	0.565	J	0.484	MDL	0.967	PQL	ng/L	J	Z, L, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.1	J	19.2	MDL	38.4	PQL	ng/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	38.2	J	20.1	MDL	40.2	PQL	ng/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	252	J	190	MDL	380	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.098	U	0.098	MDL	0.49	PQL	ug/L	UJ	C

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.097	U	0.097	MDL	0.48	PQL	ug/L	UJ	C

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.3		0.38	MDL	2.0	PQL	ug/Kg	J	*XIII
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C
Aroclor 5460	2.7	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.6	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C
Aroclor 5460	2.0	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	C
Aroclor 5460	2.9	J	1.2	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.8	U	5.8	MDL	19	PQL	ug/Kg	UJ	C

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.76	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	0.72	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	31	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	30	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	57	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	55	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	3900	PQL	ug/Kg	UJ	C

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	37	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1400	U	1400	MDL	4000	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.019	U	0.019	MDL	0.096	PQL	ug/L	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	0.72	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Butylbenzylphthalate	0.33	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Di-n-butylphthalate	0.37	J	0.096	MDL	1.9	PQL	ug/L	J	Z
Di-n-octylphthalate	0.52	J	0.096	MDL	1.9	PQL	ug/L	J	Z, C

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.010	U	0.010	MDL	0.050	PQL	ug/L	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	0.30	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.32	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.27	J	0.050	MDL	1.0	PQL	ug/L	J	Z, C
NAPHTHALENE	0.031	J	0.030	MDL	0.050	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.6		0.78	MDL	1.9	PQL	ug/Kg	J	C
BENZO(K)FLUORANTHENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.0	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	C
CHRYSENE	0.41	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.9	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, C
BENZO(G,H,I)PERYLENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	C
FLUORANTHENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.79	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-071-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	2.3		0.81	MDL	2.0	PQL	ug/Kg	J	C
BENZO(G,H,I)PERYLENE	1.5	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.94	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	U	7.3	MDL	22	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.2	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.9	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 8:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.61	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.2		0.77	MDL	1.9	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	C
INDENO(1,2,3-CD)PYRENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 12:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	C
CHRYSENE	0.52	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	U	7.1	MDL	21	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.88	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	8.3		0.73	MDL	1.8	PQL	ug/Kg	J	C
Di-n-octylphthalate	6.6	U	6.6	MDL	20	PQL	ug/Kg	UJ	C
NAPHTHALENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	C
Di-n-octylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	C

Method Category: SVOA

Method: 8330A **Matrix: AQ**

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Tetryl	0.40	U	0.40	MDL	0.60	PQL	ug/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-132-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	43	U	43	MDL	130	PQL	ug/Kg	UJ	C

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: EB13-SA5A-SB-041811 *Collected:* 4/18/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	1	U	1	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
CARBON TETRACHLORIDE	1	U	1	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Sample ID: TB-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROETHANE	1	U	1	MDL	5	PQL	ug/L	UJ	C
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
CARBON TETRACHLORIDE	1	U	1	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C, C
TRICHLOROFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.3	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.3	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.3	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	C
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-172-SA5A-SB-4.0-5.0 *Collected:* 4/18/2011 3:45:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.3	U	1.3	MDL	8.5	PQL	ug/Kg	UJ	C
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.5	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.35	U	0.35	MDL	4.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.65	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.13	U	0.13	MDL	4.2	PQL	ug/Kg	UJ	C

Sample ID: SL-174-SA5A-SB-2.0-3.0 *Collected:* 4/18/2011 3:05:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.2	U	1.2	MDL	8.0	PQL	ug/Kg	UJ	C
2-HEXANONE	1.6	U	1.6	MDL	8.0	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.33	U	0.33	MDL	4.0	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.51	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.0	PQL	ug/Kg	UJ	C

Sample ID: SL-254-SA5A-SB-2.5-3.5 *Collected:* 4/18/2011 12:45:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.1	U	1.1	MDL	7.4	PQL	ug/Kg	UJ	C
2-HEXANONE	1.5	U	1.5	MDL	7.4	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.36	U	0.36	MDL	7.4	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.31	U	0.31	MDL	3.7	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.47	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
N-BUTYLBENZENE	0.11	U	0.11	MDL	3.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: PrepDE130_v1 **eQAPP Name: CDM_SSFL_110509**

R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE130

Method Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11748AB221924	4/29/2011 7:24:00 PM	BORON	0.0156 mg/L	EB05-SA8N-SS-041811 EB13-SA5A-SB-041811

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA8N-SS-041811(REA2)	BORON	0.0221 mg/L	0.0221U mg/L
EB13-SA5A-SB-041811(REA2)	BORON	0.0151 mg/L	0.0151U mg/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11608AB220149	4/28/2011 1:49:00 AM	PHOSPHORUS TIN	1.26 mg/Kg 1.48 mg/Kg	SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA5A-SB-3.0-4.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	TIN	2.52 mg/Kg	2.52U mg/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P11626AB220808A	4/27/2011 8:08:00 AM	VANADIUM	0.0532 mg/Kg	SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

Method: **8015B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P09095AB322157A	4/20/2011 9:57:00 PM	METHANOL	100 ug/Kg	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB32B211301A	4/21/2011 1:01:00 PM	METHYLENE CHLORIDE	0.46 ug/Kg	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-172-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.2U ug/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.0U ug/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	3.7U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB05-SA8N-SS-041811 (REA2)	4/18/2011 12:00:00 PM	BORON CALCIUM	0.0221 mg/L 0.0949 mg/L	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-056-SA8N-SS-0.0-0.5(RES)	BORON	6.50 mg/Kg	6.50U mg/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	BORON	8.34 mg/Kg	8.34U mg/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	BORON	1.62 mg/Kg	1.62U mg/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	BORON	6.98 mg/Kg	6.98U mg/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	BORON	2.36 mg/Kg	2.36U mg/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	BORON	8.31 mg/Kg	8.31U mg/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	BORON	5.01 mg/Kg	5.01U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **300.0**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-056-SA8N-SS-0.0-0.5MS (SL-032-SA5A-SB-3.0-4.0 SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)
SL-254-SA5A-SB-2.5-3.5MS (SL-254-SA5A-SB-2.5-3.5)	FLUORIDE	36	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WFLCSQ261308 (EB05-SA8N-SS-041811)	N-NITROSODIMETHYLAMINE	60	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11092AQ240556A P11092AY240638A (EB05-SA8N-SS-041811)	Tetryl	50	56	72.00-141.00	-	Tetryl	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11114AQ242158A P11114AY242139A (EB05-SA8N-SS-041811 EB13-SA5A-SB-041811)	Aroclor 5442	92	96	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WJLCSY261109 (EB05-SA8N-SS-041811 EB13-SA5A-SB-041811)	BENZOIC ACID	-	-	10.00-69.00	31 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY25Q211111A (EB13-SA5A-SB-041811 TB-041811)	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHANE	126 130	- -	75.00-123.00 64.00-129.00	- -	CARBON TETRACHLORIDE TRICHLOROFLUOROMETHAN	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8330A**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P11164AQ240658A (SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5)	NITROBENZENE PETN	124 124	- -	80.00-120.00 80.00-120.00	- -	NITROBENZENE PETN	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB05-SA8N-SS-041811	N-Nitrosodimethylamine-d6	171	50.00-150.00	All Target Analytes	J (all detects)

Method: **8082**
Matrix: **AQ**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB13-SA5A-SB-041811	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)

Method: **8082**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-085-SA8N-SS-0.0-0.5	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	No Qual, Diluted Out
SL-172-SA5A-SB-4.0-5.0	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-174-SA5A-SB-2.0-3.0	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SL-254-SA5A-SB-2.5-3.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	N-NITROSODIMETHYLAMINE	J	0.565	0.967	PQL	ng/L	J (all detects)

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	BORON	J	0.0221	0.0500	PQL	mg/L	J (all detects)
	CALCIUM	J	0.0949	0.200	PQL	mg/L	
EB13-SA5A-SB-041811	BORON	J	0.0151	0.0500	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SS-041811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.72	1.9	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.33	1.9	PQL	ug/L	
	Di-n-butylphthalate	J	0.37	1.9	PQL	ug/L	
	Di-n-octylphthalate	J	0.52	1.9	PQL	ug/L	
EB13-SA5A-SB-041811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.30	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.32	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.27	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.031	0.050	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	22.1	38.4	PQL	ng/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	38.2	40.2	PQL	ng/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	252	380	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	SODIUM	J	86.0	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	11.5	PQL	mg/Kg	
	Zirconium	J	1.18	5.74	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	TIN	J	2.66	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.59	5.72	PQL	mg/Kg	
SL-057-SA8N-SS-0.0-0.5	TIN	J	2.62	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.22	5.45	PQL	mg/Kg	
SL-071-SA8N-SS-0.0-0.5	BORON	J	1.62	5.80	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.1	116	PQL	mg/Kg	
	TIN	J	2.79	11.6	PQL	mg/Kg	
SL-080-SA8N-SS-0.0-0.5	TIN	J	2.47	12.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.01	6.01	PQL	mg/Kg	
SL-085-SA8N-SS-0.0-0.5	BORON	J	2.36	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.5	114	PQL	mg/Kg	
	TIN	J	2.62	11.4	PQL	mg/Kg	
	Zirconium	J	1.44	5.72	PQL	mg/Kg	
SL-086-SA8N-SS-0.0-0.5	TIN	J	2.52	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.07	5.66	PQL	mg/Kg	
SL-132-SA8N-SS-0.0-0.5	BORON	J	5.01	5.40	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	10.8	PQL	mg/Kg	
	Zirconium	J	3.97	5.40	PQL	mg/Kg	
SL-172-SA5A-SB-4.0-5.0	SODIUM	J	91.8	118	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	11.8	PQL	mg/Kg	
	Zirconium	J	1.50	5.89	PQL	mg/Kg	
SL-174-SA5A-SB-2.0-3.0	TIN	J	2.93	10.9	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	TIN	J	2.99	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.17	5.46	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	ANTIMONY	J	0.121	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.217	0.454	PQL	mg/Kg	
	SILVER	J	0.0243	0.114	PQL	mg/Kg	
SL-056-SA8N-SS-0.0-0.5	SILVER	J	0.0468	0.116	PQL	mg/Kg	J (all detects)
SL-057-SA8N-SS-0.0-0.5	SELENIUM	J	0.376	0.445	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0356	0.111	PQL	mg/Kg	
SL-071-SA8N-SS-0.0-0.5	ANTIMONY	J	0.111	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.224	0.464	PQL	mg/Kg	
	SILVER	J	0.0362	0.116	PQL	mg/Kg	
SL-080-SA8N-SS-0.0-0.5	ANTIMONY	J	0.136	0.240	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0269	0.120	PQL	mg/Kg	
SL-085-SA8N-SS-0.0-0.5	ANTIMONY	J	0.136	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.202	0.453	PQL	mg/Kg	
SL-086-SA8N-SS-0.0-0.5	ANTIMONY	J	0.205	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.323	0.461	PQL	mg/Kg	
	SILVER	J	0.0278	0.115	PQL	mg/Kg	
SL-132-SA8N-SS-0.0-0.5	SELENIUM	J	0.397	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0462	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5A-SB-4.0-5.0	ANTIMONY	J	0.0766	0.233	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.467	PQL	mg/Kg	
	SILVER	J	0.0296	0.117	PQL	mg/Kg	
SL-174-SA5A-SB-2.0-3.0	ANTIMONY	J	0.157	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.436	PQL	mg/Kg	
	SILVER	J	0.0167	0.109	PQL	mg/Kg	
SL-254-SA5A-SB-2.5-3.5	ANTIMONY	J	0.128	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.433	PQL	mg/Kg	
	SILVER	J	0.0348	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.61	1.2	PQL	mg/Kg	J (all detects)
SL-086-SA8N-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5A-SB-3.0-4.0	MERCURY	J	0.0057	0.111	PQL	mg/Kg	J (all detects)
SL-056-SA8N-SS-0.0-0.5	MERCURY	J	0.0111	0.115	PQL	mg/Kg	J (all detects)
SL-057-SA8N-SS-0.0-0.5	MERCURY	J	0.0138	0.111	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	MERCURY	J	0.0449	0.114	PQL	mg/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	MERCURY	J	0.0249	0.116	PQL	mg/Kg	J (all detects)
SL-086-SA8N-SS-0.0-0.5	MERCURY	J	0.0106	0.112	PQL	mg/Kg	J (all detects)
SL-132-SA8N-SS-0.0-0.5	MERCURY	J	0.0896	0.104	PQL	mg/Kg	J (all detects)
SL-172-SA5A-SB-4.0-5.0	MERCURY	J	0.0179	0.113	PQL	mg/Kg	J (all detects)
SL-174-SA5A-SB-2.0-3.0	MERCURY	J	0.0119	0.108	PQL	mg/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	MERCURY	J	0.0143	0.108	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.7	3.8	PQL	ug/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	AROCLOR 1260	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.0	3.9	PQL	ug/Kg	
SL-080-SA8N-SS-0.0-0.5	Aroclor 5460	J	2.9	4.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA8N-SS-0.0-0.5	AROCLOR 1254	J	0.76	2.0	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.72	2.0	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	4.2	PQL	ug/Kg	J (all detects)
SL-174-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.51	4.0	PQL	ug/Kg	J (all detects)
SL-254-SA5A-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.47	3.7	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	390	PQL	ug/Kg	J (all detects)
SL-071-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	390	PQL	ug/Kg	J (all detects)
SL-080-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	400	PQL	ug/Kg	J (all detects)
SL-085-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	380	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	57	190	PQL	ug/Kg	
	PHENANTHRENE	J	41	190	PQL	ug/Kg	
	PYRENE	J	55	190	PQL	ug/Kg	
SL-132-SA8N-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	37	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
	PYRENE	J	1.8	1.9	PQL	ug/Kg	
SL-057-SA8N-SS-0.0-0.5	CHRYSENE	J	0.41	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE130 **Laboratory: LL**

EDD Filename: DE130_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.9	2.0	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.5	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	FLUORENE	J	1.5	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.79	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	2.0	PQL	ug/Kg	
	PYRENE	J	1.3	2.0	PQL	ug/Kg	
SL-080-SA8N-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.94	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	
	PYRENE	J	1.9	2.0	PQL	ug/Kg	
SL-085-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.61	1.9	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
SL-086-SA8N-SS-0.0-0.5	CHRYSENE	J	0.52	2.0	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.2	2.0	PQL	ug/Kg	
SL-132-SA8N-SS-0.0-0.5	ANTHRACENE	J	0.88	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	

Method: 9012B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-071-SA8N-SS-0.0-0.5	CYANIDE	J	0.23	0.58	PQL	mg/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	April 18, 2011
LDC Report Date:	August 31, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE130

Sample Identification

SL-032-SA5A-SB-3.0-4.0
SL-172-SA5A-SB-4.0-5.0
SL-174-SA5A-SB-2.0-3.0
SL-254-SA5A-SB-2.5-3.5
TB-041811
EB13-SA5A-SB-041811

Introduction

This data review covers 4 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
4/21/11	2-Butanone 4-Methyl-2-pentanone 2-Hexanone n-Butylbenzene	26 45 57 26	All soil samples in SDG DE130	J (all detects) UJ (all non-detects)	A
4/22/11	Dichlorodifluoromethane Trichlorofluoromethane Carbon tetrachloride 1,2-Dichloroethane	37 37 36 34	All water samples in SDG DE130	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11	Bromochloromethane	36	All soil samples in SDG DE130	J (all detects) UJ (all non-detects)	A
2/10/11	Dichlorodifluoromethane Acetone	30 28	All water samples in SDG DE130	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB32	4/21/11	Methylene chloride	0.46 ug/Kg	All soil samples in SDG DE130

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-172-SA5A-SB-4.0-5.0	Methylene chloride	0.65 ug/Kg	4.2U ug/Kg
SL-174-SA5A-SB-2.0-3.0	Methylene chloride	0.51 ug/Kg	4.0U ug/Kg
SL-254-SA5A-SB-2.5-3.5	Methylene chloride	0.47 ug/Kg	3.7U ug/Kg

Sample TB-041811 was identified as a trip blank. No volatile contaminants were found.

Sample EB13-SA5A-SB-041811 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS/DY25 (TB-041811 EB13-SA5A-SB-041811 VBLKY25)	Trichlorofluoromethane Carbon tetrachloride	130 (64-129) 126 (75-123)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE130	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE130

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	2-Butanone 4-Methyl-2-pentanone 2-Hexanone n-Butylbenzene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Dichlorodifluoromethane Trichlorofluoromethane Carbon tetrachloride 1,2-Dichloroethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Dichlorodifluoromethane Acetone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE130	TB-041811 EB13-SA5A-SB-041811	Trichlorofluoromethane Carbon tetrachloride	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE130	SL-032-SA5A-SB-3.0-4.0 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5 TB-041811 EB13-SA5A-SB-041811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE130

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE130	SL-172-SA5A-SB-4.0-5.0	Methylene chloride	4.2U ug/Kg	A	B
DE130	SL-174-SA5A-SB-2.0-3.0	Methylene chloride	4.0U ug/Kg	A	B
DE130	SL-254-SA5A-SB-2.5-3.5	Methylene chloride	3.7U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE130

No Sample Data Qualified in this SDG

LDC #: 26078B1a **VALIDATION COMPLETENESS WORKSHEET** Date: 8/31/11
SDG #: DE130 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/18/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 5 EB = 6

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	SL-032-SA5A-SB-3.0-4.0 S	11	YBLKB32	21		31	
2	SL-172-SA5A-SB-4.0-5.0	12	YBLKY25	22		32	
3	SL-174-SA5A-SB-2.0-3.0	13		23		33	
4	SL-254-SA5A-SB-2.5-3.5	14		24		34	
5	TB-041811 W	15		25		35	
6	EB13-SA5A-SB-041811	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	