

APPENDIX A

Field Logs



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME Causeway Sediment		STATION ID CB-N-01	STATION NAME Chocolata Bay
DATE 12 MAY 14		TIME STARTED (AT SITE) 0828	TIME FINISHED (AT SITE) 1020
NAV DATUM NAD83 WGS84		LATITUDE 30.68774	LONGITUDE 087.98679
FIELD TEAM OVANN, MCCOY, O'NEIL, WHITEHORST		RECORDER C. WANN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: Mill foil in area.		
WATER QUALITY TIME: 0938			
FIELD MEASUREMENTS	pH 7.41	Dissolved Oxygen (mg/L) 6.81	CONDUCTIVITY (µmS/cm) ms/cm 0.284
	Turbidity (NTU) 8.60	Temperature (°C) 24.14	SALINITY (ppt) 0.13
COMMENTS Depth 3.3'			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>Carseway Sediment</i>		DATE <i>2 May 14</i>	PROJECT MANAGER <i>WANN</i>	RECORDER <i>WANN</i>
STATION ID <i>CB-N-01 Top</i>		NAV DATUM <i>WGS84</i>	LATITUDE <i>30.68734</i>	LONGITUDE <i>087.98679</i>
WATER DEPTH (FT) <i>3.3'</i>		TIDE (FT) <i>1.5</i>	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT) <i>.</i>
		PENETRATION (FT) <i>24"</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>15"</i>	
CORE DIAMETER (IN) <i>2"</i>		ATTEMPT <i>1 of 2</i>	TIME STARTED <i>0947</i>	TIME FINISHED <i>0957</i>

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
<i>2"</i>		<i>Sandy silt</i>	<i>None</i>	<i>Dark sand on top</i>		<i>Dark gray</i>
<i>5</i>	<i>5</i>	↓	↓	<i>Gray sand</i>	<i>CB-N-01TD</i>	<i>Gray</i>
<i>10</i>	<i>10</i>	↓	↓	↓	↓	<i>Some organic material</i>
<i>15</i>	<i>15</i>	↓	↓	↓	↓	
<i>20</i>	<i>20</i>					
<i>25</i>	<i>25</i>					
<i>30</i>	<i>30</i>					
<i>35</i>	<i>35</i>					
<i>40</i>	<i>40</i>					
<i>45</i>	<i>45</i>					
<i>50</i>	<i>50</i>					
<i>55</i>	<i>55</i>					
<i>60</i>	<i>60</i>					

NOTES *Photo #182*



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>Causeway Sediment</i>		DATE <i>12 MAY 14</i>	PROJECT MANAGER <i>WAWW</i>	RECORDER <i>WAWW</i>
STATION ID <i>CB-N-01 Bottom</i>	NAV DATUM <i>WGS84</i>	LATITUDE <i>3068734</i>	LONGITUDE <i>087.48679</i>	
WATER DEPTH (FT) <i>3.3'</i>	TIDE (FT) <i>1.5</i>	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) <i>2</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>15-24" (9")</i>	
CORE DIAMETER (IN) <i>2</i>	ATTEMPT <i>2 of 2</i>	TIME STARTED <i>0957</i>	TIME FINISHED <i>04 10 20</i>	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
<i>24</i> 5	<i>24</i> 5	<i>Sandy Silt</i>	<i>None</i>	<i>Dark Sand</i>		
			↓	<i>Grassy</i>		
10	10		↓			
15	15		↓		<i>CB-N-01 Bottom</i>	
20	20		↓		↓	
<i>24</i> 25	<i>24</i> 25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
Retusal at 24"



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME CAUSEWAY SEDIMENT		STATION ID CB-N-02	STATION NAME Chocolate Bay
DATE 12 MAY 14		TIME STARTED (AT SITE) 1027	TIME FINISHED (AT SITE) 1103
NAV DATUM WGS84		LATITUDE 30.68615	LONGITUDE W087.97798
FIELD TEAM WANN, MCGY, O'NEIL, WHITE HULL		RECORDER WANN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> P. CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments: Mill foil in area			
WATER QUALITY TIME: 1230			
FIELD MEASUREMENTS	pH 6.9	Dissolved Oxygen (mg/L) 4.54	CONDUCTIVITY (µS/cm) 0.191
	Turbidity (NTU) 12.7	Temperature (°C) 23.94	SALINITY (ppt) 0.09
COMMENTS Mill foil in Area Depth 3.41'			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY CAUSEWAY SEDIMENT		DATE 12 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID CB-N-02	NAV DATUM WGS84	LATITUDE 30.8665	LONGITUDE 087.97798	
WATER DEPTH (FT) 3.4'	TIDE (FT) 1.5	MLLW (FT) = WATER DEPTH - TIDE		SAP DEPTH (FT)
		PENETRATION (FT) 30''	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30''	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1035	TIME FINISHED 1042	

PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	<i>Silty sand Sandy silt</i>	<i>None</i>	<i>Blackish Gray</i>		
10	10	↓	↓	↓		
15	15	↓	↓	↓	<i>CB-N-02 B-TUM</i>	
20	20	↓	↓	↓	↓	
25	25	↓	↓	↓		
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>Causeway Sediment</i>		DATE <i>12 MAY 14</i>	PROJECT MANAGER <i>WANN</i>	RECORDER <i>WANN</i>
STATION ID <i>CB-N-02</i>	NAV DATUM <i>WGS84</i>	LATITUDE <i>30.6815</i>	LONGITUDE <i>087.97742</i>	
WATER DEPTH (FT) <i>3.4</i>	TIDE (FT) <i>1.5</i>	MLLW (FT) = WATER DEPTH - TIDE		SAP DEPTH (FT)
		PENETRATION (FT) <i>33"</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>0-15"</i>	
CORE DIAMETER (IN) <i>2</i>	ATTEMPT <i>2 of 2</i>	TIME STARTED <i>1045</i>	TIME FINISHED <i>1103</i>	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	<i>Silty sand w.</i>	<i>Sulphur</i>	<i>Top 2" light Brown</i>	<i>CB-N-02</i>	
10	10	↓	↓	<i>Gray w/Bluish</i>	<i>TOP</i>	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME Causeway Sediment		STATION ID CB-N-03	STATION NAME Chocollota Bay
DATE 12 MAR 14		TIME STARTED (AT SITE) 1105	TIME FINISHED (AT SITE) 1135
NAV DATUM V6184		LATITUDE 30.68573	LONGITUDE 087.97095
FIELD TEAM WANN, MCCAY, O'NEIL		RECORDER WANN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: mill foil in Area		
WATER QUALITY TIME:			
FIELD MEASUREMENTS	pH 7.06	Dissolved Oxygen (mg/L) 4.80	CONDUCTIVITY (µS/cm) 0.200
	Turbidity (NTU) 14.8	Temperature (°C) 25.33	SALINITY (ppt) 0.09
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>Caseway Sediment</i>		DATE <i>12 MAY 14</i>	PROJECT MANAGER <i>WARW</i>	RECORDER <i>WARW</i>
STATION ID <i>CB-N-03</i>	NAV DATUM <i>WGS84</i>	LATITUDE		LONGITUDE
WATER DEPTH (FT) <i>2.0</i>	TIDE (FT) <i>1.5</i>	MLLW (FT) = WATER DEPTH - TIDE		SAP DEPTH (FT)
		PENETRATION (FT) <i>33"</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>0-15.11</i>	
CORE DIAMETER (IN) <i>2</i>	ATTEMPT <i>* Bot 2</i>	TIME STARTED <i>1110</i>	TIME FINISHED <i>1120</i>	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	<i>Sandy silt w/ shell</i>	<i>slight musty</i>	<i>Gray w/ Black</i>	<i>CB-N-03</i>	
10	10	↓	↓		<i>TOP</i>	
15	15	↓	↓		↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
** 1st attempt resulted in only 4" of recovery so not kept.*



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY C AUSEWAY SEDIMENT		DATE 12 MAY 14	PROJECT MANAGER WARRN	RECORDER WARRN
STATION ID CB-N-03	NAV DATUM WGS84	LATITUDE 30.68615	LONGITUDE 1087.97798	
WATER DEPTH (FT) 2.0	TIDE (FT) 1.5	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 33"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1120	TIME FINISHED 1135	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Silt	Slight H ₂ S	Gray	CB-No 3 Bottom	
25	25	↓		↓	↓	
30	30	↓		↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
~~1st~~ attempt non-recoverable - redo for #2



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID CA-N-06	STATION NAME CHARLOTTA RAY
DATE 12 MAY 14	TIME STARTED (AT SITE) 1158	TIME FINISHED (AT SITE) 1220	
NAV DATUM WGS84	LATITUDE 30.68008	LONGITUDE 087.97130	
FIELD TEAM WAAN, MCGY, ONEIL WHITEHORST		RECORDER WAAN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments: MILLFOIL IN AREA			
WATER QUALITY TIME: 1200			
FIELD MEASUREMENTS	pH 7.01	Dissolved Oxygen (mg/L) 5.47	CONDUCTIVITY (µS/cm) 0.183
	Turbidity (NTU) 13.5	Temperature (°C) 23.6	SALINITY (ppt) 0.09
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID CB-N-06	NAV DATUM WGS84	LATITUDE 30.61008	LONGITUDE 087.97136	
WATER DEPTH (FT) 2.5	TIDE (FT) 1.4	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 17"	CORE LENGTH COLLECTED FOR ANALYSIS (FT)	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 1*	TIME STARTED 1205	TIME FINISHED 1212	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Sand w/ silt	Slight musty	Brownish Gray w/	CB-N-06 top	
10	10	↓	↓	Some black ↓	↓	
15	15					
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES
 - met refusal at 17" on first attempt. Taking top sample.
 *NO BOTTOM SAMPLE!



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALA BAMA CAUSE WAY		DATE 12 MAY 14	PROJECT MANAGER WAW	RECORDER WAW
STATION ID CB-N-06		NAV DATUM WGS84	LATITUDE 30.608	LONGITUDE 087.9730
WATER DEPTH (FT) 2.5		TIDE (FT) 1.4	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
			PENETRATION (FT) ~ 15"	CORE LENGTH COLLECTED FOR ANALYSIS (FT)
CORE DIAMETER (IN) 2		ATTEMPT * - of -	TIME STARTED 1212	TIME FINISHED 1225

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
Hitting hard compact sand on second try.
Refusal at 10-11" this time.
*Unable to get penetration after multiple attempts



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID CB-N-08	STATION NAME Choctaw Ha Bay	
DATE 12 MAY 14		TIME STARTED (AT SITE) 1228	TIME FINISHED (AT SITE) 1258	
NAV DATUM WGS84		LATITUDE 30.68069	LONGITUDE 087.97761	
FIELD TEAM WARN, Mc GY, DAVEIL, WHITEHURST			RECORDER WARN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments: SPARSE MILLEPIL			
WATER QUALITY TIME: 1234				
FIELD MEASUREMENTS	pH 7.48	Dissolved Oxygen (mg/L) 6.85	CONDUCTIVITY (µS/cm) 0.153 ⁷⁵	
	Turbidity (NTU) 14.1	Temperature (°C) 23.54	SALINITY (ppt) 0.07	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>ALABAMA CAUSEWAY</i>		DATE <i>12 MAY 14</i>	PROJECT MANAGER <i>WARW</i>	RECORDER <i>WANW</i>
STATION ID <i>CB-N-05</i>		NAV DATUM <i>WGS84</i>	LATITUDE <i>30.68069</i>	LONGITUDE <i>087.97761</i>
WATER DEPTH (FT) <i>3.31</i>		TIDE (FT) <i>1.3</i>	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) <i>24"</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>15"-24"</i>	
CORE DIAMETER (IN) <i>2</i>		ATTEMPT <i>1 of 2</i>	TIME STARTED <i>1230</i>	TIME FINISHED <i>1240</i>

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5				<i>CB-N-05 BOTTOM</i>	
10	10					
15	15	<i>Sand w/ silt</i>	<i>slight musty odor.</i>	<i>Brownish Gray</i>		
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

#2 - 18.5" on second attempt - using bottom for sample - multiple cores for needed for lab volume. Same characterization so will same log sheet.



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID CB-N-05	NAV DATUM WGS84	LATITUDE 30.68064	LONGITUDE 087.97761 087.97761	
WATER DEPTH (FT) 3.31	TIDE (FT) 1.3	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 16"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1240	TIME FINISHED 1258	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	Slight H ₂ S	Brownish / Gray	CB-N-05 Top	
10	10	Sand	↓		↓	
15	15					
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID CR-N-04	STATION NAME CHARLOTTA BAY
DATE 12 MAY 14		TIME STARTED (AT SITE) 1307	TIME FINISHED (AT SITE) 1323
NAV DATUM WGS84		LATITUDE 30.68143	LONGITUDE 087.48340
FIELD TEAM WANN, Mc GY, ONEIL, WHITEHART			RECORDER WANN
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> P CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments: Spars milfoil. Wind picking up			
WATER QUALITY TIME:			
FIELD MEASUREMENTS	pH 6.74	Dissolved Oxygen (mg/L) 6.74 7.75	CONDUCTIVITY (µS/cm) 0.158
	Turbidity (NTU) 16.0	Temperature (°C) 24.28	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY	DATE 12 MAY 14	PROJECT MANAGER WAW	RECORDER WAW
STATION ID CB-N-04	NAV DATUM WGS84	LATITUDE 30.68143	LONGITUDE 087.92240
WATER DEPTH (FT) 3.81	TIDE (FT) 1.3	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 151	CORE LENGTH COLLECTED FOR ANALYSIS (FT)
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1308	TIME FINISHED 1315

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Gradient silt w/ sand		Brownish Gray	CB-N-05	
10	10	Sand w silt → sand			TOP	
15	15					
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAVERMAN		DATE 12 MAY 14	PROJECT MANAGER W/AN	RECORDER W/AN
STATION ID CB-N-05	NAV DATUM WGS84	LATITUDE 30.6843	LONGITUDE 087.48340	
WATER DEPTH (FT) 3.6	TIDE (FT) 1.3	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 22"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-22"	
CORE DIAMETER (IN) 2	ATTEMPT *2 of 2	TIME STARTED 1315	TIME FINISHED 1323	

PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND ↓	NONE ↓	Gray ↓	CB-N-05 Bottom	
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
* Need more volume for bottom so took additional core. Same characterization so same sheet. 23" penetration took 15-22" for mix in sample.



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID CB-N-07	STATION NAME Chocolutta Bay
DATE 12 MAY 14		TIME STARTED (AT SITE) 1330	TIME FINISHED (AT SITE) 1400
NAV DATUM WGS84		LATITUDE 30.67787	LONGITUDE 087.97890
FIELD TEAM			RECORDER WANN
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input checked="" type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: MILL FOIL thick in area		
WATER QUALITY TIME: 1335			
FIELD MEASUREMENTS	pH 6.71	Dissolved Oxygen (mg/L) 7.20	CONDUCTIVITY (µS/cm) 0.159
	Turbidity (NTU) 23.0	Temperature (°C) 23.76	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CANALWAY		DATE 12 MAY 14	PROJECT MANAGER WAW	RECORDER WAW
STATION ID CB-N-07 12 MAY 14	NAV DATUM WGS84	LATITUDE 30.67787	LONGITUDE 087.97940	
WATER DEPTH (FT) 2'	TIDE (FT) 6.3	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 19"	CORE LENGTH COLLECTED FOR ANALYSIS (FT)	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1340	TIME FINISHED 1347	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt Sand	musty	Brownish Gray	CB-N-07 TOP	some organic matter on top
10	10	↓	↓		↓	
15	15	↓	↓		↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES





PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY <i>ALABAMA CAUSEWAY</i>		DATE <i>12 MAY 14</i>	PROJECT MANAGER <i>WAW</i>	RECORDER <i>WAW</i>
STATION ID <i>CB-N-07</i>	NAV DATUM <i>WGS84</i>	LATITUDE <i>30.67787</i>	LONGITUDE <i>087.97890</i>	
WATER DEPTH (FT) <i>2'</i>	TIDE (FT) <i>1.1</i>	MLLW (FT) = WATER DEPTH - TIDE		SAP DEPTH (FT)
		PENETRATION (FT) <i>31"</i>	CORE LENGTH COLLECTED FOR ANALYSIS (FT) <i>15 = 30"</i>	
CORE DIAMETER (IN)	ATTEMPT <i>2 of 2</i>	TIME STARTED <i>1347</i>	TIME FINISHED <i>1400</i>	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	<i>Sand</i>	<i>None</i>	<i>Brownish Gray</i>	<i>CB-N-07 Bottom</i>	
25	25	↓	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY	STATION ID CBN-08	STATION NAME Chocolate Bay
DATE 12 MAY 14	TIME STARTED (AT SITE) 1420	TIME FINISHED (AT SITE) 1450
NAV DATUM	LATITUDE 30.67820	LONGITUDE 087.97545
FIELD TEAM WARN, MCGY ONEIL, WHITEHURST		RECORDER 97524
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY		

SURFACE WATER APPEARANCE	ODOR	<input type="checkbox"/> ROTTEN EGG/H ₂ S	<input type="checkbox"/> MUSTY	<input type="checkbox"/> SEWAGE	<input type="checkbox"/> AMMONIA	<input type="checkbox"/> GASOLINE/PETROLEUM	
		<input type="checkbox"/> FISH/DECAY	<input type="checkbox"/> CHLORINE	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> CHEMICAL	<input type="checkbox"/> OTHER	
	COLOR	<input type="checkbox"/> YELLOW	<input type="checkbox"/> GREEN	<input type="checkbox"/> BLUE	<input type="checkbox"/> BROWN	<input type="checkbox"/> RED	
		<input checked="" type="checkbox"/> COLORLESS	<input type="checkbox"/> OTHER				
	FLOATING MATERIALS (ALL THAT APPLY)	<input type="checkbox"/> SUDS/FOAM	<input type="checkbox"/> OILY SHEEN	<input type="checkbox"/> ORGANIC MATERIAL	<input type="checkbox"/> SCUM	<input type="checkbox"/> ALGAE	
		<input type="checkbox"/> OTHER (DESCRIBE)					
TRASH	<input checked="" type="checkbox"/> NONE	<input type="checkbox"/> VEGETATION	<input type="checkbox"/> STYROFOAM	<input type="checkbox"/> WOOD	<input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS)	<input type="checkbox"/> OTHER (DESCRIBE)	
TURBIDITY	<input type="checkbox"/> CLEAR	<input checked="" type="checkbox"/> CLOUDY	<input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE				
Water Quality Appearance Comments:							

WATER QUALITY TIME: **1420**

FIELD MEASUREMENTS	pH	6.83	Dissolved Oxygen (mg/L)	7.31	CONDUCTIVITY (µm/cm)	0.156
	Turbidity (NTU)	16.2	Temperature (°C)	24.19	SALINITY (ppt)	0.07

COMMENTS
 * Offset approx 300ft due to original coordinates putting us into middle of navigation channel - too deep to collect push core sample.
 2.9' deep



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAR 14	PROJECT MANAGER W. ARN	RECORDER W. ARN
STATION ID CB-N-08		NAV DATUM WGS84	LATITUDE 30.67120	LONGITUDE 087.97405
WATER DEPTH (FT) 2.9'		TIDE (FT) 1.1	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT) 524
CORE DIAMETER (IN) 2			PENETRATION (FT) 23"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"
ATTEMPT 1 of 5		TIME STARTED 1425	TIME FINISHED 1430	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt w/ SAND	slight H ₂ S	Greyish black	CB-N-08 TOP	organic
10	10	Silty SAND		Top 1" is Brownish Gray	↓	Debris Frag
15	15	↓			↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARW	RECORDER WARW		
STATION ID CB-N-08		NAV DATUM WGS84	LATITUDE 30.67810	LONGITUDE 087.27405 524		
WATER DEPTH (FT) 2.9'		TIDE (FT) 6.1	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)		
		PENETRATION (FT) *see below	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-19.5"			
CORE DIAMETER (IN) 2		ATTEMPT * 2, 3, 4 of 5	TIME STARTED 1430	TIME FINISHED 1450		
PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Sand w/ silt	None			
10	10	↓	↓	Blackish Gray		
15	15	↓	↓	↓	CB-N-08 Bottom	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

*#1 19.5" recovery on second core attempt

#2 12.5" recovery on third core attempt

#4 17" recovery on 4th attempt.

#5 19" recovery on 5th attempt.



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUTIONARY		STATION ID CS-5-12	STATION NAME Choccolotha Bay South
DATE 12 MAY 14		TIME STARTED (AT SITE) 1515	TIME FINISHED (AT SITE) 1545
NAV DATUM WGS84		LATITUDE 30.67020	LONGITUDE 087.97800
FIELD TEAM WARR, McWY, ONEIL, WHITEHAST			RECORDER
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: Heavy millfoam in area		
WATER QUALITY TIME: 1517			
FIELD MEASUREMENTS	pH 8.52	Dissolved Oxygen (mg/L) 10.08	CONDUCTIVITY (µS/cm) 0.150
	Turbidity (NTU) 2-1	Temperature (°C) 25.20	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARN	RECORDER WARN
STATION ID CB-5-12	NAV DATUM WGS84	LATITUDE 30.67020	LONGITUDE 087.97800	
WATER DEPTH (FT) 2.3'	TIDE (FT) (-1)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 24"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-24"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1520	TIME FINISHED 1530	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Sand w/ silt	Faint H ₂ S	Brownish Gray	CB-5-12 Bottom	
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
* #1 24" recovery on 1st attempt 15"-24" collected.
#2 18.5" recovery on 2nd attempt. 15"-18.5" collected.
- top taken for analysis - new data on new sheet



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARR	RECORDER WARR
STATION ID CB-S-12		NAV DATUM WGS84	LATITUDE 30.67020	LONGITUDE 087.97800
WATER DEPTH (FT) 2.3		TIDE (FT) -1.1	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
CORE DIAMETER (IN) 2		ATTEMPT 2 of 2	PENETRATION (FT) 18.5"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-10"
		TIME STARTED 1530	TIME FINISHED 1545	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Sand w/ Silt	Faint Has	Brown	CB-S-12 TOP	some black organic material
10	10			slack on top section	↓	
15	15			Brownish Gray		
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CANNON		STATION ID CB-5-11	STATION NAME Chocollata Bay - South	
DATE 12 MAY 14		TIME STARTED (AT SITE) 1543	TIME FINISHED (AT SITE) 1620	
NAV DATUM WGS84		LATITUDE 30.67213	LONGITUDE 087.98171	
FIELD TEAM WAW, MCGY, DANBY, WHITEHART			RECORDER WAW	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments:			
WATER QUALITY TIME:				
FIELD MEASUREMENTS	pH 7.89	Dissolved Oxygen (mg/L) 8.79	CONDUCTIVITY (µm/cm) 0.172	
	Turbidity (NTU) 15.3	Temperature (°C) 25.05	SALINITY (ppt) 0.08	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID CB-S-11	NAV DATUM WGS84	LATITUDE 30.67213	LONGITUDE 087.98171	
WATER DEPTH (FT) 4.0	TIDE (FT) 1.2	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 15"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of	TIME STARTED 1550	TIME FINISHED 1556	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Sandy silt	None	Darker gray	CB-S-11 TOP	Langia shell in sample
10	10	Silty sand	↓	Brownish gray	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 12 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID CB-5-11		NAV DATUM WGS84	LATITUDE	LONGITUDE
WATER DEPTH (FT) 4.0		TIDE (FT) 1.2	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT)	CORE LENGTH COLLECTED FOR ANALYSIS (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 2, 3 of 3	TIME STARTED 1600	TIME FINISHED 1612

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	silty clay sand	Faint H2S	Brownish Gray	CB-5-61 Bottom	Some organic debris around 20' - some shell hash
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

↓

NOTES
 #2 - 23" recovery. Collected 15-23". } multiple attempts to
 #3 - 21.5" recovery. Collected 15-21.5". } get analysis, volume needed.
 - same characterization



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY	STATION ID JB-N-01	STATION NAME Justins Bay North	
DATE 13 MAY 14	TIME STARTED (AT SITE) 0900	TIME FINISHED (AT SITE)	
NAV DATUM WGS84	LATITUDE 30.68527	LONGITUDE 087.93983	
FIELD TEAM WARW McCoy, ONEIL, WHITEHURST		RECORDER WARW	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: Heavy milfoil in area.		
WATER QUALITY TIME: 0904			
FIELD MEASUREMENTS	pH 7.58	Dissolved Oxygen (mg/L) 6.47	CONDUCTIVITY (µS/cm) 0.162
	Turbidity (NTU) 13.7	Temperature (°C) 22.53	SALINITY (ppt) 0.08
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID JB-N-01	NAV DATUM WGS84	LATITUDE 30.68527	LONGITUDE 087.93983	
WATER DEPTH (FT) 3.3	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 18.5	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 0913	TIME FINISHED 0918	

9/0

4' ↓

PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	silt silt/clay sand	H ₂ S	Brown	JB-N-01 TOP	
10	10	silty sand	↓	↓	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID JB-N-01	NAV DATUM WGS84	LATITUDE 30.68527	LONGITUDE 087.93983	
WATER DEPTH (FT) 3.3	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 29''	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-29''	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 0918	TIME FINISHED 0925	

92A

PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5				JB-N-01	
10	10				Bottom	
15	15				↓	
20	20	Silty Sand	Light	Brown	↓	
25	25	↓	↓	↓	↓	
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES





FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAVEWAY		STATION ID JB-N-01-DUP	STATION NAME JUSTINS BAY
DATE 13 MAY 14		TIME STARTED (AT SITE) 0925	TIME FINISHED (AT SITE) 0940
NAV DATUM WG 584		LATITUDE 30.68527	LONGITUDE 087.9383
FIELD TEAM WANN, MCCOY, ONEIL, WHITEHURST			RECORDER WANN
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: HEAVY MILFOIL IN AREA		
WATER QUALITY TIME: 0904			
FIELD MEASUREMENTS	pH 7.58	Dissolved Oxygen (mg/L) 6.47	CONDUCTIVITY (µS/cm) 0.162
	Turbidity (NTU) 13.7	Temperature (°C) 22.53	SALINITY (ppt) 0.08
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY	DATE 13 May 14	PROJECT MANAGER WARN	RECORDER WARN
STATION ID JB-N-01-DUP	NAV DATUM WGS84	LATITUDE 30.68527	LONGITUDE 087.9383
WATER DEPTH (FT) 3.3	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 22	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"
CORE DIAMETER (IN) 2	ATTEMPT 1 of 1	TIME STARTED 0930	TIME FINISHED 0940

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	Slight H ₂ S	Brown	JB-N-01 DUP	Field DUP
10	10	Sandy silt	↓	↓	↓	↓
15	15	↓	↓	↓	↓	↓
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES
Field dup on top sample



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CHESAPEAKE		STATION ID JB-N-02	STATION NAME JUSTINS BAY NORTH
DATE 13 MAY 14		TIME STARTED (AT SITE) 0956	TIME FINISHED (AT SITE) 1018
NAVD DATUM WGS84		LATITUDE 30.67686	LONGITUDE 087.94312
FIELD TEAM WARN, McGEY, ONEIL, WHITEHUNT			RECORDER WARN
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: HEAVY MILFOIL IN AREA.		
WATER QUALITY TIME: 0958			
FIELD MEASUREMENTS	pH 7.20	Dissolved Oxygen (mg/L) 7.35	CONDUCTIVITY (µS/cm) 0.163
	Turbidity (NTU) 8.31	Temperature (°C) 23.44	SALINITY (ppt) 0.08
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-N-02	NAV DATUM WGS84	LATITUDE 30.67696	LONGITUDE 087.94312	
WATER DEPTH (FT) 2.9	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 29.5	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-29.5	
CORE DIAMETER (IN) 2	ATTEMPT of	TIME STARTED 1000	TIME FINISHED 1048	

1010

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Sandy silt	None	Grayish	JB-N-02 Bottom	JB-N-02 Bottom
25	25	↓	↓	Brown	↓	↓
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 APR 14	PROJECT MANAGER WAN	RECORDER WAN
STATION ID JB-N-02	NAV DATUM WGS84	LATITUDE 30.67686	LONGITUDE 087.94312	
WATER DEPTH (FT) 2.9	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (IN) 76"	CORE LENGTH COLLECTED FOR ANALYSIS (IN) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of	TIME STARTED 1008	TIME FINISHED 1028	

1025

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	Light	Brownish	JB-N-02	Some
6	6	↓	↓	↓	↓	↓
10	10	Sandy Silt	None	Gray	TOP	organics
15	15	↓	↓	↓	↓	↓
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

6"

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID JB-N-03	STATION NAME JUSTINS BAY NORTH	
DATE 13 MAY 14		TIME STARTED (AT SITE) 1025	TIME FINISHED (AT SITE) 1155	
NAV DATUM NGS 84		LATITUDE 30.67524	LONGITUDE 087.94073	
FIELD TEAM WARN, MCCOY, ONEK, WHITEHUNT			RECORDER WARN	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/HS <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments: Millfoil in area.			
WATER QUALITY TIME:				
FIELD MEASUREMENTS	pH 7.98	Dissolved Oxygen (mg/L) 6.25	CONDUCTIVITY (µS/cm) 0.174	
	Turbidity (NTU) 8.76	Temperature (°C) 24.79	SALINITY (ppt) 0.08	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WAN	RECORDER WAN
STATION ID JB-N-03		NAV DATUM WGS84	LATITUDE 30.67524	LONGITUDE 087.94073
WATER DEPTH (FT) 2.8		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 35"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30"	
CORE DIAMETER (IN) 2		ATTEMPT 1 of 2	TIME STARTED 1029	TIME FINISHED 1035

1035

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Sandy silt	None	Grayish Brown	JB-N-03 Bottom	
25	25	Silty sand	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35	↓	↓	↓	↓	
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUDEWAN		DATE 13 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-N-03	NAV DATUM WGS84	LATITUDE 30.67524	LONGITUDE 882.94473	
WATER DEPTH (FT) 2.8	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 26"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1035	TIME FINISHED 1050	

1035



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	None	Dark Gray	JB-N-03	
10	10	↓	↓	Brownish Gray	TOP	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID JB-N-04		STATION NAME JUSTIN BAY	
DATE 13 MAY 14		TIME STARTED (AT SITE) 1058		TIME FINISHED (AT SITE) 1125	
NAV DATUM WGS84		LATITUDE 30.67238		LONGITUDE 087.94364	
FIELD TEAM WARN, MCCOY, ONEIL, WHITEHUNT				RECORDER WARN	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY					
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H ₂ S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER				
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER				
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)				
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)				
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE				
	Water Quality Appearance Comments: mill foil in area.				
WATER QUALITY TIME: 1100					
FIELD MEASUREMENTS	pH 7.72		Dissolved Oxygen (mg/L) 5.99 5.99		CONDUCTIVITY (µS/cm) 0.179
	Turbidity (NTU) 7.46		Temperature (°C) 25.07		SALINITY (ppt) 0.08
COMMENTS					



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY	DATE 13 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JA-N-04	NAV DATUM WGS84	LATITUDE 30.67238	LONGITUDE 087.94364
WATER DEPTH (FT) 2.7	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 35.5''	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED	TIME FINISHED

1105

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Sandy silt	None	Brownish Gray	JA-N-04 BOTTOM	
25	25	↓	↓	↓		
30	30	↓	↓	↓		
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WAN	RECORDER WAN
STATION ID JB-N-04	NAV DATUM WGS84	LATITUDE 30.67238	LONGITUDE 087.94361	
WATER DEPTH (FT) 2.7	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 29"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1110	TIME FINISHED 1125	

1120

PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	None	Dark Brown	JB-N-04	
10	10	↓	↓	↓	TOP	
15	15	Sandy silt	↓	grayish Brown	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALARAMA CANYONWAY		STATION ID SL-5-04	STATION NAME SHELLBANK RIVER SOUTH	
DATE 13 MAY 14		TIME STARTED (AT SITE) 12:145	TIME FINISHED (AT SITE) 12:20	
NAV DATUM NAD 83		LATITUDE 30.66634	LONGITUDE 087.92042	
FIELD TEAM WANN, McGOV, ONEIL, W/16/14/15			RECORDER WANN	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input checked="" type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments:			
WATER QUALITY TIME: 1150				
FIELD MEASUREMENTS	pH 6.62	Dissolved Oxygen (mg/L) 4.32	CONDUCTIVITY (µS/cm) 0.149	
	Turbidity (NTU) 19.6	Temperature (°C) 23.48	SALINITY (ppt) 0.07	
COMMENTS				

1203

5.4'



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAVEWAY	DATE 13 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID SR-S-04	NAV DATUM WGS84	LATITUDE 30.66634	LONGITUDE 087.92042
WATER DEPTH (FT) 6.3	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 29'	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-26''
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1150	TIME FINISHED 1200

200

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Silt	Slight H ₂ S	Dark Gray	SR-S-04 BOTTOM	
25	25	↓	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAVEWAY		DATE 13 MAY 14	PROJECT MANAGER WAN	RECORDER WAN
STATION ID SR-S-04		NAV DATUM WGS84	LATITUDE 30.66634	LONGITUDE 087.9242
WATER DEPTH (FT) 6.3		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 25"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2		ATTEMPT 2 of 2	TIME STARTED 1200	TIME FINISHED 1215

(215)



PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	None	Black	SR-S-04 TOP	
10	10	↓	↓	↓	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID SR-S-05	STATION NAME SHELLBANK RIVER SOUTH			
DATE 13 MAY 14		TIME STARTED (AT SITE) 1215	TIME FINISHED (AT SITE) 1245			
NAV DATUM WGS84		LATITUDE 30.66275	LONGITUDE 087.91901			
FIELD TEAM WANN, MCCOY, ONEIL, WITJEHUUS			RECORDER WANN			
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY						
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER					
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER					
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)					
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)					
	TURBIDITY <input checked="" type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE					
	Water Quality Appearance Comments:					
WATER QUALITY TIME: 1218						
FIELD MEASUREMENTS	pH	6.61	Dissolved Oxygen (mg/L)	5.16	CONDUCTIVITY (µS/cm)	0.147
	Turbidity (NTU)	24.6	Temperature (°C)	22.98	SALINITY (ppt)	0.07
COMMENTS						



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CANALWAY		DATE 13 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID SN-5-05		NAV DATUM WGS84	LATITUDE 30.66275	LONGITUDE 087.91901
WATER DEPTH (FT) 6.9		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 28'	CORE LENGTH COLLECTED FOR ANALYSIS (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 1 of 2	TIME STARTED 1220	TIME FINISHED 1230

1230



PEN. DEP.(in)	RETRV. DEP.(in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	NONE	Light Brown	SN-5-05 TOP	
10	10	↓	↓	Brownish Gray	↓	
15	15	↓	↓	Black	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARN	RECORDER WARN
STATION ID SR-5-05	NAV DATUM WGS84	LATITUDE 30.66275	LONGITUDE 087.91901	
WATER DEPTH (FT) 6.9	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 31"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1230	TIME FINISHED 1245	

1245-

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Silt	None	Black	SR-5-05 BOTTOM	
25	25	↓	↓	↓	↓	
30	30	silty clay	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID SA-5-05 DUP	STATION NAME SHELBAW RIVER SOUTH
DATE 13 MAY 14	TIME STARTED (AT SITE) 1240	TIME FINISHED (AT SITE) 1305	
NAV DATUM WGS84	LATITUDE 30.66275	LONGITUDE 087.91901	
FIELD TEAM WARR, MC COY, O'NEIL, WHITEHART		RECORDER WARR	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H ₂ S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments:		
WATER QUALITY TIME: 1218			
FIELD MEASUREMENTS	pH 6.61	Dissolved Oxygen (mg/L) 5.16	CONDUCTIVITY (µS/cm) 0.147
	Turbidity (NTU) 24.6	Temperature (°C) 22.48	SALINITY (ppt) 0.07
COMMENTS *FIELD DUPLICATE			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WAN	RECORDER WAN
STATION ID SR-5-05 DUP		NAV DATUM WGS84	LATITUDE 30.66275	LONGITUDE 087.91901
WATER DEPTH (FT) 6.9	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE		SAP DEPTH (FT)
		PENETRATION (FT) 21"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 1	TIME STARTED 1240	TIME FINISHED 1300	

(245-)



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	NONE	Light Brown	SR-5-05 DUP	
10	10	↓	↓	↓	↓	
15	15	↓	↓	Blackish Gray	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID SA-5-06	STATION NAME SHELLBANK RIVER SOUTH
DATE 13 MAY 14		TIME STARTED (AT SITE) 1306	TIME FINISHED (AT SITE) 1330
NAV DATUM WGS84		LATITUDE 30.65939	LONGITUDE 087.92275
FIELD TEAM WARREN MCGOW, ONEIL, WHITEHUNT		RECORDER WARREN	
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> P. CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H ₂ S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments: SPARSE MULLFILL IN AREA			
WATER QUALITY TIME: 1306			
FIELD MEASUREMENTS	pH 6.93	Dissolved Oxygen (mg/L) 8.33	CONDUCTIVITY (µS/cm) 0.142
	Turbidity (NTU) 20.5	Temperature (°C) 24.71	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUGWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID SR-5-06	NAV DATUM WGS84	LATITUDE 30.65939	LONGITUDE 087.92225	
WATER DEPTH (FT) 2.6	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 18"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 3 of 3	TIME STARTED 1315	TIME FINISHED 1330	

1330

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt	None	Light Brown	SR-5-06 TOP	
10	10	Silt w/ sand	↓	Gray	↓	
15	15	Sand w/ silt	↓	Grayish/Black	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAWENTH		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID SN-5-06		NAV DATUM WGS84	LATITUDE 30.65439	LONGITUDE 087.92275
WATER DEPTH (FT) 2.6		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 23"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-23"	
CORE DIAMETER (IN) 2		ATTEMPT 1 2	TIME STARTED 1310	TIME FINISHED 1315

1315

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10		strong			
15	15	Sand	H ₂ S	Grayish Brown	SN-5-06 Bottom	
20	20	↓	↓	↓		
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
 * #1 - Recovered 23" on 1st attempt. } Same characteristics
 #2 - Recovered 20" on 2nd attempt. } combined for analysis volume



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAVEWAY		STATION ID JB-S-05	STATION NAME JUSTIN'S BAY SOUTH
DATE 13 MAY 14		TIME STARTED (AT SITE) 1340	TIME FINISHED (AT SITE) 1405
NAV DATUM WGS 84		LATITUDE 30.66948	LONGITUDE 087.94455
FIELD TEAM WARN, MCGY, ONEIL, WHITEHUNT			RECORDER WARN
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input checked="" type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Comments: Heavy milfoil in area.			
WATER QUALITY TIME: 1340			
FIELD MEASUREMENTS	pH 8.43	Dissolved Oxygen (mg/L) 6.15	CONDUCTIVITY (µS/cm) 0.158
	Turbidity (NTU) 8.25	Temperature (°C) 25.27	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID JB-S-05		NAV DATUM WGS84	LATITUDE 30.66948	LONGITUDE 087.94455
WATER DEPTH (FT) 3.5		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 16"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2		ATTEMPT 1 of	TIME STARTED 1345	TIME FINISHED 1350

1350

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silty sand sand	None AZ-S	Dark Gray ↓	JB-S-05 TOP	Organics in Top 1'
10	10	↓	↓	Brownish Gray ↓	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WAW	RECORDER WAW
STATION ID JB-5-05	NAV DATUM WGS84	LATITUDE 30.66948	LONGITUDE 087.94455	
WATER DEPTH (FT) 3.5	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 20.511	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-20.511	
CORE DIAMETER (IN) 2	ATTEMPT * 2 nd of 2	TIME STARTED 1350	TIME FINISHED 1425	

1405-

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	sand	H ₂ S	Light Gray/ Brown	JB-5-05 Bottom	
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

* #2 - Recovery 20.511 in 1st attempt.
 #3 - Recovery ~~20.511 in 2nd attempt~~ unable to get any more recovery. Hitting very consolidated material that is like concrete - very dry sand. No archive available for bottom.



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID JB-S-06	STATION NAME JUSTINS BAY SOUTH
DATE 13 MAY 14		TIME STARTED (AT SITE) 1430	TIME FINISHED (AT SITE)
NAV DATUM WGS 84		LATITUDE 30.66790	LONGITUDE 087.94760
FIELD TEAM			RECORDER WAW
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input checked="" type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments:			
WATER QUALITY TIME: 1432			
FIELD MEASUREMENTS	pH 9.04	Dissolved Oxygen (mg/L) 5.32	CONDUCTIVITY (µm/cm) 0.157
	Turbidity (NTU) 6.84	Temperature (°C) 25.50	SALINITY (ppt) 0.07
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID SB-S-06	NAV DATUM WGS84	LATITUDE 30.66790	LONGITUDE 087.94760	
WATER DEPTH (FT) 3.10"	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 21"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-21	
CORE DIAMETER (IN) 2	ATTEMPT 1, 33 of 4	TIME STARTED 1435	TIME FINISHED 1445	

1445

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Sand	HS	Grayish Brown	SB-S-06 BOTTOM	Organic debris
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

- #1 Attempt - Recover of 19"
 - #2 attempt - Recover of 21"
 - #3 Attempt - Recover of 17.5"
- } Same characterization. Multiple attempts to set volume for analysis.



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 13 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID JA-5-06	NAV DATUM WGS84	LATITUDE 30.66790	LONGITUDE 087.94760	
WATER DEPTH (FT) 3' 10"	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 4 of 4	PENETRATION (FT) 15	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"
		TIME STARTED 1445	TIME FINISHED 1500	

1500



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	Silt ↓	None	Green	JA-5-06 TOP	
10	10	Sandw/ silt ↓	H ₂ S ↓	↓	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID SL-N-03	STATION NAME SHELLBANK RIVER NORTH	
DATE 15 MAY		TIME STARTED (AT SITE) 0800	TIME FINISHED (AT SITE)	
NAV DATUM WGP84		LATITUDE 30.66806	LONGITUDE 087.92549	
FIELD TEAM W/ARN, MCGOW, ONEIL, WHITE HUNT		RECORDER W/ARN		815
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY <i>windy</i>				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input checked="" type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input checked="" type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments: <i>WINDY & CHOPPY N WIND</i>			
WATER QUALITY TIME: <i>0800</i>				
FIELD MEASUREMENTS	pH <i>7.42</i>	Dissolved Oxygen (mg/L) <i>3.33</i>	CONDUCTIVITY (µm/cm) <i>0.126</i>	
	Turbidity (NTU) <i>60.3</i>	Temperature (°C) <i>20.41</i>	SALINITY (ppt) <i>0.06</i>	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WARR	RECORDER WARR
STATION ID SN-N-03		NAV DATUM WGS84	LATITUDE 30.66806	LONGITUDE 087.92049
WATER DEPTH (FT) 5.0'		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 24"	CORE LENGTH COLLECTED FOR ANALYSIS (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 1 of	TIME STARTED 0805	TIME FINISHED 0815

815



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT	FAINT	BROWN	SN-N-03	
10	10	↓	↓	BLACK	TOP	
15	15	↓	↓	BLACK	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUWAY		DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID SA-N-03	NAV DATUM WGS84	LATITUDE 30.66806	LONGITUDE 087.92049	
WATER DEPTH (FT) 5.0'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 30'	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30"	
CORE DIAMETER (IN) 2	ATTEMPT of	TIME STARTED 0815	TIME FINISHED 0830	

PEN. DEP. (in)	RETR. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SILT	None	Grayish BLACK	SA-N-03 BOTTOM	
25	25					
30	30	SAND SILT				
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

SILT TO 28" then sand w/ silt



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WPN	RECORDER WPN
STATION ID SN-N-03 DUP		NAV DATUM WGS84	LATITUDE 30.66806	LONGITUDE 087.92049
WATER DEPTH (FT) 5.0'		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 3026	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 1526	
CORE DIAMETER (IN) 2		ATTEMPT 1 of 1	TIME STARTED 0825	TIME FINISHED 0830

0830

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	Silt w/ sand	none	grayish black	SN-N-03 BOTTOM	
25	25	sand	↓		DUP	
30	30				↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

214

NOTES

DUPLICATE QA SAMPLE

3.7



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CMLCWWP		STATION ID SA-N-02	STATION NAME SHELLBANK RIVER NORTH			
DATE 15 MAY 14		TIME STARTED (AT SITE) 0840	TIME FINISHED (AT SITE)			
NAV DATUM WGS 84		LATITUDE 30.67078	LONGITUDE 087.92101			
FIELD TEAM WANN, McGOY		RECORDER WANN				
WEATHER CONDITIONS <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY WINDY						
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM					
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER					
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED					
	<input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER					
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE					
	<input type="checkbox"/> OTHER (DESCRIBE)					
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)						
TURBIDITY <input type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input checked="" type="checkbox"/> HEAVY CLOUDINESS, OPAQUE						
Water Quality Appearance Comments: LIGHT CLIP						
WATER QUALITY TIME:						
FIELD MEASUREMENTS	pH	7.82	Dissolved Oxygen (mg/L)	7.71	CONDUCTIVITY (µm/cm)	0.117
	Turbidity (NTU)	70.2	Temperature (°C)	19.8	SALINITY (ppt)	0.05
COMMENTS						



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WAPN	RECORDER WAPN
STATION ID SR-N-02	NAV DATUM WGS84	LATITUDE 30.67077	LONGITUDE 087.92102	
WATER DEPTH (FT) 3.7	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 33'	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30''	
CORE DIAMETER (IN) 2	ATTEMPT 1 of	TIME STARTED 0840	TIME FINISHED 0900	

0840

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SILK	None	Grayish Black	SR-N-02 Bottom	
25	25	↓	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WAW	RECORDER WAW
STATION ID SA-N-02	NAV DATUM WGS84	LATITUDE 30.67076	LONGITUDE 087.92704	
WATER DEPTH (FT) 3.7'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 2 of 2	TIME STARTED 0850	TIME FINISHED 0900
		PENETRATION (FT)	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	

0900

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT	NUMB	Light Brown	SA-N-02 TOP	
10	10	↓	↓	↓	↓	
15	15	↓	↓	Grayish Brown	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CONCRETEWAY SA-N-01		STATION ID 5A-N-01		STATION NAME SHELLBANK RIVER MOUTH	
DATE 15 MAY 14		TIME STARTED (AT SITE) 0910		TIME FINISHED (AT SITE)	
NAV DATUM WGS 84		LATITUDE 30.67296		LONGITUDE 087.72108	
FIELD TEAM WARR, McWY, ONEIL, WHITE HUNT		RECORDER WARR			
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY WINDY WINNY 0910					
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGGHS <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER				
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER				
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)				
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)				
	TURBIDITY <input type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input checked="" type="checkbox"/> HEAVY CLOUDINESS, OPAQUE				
	Water Quality Appearance Comments: CHOPPY SEM				
WATER QUALITY TIME: 0910					
FIELD MEASUREMENTS	pH 7.74		Dissolved Oxygen (mg/L) 7.60		CONDUCTIVITY (µS/cm) 0.127
	Turbidity (NTU) 55.5		Temperature (°C) 21.01		SALINITY (ppt) 0.06
COMMENTS					



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ARABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WARR	RECORDER WARR
STATION ID SR-N-01	NAV DATUM WGS84	LATITUDE 30.67296	LONGITUDE 087.92187	
WATER DEPTH (FT) 2.5	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 29	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-29 11	
CORE DIAMETER (IN) 2	ATTEMPT 1 of	TIME STARTED 0910	TIME FINISHED 0915	

0915

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15				SR-N-01 Bottom	
20	20	Silt	NO NB	GRAY SILT BLACK		
25	25					
30	30	sandy silt				
35	35	inlet				
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 11	PROJECT MANAGER WARR	RECORDER WARR
STATION ID SN-N-01	NAV DATUM WGS84	LATITUDE 30.67295	LONGITUDE 087.92192	
WATER DEPTH (FT) 2.5'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 29"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 0915	TIME FINISHED 0930	

0915



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT	NONE	BROWN-1" GRAVITY	SN-N-01 TOP	
10	10	↓	↓	BROWN	↓	
15	15	↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA COUSE WPT		STATION ID JB-S-09	STATION NAME JUSTINS BAY SOUTH
DATE 15 MAY 14		TIME STARTED (AT SITE) 0955	TIME FINISHED (AT SITE)
NAV DATUM WGP84		LATITUDE 30.66430	LONGITUDE 089.95113
FIELD TEAM WAMP, MCWY, ONEIL, WHITE AMISH		RECORDER WAMP	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY W/NOY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input checked="" type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)		
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)		
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE		
	Water Quality Appearance Comments: Heavy mill tail in area.		
	WATER QUALITY TIME: 0955		
FIELD MEASUREMENTS	pH 8.26	Dissolved Oxygen (mg/L) 5.71	CONDUCTIVITY (µm/cm) 0.200
	Turbidity (NTU) 17.9	Temperature (°C) 20.30	SALINITY (ppt) 0.09
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-S-09	NAV DATUM WGS84	LATITUDE 30.66430	LONGITUDE 087.95113	
WATER DEPTH (FT) 3.0'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 26.5"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-26.5"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 0:55	TIME FINISHED 1:00	

(070)

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND	H ₂ S	Brownish - GRAY	JB-S-09 Bottom	Some shell & wood
25	25	↓	↓	↓	↓	
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
 #1 - 1st attempt 25.1" recovery } were combined for bottom sample
 #2 - 2nd attempt 26.5" recovery } same characteristics



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WAIN	RECORDER WAIN
STATION ID JR-5-09	NAV DATUM WGS84	LATITUDE 30.66430	LONGITUDE 087.95111	
WATER DEPTH (FT) 3.0'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 26.5'	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15	
CORE DIAMETER (IN)	ATTEMPT 2 of 2	TIME STARTED 1000	TIME FINISHED 1010	

(1010)

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT SILT	↓	Grayish BROWN	JR-5-09 TOP	some shell
10	10	SILT w/	↓	↓	↓	
15	15	SAND	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID JB-508	STATION NAME JUSTINS BAY SOUTH			
DATE 15 MAY 14		TIME STARTED (AT SITE) 1015	TIME FINISHED (AT SITE)			
NAV DATUM WGS84		LATITUDE 30.66461	LONGITUDE 087.94642			
FIELD TEAM WARN, MCWY, ONEIL, WHITEHURT			RECORDER WARN			
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY W/No Y						
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H ₂ S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM					
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER					
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED					
	<input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER					
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE					
	<input type="checkbox"/> OTHER (DESCRIBE)					
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)						
TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE						
Water Quality Appearance Comments:						
WATER QUALITY TIME: 1015						
FIELD MEASUREMENTS	pH	8.08	Dissolved Oxygen (mg/L)	7.83	CONDUCTIVITY (µm/cm)	0.134
	Turbidity (NTU)	23.6	Temperature (°C)	21.09	SALINITY (ppt)	0.06
COMMENTS						



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-1-08	NAV DATUM WGS84	LATITUDE 30.66461	LONGITUDE 087.94643	
WATER DEPTH (FT) 3.4	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 23"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-23"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1015	TIME FINISHED 1030	

020

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND ↓	H ₂ S ↓	Grayish Brown ↓	JB-1-08 Bottom ↓	
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

#1 - 1st attempt 21" recovery, used for bottom sample

#2 - 2nd attempt 23" recovery, same characteristics



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CONJEWAY		DATE 15 MAY 14	PROJECT MANAGER WARREN	RECORDER WARREN
STATION ID JB-S-08	NAV DATUM WGS84	LATITUDE 30.66462	LONGITUDE 087.94643	
WATER DEPTH (FT) 3.4'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 23"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1030	TIME FINISHED 1045	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT - 2" SILT	Must A.S	Dark-Gray Brown -	JB-S-08 TOP	0.66462
10	10	SAND & SILT		↓ Brownish gray	↓	
15	15	SILT &			↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES

2.5



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CANAL/EWAY		STATION ID JA-5-07	STATION NAME JUSTINS BAY SOUTH	
DATE 15 MAY 14		TIME STARTED (AT SITE) 10:50	TIME FINISHED (AT SITE)	
NAV DATUM WGS 84		LATITUDE 30.66688	LONGITUDE W 087.94338	
FIELD TEAM WANN, Mc COY			RECORDER WANN	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY WINDY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments:			
WATER QUALITY TIME: 1050				
FIELD MEASUREMENTS	pH 7.84	Dissolved Oxygen (mg/L) 6.18	CONDUCTIVITY (µm/cm) 0.156	
	Turbidity (NTU) 14.3	Temperature (°C) 19.56	SALINITY (ppt) 0.07	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 14 MAY 15	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-5-07	NAV DATUM WGS84	LATITUDE 30.66688	LONGITUDE 087.94338	
WATER DEPTH (FT) 2.5	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 31	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-13	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1:57	TIME FINISHED 10:55	

10:55

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND	H ₂ S	Grayish Brown	JB-5-07 Bottom	
25	25	↓	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA DUNEWAY		DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-5-07	NAV DATUM WGS84	LATITUDE 30.66687	LONGITUDE 087.94341	
WATER DEPTH (FT) 2.5	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 2 of 2	TIME STARTED 1055	TIME FINISHED 1100

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	silt ↓	H ₂ S	Dark Brown - ↓	JB-5-07 ↓	Organic
10	10	silt w/ sand ↓	↓	Grayish Brown ↓	↓	
15	15	silt sand ↓	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CANALWAY		STATION ID JQ-5-10	STATION NAME JUSTINS BAY SOUTH
DATE 15 MAR 14		TIME STARTED (AT SITE) 1110	TIME FINISHED (AT SITE)
NAV DATUM WGS84		LATITUDE 30.66239	LONGITUDE 087.94154
FIELD TEAM WANN, McWY, DNEIK, WHITEHUNT			RECORDER WANN
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY WINDY			
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM		
	<input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER		
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED		
	<input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER		
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE		
	<input type="checkbox"/> OTHER (DESCRIBE)		
TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
Water Quality Appearance Comments: Heavy mill fill in area			
WATER QUALITY TIME: 1110			
FIELD MEASUREMENTS	pH 8.13	Dissolved Oxygen (mg/L) 8.29	CONDUCTIVITY (µS/cm) 0.132
	Turbidity (NTU) 23.2	Temperature (°C) 20.93	SALINITY (ppt) 0.06
COMMENTS			



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CANALWAY		DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID JB-5-10	NAV DATUM WGS84	LATITUDE 30.66240	LONGITUDE 087.94153	
WATER DEPTH (FT) 3.1	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 23" 30"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 11:10	TIME FINISHED 11:10	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND	H ₂ S	Brownish Gray	JB-5-10 BOTTOM	Some ORGANICS
25	25	↓	↓	↓	↓	
30	30	↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					



NOTES
~~#1 - 1st attempt~~
~~#2 - 2nd attempt~~



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WARW	RECORDER WARW
STATION ID W JB-5-10	NAV DATUM WGS84	LATITUDE 30.66239	LONGITUDE 087.9415-4	
WATER DEPTH (FT) 3.1	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 3.0	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1715	TIME FINISHED 1/20	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	silt		lt. brown	JB-5-10 TOP	
10	10	silty sand	slight	brownish		
15	15	sand	hard	gray		
20	20	white				
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES





FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

12/20

PROJECT/SURVEY NAME ALABAMA CANSEWAY		STATION ID JB-5-11		STATION NAME JUSTINS BAY SOUTH	
DATE 15 MAY 14		TIME STARTED (AT SITE) 1130		TIME FINISHED (AT SITE)	
NAV DATUM WGS84		LATITUDE 30.65933		LONGITUDE 017.94955	
FIELD TEAM WARW O'NEAL, MCBY, WHITEHALL				RECORDER	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY WINDY					
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H ₂ S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER				
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input type="checkbox"/> BROWN <input type="checkbox"/> RED <input checked="" type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER				
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)				
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)				
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE				
	Water Quality Appearance Comments: Choppy				
WATER QUALITY TIME:					
FIELD MEASUREMENTS	pH 8.00		Dissolved Oxygen (mg/L) 8.23		CONDUCTIVITY (µS/cm) 0.137
	Turbidity (NTU) 20.5		Temperature (°C) 21.02		SALINITY (ppt) 0.06
COMMENTS					



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 15 MAY 14	PROJECT MANAGER WARR	RECORDER WARR
STATION ID JB-S-11	NAV DATUM WGS84	LATITUDE 30.65933	LONGITUDE 087.94955	
WATER DEPTH (FT) 3.7'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 23"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15"	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1130	TIME FINISHED 1146	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5 1/2"	Silt 4H	NONE	Lt. Brown at Top Grny	JB-S-11 TW	
10	10	Sticky Sand	↓	↓	↓	
15	15		↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY	DATE 15 MAY 14	PROJECT MANAGER WANN	RECORDER WANN
STATION ID SB-5-11	NAV DATUM WGS84	LATITUDE 30.65934	LONGITUDE 087.94956
WATER DEPTH (FT) 3.7	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
		PENETRATION (FT) 26"	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 5-10
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 1140	TIME FINISHED 1145

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5				SB-5-11 Top Bot	
10	10					
15	15					
20	20	Silty sand sandy clay		Brownish Gray Blackish Gray	SB-5-11 Bottom	
25	25	clay ↓ Silty sand		↓	↓	
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
Silty sand / sandy clay / silty sand



FIELD OBSERVATIONS AND WATER QUALITY LOG SHEET

PROJECT/SURVEY NAME ALABAMA CAUSEWAY		STATION ID CB-J-10	STATION NAME CHOCOTTA BAY SOUTH	
DATE 16 MAY 14		TIME STARTED (AT SITE) 0955	TIME FINISHED (AT SITE)	
NAV DATUM WGS 84		LATITUDE 30.6744	LONGITUDE 087.97501	
FIELD TEAM WARW, McWY, ONEIL, WHITEWAT			RECORDER WARW	
WEATHER CONDITIONS <input checked="" type="checkbox"/> CLEAR <input type="checkbox"/> CLOUDY <input type="checkbox"/> FOGGY <input type="checkbox"/> DRIZZLING <input type="checkbox"/> RAINY				
SURFACE WATER APPEARANCE	ODOR <input type="checkbox"/> ROTTEN EGG/H2S <input type="checkbox"/> MUSTY <input type="checkbox"/> SEWAGE <input type="checkbox"/> AMMONIA <input type="checkbox"/> GASOLINE/PETROLEUM <input type="checkbox"/> FISH/DECAY <input type="checkbox"/> CHLORINE <input checked="" type="checkbox"/> NONE <input type="checkbox"/> CHEMICAL <input type="checkbox"/> OTHER			
	COLOR <input type="checkbox"/> YELLOW <input type="checkbox"/> GREEN <input type="checkbox"/> BLUE <input checked="" type="checkbox"/> BROWN <input type="checkbox"/> RED <input type="checkbox"/> COLORLESS <input type="checkbox"/> OTHER			
	FLOATING MATERIALS (ALL THAT APPLY) <input type="checkbox"/> SUDS/FOAM <input type="checkbox"/> OILY SHEEN <input type="checkbox"/> ORGANIC MATERIAL <input type="checkbox"/> SCUM <input type="checkbox"/> ALGAE <input type="checkbox"/> OTHER (DESCRIBE)			
	TRASH <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VEGETATION <input type="checkbox"/> STYROFOAM <input type="checkbox"/> WOOD <input type="checkbox"/> PLASTIC (CUPS, BOTTLES, BAGS) <input type="checkbox"/> OTHER (DESCRIBE)			
	TURBIDITY <input type="checkbox"/> CLEAR <input checked="" type="checkbox"/> CLOUDY <input type="checkbox"/> HEAVY CLOUDINESS, OPAQUE			
	Water Quality Appearance Comments: Dense mill/foil in area.			
WATER QUALITY TIME: 0955				
FIELD MEASUREMENTS	pH 8.53	Dissolved Oxygen (mg/L) 6.38	CONDUCTIVITY (µS/cm) 0.194	
	Turbidity (NTU) 21.9	Temperature (°C) 18.07	SALINITY (ppt) 0.09	
COMMENTS				



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 16 MAY 15	PROJECT MANAGER WARN	RECORDER WARN
STATION ID CB-5-10	NAV DATUM WGS84	LATITUDE 30.67449	LONGITUDE 087.97501	
WATER DEPTH (FT) 4.0'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 26''	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15''	
CORE DIAMETER (IN) 2	ATTEMPT 1 of 2	TIME STARTED 1000	TIME FINISHED 1005	

1005



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT ↓ 6''	NOPE	Dark Blue	CB-5-10 TOP	
10	10	sandy silt	↓	Grayish Brown	↓	
15	15	sandy silt	↓	↓	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA CAUSEWAY		DATE 16 MAY 15	PROJECT MANAGER WARN	RECORDER WARN
STATION ID CB-5-10	NAV DATUM WGS84	LATITUDE 30.67449	LONGITUDE 087.97501	
WATER DEPTH (FT) 4.0'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
		PENETRATION (FT) 33	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 15-30'	
CORE DIAMETER (IN) 2	ATTEMPT 2 of 2	TIME STARTED 10 05	TIME FINISHED 10 10	

PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	SILT				
10	10					
15	15					
20	20	Silt w/ sand	none	Brownish gray	CB-5-10 Bottom	
25	25	↓ sand	↓	↓	↓	
30	30	SILT ↓	↓	↓	↓	
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ATA PAMA CAUSEWAY		DATE 16 MAY 14	PROJECT MANAGER WAPN	RECORDER WAPN
STATION ID CB-5-09		NAV DATUM WGS84	LATITUDE 30.67551	LONGITUDE 087.97868
WATER DEPTH (FT) 3.4'		TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)
CORE DIAMETER (IN) 2		ATTEMPT 1 of 2	PENETRATION (FT) 15	CORE LENGTH COLLECTED FOR ANALYSIS (FT) 0-15'
		TIME STARTED 1030	TIME FINISHED 1045	

1045



PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE_VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5	silt	H ₂ S	Light Brown	CB-5-09 TOP	
10	10	silt w/ sand	↓	Dark grey black	↓	
15	15	silty SAND to SAND (34")	↓	Brownish Grey	↓	
20	20					
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES



PUSHCORE SEDIMENT CORING LOG

PROJECT/SURVEY ALABAMA OUSTWAY		DATE 16 MAY 15	PROJECT MANAGER WANN	RECORDER WANN
STATION ID CB-5-09	NAV DATUM WGS84	LATITUDE 30.67501	LONGITUDE 087.97868	
WATER DEPTH (FT) 3.4'	TIDE (FT)	MLLW (FT) = WATER DEPTH - TIDE	SAP DEPTH (FT)	
CORE DIAMETER (IN) 2		ATTEMPT 2 of 2	PENETRATION (FT) 18.5"	CORE LENGTH COLLECTED FOR ANALYSIS (FT)
		TIME STARTED 1045	TIME FINISHED 1100	

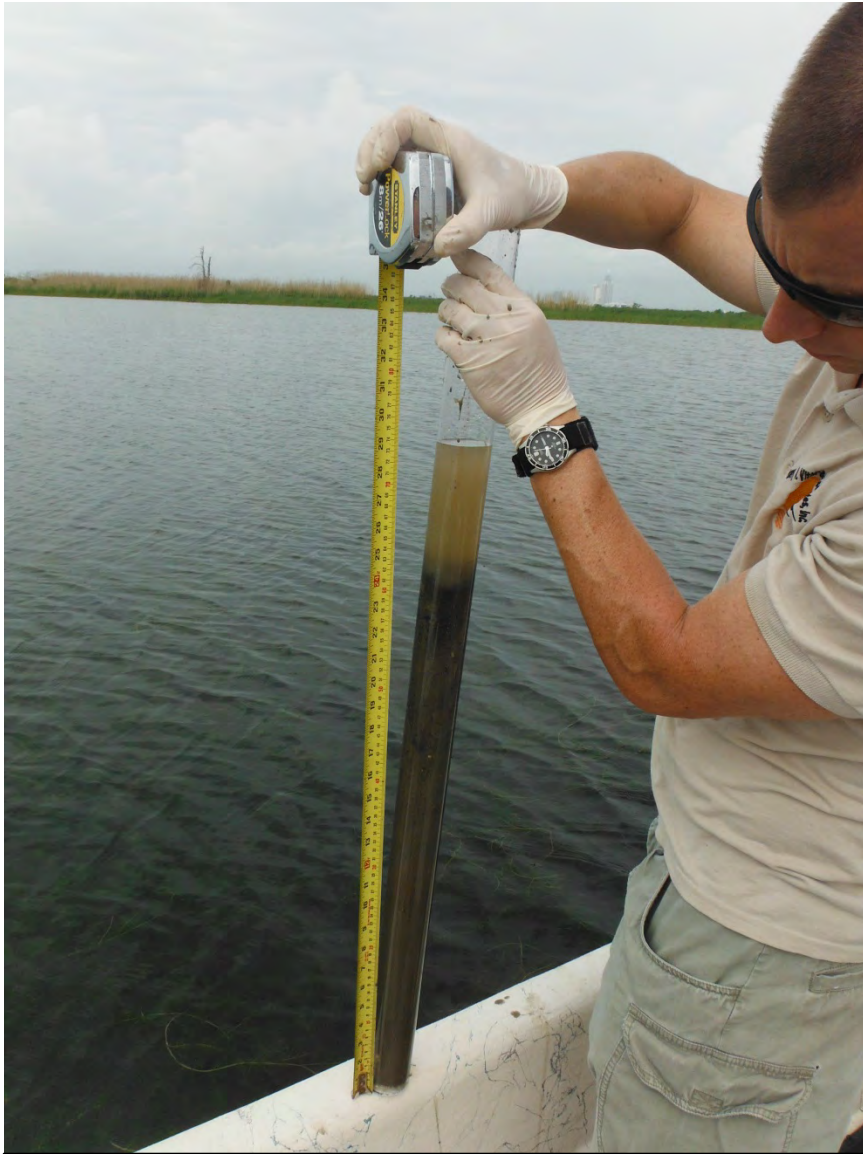
PEN. DEP. (in)	RETRV. DEP. (in)	SEDIMENT TYPE	ODOR	COLOR (HUE, VALUE/CHROMA)	SAMPLE ID BY DEPTH	MISC
5	5					
10	10					
15	15					
20	20	SAND	Slight Amber H2S	Brownish grey	CB-5-09 BOTTOM	Clam shells
25	25					
30	30					
35	35					
40	40					
45	45					
50	50					
55	55					
60	60					

NOTES
 1st attempt 18.5" for Bottom Sample } some characteristics
 2nd attempt 19.5" for Bottom Sample } combined for
 3rd attempt 18.5" " " } Bottom Sample

APPENDIX B

Sediment Core Photos

APPENDIX B. Core Photos.



CB-N-01

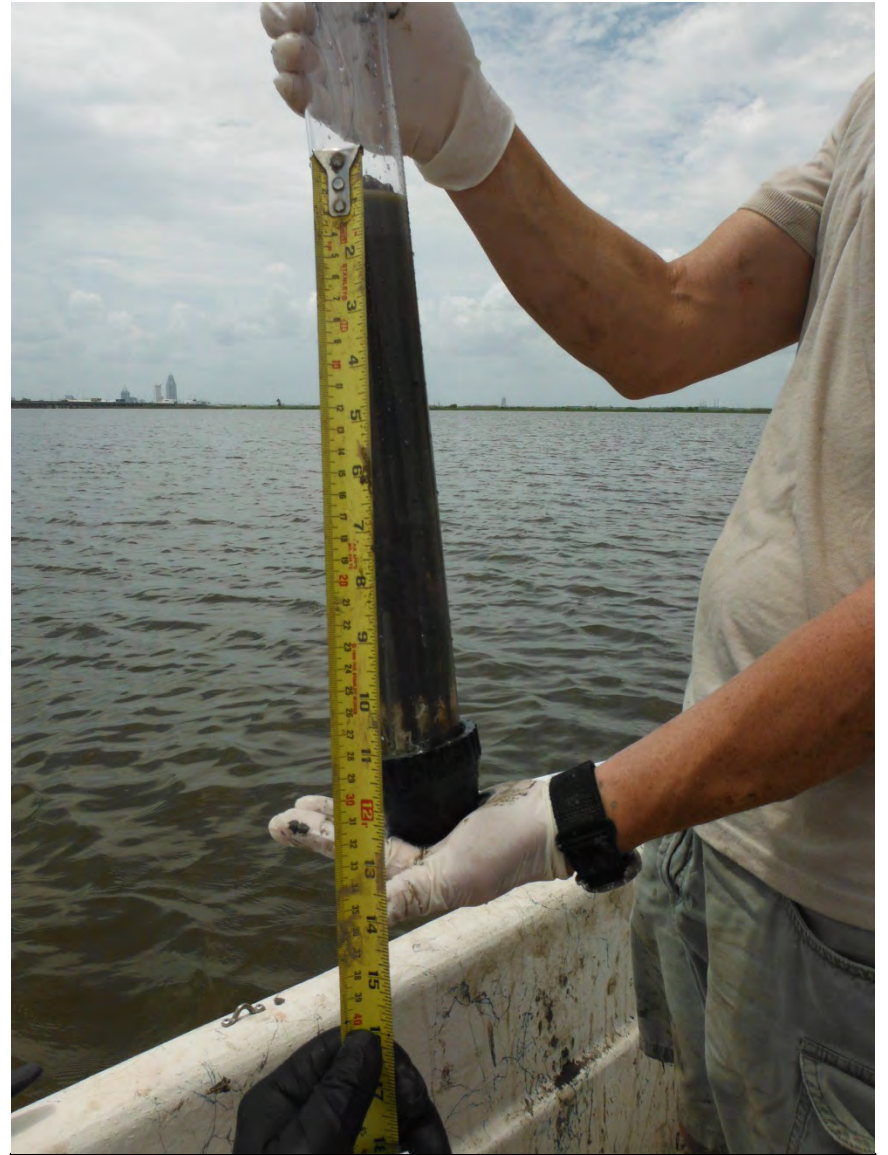


CB-N-02

APPENDIX B. Core Photos.



CB-N-03



CB-N-04

APPENDIX B. Core Photos.



CB-N-05



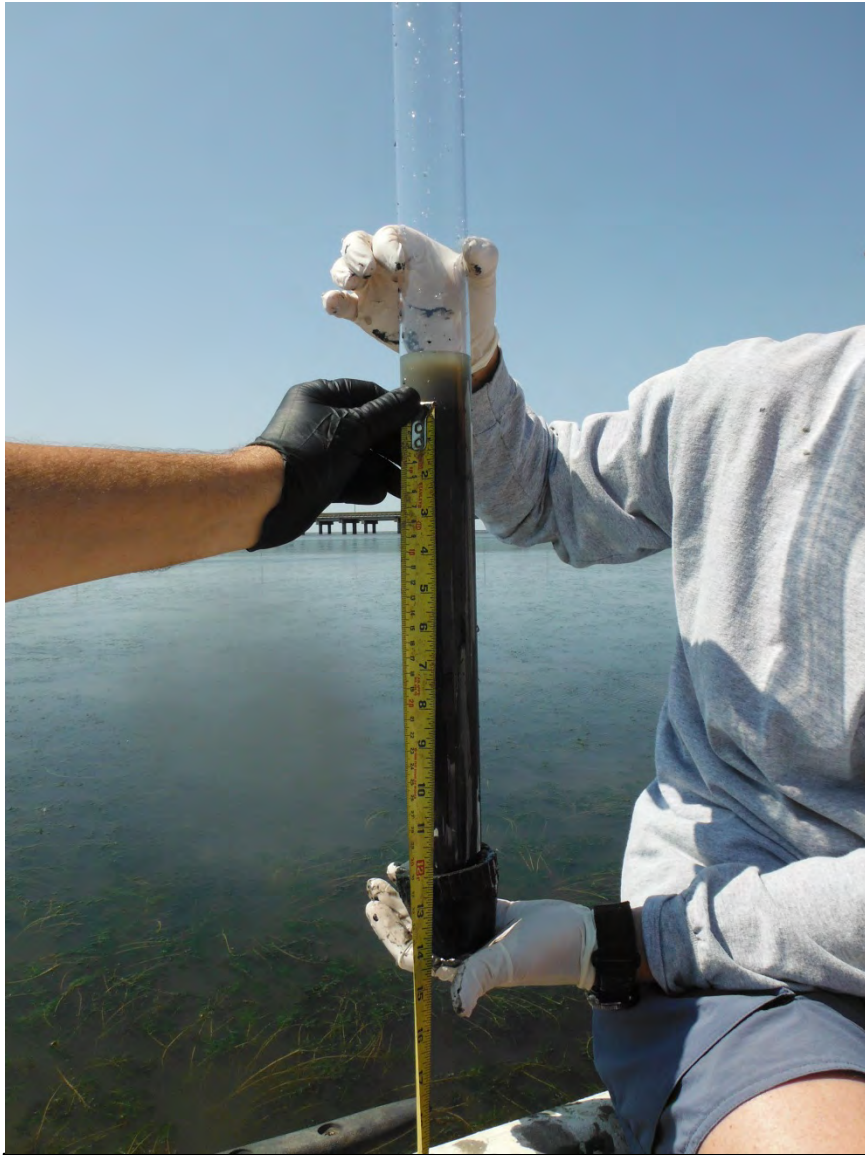
CB-N-06

APPENDIX B. Core Photos.



CB-N-07

APPENDIX B. Core Photos.



CB-S-09

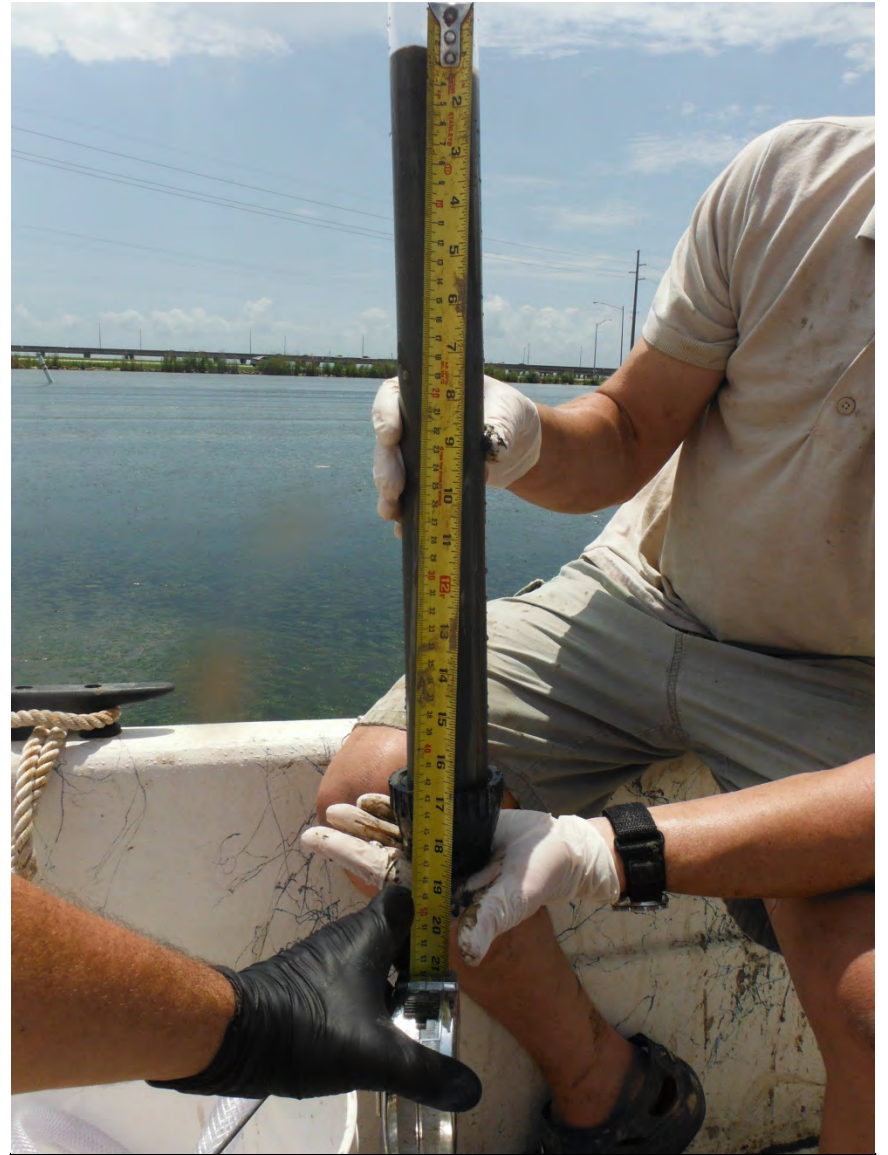


CB-S-10

APPENDIX B. Core Photos.



CB-S-11



CB-S-12

APPENDIX B. Core Photos.



JB-N-01



JB-N-02

APPENDIX B. Core Photos.

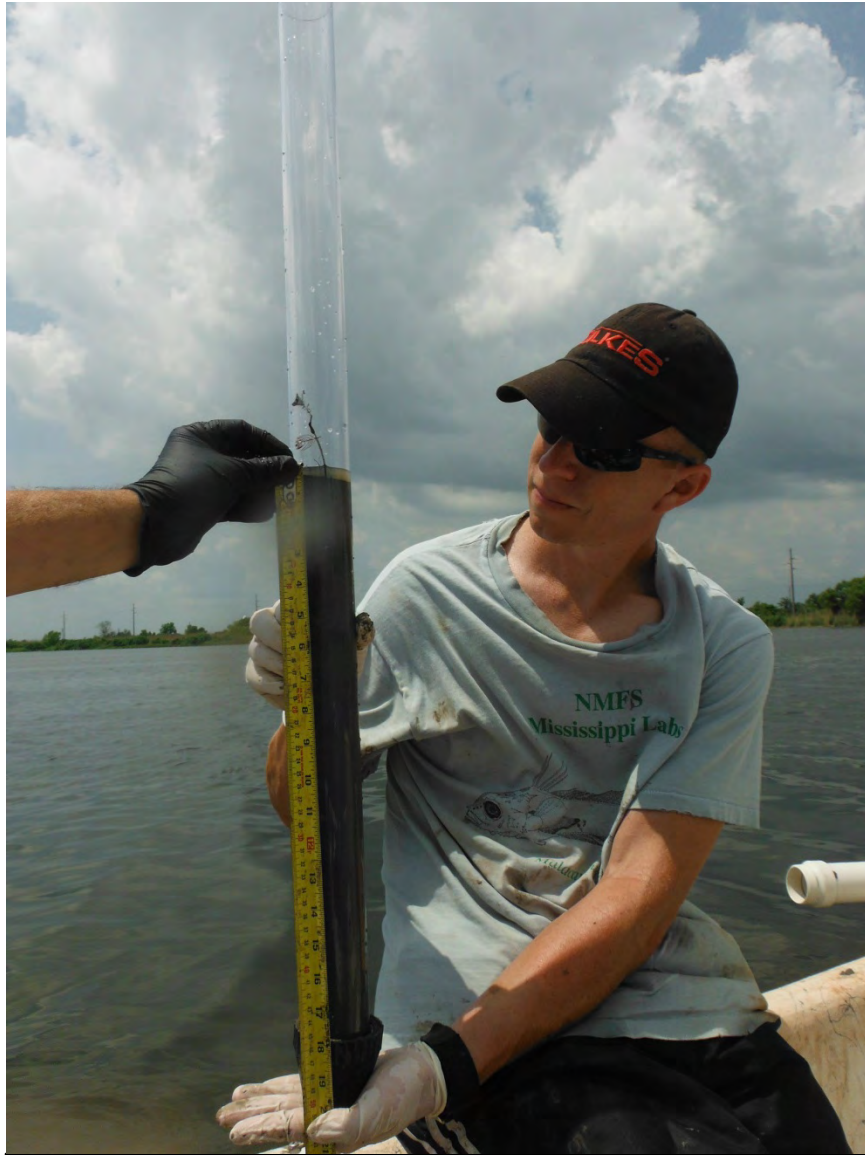


JB-N-03



JB-N-04

APPENDIX B. Core Photos.



JB-S-05



JB-S-06

APPENDIX B. Core Photos.

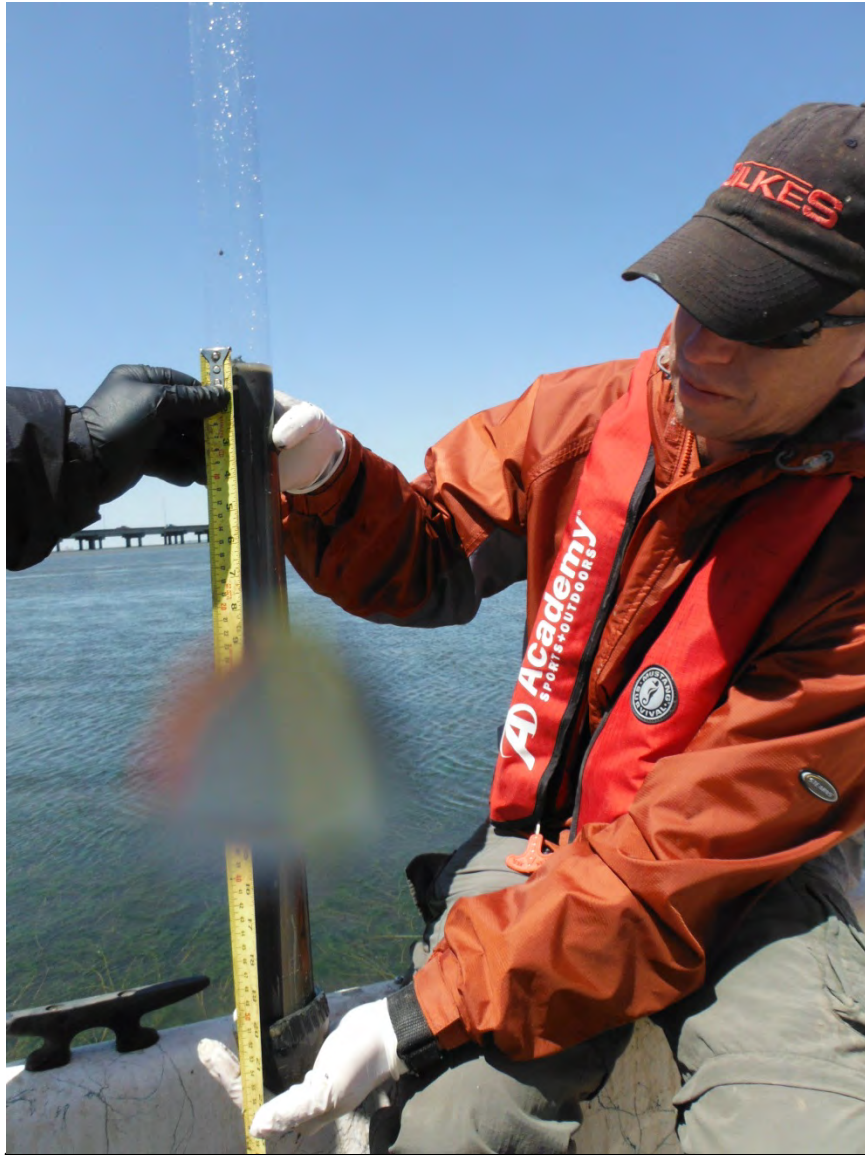


JB-S-08

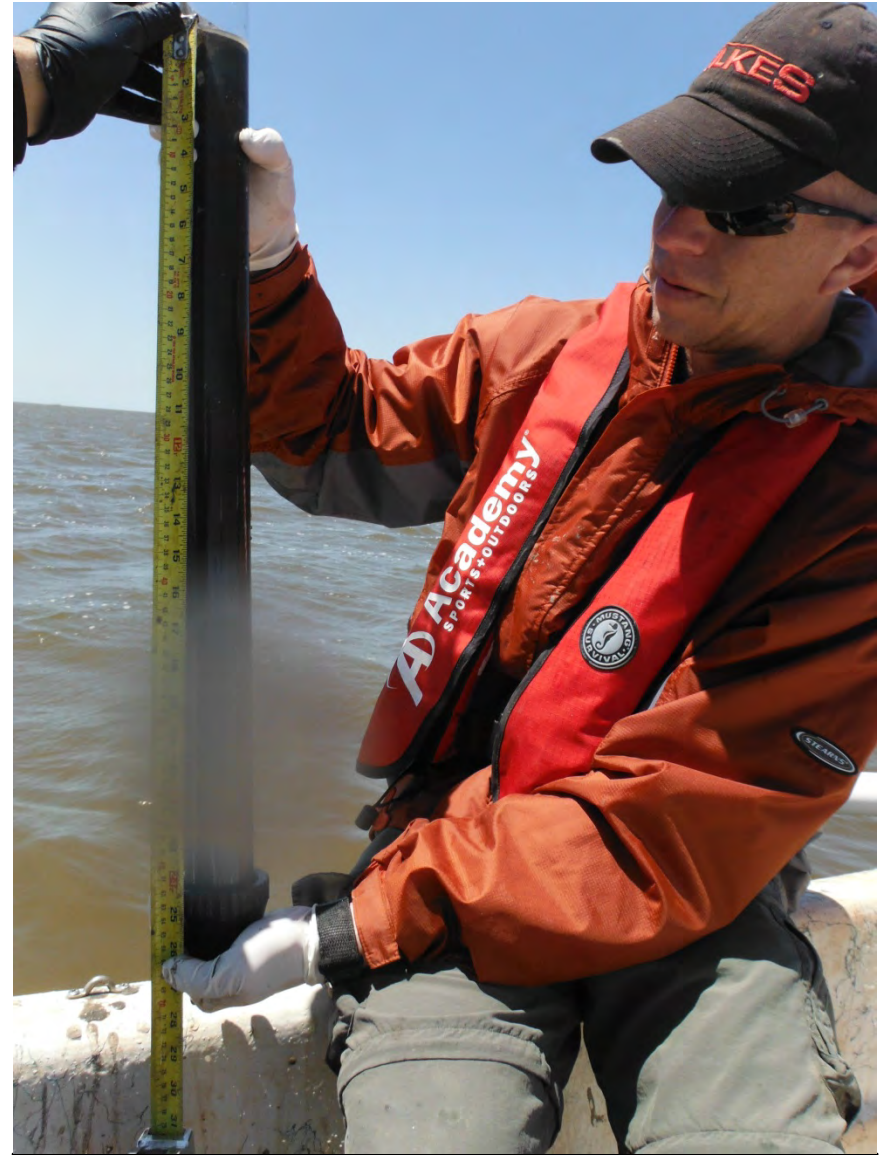


JB-S-09

APPENDIX B. Core Photos.



JB-S-10



JB-S-11

APPENDIX B. Core Photos.

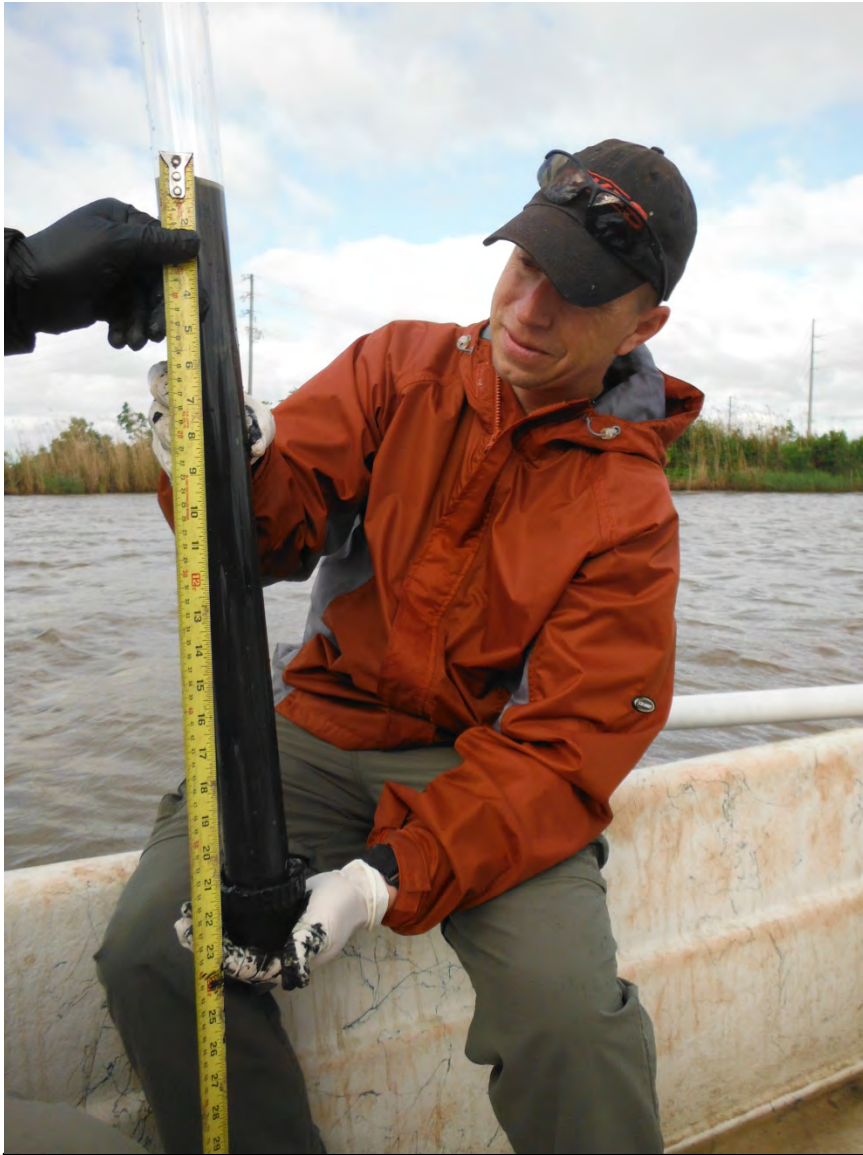


SR-N-01



SR-N-02

APPENDIX B. Core Photos.



SR-N-03

APPENDIX B. Core Photos.



SR-S-04



SR-S-05

APPENDIX B. Core Photos.



SR-S-05 Dup



SR-S-06

APPENDIX C

Results Table

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	CB-S-09	CB-S-10	CB-S-10	CB-S-11	CB-S-11	CB-S-12	CB-S-12	JB-N-01	JB-N-01	JB-N-01	JB-N-02	JB-N-02	JB-N-03	JB-N-03	JB-N-04	JB-N-04
							BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
							5/16/2014	5/16/2014	5/16/2014	5/12/2014	5/12/2014	5/12/2014	5/12/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014
PCB044	ug/kg							<0.27		<0.19		<0.19		<0.19	<0.26		<0.27		<0.33		<0.37	
PCB049	ug/kg							<0.25		<0.17		<0.17		<0.17	<0.24		<0.24		<0.30		<0.33	
PCB052	ug/kg							<0.20		<0.14		<0.14		<0.14	<0.19		<0.20		<0.24		<0.27	
PCB056	ug/kg							<0.29		<0.20		<0.19		<0.19	<0.28		<0.28		<0.35		<0.39	
PCB060	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.22		<0.27		<0.30	
PCB066	ug/kg							<0.19		<0.13		<0.13		<0.13	<0.18		<0.19		<0.23		<0.26	
PCB070	ug/kg							<0.17		<0.12		<0.12		<0.12	<0.16		<0.17		<0.21		<0.23	
PCB074	ug/kg							<0.20		<0.14		<0.13		<0.13	<0.19		<0.19		<0.24		<0.26	
PCB077	ug/kg							<0.20		<0.14		<0.14		<0.14	<0.19		<0.20		<0.25		<0.27	
PCB081	ug/kg							<0.26		<0.18		<0.17		<0.17	<0.24		<0.25		<0.31		<0.34	
PCB087	ug/kg							<0.21		<0.15		<0.14		<0.14	<0.20		<0.20		<0.25		<0.28	
PCB095	ug/kg							<0.35		<0.24		<0.23		<0.23	<0.33		<0.34		<0.42		<0.46	
PCB097	ug/kg							<0.29		<0.20		<0.19		<0.19	<0.27		<0.28		<0.34		<0.38	
PCB099	ug/kg							<0.18		<0.12		<0.12		<0.12	<0.17		<0.17		<0.21		<0.24	
PCB101	ug/kg							<0.17		<0.12		<0.11		<0.11	<0.16		<0.16		<0.20		<0.23	
PCB105	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.21		<0.26		<0.29	
PCB110	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.21		<0.26		<0.29	
PCB114	ug/kg							<0.21		<0.14		<0.14		<0.14	<0.20		<0.20		<0.25		<0.28	
PCB118	ug/kg							<0.28		<0.19		<0.19		<0.19	<0.27		<0.27		<0.33		<0.37	
PCB119	ug/kg							<0.18		<0.13		<0.12		<0.12	<0.17		<0.18		<0.22		<0.24	
PCB123	ug/kg							<0.18		<0.13		<0.12		<0.12	<0.17		<0.18		<0.22		<0.24	
PCB126	ug/kg							<0.29		<0.20		<0.19		<0.19	<0.28		<0.28		<0.35		<0.39	
PCB128	ug/kg							<0.21		<0.15		<0.14		<0.14	<0.21		<0.21		<0.26		<0.29	
PCB132	ug/kg							<0.35		<0.24		<0.23		<0.23	<0.33		<0.34		<0.42		<0.46	
PCB138/158	ug/kg							<0.42		<0.29		<0.29		<0.29	<0.41		<0.41		<0.51		<0.57	
PCB141	ug/kg							<0.23		<0.16		<0.16		<0.16	<0.22		<0.22		<0.28		<0.31	
PCB149	ug/kg							<0.19		<0.13		<0.13		<0.13	<0.18		<0.18		<0.23		<0.25	
PCB151	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.21		<0.26		<0.29	
PCB153	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.21		<0.26		<0.29	
PCB156	ug/kg							<0.20		<0.14		<0.14		<0.14	<0.20		<0.20		<0.25		<0.27	
PCB157	ug/kg							<0.20		<0.14		<0.14		<0.14	<0.19		<0.19		<0.24		<0.27	
PCB167	ug/kg							<0.21		<0.14		<0.14		<0.14	<0.20		<0.20		<0.25		<0.28	
PCB168	ug/kg							<0.18		<0.12		<0.12		<0.12	<0.17		<0.17		<0.22		<0.24	
PCB169	ug/kg							<0.17		<0.12		<0.12		<0.12	<0.16		<0.17		<0.21		<0.23	
PCB170	ug/kg							<0.19		<0.13		<0.13		<0.13	<0.19		<0.19		<0.23		<0.26	
PCB174	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.22		<0.27		<0.30	
PCB177	ug/kg							<0.26		<0.18		<0.17		<0.17	<0.25		<0.25		<0.31		<0.34	
PCB180	ug/kg							<0.13		<0.088		<0.086		<0.086	<0.12		<0.12		<0.15		<0.17	
PCB183	ug/kg							<0.23		<0.16		<0.16		<0.16	<0.22		<0.23		<0.28		<0.31	
PCB184	ug/kg							<0.12		<0.081		<0.078		<0.079	<0.11		<0.11		<0.14		<0.16	
PCB187	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.21		<0.26		<0.29	
PCB189	ug/kg							<0.18		<0.12		<0.12		<0.12	<0.17		<0.17		<0.22		<0.24	
PCB194	ug/kg							<0.20		<0.14		<0.13		<0.13	<0.19		<0.19		<0.24		<0.27	
PCB195	ug/kg							<0.11		<0.076		<0.074		<0.074	<0.11		<0.11		<0.13		<0.15	
PCB200	ug/kg							<0.20		<0.13		<0.13		<0.13	<0.19		<0.19		<0.24		<0.26	
PCB201	ug/kg							<0.12		<0.082		<0.080		<0.080	<0.11		<0.12		<0.14		<0.16	
PCB203	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.22		<0.27		<0.30	
PCB206	ug/kg							<0.17		<0.12		<0.12		<0.12	<0.17		<0.17		<0.21		<0.23	
PCB209	ug/kg							<0.22		<0.15		<0.15		<0.15	<0.21		<0.22		<0.27		<0.30	
Total PCBs	ug/kg	22.7	180	21.6	189	21.6 (TEL)		<0.42		<0.29		<0.29		<0.29	<0.41		<0.41		<0.51		<0.57	
Polynuclear Aromatic Hydrocarbons																						
1,6,7-Trimethylnaphthalene	ug/kg							<6.3		<4.3		<4.2		<4.3	<6.0		<6.2		<7.6		<8.4	
1-Methylnaphthalene	ug/kg							<7.8		<5.3		<5.2		<5.2	<7.4		<7.6		<9.3		<10	
1-Methylphenanthrene	ug/kg							<7.5		<5.1		<5.0		<5.0	<7.1		<7.3		<9.0		<9.9	
2,6-Dimethylnaphthalene	ug/kg							<7.1		<4.9		<4.7		<4.8	<6.7		<6.9		<8.5		<9.4	
2-Methylnaphthalene	ug/kg	70	670	20.2	201	20.23 (TEL)		<7.5		<5.1		<5.0		<5.0	<7.1		<7.3		<8.9		<9.9	

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	CB-S-09	CB-S-10	CB-S-10	CB-S-11	CB-S-11	CB-S-12	CB-S-12	JB-N-01	JB-N-01	JB-N-01	JB-N-02	JB-N-02	JB-N-03	JB-N-03	JB-N-04	JB-N-04	
							BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
								5/16/2014	5/16/2014	5/16/2014	5/12/2014	5/12/2014	5/12/2014	5/12/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014
Acenaphthene	ug/kg	16	500	6.71	88.9	6.71 (TEL)		<9.7*		<6.7		<6.5		<6.6	<9.3*		<9.5*		<12*		<13*		
Acenaphthylene	ug/kg	44	640	5.87	128	5.87 (TEL)		<9.4*		<6.5*		<6.3*		<6.4*	<9.0*		<9.2*		<11*		<13*		
Anthracene	ug/kg	85.3	1100	46.9	245	46.9 (TEL)		<11		<7.7		<7.6		<7.6	<11		<11		<14		<15		
Benzo (a) Anthracene	ug/kg	261	1600	74.8	693	74.8 (TEL)		14J		13J		6.6J		<6.6	<9.3		<9.5		<12		<13		
Benzo (a) Pyrene	ug/kg	430	1600	88.8	763	88.8 (TEL)		130		<7.2		<7.1		48	160		310		200		330		
Benzo (b) Fluoranthene	ug/kg							16J		11J		7.6J		<7.3	<10		<10		<13		<14		
Benzo (e) Pyrene	ug/kg							11J		7.3J		5.4J		<3.4	<4.8		<4.9		<6.0		7.5J		
Benzo (g,h,i) Perylene	ug/kg							12J		7.4J		<5.9		<5.9	<8.3		<8.5		<11		<12		
Benzo (k) Fluoranthene	ug/kg							<14		<9.4		<9.2		<9.3	<13		<13		<16		<18		
Biphenyl	ug/kg							<8.4		<5.8		<5.7		<5.7	<8.0		<8.2		<10		<11		
Chrysene	ug/kg	384	2800	108	846	108 (TEL)		13J		8.5J		<7.1		<7.1	<10		<10		<13		<14		
Dibenz (a,h) Anthracene	ug/kg	63.4	260	6.22	135	6.22 (TEL)		<7.8*		<5.3		<5.2		<5.3	<7.4*		<7.6*		<9.3*		<10*		
Dibenzothiophene	ug/kg							<12		<8.3		<8.1		<8.1	<11		<12		<14		<16		
Fluoranthene	ug/kg	600	5100	113	1494	113 (TEL)		19J		20		<8.1		<8.2	<12		<12		<15		19J		
Fluorene	ug/kg	19	540	21.2	144	21.2 (TEL)		<11		<7.3		<7.1		<7.2	<10		<10		<13		<14		
Indeno (1,2,3-c,d) Pyrene	ug/kg							11J		7.5J		<6.4		<6.4	<9.0		<9.2		<11		<13		
Naphthalene	ug/kg	160	2100	34.6	391	34.6 (TEL)		8.0J		<5.4		<5.3		<5.3	<7.5		9.5J		<9.5		<10		
Perylene	ug/kg							110		39		89		42	140		270		170		290		
Phenanthrene	ug/kg	240	1500	86.7	544	86.7 (TEL)		<12		<8.2		<8.0		<8.1	<11		<12		<14		<16		
Pyrene	ug/kg	665	2600	153	1398	153 (TEL)		23		21		9.5J		<7.5	<11		<11		13J		17J		
Total PAHs	ug/kg	4022	44792	1684	16770	1684 (TEL)		246		88.4		23.7		48	160		319.5		213		366		
Semivolatile Organics																							
2,3,4,6-Tetrachlorophenol	ug/kg							<8.1		<5.6		<5.4		<5.5	<7.7		<7.9		<9.7		<11		
2,4,5-Trichlorophenol	ug/kg							<6.8		<4.6		<4.5		<4.6	<6.4		<6.6		<8.1		<9.0		
2,4,6-Trichlorophenol	ug/kg							<7.5		<5.2		<5.0		<5.1	<7.2		<7.3		<9.0		<10		
2,4-Dichlorophenol	ug/kg							<5.6		<3.8		<3.7		<3.8	<5.3		<5.4		<6.7		<7.4		
2,4-Dimethylphenol	ug/kg							<6.4		<4.4		<4.3		<4.3	<6.1		<6.2		<7.7		<8.5		
2,4-Dinitrophenol	ug/kg							<110		<77		<75		<76	<110		<110		<130		<150		
2,6-Dichlorophenol	ug/kg							<12		<8.5		<8.3		<8.3	<12		<12		<15		<16		
2-Chlorophenol	ug/kg							<7.0		<4.8		<4.7		<4.7	<6.7		<6.8		<8.4		<9.3		
2-Methylphenol	ug/kg							13J		<7.5		<7.3		<7.4	<10		<11		<13		<15		
2-Nitrophenol	ug/kg							<5.0		<3.4		<3.3		<3.4	<4.7		<4.8		<6.0		<6.6		
3/4-Methylphenol	ug/kg							<5.3		<3.7		<3.6		<3.6	<5.1		<5.2		<6.4		<7.1		
4,6-Dinitro-2-Methylphenol	ug/kg							<140		<99		<97		<97	<140		<140		<170		<190		
4-Chloro-3-Methylphenol	ug/kg							<7.4		<5.1		<5.0		<5.0	<7.0		<7.2		<8.9		<9.8		
4-Nitrophenol	ug/kg							<130		<91		<89		<90	<130		<130		<160		<180		
Benzoic Acid	ug/kg							310		200		200		200	290		300		360		400		
Bis(2-Ethylhexyl) Phthalate	ug/kg			182	2647	182 (TEL)		61B		18B		37B		16B	28B		29B		52B		69B		
Butyl Benzyl Phthalate	ug/kg							51		28		83		19	39		46		59		69		
DCPA	ug/kg							<5.0		<3.4		<3.3		<3.3	<4.7		<4.8		<5.9		<6.6		
Diethyl Phthalate	ug/kg							<10		<7.1		<7.0		7.2J	<9.9		<10		<12		<14		
Dimethyl Phthalate	ug/kg							170		150		130		200	190		250		320		270		
Di-n-Butyl Phthalate	ug/kg							<11		<7.3		<7.2		<7.2	<10		<10		<13		<14		
Di-n-Octyl Phthalate	ug/kg							11J		<6.8		<6.6		<6.6	<9.4		<9.6		<12		<13		
Isophorone	ug/kg							<26		<18		<17		<17	<25		<25		<31		<34		
Pentachlorophenol	ug/kg							<2.7		<1.8		<1.8		<1.8	<2.5		<2.6		<3.2		<3.5		
Perthane	ug/kg							<2.7		<1.9		<1.8		<1.8	<2.6		<2.6		<3.2		<3.6		
Phenol	ug/kg							<7.7		<5.3		<5.1		<5.2	<7.3		<7.5		<9.2		<10		

< - Results less than the method detection limit.

J - Analyte was detected at a concentration below the reporting limit and above the m

B - Analyte was present in the associated method blank.

*method detection limit greater than the TEL, PEL, or RAG.

Black bold exceeds TEL.

Red bold exceeds PEL.

Grey highlight exceed RAG/Reg4.

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	JB-S-05	JB-S-05	JB-S-06	JB-S-06	JB-S-07	JB-S-07	JB-S-08	JB-S-08	JB-S-09	JB-S-09	JB-S-10	JB-S-10	JB-S-11	JB-S-11	SR-N-01	SR-N-01
							TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM
							5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014
PCB044	ug/kg						<0.18		<0.20		<0.20		<0.19		<0.27		<0.20		<0.19		<0.28	
PCB049	ug/kg						<0.16		<0.18		<0.18		<0.17		<0.24		<0.18		<0.17		<0.25	
PCB052	ug/kg						<0.13		<0.14		<0.14		<0.14		<0.20		<0.15		<0.14		<0.20	
PCB056	ug/kg						<0.19		<0.21		<0.20		<0.20		<0.28		<0.21		<0.20		<0.29	
PCB060	ug/kg						<0.15		<0.16		<0.16		<0.15		<0.22		<0.16		<0.16		<0.22	
PCB066	ug/kg						<0.13		<0.14		<0.14		<0.13		<0.19		<0.14		<0.13		<0.19	
PCB070	ug/kg						<0.11		<0.12		<0.12		<0.12		<0.17		<0.13		<0.12		<0.17	
PCB074	ug/kg						<0.13		<0.14		<0.14		<0.14		<0.19		<0.15		<0.14		<0.20	
PCB077	ug/kg						<0.13		<0.15		<0.14		<0.14		<0.20		<0.15		<0.14		<0.21	
PCB081	ug/kg						<0.17		<0.18		<0.18		<0.18		<0.25		<0.19		<0.18		<0.26	
PCB087	ug/kg						<0.14		<0.15		<0.15		<0.15		<0.21		<0.16		<0.15		<0.21	
PCB095	ug/kg						<0.23		<0.25		<0.25		<0.24		<0.34		<0.26		<0.24		<0.35	
PCB097	ug/kg						<0.19		<0.20		<0.20		<0.20		<0.28		<0.21		<0.20		<0.29	
PCB099	ug/kg						<0.12		<0.13		<0.13		<0.12		<0.17		<0.13		<0.12		<0.18	
PCB101	ug/kg						<0.11		<0.12		<0.12		<0.12		<0.17		<0.13		<0.12		<0.17	
PCB105	ug/kg						<0.14		<0.16		<0.16		<0.15		<0.22		<0.16		<0.15		<0.22	
PCB110	ug/kg						<0.14		<0.15		<0.15		<0.15		<0.21		<0.16		<0.15		<0.22	
PCB114	ug/kg						<0.14		<0.15		<0.15		<0.14		<0.20		<0.15		<0.15		<0.21	
PCB118	ug/kg						<0.18		<0.20		<0.20		<0.19		<0.27		<0.21		<0.19		<0.28	
PCB119	ug/kg						<0.12		<0.13		<0.13		<0.12		<0.18		<0.13		<0.13		<0.18	
PCB123	ug/kg						<0.12		<0.13		<0.13		<0.13		<0.18		<0.14		<0.13		<0.18	
PCB126	ug/kg						<0.19		<0.21		<0.21		<0.20		<0.28		<0.21		<0.20		<0.29	
PCB128	ug/kg						<0.14		<0.15		<0.15		<0.15		<0.21		<0.16		<0.15		<0.22	
PCB132	ug/kg						<0.23		<0.25		<0.25		<0.24		<0.34		<0.26		<0.24		<0.35	
PCB138/158	ug/kg						<0.28		<0.30		<0.30		<0.29		<0.42		<0.31		<0.30		<0.43	
PCB141	ug/kg						<0.15		<0.17		<0.16		<0.16		<0.23		<0.17		<0.16		<0.23	
PCB149	ug/kg						<0.12		<0.13		<0.13		<0.13		<0.18		<0.14		<0.13		<0.19	
PCB151	ug/kg						<0.14		<0.15		<0.15		<0.15		<0.21		<0.16		<0.15		<0.22	
PCB153	ug/kg						<0.14		<0.16		<0.15		<0.15		<0.21		<0.16		<0.15		<0.22	
PCB156	ug/kg						<0.13		<0.15		<0.15		<0.14		<0.20		<0.15		<0.14		<0.21	
PCB157	ug/kg						<0.13		<0.14		<0.14		<0.14		<0.20		<0.15		<0.14		<0.20	
PCB167	ug/kg						<0.14		<0.15		<0.15		<0.14		<0.21		<0.15		<0.15		<0.21	
PCB168	ug/kg						<0.12		<0.13		<0.13		<0.12		<0.18		<0.13		<0.13		<0.18	
PCB169	ug/kg						<0.11		<0.12		<0.12		<0.12		<0.17		<0.13		<0.12		<0.17	
PCB170	ug/kg						<0.13		<0.14		<0.14		<0.13		<0.19		<0.14		<0.14		<0.19	
PCB174	ug/kg						<0.15		<0.16		<0.16		<0.15		<0.22		<0.17		<0.16		<0.22	
PCB177	ug/kg						<0.17		<0.18		<0.18		<0.18		<0.25		<0.19		<0.18		<0.26	
PCB180	ug/kg						<0.084		<0.091		<0.091		<0.088		<0.13		<0.095		<0.090		<0.13	
PCB183	ug/kg						<0.15		<0.17		<0.17		<0.16		<0.23		<0.17		<0.16		<0.23	
PCB184	ug/kg						<0.077		<0.084		<0.083		<0.080		<0.11		<0.087		<0.082		<0.12	
PCB187	ug/kg						<0.14		<0.16		<0.16		<0.15		<0.22		<0.16		<0.15		<0.22	
PCB189	ug/kg						<0.12		<0.13		<0.13		<0.12		<0.18		<0.13		<0.13		<0.18	
PCB194	ug/kg						<0.13		<0.14		<0.14		<0.14		<0.20		<0.15		<0.14		<0.20	
PCB195	ug/kg						<0.072		<0.079		<0.078		<0.076		<0.11		<0.082		<0.077		<0.11	
PCB200	ug/kg						<0.13		<0.14		<0.14		<0.13		<0.19		<0.14		<0.14		<0.20	
PCB201	ug/kg						<0.078		<0.085		<0.085		<0.082		<0.12		<0.088		<0.084		<0.12	
PCB203	ug/kg						<0.15		<0.16		<0.16		<0.15		<0.22		<0.17		<0.16		<0.23	
PCB206	ug/kg						<0.11		<0.12		<0.12		<0.12		<0.17		<0.13		<0.12		<0.17	
PCB209	ug/kg						<0.15		<0.16		<0.16		<0.15		<0.22		<0.17		<0.16		<0.22	
Total PCBs	ug/kg	22.7	180	21.6	189	21.6 (TEL)	<0.28		<0.3		<0.3		<0.29		<0.42		<0.31		<0.3		<0.43	
Polynuclear Aromatic Hydrocarbons																						
1,6,7-Trimethylnaphthalene	ug/kg						<4.1		<4.6		<4.5		<4.4		<6.3		<4.7		<4.5		<6.4	
1-Methylnaphthalene	ug/kg						<5.1		<5.6		<5.5		<5.4		<7.8		<5.8		<5.5		<7.8	
1-Methylphenanthrene	ug/kg						<4.9		<5.4		<5.3		<5.2		<7.5		<5.6		<5.3		<7.5	
2,6-Dimethylnaphthalene	ug/kg						<4.6		<5.1		5.4J		<4.9		<7.1		<5.3		<5.0		<7.1	
2-Methylnaphthalene	ug/kg	70	670	20.2	201	20.23 (TEL)	<4.9		<5.4		<5.3		<5.2		<7.5		<5.6		<5.3		<7.5	

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	JB-S-05	JB-S-05	JB-S-06	JB-S-06	JB-S-07	JB-S-07	JB-S-08	JB-S-08	JB-S-09	JB-S-09	JB-S-10	JB-S-10	JB-S-11	JB-S-11	SR-N-01	SR-N-01	
							TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP
							5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014
Acenaphthene	ug/kg	16	500	6.71	88.9	6.71 (TEL)	<6.4		<7.0*		<7.0*		<6.8*		<9.8*		<7.3*		<6.9*		<9.8*		
Acenaphthylene	ug/kg	44	640	5.87	128	5.87 (TEL)	<6.2*		<6.8*		<6.7*		<6.6*		<9.5*		<7.0*		<6.7*		<9.5*		
Anthracene	ug/kg	85.3	1100	46.9	245	46.9 (TEL)	<7.4		<8.1		<8.0		<7.9		<11		<8.4		<8.0		<11		
Benzo (a) Anthracene	ug/kg	261	1600	74.8	693	74.8 (TEL)	<6.4		<7.1		<7.0		<6.8		<9.8		<7.3		<6.9		12J		
Benzo (a) Pyrene	ug/kg	430	1600	88.8	763	88.8 (TEL)	16		17		26		20		96		43		110		710		
Benzo (b) Fluoranthene	ug/kg						<7.0		<7.8		<7.7		<7.5		<11		<8.0		<7.6		16J		
Benzo (e) Pyrene	ug/kg						<3.3		4.3J		<3.6		<3.5		<5.0		<3.7		<3.6		12J		
Benzo (g,h,i) Perylene	ug/kg						<5.7		<6.3		<6.3		<6.1		<8.8		<6.5		<6.2		11J		
Benzo (k) Fluoranthene	ug/kg						<9.0		<9.9		<9.8		<9.6		<14		<10		<9.7		<14		
Biphenyl	ug/kg						<5.5		<6.1		<6.0		<5.9		<8.5		<6.3		<6.0		<8.5		
Chrysene	ug/kg	384	2800	108	846	108 (TEL)	<6.9		11J		<7.6		<7.4		<11		<7.9		<7.5		15J		
Dibenz (a,h) Anthracene	ug/kg	63.4	260	6.22	135	6.22 (TEL)	<5.1		<5.6		<5.6		<5.4		<7.8*		<5.8		<5.5		<7.8*		
Dibenzothiophene	ug/kg						<7.9		<8.7		<8.6		<8.4		<12		<9.0		<8.5		<12		
Fluoranthene	ug/kg	600	5100	113	1494	113 (TEL)	<7.9		<8.7		<8.6		<8.5		<12		<9.0		<8.6		12J		
Fluorene	ug/kg	19	540	21.2	144	21.2 (TEL)	<6.9		<7.7		<7.6		<7.4		<11		<7.9		<7.5		<11		
Indeno (1,2,3-c,d) Pyrene	ug/kg						<6.2		<6.8		<6.8		<6.6		<9.5		<7.1		<6.7		11J		
Naphthalene	ug/kg	160	2100	34.6	391	34.6 (TEL)	<5.2		6.0J		<5.6		<5.5		<7.9		<5.9		<5.6		<7.9		
Perylene	ug/kg						14		15J		23		18		86		39		97		620		
Phenanthrene	ug/kg	240	1500	86.7	544	86.7 (TEL)	<7.8		<8.7		<8.5		<8.4		<12		<8.9		<8.5		<12		
Pyrene	ug/kg	665	2600	153	1398	153 (TEL)	<7.3		<8.1		<8.0		<7.8		<11		<8.3		<7.9		22		
Total PAHs	ug/kg	4022	44792	1684	16770	1684 (TEL)	16		34		26		20		96		43		110		809		
Semivolatile Organics																							
2,3,4,6-Tetrachlorophenol	ug/kg						<5.3		<5.9		<5.8		<5.7		<8.1		<6.0		<5.8		<8.2		
2,4,5-Trichlorophenol	ug/kg						<4.4		<4.9		<4.8		<4.7		<6.8		<5.0		<4.8		<6.8		
2,4,6-Trichlorophenol	ug/kg						<4.9		<5.4		<5.4		<5.3		<7.5		<5.6		<5.3		<7.6		
2,4-Dichlorophenol	ug/kg						<3.6		<4.0		<4.0		<3.9		<5.6		<4.1		<3.9		<5.6		
2,4-Dimethylphenol	ug/kg						<4.2		<4.6		<4.6		<4.5		<6.4		<4.8		<4.5		<6.4		
2,4-Dinitrophenol	ug/kg						<73		<81		<80		<78		<110		<84		<79		<110		
2,6-Dichlorophenol	ug/kg						<8.1		<8.9		<8.8		<8.6		<12		<9.2		<8.7		<12		
2-Chlorophenol	ug/kg						<4.6		<5.1		<5.0		<4.9		<7.0		<5.2		<5.0		<7.0		
2-Methylphenol	ug/kg						<7.2		<7.9		<7.8		<7.6		<11		<8.2		<7.8		<11		
2-Nitrophenol	ug/kg						<3.3		<3.6		<3.6		<3.5		<5.0		<3.7		<3.5		<5.0		
3/4-Methylphenol	ug/kg						<3.5		<3.9		<3.8		<3.7		<5.4		<4.0		<3.8		<5.4		
4,6-Dinitro-2-Methylphenol	ug/kg						<94		<100		<100		<100		<140		<110		<100		<140		
4-Chloro-3-Methylphenol	ug/kg						<4.8		<5.3		<5.3		<5.2		<7.4		<5.5		<5.2		<7.4		
4-Nitrophenol	ug/kg						<87		<96		<95		<93		<130		<99		<94		<130		
Benzoic Acid	ug/kg						190		220		230		220		310		220		210		310		
Bis(2-Ethylhexyl) Phthalate	ug/kg			182	2647	182 (TEL)	26B		35B		32B		28B		45B		33B		35B		38B		
Butyl Benzyl Phthalate	ug/kg						30		37		53		49		64		54		57		54		
DCPA	ug/kg						<3.2		<3.6		<3.5		<3.5		<5.0		<3.7		<3.5		<5.0		
Diethyl Phthalate	ug/kg						<6.8		8.3J		12J		13J		<10		<7.7		9.8J		13J		
Dimethyl Phthalate	ug/kg						140		210		150		140		190		140		110		180		
Di-n-Butyl Phthalate	ug/kg						<7.0		<7.7		<7.6		<7.5		<11		<8.0		<7.6		<11		
Di-n-Octyl Phthalate	ug/kg						<6.4		<7.1		<7.0		<6.9		<9.9		<7.3		<7.0		<9.9		
Isophorone	ug/kg						<17		<19		<18		<18		<26		<19		<18		<26		
Pentachlorophenol	ug/kg						<1.7		<1.9		<1.9		<1.9		<2.7		<2.0		<1.9		<2.7		
Perthane	ug/kg						<1.8		<2.0		<1.9		<1.9		<2.7		<2.0		<1.9		<2.7		
Phenol	ug/kg						<5.0		<5.5		<5.5		<5.4		<7.7		<5.7		<5.4		<7.7		

< - Results less than the method detection limit.

J - Analyte was detected at a concentration below the reporting limit and above the m

B - Analyte was present in the associated method blank.

*method detection limit greater than the TEL, PEL, or RAG.

Black bold exceeds TEL.

Red bold exceeds PEL.

Grey highlight exceed RAG/Reg4.

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	SR-N-02	SR-N-02	SR-N-03	SR-N-03	SR-N-03	SR-S-04	SR-S-04	SR-S-05	SR-S-05	SR-S-05	SR-S-06	SR-S-06	
							TOP	BOTTOM	TOP	BOTTOM	BOTTOM-DUP	TOP	BOTTOM	TOP	TOP-DUP	BOTTOM	TOP	BOTTOM	
								5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014
PCB044	ug/kg						<0.38		<0.46			<0.53		<0.48	<0.49		<0.25		
PCB049	ug/kg						<0.34		<0.41			<0.47		<0.43	<0.44		<0.22		
PCB052	ug/kg						<0.28		<0.34			<0.39		<0.36	<0.36		<0.18		
PCB056	ug/kg						<0.40		<0.48			<0.55		<0.51	<0.51		<0.26		
PCB060	ug/kg						<0.31		<0.37			<0.42		<0.39	<0.39		<0.20		
PCB066	ug/kg						<0.26		<0.32			<0.37		<0.34	<0.34		<0.17		
PCB070	ug/kg						<0.24		<0.28			<0.33		<0.30	<0.30		<0.16		
PCB074	ug/kg						<0.27		<0.33			<0.38		<0.35	<0.35		<0.18		
PCB077	ug/kg						<0.28		<0.34			<0.39		<0.36	<0.36		<0.18		
PCB081	ug/kg						<0.35		<0.42			<0.49		<0.45	<0.45		<0.23		
PCB087	ug/kg						<0.29		<0.35			<0.40		<0.37	<0.37		<0.19		
PCB095	ug/kg						<0.48		<0.57			<0.66		<0.61	<0.61		<0.31		
PCB097	ug/kg						<0.39		<0.47			<0.55		<0.50	<0.50		<0.26		
PCB099	ug/kg						<0.25		<0.29			<0.34		<0.31	<0.31		<0.16		
PCB101	ug/kg						<0.23		<0.28			<0.32		<0.30	<0.30		<0.15		
PCB105	ug/kg						<0.30		<0.36			<0.42		<0.38	<0.39		<0.20		
PCB110	ug/kg						<0.30		<0.36			<0.41		<0.38	<0.38		<0.20		
PCB114	ug/kg						<0.29		<0.35			<0.40		<0.37	<0.37		<0.19		
PCB118	ug/kg						<0.38		<0.46			<0.53		<0.49	<0.49		<0.25		
PCB119	ug/kg						<0.25		<0.30			<0.35		<0.32	<0.32		<0.16		
PCB123	ug/kg						<0.25		<0.30			<0.35		<0.32	<0.32		<0.17		
PCB126	ug/kg						<0.40		<0.48			<0.55		<0.51	<0.51		<0.26		
PCB128	ug/kg						<0.30		<0.35			<0.41		<0.38	<0.38		<0.19		
PCB132	ug/kg						<0.48		<0.57			<0.66		<0.61	<0.61		<0.31		
PCB138/158	ug/kg						<0.59		<0.70			<0.81		<0.74	<0.75		<0.38		
PCB141	ug/kg						<0.32		<0.38			<0.44		<0.41	<0.41		<0.21		
PCB149	ug/kg						<0.26		<0.31			<0.36		<0.33	<0.33		<0.17		
PCB151	ug/kg						<0.30		<0.36			<0.41		<0.38	<0.38		<0.20		
PCB153	ug/kg						<0.30		<0.36			<0.42		<0.38	<0.38		<0.20		
PCB156	ug/kg						<0.28		<0.34			<0.39		<0.36	<0.36		<0.19		
PCB157	ug/kg						<0.28		<0.33			<0.38		<0.35	<0.35		<0.18		
PCB167	ug/kg						<0.29		<0.35			<0.40		<0.37	<0.37		<0.19		
PCB168	ug/kg						<0.25		<0.30			<0.34		<0.32	<0.32		<0.16		
PCB169	ug/kg						<0.24		<0.28			<0.33		<0.30	<0.30		<0.15		
PCB170	ug/kg						<0.27		<0.32			<0.37		<0.34	<0.34		<0.18		
PCB174	ug/kg						<0.31		<0.37			<0.43		<0.39	<0.39		<0.20		
PCB177	ug/kg						<0.36		<0.43			<0.49		<0.45	<0.45		<0.23		
PCB180	ug/kg						<0.18		<0.21			<0.24		<0.22	<0.23		<0.12		
PCB183	ug/kg						<0.32		<0.39			<0.45		<0.41	<0.41		<0.21		
PCB184	ug/kg						<0.16		<0.19			<0.22		<0.21	<0.21		<0.11		
PCB187	ug/kg						<0.30		<0.36			<0.42		<0.38	<0.39		<0.20		
PCB189	ug/kg						<0.25		<0.30			<0.34		<0.31	<0.32		<0.16		
PCB194	ug/kg						<0.28		<0.33			<0.38		<0.35	<0.35		<0.18		
PCB195	ug/kg						<0.15		<0.18			<0.21		<0.19	<0.19		<0.10		
PCB200	ug/kg						<0.27		<0.32			<0.37		<0.34	<0.34		<0.18		
PCB201	ug/kg						<0.16		<0.20			<0.23		<0.21	<0.21		<0.11		
PCB203	ug/kg						<0.31		<0.37			<0.43		<0.39	<0.40		<0.20		
PCB206	ug/kg						<0.24		<0.29			<0.33		<0.30	<0.31		<0.16		
PCB209	ug/kg						<0.31		<0.37			<0.43		<0.39	<0.39		<0.20		
Total PCBs	ug/kg	22.7	180	21.6	189	21.6 (TEL)	<0.59		<0.7			<0.81		<0.74	<0.75		<0.38		
Polynuclear Aromatic Hydrocarbons																			
1,6,7-Trimethylnaphthalene	ug/kg						<8.8		<11			<12		<11	<11		<5.7		
1-Methylnaphthalene	ug/kg						<11		<13			<15		<14	<14		<6.9		
1-Methylphenanthrene	ug/kg						<10		<12			<14		<13	<13		<6.7		
2,6-Dimethylnaphthalene	ug/kg						<9.9		<12			<13		<13	<13		<6.3		
2-Methylnaphthalene	ug/kg	70	670	20.2	201	20.23 (TEL)	<10		<12			<14		<13	<13		<6.7		

Parameter	Units	ERL	ERM	TEL	PEL	RAG/Reg4	SR-N-02	SR-N-02	SR-N-03	SR-N-03	SR-N-03	SR-S-04	SR-S-04	SR-S-05	SR-S-05	SR-S-05	SR-S-06	SR-S-06	
							TOP	BOTTOM	TOP	BOTTOM	BOTTOM-DUP	TOP	BOTTOM	TOP	TOP-DUP	BOTTOM	TOP	BOTTOM	
								5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/15/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014	5/13/2014
Acenaphthene	ug/kg	16	500	6.71	88.9	6.71 (TEL)	<14*		<16*			<19*		<17*	<17*		<8.7*		
Acenaphthylene	ug/kg	44	640	5.87	128	5.87 (TEL)	<13*		<16*			<18*		<17*	<17*		<8.5*		
Anthracene	ug/kg	85.3	1100	46.9	245	46.9 (TEL)	<16		<19			<21		<20	<20		<10		
Benzo (a) Anthracene	ug/kg	261	1600	74.8	693	74.8 (TEL)	19J		59			<19		<17	<17		18J		
Benzo (a) Pyrene	ug/kg	430	1600	88.8	763	88.8 (TEL)	20J		71			<20		<19	<19		16J		
Benzo (b) Fluoranthene	ug/kg						30		91			<20		20J	21J		20		
Benzo (e) Pyrene	ug/kg						20J		66			12J		13J	15J		15J		
Benzo (g,h,i) Perylene	ug/kg						18J		52			<17		<16	16J		12J		
Benzo (k) Fluoranthene	ug/kg						<19		34J			<26		<25	<24		<12		
Biphenyl	ug/kg						<12		<14			<16		<15	<15		<7.6		
Chrysene	ug/kg	384	2800	108	846	108 (TEL)	25J		78			<20		<19	<19		21		
Dibenz (a,h) Anthracene	ug/kg	63.4	260	6.22	135	6.22 (TEL)	<11*		<13*			<15*		<14*	<14*		<7.0*		
Dibenzothiophene	ug/kg						<17		<20			<23		<22	<21		<11		
Fluoranthene	ug/kg	600	5100	113	1494	113 (TEL)	23J		<20			<23		23J	24J		18J		
Fluorene	ug/kg	19	540	21.2	144	21.2 (TEL)	<15		<18			<20		<19	<19		<9.5		
Indeno (1,2,3-c,d) Pyrene	ug/kg						18J		55			<18		<17	<17		13J		
Naphthalene	ug/kg	160	2100	34.6	391	34.6 (TEL)	<11		<13			<15		<14	<14		<7.1		
Perylene	ug/kg						790		800			440		480	450		470		
Phenanthrene	ug/kg	240	1500	86.7	544	86.7 (TEL)	<17		<20			<23		<21	<21		12J		
Pyrene	ug/kg	665	2600	153	1398	153 (TEL)	43		120			22J		24J	25J		28		
Total PAHs	ug/kg	4022	44792	1684	16770	1684 (TEL)	196		560			22		67	86		158		
Semivolatile Organics																			
2,3,4,6-Tetrachlorophenol	ug/kg						<11		<14			<15		<15	<14		<7.3		
2,4,5-Trichlorophenol	ug/kg						<9.4		<11			<13		<12	<12		<6.1		
2,4,6-Trichlorophenol	ug/kg						<10		<13			<14		<13	<13		<6.7		
2,4-Dichlorophenol	ug/kg						<7.8		<9.3			<11		<10	<9.9		<5.0		
2,4-Dimethylphenol	ug/kg						<8.9		<11			<12		<11	<11		<5.7		
2,4-Dinitrophenol	ug/kg						<160		<190			<210		<200	<200		<100		
2,6-Dichlorophenol	ug/kg						<17		<21			<23		<22	<22		<11		
2-Chlorophenol	ug/kg						<9.8		<12			<13		<13	<12		<6.3		
2-Methylphenol	ug/kg						<15		<18			<21		<20	<19		<9.8		
2-Nitrophenol	ug/kg						<6.9		<8.3			<9.5		<8.9	<8.8		<4.5		
3/4-Methylphenol	ug/kg						<7.5		<8.9			<10		<9.6	<9.5		8.8J		
4,6-Dinitro-2-Methylphenol	ug/kg						<200		<240			<270		<260	<260		<130		
4-Chloro-3-Methylphenol	ug/kg						<10		<12			<14		<13	<13		<6.6		
4-Nitrophenol	ug/kg						<190		<220			<250		<240	<240		<120		
Benzoic Acid	ug/kg						420		530			560		540	530		270		
Bis(2-Ethylhexyl) Phthalate	ug/kg			182	2647	182 (TEL)	47B		56B			46B		67B	38B		21B		
Butyl Benzyl Phthalate	ug/kg						92		82			60		43	42		31		
DCPA	ug/kg						<6.9		<8.3			<9.4		<8.9	<8.8		<4.4		
Diethyl Phthalate	ug/kg						<14		<17			<20		<19	<18		<9.3		
Dimethyl Phthalate	ug/kg						240		280			360		440	450		200		
Di-n-Butyl Phthalate	ug/kg						<15		<18			<20		<19	<19		<9.6		
Di-n-Octyl Phthalate	ug/kg						<14		<16			<19		<18	<17		<8.8		
Isophorone	ug/kg						<36		<43			<49		<46	<46		<23		
Pentachlorophenol	ug/kg						<3.7		<4.4			<5.1		<4.8	<4.7		<2.4		
Perthane	ug/kg						<3.8		<4.5			<5.1		<4.8	<4.8		<2.4		
Phenol	ug/kg						<11		<13			<15		<14	<14		<6.9		

< - Results less than the method detection limit.

J - Analyte was detected at a concentration below the reporting limit and above the m

B - Analyte was present in the associated method blank.

*method detection limit greater than the TEL, PEL, or RAG.

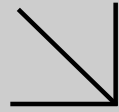
Black bold exceeds TEL.

Red bold exceeds PEL.

Grey highlight exceed RAG/Reg4.

APPENDIX D

Laboratory Report



WORK ORDER NUMBER: 14-05-1270

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Weston Solutions

Client Project Name: ADCNR Mobile Bay

Attention: Dan McCoy
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Approved for release on 06/13/2014 by:
Danielle Gonsman
Project Manager

ResultLink ▶

Email your PM ▶



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Client Project Name: ADCNR Mobile Bay
 Work Order Number: 14-05-1270

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CASE NARRATIVE

Calscience Work Order No.: 14-05-1270
Project ID: ADCNR – Mobile Bay

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

Thirty-nine sediment samples were received for this project on May 16, 2014. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was between 2.3 and 2.6°C. All samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers and then stored in refrigeration units pending chemistry.

Tests Performed

Total Solids by SM 2540B
Trace Metals by EPA 6020
Mercury by EPA 7471A
Total Organic Carbon by EPA 9060A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Particle Size by ASTM D4464 (M)

Data Summary

The sediment samples were homogenized prior to analysis.

Holding times

All holding times were met.

The two laboratory duplicates were analyzed outside the EPA Method recommended holding time for solid samples for SVOCs, Pesticides, PCBs and Total Solids. However, the samples were frozen after collection (prior to holding time expiration) at -18°C. Calscience follows SWAMP criteria and the Puget Sound Protocol (USEPA/PSWQAT, 1997, Table 2) for holding times in sediment samples, which states holding times may be extended up to six months to one year (two years for metals) if stored frozen at -18°C after collection. Therefore, the sample results have not been flagged as exceeding the EPA Method recommended holding times.

Blanks

Concentrations of target analytes in the method blank were found to be below reporting limits for all analyses with the exception of the following.

A trace amount of Copper was detected in one of the EPA 6020 method blanks. The values in the samples were over 10 times the Method Blank concentration, so the results are released with the appropriate qualifiers.

A trace amount (below the RL) of Bis(2-ethylhexyl)phthalate was detected in the EPA 8270C Method Blank. If detected in the samples, the results have been flagged with a “B” qualifier.

Reporting Limits

The Method Detection Limits were met.

Laboratory Control Samples

A Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were performed for each applicable test. All parameters were within established control limits.

Matrix Spikes

Matrix spiking was performed at the required frequencies using both project and non-project samples. Unless otherwise noted, all parameters for the project sample matrix spikes were within the control limits specified. Only Work Order specific matrix spike samples are discussed in this report.

The Zinc MS/MSD recoveries were above the established control limits for the CB-S-12 BOTTOM matrix spike QC Batch. Since the LCS/LCSDs were in control, the results are released with no further action.

The delta-BHC MS/MSD recoveries were above the established control limits for the JB-N-01 BOTTOM matrix spike QC Batch. However, the LCS/LCSDs were in control, so the results are released with no further action.

Many of the PCB Congener MS/MSD RPDs (for matrix spike sample JB-S-06 TOP), were outside the established control limits. Since the LCS/LCSD RPDs were in control, the results have been flagged with the appropriate qualifiers and are released with no further action.

Surrogates

Surrogate recoveries for all applicable tests and samples were within acceptable control limits with the following exceptions.

For several samples, one or both of the PCB Congeners surrogates were outside of established control limits. All results were confirmed by re-analysis. The low surrogates samples were re-extracted (past

HT) for confirmation. While the re-extracted samples surrogate recoveries were within the control limits, the original data is released since it was extracted within HT.

Laboratory Duplicate

Laboratory Duplicates were performed at the required frequencies. Samples CB-N-06 TOP and JB-N-02 TOP were used for the Lab Dups. The RPDs for all analyses were within control limits with the exception of the DDTs.

Acronyms

LCS - Laboratory Control Sample
PDS - Post Digestion Spike
MS/MSD- Matrix Spike/Matrix Spike Duplicate
ME-Marginal Exceedance
RPD- Relative Percent Difference

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/16/14. They were assigned to Work Order 14-05-1270.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Weston Solutions	Work Order:	14-05-1270
5817 Dryden Place, Suite 101	Project Name:	ADCNR Mobile Bay
Carlsbad, CA 92008-9999	PO Number:	
	Date/Time Received:	05/16/14 10:40
	Number of Containers:	43

Attn: Dan McCoy

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
CB-N-01 TOP	14-05-1270-1	05/12/14 09:53	1	Sediment
CB-N-01 BOTTOM	14-05-1270-2	05/12/14 10:08	1	Sediment
CB-N-02 TOP	14-05-1270-3	05/12/14 10:30	1	Sediment
CB-N-02 BOTTOM	14-05-1270-4	05/12/14 10:45	1	Sediment
CB-N-03 TOP	14-05-1270-5	05/12/14 11:15	1	Sediment
CB-N-03 BOTTOM	14-05-1270-6	05/12/14 11:40	1	Sediment
CB-N-04 TOP	14-05-1270-7	05/12/14 13:45	1	Sediment
CB-N-04 BOTTOM	14-05-1270-8	05/12/14 13:20	1	Sediment
CB-N-05 TOP	14-05-1270-9	05/12/14 12:50	1	Sediment
CB-N-05 BOTTOM	14-05-1270-10	05/12/14 12:45	1	Sediment
CB-N-06 TOP	14-05-1270-11	05/12/14 12:00	1	Sediment
CB-N-07 TOP	14-05-1270-12	05/12/14 13:50	1	Sediment
CB-N-07 BOTTOM	14-05-1270-13	05/12/14 14:00	1	Sediment
CB-N-08 TOP	14-05-1270-14	05/12/14 14:45	1	Sediment
CB-N-08 BOTTOM	14-05-1270-15	05/12/14 14:25	1	Sediment
CB-S-11 TOP	14-05-1270-16	05/12/14 16:15	1	Sediment
CB-S-11 BOTTOM	14-05-1270-17	05/12/14 15:50	1	Sediment
CB-S-12 TOP	14-05-1270-18	05/12/14 15:50	1	Sediment
CB-S-12 BOTTOM	14-05-1270-19	05/12/14 15:40	1	Sediment
SR-S-04 TOP	14-05-1270-20	05/13/14 12:15	1	Sediment
SR-S-04 BOTTOM	14-05-1270-21	05/13/14 12:00	1	Sediment
SR-S-05 TOP	14-05-1270-22	05/13/14 12:30	1	Sediment
SR-S-05 BOTTOM	14-05-1270-23	05/13/14 12:45	1	Sediment
SR-S-05 TOP DUP	14-05-1270-24	05/13/14 12:45	1	Sediment
SR-S-06 TOP	14-05-1270-25	05/13/14 13:30	1	Sediment
SR-S-06 BOTTOM	14-05-1270-26	05/13/14 13:15	1	Sediment
JB-N-01 TOP	14-05-1270-27	05/13/14 09:10	1	Sediment
JB-N-01 BOTTOM	14-05-1270-28	05/13/14 09:20	1	Sediment
JB-N-01 TOP DUP	14-05-1270-29	05/13/14 09:40	1	Sediment
JB-N-02 TOP	14-05-1270-30	05/13/14 10:25	1	Sediment
JB-N-02 BOTTOM	14-05-1270-31	05/13/14 10:10	1	Sediment
JB-N-03 TOP	14-05-1270-32	05/13/14 10:55	1	Sediment
JB-N-03 BOTTOM	14-05-1270-33	05/13/14 10:35	1	Sediment
JB-N-04 TOP	14-05-1270-34	05/13/14 11:20	1	Sediment
JB-N-04 BOTTOM	14-05-1270-35	05/13/14 11:05	1	Sediment
JB-S-05 TOP	14-05-1270-36	05/13/14 13:05	1	Sediment
JB-S-05 BOTTOM	14-05-1270-37	05/13/14 14:05	1	Sediment
JB-S-06 TOP	14-05-1270-38	05/13/14 15:00	1	Sediment
JB-S-06 BOTTOM	14-05-1270-39	05/13/14 14:45	1	Sediment
CB-N-06 TOP LAB DUP	14-05-1270-40	05/12/14 12:00	1	Sediment
JB-N-02 TOP LAB DUP	14-05-1270-41	05/13/14 10:25	1	Sediment
SR-S-04 TOP (Particle Size Dup)	14-05-1270-42	05/13/14 12:15	1	Sediment

Sample Summary

Client: Weston Solutions	Work Order: 14-05-1270
5817 Dryden Place, Suite 101	Project Name: ADCNR Mobile Bay
Carlsbad, CA 92008-9999	PO Number:
	Date/Time Received: 05/16/14 10:40
	Number of Containers: 43

Attn: Dan McCoy

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
JB-S-06 BOTTOM (Particle Size Dup)	14-05-1270-43	05/13/14 14:45	1	Sediment

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

Page 1 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-A	05/12/14 09:53	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.1	0.075	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 BOTTOM	14-05-1270-2-A	05/12/14 10:08	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.63	0.070	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 TOP	14-05-1270-3-A	05/12/14 10:30	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.64	0.076	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 BOTTOM	14-05-1270-4-A	05/12/14 10:45	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.2	0.10	0.024	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 TOP	14-05-1270-5-A	05/12/14 11:15	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.7	0.095	0.023	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 BOTTOM	14-05-1270-6-A	05/12/14 11:40	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.81	0.085	0.021	1.00	

CB-N-04 TOP	14-05-1270-7-A	05/12/14 13:45	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.54	0.075	0.018	1.00	

CB-N-04 BOTTOM	14-05-1270-8-A	05/12/14 13:20	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.40	0.066	0.016	1.00	

CB-N-05 TOP	14-05-1270-9-A	05/12/14 12:50	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.81	0.073	0.018	1.00	

CB-N-05 BOTTOM	14-05-1270-10-A	05/12/14 12:45	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.92	0.074	0.018	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-A	05/12/14 12:00	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.91	0.080	0.019	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-A	05/12/14 13:50	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.95	0.076	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-A	05/12/14 14:00	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.76	0.068	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-A	05/12/14 14:45	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.7	0.093	0.023	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 BOTTOM	14-05-1270-15-A	05/12/14 14:25	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.0	0.072	0.017	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-A	05/12/14 16:15	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.97	0.072	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 BOTTOM	14-05-1270-17-A	05/12/14 15:50	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.2	0.073	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-A	05/12/14 15:50	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.74	0.070	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-A	05/12/14 15:40	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.40	0.064	0.016	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-A	05/13/14 12:15	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	4.2	0.20	0.048	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 BOTTOM	14-05-1270-21-A	05/13/14 12:00	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.6	0.10	0.025	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-A	05/13/14 12:30	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	3.2	0.19	0.045	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 BOTTOM	14-05-1270-23-A	05/13/14 12:45	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	2.8	0.17	0.042	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-A	05/13/14 12:45	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	3.1	0.18	0.045	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-A	05/13/14 13:30	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.3	0.094	0.023	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 BOTTOM	14-05-1270-26-A	05/13/14 13:15	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.20	0.066	0.016	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-A	05/13/14 09:10	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.55	0.071	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 BOTTOM	14-05-1270-28-A	05/13/14 09:20	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.51	0.071	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP DUP	14-05-1270-29-A	05/13/14 09:40	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.2	0.10	0.024	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP	14-05-1270-30-A	05/13/14 10:25	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.8	0.10	0.025	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-A	05/13/14 10:10	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	1.5	0.081	0.020	1.00	

JB-N-03 TOP	14-05-1270-32-A	05/13/14 10:55	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	2.6	0.13	0.031	1.00	

JB-N-03 BOTTOM	14-05-1270-33-A	05/13/14 10:35	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	1.3	0.080	0.019	1.00	

JB-N-04 TOP	14-05-1270-34-A	05/13/14 11:20	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	2.8	0.14	0.034	1.00	

JB-N-04 BOTTOM	14-05-1270-35-A	05/13/14 11:05	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.81	0.072	0.017	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	EPA 9060A
	Units:	%

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-A	05/13/14 13:05	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.80	0.069	0.017	1.00	

JB-S-05 BOTTOM	14-05-1270-37-A	05/13/14 14:05	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.26	0.066	0.016	1.00	

JB-S-06 TOP	14-05-1270-38-A	05/13/14 15:00	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.89	0.076	0.018	1.00	

JB-S-06 BOTTOM	14-05-1270-39-A	05/13/14 14:45	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.96	0.069	0.017	1.00	

CB-N-06 TOP LAB DUP	14-05-1270-40-A	05/12/14 12:00	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.75	0.078	0.019	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-A	05/13/14 10:25	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.9	0.098	0.024	1.00	

Method Blank	099-06-013-1042	N/A	Solid	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Method Blank	099-06-013-1043	N/A	Solid	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Method Blank	099-06-013-1044	N/A	Solid	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Method Blank	099-06-013-1045	N/A	Solid	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Method Blank	099-06-013-1055	N/A	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-A	05/12/14 09:53	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	66.7	0.100	0.100	1.00	

CB-N-01 BOTTOM	14-05-1270-2-A	05/12/14 10:08	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	71.7	0.100	0.100	1.00	

CB-N-02 TOP	14-05-1270-3-A	05/12/14 10:30	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	66.1	0.100	0.100	1.00	

CB-N-02 BOTTOM	14-05-1270-4-A	05/12/14 10:45	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	50.0	0.100	0.100	1.00	

CB-N-03 TOP	14-05-1270-5-A	05/12/14 11:15	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	52.4	0.100	0.100	1.00	

CB-N-03 BOTTOM	14-05-1270-6-A	05/12/14 11:40	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	59.1	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-A	05/12/14 13:45	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	67.0	0.100	0.100	1.00	

CB-N-04 BOTTOM	14-05-1270-8-A	05/12/14 13:20	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	75.2	0.100	0.100	1.00	

CB-N-05 TOP	14-05-1270-9-A	05/12/14 12:50	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	68.8	0.100	0.100	1.00	

CB-N-05 BOTTOM	14-05-1270-10-A	05/12/14 12:45	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	67.6	0.100	0.100	1.00	

CB-N-06 TOP	14-05-1270-11-A	05/12/14 12:00	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	62.3	0.100	0.100	1.00	

CB-N-07 TOP	14-05-1270-12-A	05/12/14 13:50	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	66.2	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-A	05/12/14 14:00	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	73.3	0.100	0.100	1.00	

CB-N-08 TOP	14-05-1270-14-A	05/12/14 14:45	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	53.6	0.100	0.100	1.00	

CB-N-08 BOTTOM	14-05-1270-15-A	05/12/14 14:25	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	69.9	0.100	0.100	1.00	

CB-S-11 TOP	14-05-1270-16-A	05/12/14 16:15	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	69.4	0.100	0.100	1.00	

CB-S-11 BOTTOM	14-05-1270-17-A	05/12/14 15:50	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	68.6	0.100	0.100	1.00	

CB-S-12 TOP	14-05-1270-18-A	05/12/14 15:50	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	71.3	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: N/A
 Method: SM 2540 B (M)
 Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-A	05/12/14 15:40	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	77.7	0.100	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-A	05/13/14 12:15	Sediment	N/A	05/19/14	05/20/14 15:00	E0520TSB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	25.0	0.100	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 BOTTOM	14-05-1270-21-A	05/13/14 12:00	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	48.1	0.100	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-A	05/13/14 12:30	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	27.0	0.100	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 BOTTOM	14-05-1270-23-A	05/13/14 12:45	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	28.8	0.100	0.100	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-A	05/13/14 12:45	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	27.1	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	SM 2540 B (M)
	Units:	%

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-A	05/13/14 13:30	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	53.1	0.100	0.100	1.00	

SR-S-06 BOTTOM	14-05-1270-26-A	05/13/14 13:15	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	75.7	0.100	0.100	1.00	

JB-N-01 TOP	14-05-1270-27-A	05/13/14 09:10	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	70.9	0.100	0.100	1.00	

JB-N-01 BOTTOM	14-05-1270-28-A	05/13/14 09:20	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	70.7	0.100	0.100	1.00	

JB-N-01 TOP DUP	14-05-1270-29-A	05/13/14 09:40	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	50.0	0.100	0.100	1.00	

JB-N-02 TOP	14-05-1270-30-A	05/13/14 10:25	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	49.1	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-A	05/13/14 10:10	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	62.1	0.100	0.100	1.00	

JB-N-03 TOP	14-05-1270-32-A	05/13/14 10:55	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	39.7	0.100	0.100	1.00	

JB-N-03 BOTTOM	14-05-1270-33-A	05/13/14 10:35	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	62.4	0.100	0.100	1.00	

JB-N-04 TOP	14-05-1270-34-A	05/13/14 11:20	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	36.0	0.100	0.100	1.00	

JB-N-04 BOTTOM	14-05-1270-35-A	05/13/14 11:05	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	69.3	0.100	0.100	1.00	

JB-S-05 TOP	14-05-1270-36-A	05/13/14 13:05	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	72.8	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 BOTTOM	14-05-1270-37-A	05/13/14 14:05	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	75.8	0.100	0.100	1.00	

JB-S-06 TOP	14-05-1270-38-A	05/13/14 15:00	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	66.2	0.100	0.100	1.00	

JB-S-06 BOTTOM	14-05-1270-39-A	05/13/14 14:45	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	72.8	0.100	0.100	1.00	

CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	N/A	06/06/14	06/09/14 13:00	E0609TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	63.9	0.100	0.100	1.00	

JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	N/A	06/06/14	06/09/14 13:00	E0609TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	51.0	0.100	0.100	1.00	

Method Blank	099-05-019-2577	N/A	Solid	N/A	05/19/14	05/20/14 15:00	E0520TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	ND	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	SM 2540 B (M)
	Units:	%

Project: ADCNR Mobile Bay Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-05-019-2578	N/A	Solid	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Method Blank	099-05-019-2603	N/A	Solid	N/A	06/06/14	06/09/14 13:00	E0609TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-AA	05/12/14 09:53	Sediment	ICP/MS 04	05/20/14	05/21/14 17:43	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.61	0.150	0.131	1.00	
Cadmium	0.202	0.150	0.0858	1.00	
Chromium	8.92	0.150	0.0931	1.00	
Copper	3.61	0.150	0.0628	1.00	
Lead	5.54	0.150	0.0988	1.00	
Nickel	5.23	0.150	0.0759	1.00	
Selenium	0.255	0.150	0.110	1.00	
Silver	ND	0.150	0.0469	1.00	
Zinc	24.0	1.50	1.19	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 BOTTOM	14-05-1270-2-AA	05/12/14 10:08	Sediment	ICP/MS 04	05/20/14	05/21/14 17:46	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.05	0.139	0.122	1.00	
Cadmium	0.130	0.139	0.0798	1.00	J
Chromium	5.36	0.139	0.0866	1.00	
Copper	2.30	0.139	0.0585	1.00	
Lead	2.81	0.139	0.0919	1.00	
Nickel	3.56	0.139	0.0706	1.00	
Selenium	0.105	0.139	0.102	1.00	J
Silver	ND	0.139	0.0437	1.00	
Zinc	15.8	1.39	1.11	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 TOP	14-05-1270-3-AA	05/12/14 10:30	Sediment	ICP/MS 04	05/20/14	05/21/14 17:49	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	1.07	0.151	0.132	1.00	
Cadmium	0.126	0.151	0.0866	1.00	J
Chromium	7.68	0.151	0.0939	1.00	
Copper	2.82	0.151	0.0634	1.00	
Lead	3.40	0.151	0.0997	1.00	
Nickel	4.79	0.151	0.0766	1.00	
Selenium	0.117	0.151	0.111	1.00	J
Silver	ND	0.151	0.0474	1.00	
Zinc	26.5	1.51	1.20	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 BOTTOM	14-05-1270-4-AA	05/12/14 10:45	Sediment	ICP/MS 04	05/20/14	05/21/14 18:03	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	3.88	0.200	0.175	1.00	
Cadmium	0.307	0.200	0.114	1.00	
Chromium	17.4	0.200	0.124	1.00	
Copper	8.30	0.200	0.0838	1.00	
Lead	10.2	0.200	0.132	1.00	
Nickel	9.79	0.200	0.101	1.00	
Selenium	0.500	0.200	0.146	1.00	
Silver	ND	0.200	0.0626	1.00	
Zinc	47.6	2.00	1.59	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 TOP	14-05-1270-5-AA	05/12/14 11:15	Sediment	ICP/MS 04	05/20/14	05/21/14 18:07	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	3.72	0.191	0.167	1.00	
Cadmium	0.389	0.191	0.109	1.00	
Chromium	19.2	0.191	0.118	1.00	
Copper	9.46	0.191	0.0800	1.00	
Lead	11.9	0.191	0.126	1.00	
Nickel	10.2	0.191	0.0966	1.00	
Selenium	0.511	0.191	0.139	1.00	
Silver	0.0653	0.191	0.0597	1.00	J
Zinc	67.3	1.91	1.52	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 BOTTOM	14-05-1270-6-AA	05/12/14 11:40	Sediment	ICP/MS 04	05/20/14	05/21/14 18:10	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.24	0.169	0.148	1.00	
Cadmium	0.192	0.169	0.0968	1.00	
Chromium	9.96	0.169	0.105	1.00	
Copper	3.29	0.169	0.0709	1.00	
Lead	3.86	0.169	0.112	1.00	
Nickel	5.70	0.169	0.0857	1.00	
Selenium	0.135	0.169	0.124	1.00	J
Silver	ND	0.169	0.0530	1.00	
Zinc	29.4	1.69	1.34	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-AA	05/12/14 13:45	Sediment	ICP/MS 04	05/20/14	05/21/14 18:13	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.13	0.149	0.130	1.00	
Cadmium	0.137	0.149	0.0854	1.00	J
Chromium	8.01	0.149	0.0926	1.00	
Copper	3.44	0.149	0.0626	1.00	
Lead	4.83	0.149	0.0984	1.00	
Nickel	4.56	0.149	0.0756	1.00	
Selenium	0.122	0.149	0.109	1.00	J
Silver	ND	0.149	0.0467	1.00	
Zinc	27.9	1.49	1.19	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 BOTTOM	14-05-1270-8-AA	05/12/14 13:20	Sediment	ICP/MS 04	05/20/14	05/21/14 18:17	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	0.319	0.133	0.116	1.00	
Cadmium	0.0834	0.133	0.0761	1.00	J
Chromium	4.57	0.133	0.0825	1.00	
Copper	1.32	0.133	0.0557	1.00	
Lead	2.14	0.133	0.0876	1.00	
Nickel	2.54	0.133	0.0673	1.00	
Selenium	0.112	0.133	0.0972	1.00	J
Silver	ND	0.133	0.0416	1.00	
Zinc	17.7	1.33	1.06	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 5 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 TOP	14-05-1270-9-AA	05/12/14 12:50	Sediment	ICP/MS 04	05/20/14	05/21/14 18:20	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.37	0.145	0.127	1.00	
Cadmium	0.161	0.145	0.0832	1.00	
Chromium	8.34	0.145	0.0902	1.00	
Copper	3.08	0.145	0.0609	1.00	
Lead	4.26	0.145	0.0958	1.00	
Nickel	4.58	0.145	0.0736	1.00	
Selenium	0.187	0.145	0.106	1.00	
Silver	ND	0.145	0.0455	1.00	
Zinc	25.1	1.45	1.16	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 BOTTOM	14-05-1270-10-AA	05/12/14 12:45	Sediment	ICP/MS 04	05/20/14	05/21/14 18:24	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.02	0.148	0.129	1.00	
Cadmium	0.158	0.148	0.0847	1.00	
Chromium	7.21	0.148	0.0918	1.00	
Copper	2.64	0.148	0.0620	1.00	
Lead	3.08	0.148	0.0975	1.00	
Nickel	4.26	0.148	0.0749	1.00	
Selenium	0.178	0.148	0.108	1.00	
Silver	ND	0.148	0.0463	1.00	
Zinc	21.4	1.48	1.18	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-AA	05/12/14 12:00	Sediment	ICP/MS 04	05/20/14	05/21/14 18:27	140520L06E

Comment(s):
 - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.21	0.161	0.140	1.00	
Cadmium	0.160	0.161	0.0919	1.00	J
Chromium	9.16	0.161	0.0996	1.00	
Copper	4.21	0.161	0.0673	1.00	
Lead	5.31	0.161	0.106	1.00	
Nickel	4.99	0.161	0.0813	1.00	
Selenium	ND	0.161	0.117	1.00	
Silver	ND	0.161	0.0502	1.00	
Zinc	32.4	1.61	1.28	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-AA	05/12/14 13:50	Sediment	ICP/MS 04	05/20/14	05/21/14 18:30	140520L06E

Comment(s):
 - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.33	0.151	0.132	1.00	
Cadmium	0.165	0.151	0.0864	1.00	
Chromium	8.40	0.151	0.0938	1.00	
Copper	3.80	0.151	0.0633	1.00	
Lead	5.07	0.151	0.0995	1.00	
Nickel	5.09	0.151	0.0765	1.00	
Selenium	0.208	0.151	0.110	1.00	
Silver	ND	0.151	0.0473	1.00	
Zinc	29.5	1.51	1.20	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-AA	05/12/14 14:00	Sediment	ICP/MS 04	05/20/14	05/21/14 18:34	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	0.802	0.136	0.119	1.00	
Cadmium	0.114	0.136	0.0781	1.00	J
Chromium	5.39	0.136	0.0847	1.00	
Copper	1.75	0.136	0.0572	1.00	
Lead	2.29	0.136	0.0899	1.00	
Nickel	3.07	0.136	0.0691	1.00	
Selenium	ND	0.136	0.0997	1.00	
Silver	ND	0.136	0.0427	1.00	
Zinc	16.8	1.36	1.08	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-AA	05/12/14 14:45	Sediment	ICP/MS 04	05/20/14	05/21/14 18:48	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	4.14	0.187	0.163	1.00	
Cadmium	0.237	0.187	0.107	1.00	
Chromium	12.1	0.187	0.116	1.00	
Copper	6.52	0.187	0.0782	1.00	
Lead	7.07	0.187	0.123	1.00	
Nickel	7.04	0.187	0.0945	1.00	
Selenium	0.407	0.187	0.136	1.00	
Silver	ND	0.187	0.0584	1.00	
Zinc	42.1	1.87	1.48	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 8 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 BOTTOM	14-05-1270-15-AA	05/12/14 14:25	Sediment	ICP/MS 04	05/20/14	05/21/14 18:51	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.99	0.143	0.125	1.00	
Cadmium	0.140	0.143	0.0819	1.00	J
Chromium	8.67	0.143	0.0888	1.00	
Copper	3.62	0.143	0.0600	1.00	
Lead	5.65	0.143	0.0943	1.00	
Nickel	4.92	0.143	0.0724	1.00	
Selenium	0.197	0.143	0.105	1.00	
Silver	ND	0.143	0.0448	1.00	
Zinc	60.4	1.43	1.14	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-AA	05/12/14 16:15	Sediment	ICP/MS 04	05/20/14	05/21/14 18:55	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.47	0.144	0.126	1.00	
Cadmium	0.183	0.144	0.0825	1.00	
Chromium	11.0	0.144	0.0894	1.00	
Copper	4.54	0.144	0.0604	1.00	
Lead	6.52	0.144	0.0950	1.00	
Nickel	6.01	0.144	0.0729	1.00	
Selenium	0.182	0.144	0.105	1.00	
Silver	ND	0.144	0.0451	1.00	
Zinc	51.2	1.44	1.15	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 BOTTOM	14-05-1270-17-AA	05/12/14 15:50	Sediment	ICP/MS 04	05/20/14	05/21/14 18:58	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.23	0.146	0.127	1.00	
Cadmium	0.193	0.146	0.0834	1.00	
Chromium	10.6	0.146	0.0905	1.00	
Copper	4.78	0.146	0.0611	1.00	
Lead	5.94	0.146	0.0961	1.00	
Nickel	5.82	0.146	0.0738	1.00	
Selenium	0.108	0.146	0.107	1.00	J
Silver	ND	0.146	0.0456	1.00	
Zinc	28.2	1.46	1.16	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-AA	05/12/14 15:50	Sediment	ICP/MS 04	05/20/14	05/21/14 19:01	140520L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	0.951	0.140	0.122	1.00	
Cadmium	0.151	0.140	0.0803	1.00	
Chromium	8.41	0.140	0.0871	1.00	
Copper	3.52	0.140	0.0588	1.00	
Lead	4.70	0.140	0.0924	1.00	
Nickel	4.69	0.140	0.0710	1.00	
Selenium	0.233	0.140	0.102	1.00	
Silver	ND	0.140	0.0439	1.00	
Zinc	34.6	1.40	1.11	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-AA	05/12/14 15:40	Sediment	ICP/MS 04	05/20/14	05/21/14 17:39	140520L06E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.676	0.129	0.112	1.00	
Cadmium	0.0779	0.129	0.0737	1.00	J
Chromium	5.30	0.129	0.0799	1.00	
Copper	2.18	0.129	0.0539	1.00	
Lead	3.14	0.129	0.0848	1.00	
Nickel	2.93	0.129	0.0652	1.00	
Selenium	0.151	0.129	0.0940	1.00	
Silver	ND	0.129	0.0403	1.00	
Zinc	21.5	1.29	1.02	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-AA	05/13/14 12:15	Sediment	ICP/MS 04	05/20/14	05/21/14 19:05	140520L06E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	7.24	0.400	0.349	1.00	
Cadmium	0.643	0.400	0.229	1.00	
Chromium	35.4	0.400	0.248	1.00	
Copper	23.9	0.400	0.168	1.00	
Lead	23.5	0.400	0.264	1.00	
Nickel	18.5	0.400	0.203	1.00	
Selenium	1.08	0.400	0.292	1.00	
Silver	ND	0.400	0.125	1.00	
Zinc	128	4.00	3.18	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 BOTTOM	14-05-1270-21-AA	05/13/14 12:00	Sediment	ICP/MS 04	05/20/14	05/21/14 19:08	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	6.06	0.208	0.182	1.00	
Cadmium	0.447	0.208	0.119	1.00	
Chromium	25.8	0.208	0.129	1.00	
Copper	14.8	0.208	0.0871	1.00	B
Lead	18.4	0.208	0.137	1.00	
Nickel	12.8	0.208	0.105	1.00	
Selenium	0.491	0.208	0.152	1.00	
Silver	0.0866	0.208	0.0651	1.00	J
Zinc	78.5	2.08	1.65	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-AA	05/13/14 12:30	Sediment	ICP/MS 04	05/20/14	05/21/14 19:12	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	7.53	0.370	0.323	1.00	
Cadmium	0.677	0.370	0.212	1.00	
Chromium	37.0	0.370	0.230	1.00	
Copper	22.5	0.370	0.155	1.00	B
Lead	22.0	0.370	0.244	1.00	
Nickel	18.9	0.370	0.188	1.00	
Selenium	0.929	0.370	0.271	1.00	
Silver	0.121	0.370	0.116	1.00	J
Zinc	121	3.70	2.94	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 BOTTOM	14-05-1270-23-AA	05/13/14 12:45	Sediment	ICP/MS 04	05/20/14	05/21/14 19:15	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	7.89	0.347	0.303	1.00	
Cadmium	0.596	0.347	0.199	1.00	
Chromium	42.3	0.347	0.216	1.00	
Copper	22.4	0.347	0.146	1.00	B
Lead	26.5	0.347	0.229	1.00	
Nickel	20.7	0.347	0.176	1.00	
Selenium	0.705	0.347	0.254	1.00	
Silver	0.146	0.347	0.109	1.00	J
Zinc	158	3.47	2.76	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-AA	05/13/14 12:45	Sediment	ICP/MS 04	05/20/14	05/21/14 19:18	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	7.99	0.369	0.322	1.00	
Cadmium	0.607	0.369	0.211	1.00	
Chromium	33.6	0.369	0.229	1.00	
Copper	20.8	0.369	0.155	1.00	B
Lead	20.1	0.369	0.243	1.00	
Nickel	17.7	0.369	0.187	1.00	
Selenium	0.492	0.369	0.270	1.00	
Silver	ND	0.369	0.115	1.00	
Zinc	110	3.69	2.93	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	ICP/MS 04	05/20/14	05/21/14 19:45	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	3.77	0.188	0.164	1.00	
Cadmium	0.279	0.188	0.108	1.00	
Chromium	16.9	0.188	0.117	1.00	
Copper	8.60	0.188	0.0789	1.00	B
Lead	10.3	0.188	0.124	1.00	
Nickel	9.49	0.188	0.0953	1.00	
Selenium	0.385	0.188	0.138	1.00	
Silver	0.0630	0.188	0.0589	1.00	J
Zinc	63.2	1.88	1.50	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 BOTTOM	14-05-1270-26-AA	05/13/14 13:15	Sediment	ICP/MS 04	05/20/14	05/21/14 19:49	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.915	0.132	0.115	1.00	
Cadmium	ND	0.132	0.0756	1.00	
Chromium	4.40	0.132	0.0820	1.00	
Copper	1.61	0.132	0.0554	1.00	B
Lead	2.89	0.132	0.0871	1.00	
Nickel	2.16	0.132	0.0669	1.00	
Selenium	ND	0.132	0.0965	1.00	
Silver	ND	0.132	0.0413	1.00	
Zinc	11.5	1.32	1.05	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-AA	05/13/14 09:10	Sediment	ICP/MS 04	05/20/14	05/21/14 19:52	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.09	0.141	0.123	1.00	
Cadmium	0.136	0.141	0.0807	1.00	J
Chromium	6.52	0.141	0.0875	1.00	
Copper	2.96	0.141	0.0591	1.00	B
Lead	4.04	0.141	0.0930	1.00	
Nickel	4.29	0.141	0.0714	1.00	
Selenium	0.172	0.141	0.103	1.00	
Silver	ND	0.141	0.0441	1.00	
Zinc	21.9	1.41	1.12	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 BOTTOM	14-05-1270-28-AA	05/13/14 09:20	Sediment	ICP/MS 04	05/20/14	05/21/14 19:56	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	0.778	0.141	0.123	1.00	
Cadmium	0.161	0.141	0.0809	1.00	
Chromium	7.85	0.141	0.0878	1.00	
Copper	3.74	0.141	0.0593	1.00	B
Lead	3.84	0.141	0.0932	1.00	
Nickel	4.96	0.141	0.0716	1.00	
Selenium	0.153	0.141	0.103	1.00	
Silver	ND	0.141	0.0443	1.00	
Zinc	24.0	1.41	1.12	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP DUP	14-05-1270-29-AA	05/13/14 09:40	Sediment	ICP/MS 04	05/20/14	05/21/14 19:59	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.80	0.200	0.175	1.00	
Cadmium	0.281	0.200	0.114	1.00	
Chromium	15.2	0.200	0.124	1.00	
Copper	7.64	0.200	0.0838	1.00	B
Lead	9.64	0.200	0.132	1.00	
Nickel	8.89	0.200	0.101	1.00	
Selenium	0.354	0.200	0.146	1.00	
Silver	ND	0.200	0.0626	1.00	
Zinc	44.2	2.00	1.59	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP	14-05-1270-30-AA	05/13/14 10:25	Sediment	ICP/MS 04	05/20/14	05/21/14 20:02	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	3.57	0.204	0.178	1.00	
Cadmium	0.287	0.204	0.117	1.00	
Chromium	16.8	0.204	0.126	1.00	
Copper	8.65	0.204	0.0854	1.00	B
Lead	9.84	0.204	0.134	1.00	
Nickel	9.31	0.204	0.103	1.00	
Selenium	0.442	0.204	0.149	1.00	
Silver	ND	0.204	0.0637	1.00	
Zinc	40.2	2.04	1.62	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-AA	05/13/14 10:10	Sediment	ICP/MS 04	05/20/14	05/21/14 20:16	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.78	0.161	0.141	1.00	
Cadmium	0.266	0.161	0.0922	1.00	
Chromium	11.2	0.161	0.100	1.00	
Copper	4.77	0.161	0.0675	1.00	B
Lead	5.32	0.161	0.106	1.00	
Nickel	6.95	0.161	0.0815	1.00	
Selenium	0.334	0.161	0.118	1.00	
Silver	ND	0.161	0.0504	1.00	
Zinc	28.3	1.61	1.28	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 TOP	14-05-1270-32-AA	05/13/14 10:55	Sediment	ICP/MS 04	05/20/14	05/21/14 20:20	140520L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	6.83	0.252	0.220	1.00	
Cadmium	0.505	0.252	0.144	1.00	
Chromium	32.2	0.252	0.156	1.00	
Copper	15.8	0.252	0.106	1.00	B
Lead	16.5	0.252	0.166	1.00	
Nickel	17.0	0.252	0.128	1.00	
Selenium	0.976	0.252	0.184	1.00	
Silver	0.0818	0.252	0.0788	1.00	J
Zinc	73.2	2.52	2.00	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 17 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 BOTTOM	14-05-1270-33-AA	05/13/14 10:35	Sediment	ICP/MS 04	05/20/14	05/21/14 20:23	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.70	0.160	0.140	1.00	
Cadmium	0.245	0.160	0.0917	1.00	
Chromium	15.2	0.160	0.0995	1.00	
Copper	5.87	0.160	0.0672	1.00	B
Lead	6.75	0.160	0.106	1.00	
Nickel	8.30	0.160	0.0811	1.00	
Selenium	0.274	0.160	0.117	1.00	
Silver	ND	0.160	0.0502	1.00	
Zinc	34.1	1.60	1.27	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 TOP	14-05-1270-34-AA	05/13/14 11:20	Sediment	ICP/MS 04	05/20/14	05/21/14 20:26	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	6.77	0.278	0.243	1.00	
Cadmium	0.401	0.278	0.159	1.00	
Chromium	23.2	0.278	0.172	1.00	
Copper	14.2	0.278	0.116	1.00	B
Lead	15.9	0.278	0.183	1.00	
Nickel	13.7	0.278	0.141	1.00	
Selenium	0.767	0.278	0.203	1.00	
Silver	ND	0.278	0.0869	1.00	
Zinc	64.3	2.78	2.21	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 BOTTOM	14-05-1270-35-AA	05/13/14 11:05	Sediment	ICP/MS 04	05/20/14	05/21/14 20:30	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.61	0.144	0.126	1.00	
Cadmium	0.179	0.144	0.0826	1.00	
Chromium	11.5	0.144	0.0896	1.00	
Copper	4.49	0.144	0.0605	1.00	B
Lead	5.54	0.144	0.0951	1.00	
Nickel	6.77	0.144	0.0731	1.00	
Selenium	1.24	0.144	0.105	1.00	
Silver	ND	0.144	0.0452	1.00	
Zinc	30.6	1.44	1.15	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-AA	05/13/14 13:05	Sediment	ICP/MS 04	05/20/14	05/21/14 20:33	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.89	0.137	0.120	1.00	
Cadmium	0.110	0.137	0.0786	1.00	J
Chromium	5.54	0.137	0.0853	1.00	
Copper	2.23	0.137	0.0576	1.00	B
Lead	3.04	0.137	0.0905	1.00	
Nickel	3.30	0.137	0.0695	1.00	
Selenium	0.119	0.137	0.100	1.00	J
Silver	ND	0.137	0.0430	1.00	
Zinc	23.0	1.37	1.09	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 BOTTOM	14-05-1270-37-AA	05/13/14 14:05	Sediment	ICP/MS 04	05/20/14	05/21/14 20:37	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.589	0.132	0.115	1.00	
Cadmium	ND	0.132	0.0755	1.00	
Chromium	3.62	0.132	0.0819	1.00	
Copper	1.15	0.132	0.0553	1.00	B
Lead	1.82	0.132	0.0869	1.00	
Nickel	2.12	0.132	0.0668	1.00	
Selenium	ND	0.132	0.0964	1.00	
Silver	ND	0.132	0.0413	1.00	
Zinc	12.6	1.32	1.05	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 TOP	14-05-1270-38-AA	05/13/14 15:00	Sediment	ICP/MS 04	05/20/14	05/21/14 20:40	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.14	0.151	0.132	1.00	
Cadmium	0.114	0.151	0.0864	1.00	J
Chromium	5.87	0.151	0.0938	1.00	
Copper	2.61	0.151	0.0633	1.00	B
Lead	3.38	0.151	0.0995	1.00	
Nickel	3.70	0.151	0.0765	1.00	
Selenium	0.130	0.151	0.110	1.00	J
Silver	ND	0.151	0.0473	1.00	
Zinc	19.7	1.51	1.20	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 20 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 BOTTOM	14-05-1270-39-AA	05/13/14 14:45	Sediment	ICP/MS 04	05/20/14	05/21/14 20:43	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	0.854	0.137	0.120	1.00	
Cadmium	0.120	0.137	0.0786	1.00	J
Chromium	5.28	0.137	0.0853	1.00	
Copper	1.83	0.137	0.0576	1.00	B
Lead	2.33	0.137	0.0905	1.00	
Nickel	3.14	0.137	0.0695	1.00	
Selenium	ND	0.137	0.100	1.00	
Silver	ND	0.137	0.0430	1.00	
Zinc	14.9	1.37	1.09	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	ICP/MS 03	06/09/14	06/09/14 21:24	140609L01E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.35	0.156	0.137	1.00	
Cadmium	0.194	0.156	0.0896	1.00	
Chromium	8.18	0.156	0.0971	1.00	
Copper	4.23	0.156	0.0656	1.00	
Lead	6.05	0.156	0.103	1.00	
Nickel	5.22	0.156	0.0792	1.00	
Selenium	0.145	0.156	0.114	1.00	J
Silver	ND	0.156	0.0490	1.00	
Zinc	33.2	1.56	1.24	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 21 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	ICP/MS 03	06/09/14	06/09/14 21:28	140609L01E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.56	0.196	0.171	1.00	
Cadmium	0.213	0.196	0.112	1.00	
Chromium	9.67	0.196	0.122	1.00	
Copper	4.73	0.196	0.0822	1.00	
Lead	6.49	0.196	0.129	1.00	
Nickel	6.02	0.196	0.0993	1.00	
Selenium	0.175	0.196	0.143	1.00	J
Silver	ND	0.196	0.0614	1.00	
Zinc	35.5	1.96	1.56	1.00	

Method Blank	099-15-254-207	N/A	Solid	ICP/MS 04	05/20/14	05/21/14 12:56	140520L05E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	0.0475	0.100	0.0419	1.00	J
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-254-208	N/A	Solid	ICP/MS 04	05/20/14	05/21/14 12:59	140520L06E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	ND	0.100	0.0419	1.00	
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-254-212	N/A	Solid	ICP/MS 03	06/09/14	06/09/14 19:44	140609L01E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	ND	0.100	0.0419	1.00	
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-AA	05/12/14 09:53	Sediment	Mercury 05	05/21/14	05/21/14 18:56	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0106	0.0295	0.00866	1.00	J

CB-N-01 BOTTOM	14-05-1270-2-AA	05/12/14 10:08	Sediment	Mercury 05	05/21/14	05/21/14 18:59	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0284	0.00833	1.00	

CB-N-02 TOP	14-05-1270-3-AA	05/12/14 10:30	Sediment	Mercury 05	05/21/14	05/21/14 19:05	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0288	0.00846	1.00	

CB-N-02 BOTTOM	14-05-1270-4-AA	05/12/14 10:45	Sediment	Mercury 05	05/21/14	05/21/14 19:07	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0341	0.0400	0.0117	1.00	J

CB-N-03 TOP	14-05-1270-5-AA	05/12/14 11:15	Sediment	Mercury 05	05/21/14	05/21/14 19:10	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0763	0.0364	0.0107	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 BOTTOM	14-05-1270-6-AA	05/12/14 11:40	Sediment	Mercury 05	05/21/14	05/21/14 19:12	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0338	0.00993	1.00	

CB-N-04 TOP	14-05-1270-7-AA	05/12/14 13:45	Sediment	Mercury 05	05/21/14	05/21/14 19:14	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00955	0.0299	0.00876	1.00	J

CB-N-04 BOTTOM	14-05-1270-8-AA	05/12/14 13:20	Sediment	Mercury 05	05/21/14	05/21/14 19:16	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0270	0.00794	1.00	

CB-N-05 TOP	14-05-1270-9-AA	05/12/14 12:50	Sediment	Mercury 05	05/21/14	05/21/14 19:19	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0109	0.0296	0.00868	1.00	J

CB-N-05 BOTTOM	14-05-1270-10-AA	05/12/14 12:45	Sediment	Mercury 05	05/21/14	05/21/14 19:21	140521L04E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0311	0.00914	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-AA	05/12/14 12:00	Sediment	Mercury 05	05/21/14	05/21/14 19:23	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0169	0.0338	0.00992	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-AA	05/12/14 13:50	Sediment	Mercury 05	05/21/14	05/21/14 19:25	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0135	0.0288	0.00845	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-AA	05/12/14 14:00	Sediment	Mercury 05	05/21/14	05/21/14 19:32	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0273	0.00801	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-AA	05/12/14 14:45	Sediment	Mercury 05	05/21/14	05/21/14 19:34	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0275	0.0393	0.0115	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 BOTTOM	14-05-1270-15-AA	05/12/14 14:25	Sediment	Mercury 05	05/21/14	05/21/14 19:37	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0192	0.0286	0.00840	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-AA	05/12/14 16:15	Sediment	Mercury 05	05/21/14	05/21/14 19:39	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0195	0.0274	0.00806	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 BOTTOM	14-05-1270-17-AA	05/12/14 15:50	Sediment	Mercury 05	05/21/14	05/21/14 19:41	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.00818	0.0278	0.00815	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-AA	05/12/14 15:50	Sediment	Mercury 05	05/21/14	05/21/14 19:43	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0365	0.0281	0.00823	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-AA	05/12/14 15:40	Sediment	Mercury 05	05/21/14	05/21/14 18:32	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0622	0.0257	0.00756	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-AA	05/13/14 12:15	Sediment	Mercury 05	05/21/14	05/21/14 19:46	140521L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0837	0.0842	0.0247	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 BOTTOM	14-05-1270-21-AA	05/13/14 12:00	Sediment	Mercury 05	05/21/14	05/21/14 19:48	140521L06E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.100	0.0416	0.0122	1.00	

SR-S-05 TOP	14-05-1270-22-AA	05/13/14 12:30	Sediment	Mercury 05	05/21/14	05/21/14 19:50	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0819	0.0741	0.0217	1.00	

SR-S-05 BOTTOM	14-05-1270-23-AA	05/13/14 12:45	Sediment	Mercury 05	05/21/14	05/21/14 19:52	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.127	0.0706	0.0207	1.00	

SR-S-05 TOP DUP	14-05-1270-24-AA	05/13/14 12:45	Sediment	Mercury 05	05/21/14	05/21/14 19:59	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0722	0.0703	0.0206	1.00	

SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	Mercury 05	05/21/14	05/21/14 20:01	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0746	0.0364	0.0107	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 6 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 BOTTOM	14-05-1270-26-AA	05/13/14 13:15	Sediment	Mercury 05	05/21/14	05/21/14 20:03	140521L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0244	0.00716	1.00	

JB-N-01 TOP	14-05-1270-27-AA	05/13/14 09:10	Sediment	Mercury 05	05/21/14	05/21/14 20:06	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0273	0.00801	1.00	

JB-N-01 BOTTOM	14-05-1270-28-AA	05/13/14 09:20	Sediment	Mercury 05	05/21/14	05/21/14 20:08	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0288	0.00845	1.00	

JB-N-01 TOP DUP	14-05-1270-29-AA	05/13/14 09:40	Sediment	Mercury 05	05/21/14	05/21/14 20:10	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0270	0.0400	0.0117	1.00	J

JB-N-02 TOP	14-05-1270-30-AA	05/13/14 10:25	Sediment	Mercury 05	05/21/14	05/21/14 20:12	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0224	0.0388	0.0114	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 7 of 9

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-AA	05/13/14 10:10	Sediment	Mercury 05	05/21/14	05/21/14 20:15	140521L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00964	0.0317	0.00930	1.00	J

JB-N-03 TOP	14-05-1270-32-AA	05/13/14 10:55	Sediment	Mercury 05	05/21/14	05/21/14 20:17	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0520	0.0521	0.0153	1.00	J

JB-N-03 BOTTOM	14-05-1270-33-AA	05/13/14 10:35	Sediment	Mercury 05	05/21/14	05/21/14 20:19	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0131	0.0310	0.00911	1.00	J

JB-N-04 TOP	14-05-1270-34-AA	05/13/14 11:20	Sediment	Mercury 05	05/21/14	05/21/14 20:26	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0483	0.0575	0.0169	1.00	J

JB-N-04 BOTTOM	14-05-1270-35-AA	05/13/14 11:05	Sediment	Mercury 05	05/21/14	05/21/14 20:28	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0103	0.0289	0.00847	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-AA	05/13/14 13:05	Sediment	Mercury 05	05/21/14	05/21/14 20:30	140521L06E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0275	0.00806	1.00	

JB-S-05 BOTTOM	14-05-1270-37-AA	05/13/14 14:05	Sediment	Mercury 05	05/21/14	05/21/14 20:33	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0273	0.00801	1.00	

JB-S-06 TOP	14-05-1270-38-AA	05/13/14 15:00	Sediment	Mercury 05	05/21/14	05/21/14 20:35	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0302	0.00887	1.00	

JB-S-06 BOTTOM	14-05-1270-39-AA	05/13/14 14:45	Sediment	Mercury 05	05/21/14	05/21/14 20:37	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0270	0.00793	1.00	

CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	Mercury 05	06/09/14	06/10/14 14:05	140609L08E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0443	0.0313	0.00919	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	Mercury 05	06/09/14	06/10/14 14:07	140609L08E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0415	0.0399	0.0117	1.00	

Method Blank	099-16-278-23	N/A	Solid	Mercury 05	05/21/14	05/21/14 18:12	140521L04E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00587	1.00	

Method Blank	099-16-278-22	N/A	Solid	Mercury 05	05/21/14	05/21/14 18:14	140521L05E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00587	1.00	

Method Blank	099-16-278-21	N/A	Solid	Mercury 05	05/21/14	05/21/14 18:17	140521L06E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00587	1.00	

Method Blank	099-16-278-28	N/A	Solid	Mercury 05	06/09/14	06/10/14 13:25	140609L08E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	ND	0.0200	0.00587	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-A	05/12/14 09:53	Sediment	LPSA 1	N/A	05/21/14 10:19	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.37	
Silt (0.00391 to 0.0625mm)	22.91	
Total Silt and Clay (0 to 0.0625mm)	27.28	
Very Fine Sand (0.0625 to 0.125mm)	18.41	
Fine Sand (0.125 to 0.25mm)	34.11	
Medium Sand (0.25 to 0.5mm)	13.40	
Coarse Sand (0.5 to 1mm)	6.75	
Very Coarse Sand (1 to 2mm)	0.050	
Gravel (greater than 2mm)	ND	

CB-N-01 BOTTOM	14-05-1270-2-A	05/12/14 10:08	Sediment	LPSA 1	N/A	05/21/14 10:29	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.38	
Silt (0.00391 to 0.0625mm)	17.90	
Total Silt and Clay (0 to 0.0625mm)	21.27	
Very Fine Sand (0.0625 to 0.125mm)	14.20	
Fine Sand (0.125 to 0.25mm)	41.59	
Medium Sand (0.25 to 0.5mm)	15.20	
Coarse Sand (0.5 to 1mm)	6.20	
Very Coarse Sand (1 to 2mm)	1.55	
Gravel (greater than 2mm)	ND	

CB-N-02 TOP	14-05-1270-3-A	05/12/14 10:30	Sediment	LPSA 1	N/A	05/21/14 10:35	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.31	
Silt (0.00391 to 0.0625mm)	27.30	
Total Silt and Clay (0 to 0.0625mm)	33.62	
Very Fine Sand (0.0625 to 0.125mm)	24.90	
Fine Sand (0.125 to 0.25mm)	29.80	
Medium Sand (0.25 to 0.5mm)	7.91	
Coarse Sand (0.5 to 1mm)	3.73	
Very Coarse Sand (1 to 2mm)	0.040	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 BOTTOM	14-05-1270-4-A	05/12/14 10:45	Sediment	LPSA 1	N/A	05/21/14 10:41	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	11.38	
Silt (0.00391 to 0.0625mm)	48.62	
Total Silt and Clay (0 to 0.0625mm)	60.01	
Very Fine Sand (0.0625 to 0.125mm)	16.81	
Fine Sand (0.125 to 0.25mm)	19.81	
Medium Sand (0.25 to 0.5mm)	3.37	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-03 TOP	14-05-1270-5-A	05/12/14 11:15	Sediment	LPSA 1	N/A	05/21/14 10:47	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	9.96	
Silt (0.00391 to 0.0625mm)	37.70	
Total Silt and Clay (0 to 0.0625mm)	47.66	
Very Fine Sand (0.0625 to 0.125mm)	21.80	
Fine Sand (0.125 to 0.25mm)	17.50	
Medium Sand (0.25 to 0.5mm)	10.10	
Coarse Sand (0.5 to 1mm)	2.93	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-03 BOTTOM	14-05-1270-6-A	05/12/14 11:40	Sediment	LPSA 1	N/A	05/21/14 10:53	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.16	
Silt (0.00391 to 0.0625mm)	29.89	
Total Silt and Clay (0 to 0.0625mm)	36.05	
Very Fine Sand (0.0625 to 0.125mm)	29.89	
Fine Sand (0.125 to 0.25mm)	23.69	
Medium Sand (0.25 to 0.5mm)	7.61	
Coarse Sand (0.5 to 1mm)	2.75	
Very Coarse Sand (1 to 2mm)	0.020	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-A	05/12/14 13:45	Sediment	LPSA 1	N/A	05/21/14 10:58	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.04	
Silt (0.00391 to 0.0625mm)	20.49	
Total Silt and Clay (0 to 0.0625mm)	26.53	
Very Fine Sand (0.0625 to 0.125mm)	23.29	
Fine Sand (0.125 to 0.25mm)	38.29	
Medium Sand (0.25 to 0.5mm)	11.70	
Coarse Sand (0.5 to 1mm)	0.19	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-04 BOTTOM	14-05-1270-8-A	05/12/14 13:20	Sediment	LPSA 1	N/A	05/21/14 11:05	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	1.71	
Silt (0.00391 to 0.0625mm)	8.28	
Total Silt and Clay (0 to 0.0625mm)	9.99	
Very Fine Sand (0.0625 to 0.125mm)	24.60	
Fine Sand (0.125 to 0.25mm)	53.09	
Medium Sand (0.25 to 0.5mm)	11.50	
Coarse Sand (0.5 to 1mm)	0.82	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-05 TOP	14-05-1270-9-A	05/12/14 12:50	Sediment	LPSA 1	N/A	05/21/14 11:11	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	5.61	
Silt (0.00391 to 0.0625mm)	21.10	
Total Silt and Clay (0 to 0.0625mm)	26.71	
Very Fine Sand (0.0625 to 0.125mm)	26.70	
Fine Sand (0.125 to 0.25mm)	31.70	
Medium Sand (0.25 to 0.5mm)	10.40	
Coarse Sand (0.5 to 1mm)	4.47	
Very Coarse Sand (1 to 2mm)	0.020	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: N/A
 Method: ASTM D4464 (M)
 Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 BOTTOM	14-05-1270-10-A	05/12/14 12:45	Sediment	LPSA 1	N/A	05/21/14 11:17	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.24	
Silt (0.00391 to 0.0625mm)	20.59	
Total Silt and Clay (0 to 0.0625mm)	24.83	
Very Fine Sand (0.0625 to 0.125mm)	27.89	
Fine Sand (0.125 to 0.25mm)	32.39	
Medium Sand (0.25 to 0.5mm)	9.48	
Coarse Sand (0.5 to 1mm)	5.38	
Very Coarse Sand (1 to 2mm)	0.040	
Gravel (greater than 2mm)	ND	

CB-N-06 TOP	14-05-1270-11-A	05/12/14 12:00	Sediment	LPSA 1	N/A	05/21/14 12:26	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.45	
Silt (0.00391 to 0.0625mm)	32.98	
Total Silt and Clay (0 to 0.0625mm)	40.42	
Very Fine Sand (0.0625 to 0.125mm)	18.69	
Fine Sand (0.125 to 0.25mm)	37.27	
Medium Sand (0.25 to 0.5mm)	3.62	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-07 TOP	14-05-1270-12-A	05/12/14 13:50	Sediment	LPSA 1	N/A	05/21/14 12:32	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.30	
Silt (0.00391 to 0.0625mm)	31.69	
Total Silt and Clay (0 to 0.0625mm)	38.99	
Very Fine Sand (0.0625 to 0.125mm)	25.89	
Fine Sand (0.125 to 0.25mm)	27.29	
Medium Sand (0.25 to 0.5mm)	6.42	
Coarse Sand (0.5 to 1mm)	1.42	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-A	05/12/14 14:00	Sediment	LPSA 1	N/A	05/21/14 12:38	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.52	
Silt (0.00391 to 0.0625mm)	18.01	
Total Silt and Clay (0 to 0.0625mm)	21.53	
Very Fine Sand (0.0625 to 0.125mm)	28.51	
Fine Sand (0.125 to 0.25mm)	38.42	
Medium Sand (0.25 to 0.5mm)	7.45	
Coarse Sand (0.5 to 1mm)	4.06	
Very Coarse Sand (1 to 2mm)	0.030	
Gravel (greater than 2mm)	ND	

CB-N-08 TOP	14-05-1270-14-A	05/12/14 14:45	Sediment	LPSA 1	N/A	05/21/14 12:44	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.68	
Silt (0.00391 to 0.0625mm)	35.70	
Total Silt and Clay (0 to 0.0625mm)	43.38	
Very Fine Sand (0.0625 to 0.125mm)	22.50	
Fine Sand (0.125 to 0.25mm)	29.30	
Medium Sand (0.25 to 0.5mm)	4.83	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-N-08 BOTTOM	14-05-1270-15-A	05/12/14 14:25	Sediment	LPSA 1	N/A	05/21/14 12:50	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.43	
Silt (0.00391 to 0.0625mm)	30.21	
Total Silt and Clay (0 to 0.0625mm)	37.64	
Very Fine Sand (0.0625 to 0.125mm)	22.61	
Fine Sand (0.125 to 0.25mm)	37.51	
Medium Sand (0.25 to 0.5mm)	2.24	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-A	05/12/14 16:15	Sediment	LPSA 1	N/A	05/21/14 12:55	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	10.86	
Silt (0.00391 to 0.0625mm)	26.59	
Total Silt and Clay (0 to 0.0625mm)	37.45	
Very Fine Sand (0.0625 to 0.125mm)	32.99	
Fine Sand (0.125 to 0.25mm)	29.39	
Medium Sand (0.25 to 0.5mm)	0.18	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-S-11 BOTTOM	14-05-1270-17-A	05/12/14 15:50	Sediment	LPSA 1	N/A	05/21/14 13:01	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	12.86	
Silt (0.00391 to 0.0625mm)	29.01	
Total Silt and Clay (0 to 0.0625mm)	41.87	
Very Fine Sand (0.0625 to 0.125mm)	28.61	
Fine Sand (0.125 to 0.25mm)	29.51	
Medium Sand (0.25 to 0.5mm)	0.020	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-S-12 TOP	14-05-1270-18-A	05/12/14 15:50	Sediment	LPSA 1	N/A	05/21/14 13:11	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.07	
Silt (0.00391 to 0.0625mm)	25.58	
Total Silt and Clay (0 to 0.0625mm)	32.65	
Very Fine Sand (0.0625 to 0.125mm)	22.99	
Fine Sand (0.125 to 0.25mm)	27.48	
Medium Sand (0.25 to 0.5mm)	16.69	
Coarse Sand (0.5 to 1mm)	0.19	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-A	05/12/14 15:40	Sediment	LPSA 1	N/A	05/21/14 13:16	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.94	
Silt (0.00391 to 0.0625mm)	16.39	
Total Silt and Clay (0 to 0.0625mm)	21.33	
Very Fine Sand (0.0625 to 0.125mm)	8.06	
Fine Sand (0.125 to 0.25mm)	25.59	
Medium Sand (0.25 to 0.5mm)	41.48	
Coarse Sand (0.5 to 1mm)	3.55	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-S-04 TOP	14-05-1270-20-A	05/13/14 12:15	Sediment	LPSA 1	N/A	05/21/14 13:25	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	10.01	
Silt (0.00391 to 0.0625mm)	75.30	
Total Silt and Clay (0 to 0.0625mm)	85.32	
Very Fine Sand (0.0625 to 0.125mm)	11.20	
Fine Sand (0.125 to 0.25mm)	3.48	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-S-04 BOTTOM	14-05-1270-21-A	05/13/14 12:00	Sediment	LPSA 1	N/A	05/22/14 09:54	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	17.72	
Silt (0.00391 to 0.0625mm)	69.28	
Total Silt and Clay (0 to 0.0625mm)	87.00	
Very Fine Sand (0.0625 to 0.125mm)	10.30	
Fine Sand (0.125 to 0.25mm)	2.70	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-A	05/13/14 12:30	Sediment	LPSA 1	N/A	05/22/14 10:02	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	12.01	
Silt (0.00391 to 0.0625mm)	78.29	
Total Silt and Clay (0 to 0.0625mm)	90.30	
Very Fine Sand (0.0625 to 0.125mm)	8.43	
Fine Sand (0.125 to 0.25mm)	1.27	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-S-05 BOTTOM	14-05-1270-23-A	05/13/14 12:45	Sediment	LPSA 1	N/A	05/22/14 10:11	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	15.98	
Silt (0.00391 to 0.0625mm)	83.98	
Total Silt and Clay (0 to 0.0625mm)	99.96	
Very Fine Sand (0.0625 to 0.125mm)	0.040	
Fine Sand (0.125 to 0.25mm)	ND	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-S-05 TOP DUP	14-05-1270-24-A	05/13/14 12:45	Sediment	LPSA 1	N/A	05/22/14 10:18	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	13.31	
Silt (0.00391 to 0.0625mm)	77.40	
Total Silt and Clay (0 to 0.0625mm)	90.71	
Very Fine Sand (0.0625 to 0.125mm)	8.28	
Fine Sand (0.125 to 0.25mm)	1.01	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-A	05/13/14 13:30	Sediment	LPSA 1	N/A	05/22/14 10:24	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	12.24	
Silt (0.00391 to 0.0625mm)	54.24	
Total Silt and Clay (0 to 0.0625mm)	66.48	
Very Fine Sand (0.0625 to 0.125mm)	19.51	
Fine Sand (0.125 to 0.25mm)	13.11	
Medium Sand (0.25 to 0.5mm)	0.90	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 BOTTOM	14-05-1270-26-A	05/13/14 13:15	Sediment	LPSA 1	N/A	05/22/14 10:34	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.08	
Silt (0.00391 to 0.0625mm)	7.53	
Total Silt and Clay (0 to 0.0625mm)	10.62	
Very Fine Sand (0.0625 to 0.125mm)	5.62	
Fine Sand (0.125 to 0.25mm)	44.32	
Medium Sand (0.25 to 0.5mm)	38.12	
Coarse Sand (0.5 to 1mm)	1.32	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-A	05/13/14 09:10	Sediment	LPSA 1	N/A	05/22/14 10:41	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	5.44	
Silt (0.00391 to 0.0625mm)	28.28	
Total Silt and Clay (0 to 0.0625mm)	33.72	
Very Fine Sand (0.0625 to 0.125mm)	18.09	
Fine Sand (0.125 to 0.25mm)	32.28	
Medium Sand (0.25 to 0.5mm)	12.19	
Coarse Sand (0.5 to 1mm)	3.70	
Very Coarse Sand (1 to 2mm)	0.020	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 BOTTOM	14-05-1270-28-A	05/13/14 09:20	Sediment	LPSA 1	N/A	05/22/14 10:50	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.22	
Silt (0.00391 to 0.0625mm)	30.30	
Total Silt and Clay (0 to 0.0625mm)	36.52	
Very Fine Sand (0.0625 to 0.125mm)	19.60	
Fine Sand (0.125 to 0.25mm)	29.30	
Medium Sand (0.25 to 0.5mm)	11.40	
Coarse Sand (0.5 to 1mm)	3.18	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-N-01 TOP DUP	14-05-1270-29-A	05/13/14 09:40	Sediment	LPSA 1	N/A	05/22/14 10:59	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	9.89	
Silt (0.00391 to 0.0625mm)	53.72	
Total Silt and Clay (0 to 0.0625mm)	63.61	
Very Fine Sand (0.0625 to 0.125mm)	18.21	
Fine Sand (0.125 to 0.25mm)	15.51	
Medium Sand (0.25 to 0.5mm)	1.92	
Coarse Sand (0.5 to 1mm)	0.75	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-N-02 TOP	14-05-1270-30-A	05/13/14 10:25	Sediment	LPSA 1	N/A	05/22/14 11:05	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.62	
Silt (0.00391 to 0.0625mm)	40.39	
Total Silt and Clay (0 to 0.0625mm)	48.02	
Very Fine Sand (0.0625 to 0.125mm)	19.10	
Fine Sand (0.125 to 0.25mm)	20.20	
Medium Sand (0.25 to 0.5mm)	9.90	
Coarse Sand (0.5 to 1mm)	2.79	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-A	05/13/14 10:10	Sediment	LPSA 1	N/A	05/22/14 11:22	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.58	
Silt (0.00391 to 0.0625mm)	36.29	
Total Silt and Clay (0 to 0.0625mm)	42.87	
Very Fine Sand (0.0625 to 0.125mm)	22.49	
Fine Sand (0.125 to 0.25mm)	24.89	
Medium Sand (0.25 to 0.5mm)	7.27	
Coarse Sand (0.5 to 1mm)	2.48	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 TOP	14-05-1270-32-A	05/13/14 10:55	Sediment	LPSA 1	N/A	05/22/14 11:29	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	17.09	
Silt (0.00391 to 0.0625mm)	65.69	
Total Silt and Clay (0 to 0.0625mm)	82.78	
Very Fine Sand (0.0625 to 0.125mm)	9.90	
Fine Sand (0.125 to 0.25mm)	7.32	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 BOTTOM	14-05-1270-33-A	05/13/14 10:35	Sediment	LPSA 1	N/A	05/22/14 11:37	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	10.08	
Silt (0.00391 to 0.0625mm)	42.19	
Total Silt and Clay (0 to 0.0625mm)	52.27	
Very Fine Sand (0.0625 to 0.125mm)	18.99	
Fine Sand (0.125 to 0.25mm)	23.79	
Medium Sand (0.25 to 0.5mm)	4.81	
Coarse Sand (0.5 to 1mm)	0.13	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 TOP	14-05-1270-34-A	05/13/14 11:20	Sediment	LPSA 1	N/A	05/22/14 11:48	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.54	
Silt (0.00391 to 0.0625mm)	22.37	
Total Silt and Clay (0 to 0.0625mm)	26.91	
Very Fine Sand (0.0625 to 0.125mm)	67.81	
Fine Sand (0.125 to 0.25mm)	5.26	
Medium Sand (0.25 to 0.5mm)	0.020	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-N-04 BOTTOM	14-05-1270-35-A	05/13/14 11:05	Sediment	LPSA 1	N/A	05/22/14 11:58	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	7.31	
Silt (0.00391 to 0.0625mm)	29.80	
Total Silt and Clay (0 to 0.0625mm)	37.11	
Very Fine Sand (0.0625 to 0.125mm)	31.10	
Fine Sand (0.125 to 0.25mm)	31.20	
Medium Sand (0.25 to 0.5mm)	0.58	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-05 TOP	14-05-1270-36-A	05/13/14 13:05	Sediment	LPSA 1	N/A	05/22/14 12:05	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.99	
Silt (0.00391 to 0.0625mm)	21.72	
Total Silt and Clay (0 to 0.0625mm)	26.71	
Very Fine Sand (0.0625 to 0.125mm)	17.11	
Fine Sand (0.125 to 0.25mm)	35.43	
Medium Sand (0.25 to 0.5mm)	17.21	
Coarse Sand (0.5 to 1mm)	3.50	
Very Coarse Sand (1 to 2mm)	0.030	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: N/A
 Method: ASTM D4464 (M)
 Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 BOTTOM	14-05-1270-37-A	05/13/14 14:05	Sediment	LPSA 1	N/A	05/22/14 12:11	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.29	
Silt (0.00391 to 0.0625mm)	14.20	
Total Silt and Clay (0 to 0.0625mm)	17.49	
Very Fine Sand (0.0625 to 0.125mm)	18.40	
Fine Sand (0.125 to 0.25mm)	52.90	
Medium Sand (0.25 to 0.5mm)	11.20	
Coarse Sand (0.5 to 1mm)	0.010	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-06 TOP	14-05-1270-38-A	05/13/14 15:00	Sediment	LPSA 1	N/A	05/22/14 12:18	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.65	
Silt (0.00391 to 0.0625mm)	21.90	
Total Silt and Clay (0 to 0.0625mm)	26.55	
Very Fine Sand (0.0625 to 0.125mm)	22.50	
Fine Sand (0.125 to 0.25mm)	40.81	
Medium Sand (0.25 to 0.5mm)	6.74	
Coarse Sand (0.5 to 1mm)	3.39	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-06 BOTTOM	14-05-1270-39-A	05/13/14 14:45	Sediment	LPSA 1	N/A	05/22/14 12:24	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.42	
Silt (0.00391 to 0.0625mm)	14.69	
Total Silt and Clay (0 to 0.0625mm)	18.11	
Very Fine Sand (0.0625 to 0.125mm)	23.09	
Fine Sand (0.125 to 0.25mm)	47.48	
Medium Sand (0.25 to 0.5mm)	6.44	
Coarse Sand (0.5 to 1mm)	4.85	
Very Coarse Sand (1 to 2mm)	0.040	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: N/A
 Method: ASTM D4464 (M)
 Units: %

Project: ADCNR Mobile Bay

Page 14 of 14

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP (Particle Size Dup)	14-05-1270-42-A	05/13/14 12:15	Sediment	LPSA 1	N/A	05/21/14 13:38	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	10.04	
Silt (0.00391 to 0.0625mm)	73.92	
Total Silt and Clay (0 to 0.0625mm)	83.96	
Very Fine Sand (0.0625 to 0.125mm)	11.20	
Fine Sand (0.125 to 0.25mm)	4.84	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 BOTTOM (Particle Size Dup)	14-05-1270-43-A	05/13/14 14:45	Sediment	LPSA 1	N/A	05/22/14 12:35	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.28	
Silt (0.00391 to 0.0625mm)	13.80	
Total Silt and Clay (0 to 0.0625mm)	17.07	
Very Fine Sand (0.0625 to 0.125mm)	23.00	
Fine Sand (0.125 to 0.25mm)	48.19	
Medium Sand (0.25 to 0.5mm)	7.81	
Coarse Sand (0.5 to 1mm)	3.91	
Very Coarse Sand (1 to 2mm)	0.020	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-AA	05/12/14 09:53	Sediment	GC 66	05/21/14	05/24/14 10:56	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.48	1.00	
Beta-BHC	ND	1.5	0.40	1.00	
Delta-BHC	ND	1.5	0.38	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.49	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	ND	1.5	0.51	1.00	
2,4'-DDE	ND	1.5	0.46	1.00	
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.47	1.00	
4,4'-DDE	ND	1.5	0.45	1.00	
4,4'-DDT	ND	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.51	1.00	
Endrin	ND	1.5	0.54	1.00	
Endrin Aldehyde	ND	1.5	0.37	1.00	
Endrin Ketone	ND	1.5	0.52	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.49	1.00	
Toxaphene	ND	30	9.5	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.48	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	69	25-145			
Decachlorobiphenyl	74	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 BOTTOM	14-05-1270-2-AA	05/12/14 10:08	Sediment	GC 66	05/21/14	05/24/14 11:10	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.44	1.00	
Alpha-BHC	ND	1.4	0.45	1.00	
Beta-BHC	ND	1.4	0.37	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.48	1.00	
Chlordane	ND	14	4.5	1.00	
Dieldrin	ND	1.4	0.46	1.00	
Trans-nonachlor	ND	1.4	0.40	1.00	
2,4'-DDD	ND	1.4	0.47	1.00	
2,4'-DDE	ND	1.4	0.42	1.00	
2,4'-DDT	ND	1.4	0.42	1.00	
4,4'-DDD	ND	1.4	0.44	1.00	
4,4'-DDE	ND	1.4	0.42	1.00	
4,4'-DDT	ND	1.4	0.46	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.39	1.00	
Endosulfan Sulfate	ND	1.4	0.47	1.00	
Endrin	ND	1.4	0.50	1.00	
Endrin Aldehyde	ND	1.4	0.34	1.00	
Endrin Ketone	ND	1.4	0.48	1.00	
Heptachlor	ND	1.4	0.45	1.00	
Heptachlor Epoxide	ND	1.4	0.49	1.00	
Methoxychlor	ND	1.4	0.45	1.00	
Toxaphene	ND	28	8.8	1.00	
Alpha Chlordane	ND	1.4	0.45	1.00	
Gamma Chlordane	ND	1.4	0.44	1.00	
Cis-nonachlor	ND	1.4	0.41	1.00	
Oxychlordane	ND	1.4	0.39	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	71	25-145			
Decachlorobiphenyl	78	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 TOP	14-05-1270-3-AA	05/12/14 10:30	Sediment	GC 66	05/21/14	05/24/14 11:24	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.48	1.00	
Alpha-BHC	ND	1.5	0.49	1.00	
Beta-BHC	ND	1.5	0.40	1.00	
Delta-BHC	ND	1.5	0.39	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.50	1.00	
Trans-nonachlor	ND	1.5	0.44	1.00	
2,4'-DDD	ND	1.5	0.51	1.00	
2,4'-DDE	ND	1.5	0.46	1.00	
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.48	1.00	
4,4'-DDE	ND	1.5	0.45	1.00	
4,4'-DDT	ND	1.5	0.51	1.00	
Endosulfan I	ND	1.5	0.40	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.51	1.00	
Endrin	ND	1.5	0.54	1.00	
Endrin Aldehyde	ND	1.5	0.37	1.00	
Endrin Ketone	ND	1.5	0.53	1.00	
Heptachlor	ND	1.5	0.49	1.00	
Heptachlor Epoxide	ND	1.5	0.54	1.00	
Methoxychlor	ND	1.5	0.49	1.00	
Toxaphene	ND	30	9.6	1.00	
Alpha Chlordane	ND	1.5	0.49	1.00	
Gamma Chlordane	ND	1.5	0.48	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.43	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	63	25-145			
Decachlorobiphenyl	63	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 BOTTOM	14-05-1270-4-AA	05/12/14 10:45	Sediment	GC 66	05/21/14	05/24/14 11:38	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	2.0	0.63	1.00	
Alpha-BHC	ND	2.0	0.65	1.00	
Beta-BHC	ND	2.0	0.53	1.00	
Delta-BHC	ND	2.0	0.51	1.00	
Gamma-BHC	ND	2.0	0.69	1.00	
Chlordane	ND	20	6.5	1.00	
Dieldrin	ND	2.0	0.66	1.00	
Trans-nonachlor	ND	2.0	0.57	1.00	
2,4'-DDD	ND	2.0	0.67	1.00	
2,4'-DDE	ND	2.0	0.61	1.00	
2,4'-DDT	ND	2.0	0.60	1.00	
4,4'-DDD	ND	2.0	0.63	1.00	
4,4'-DDE	ND	2.0	0.60	1.00	
4,4'-DDT	ND	2.0	0.67	1.00	
Endosulfan I	ND	2.0	0.52	1.00	
Endosulfan II	ND	2.0	0.56	1.00	
Endosulfan Sulfate	ND	2.0	0.67	1.00	
Endrin	ND	2.0	0.71	1.00	
Endrin Aldehyde	ND	2.0	0.49	1.00	
Endrin Ketone	ND	2.0	0.69	1.00	
Heptachlor	ND	2.0	0.64	1.00	
Heptachlor Epoxide	ND	2.0	0.71	1.00	
Methoxychlor	ND	2.0	0.65	1.00	
Toxaphene	ND	40	13	1.00	
Alpha Chlordane	ND	2.0	0.64	1.00	
Gamma Chlordane	ND	2.0	0.63	1.00	
Cis-nonachlor	ND	2.0	0.58	1.00	
Oxychlordane	ND	2.0	0.56	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	68	25-145			
Decachlorobiphenyl	75	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 TOP	14-05-1270-5-AA	05/12/14 11:15	Sediment	GC 66	05/21/14	05/24/14 11:52	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.9	0.60	1.00	
Alpha-BHC	ND	1.9	0.62	1.00	
Beta-BHC	ND	1.9	0.50	1.00	
Delta-BHC	ND	1.9	0.49	1.00	
Gamma-BHC	ND	1.9	0.66	1.00	
Chlordane	ND	19	6.2	1.00	
Dieldrin	ND	1.9	0.63	1.00	
Trans-nonachlor	ND	1.9	0.55	1.00	
2,4'-DDD	ND	1.9	0.64	1.00	
2,4'-DDE	12	1.9	0.58	1.00	
2,4'-DDT	ND	1.9	0.57	1.00	
4,4'-DDD	3.0	1.9	0.60	1.00	
4,4'-DDE	8.4	1.9	0.57	1.00	
4,4'-DDT	8.6	1.9	0.64	1.00	
Endosulfan I	ND	1.9	0.50	1.00	
Endosulfan II	ND	1.9	0.53	1.00	
Endosulfan Sulfate	ND	1.9	0.64	1.00	
Endrin	ND	1.9	0.68	1.00	
Endrin Aldehyde	ND	1.9	0.46	1.00	
Endrin Ketone	ND	1.9	0.66	1.00	
Heptachlor	ND	1.9	0.61	1.00	
Heptachlor Epoxide	ND	1.9	0.68	1.00	
Methoxychlor	ND	1.9	0.62	1.00	
Toxaphene	ND	38	12	1.00	
Alpha Chlordane	ND	1.9	0.61	1.00	
Gamma Chlordane	ND	1.9	0.60	1.00	
Cis-nonachlor	ND	1.9	0.56	1.00	
Oxychlordane	ND	1.9	0.53	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	64	25-145			
Decachlorobiphenyl	80	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 6 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 BOTTOM	14-05-1270-6-AA	05/12/14 11:40	Sediment	GC 66	05/21/14	05/24/14 12:06	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.7	0.53	1.00	
Alpha-BHC	ND	1.7	0.55	1.00	
Beta-BHC	ND	1.7	0.45	1.00	
Delta-BHC	ND	1.7	0.43	1.00	
Gamma-BHC	ND	1.7	0.58	1.00	
Chlordane	ND	17	5.5	1.00	
Dieldrin	ND	1.7	0.56	1.00	
Trans-nonachlor	ND	1.7	0.49	1.00	
2,4'-DDD	ND	1.7	0.57	1.00	
2,4'-DDE	ND	1.7	0.51	1.00	
2,4'-DDT	ND	1.7	0.51	1.00	
4,4'-DDD	ND	1.7	0.53	1.00	
4,4'-DDE	0.62	1.7	0.50	1.00	J
4,4'-DDT	ND	1.7	0.56	1.00	
Endosulfan I	ND	1.7	0.44	1.00	
Endosulfan II	ND	1.7	0.47	1.00	
Endosulfan Sulfate	ND	1.7	0.57	1.00	
Endrin	ND	1.7	0.60	1.00	
Endrin Aldehyde	ND	1.7	0.41	1.00	
Endrin Ketone	ND	1.7	0.59	1.00	
Heptachlor	ND	1.7	0.54	1.00	
Heptachlor Epoxide	ND	1.7	0.60	1.00	
Methoxychlor	ND	1.7	0.55	1.00	
Toxaphene	ND	34	11	1.00	
Alpha Chlordane	ND	1.7	0.54	1.00	
Gamma Chlordane	ND	1.7	0.54	1.00	
Cis-nonachlor	ND	1.7	0.49	1.00	
Oxychlordane	ND	1.7	0.47	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	59	25-145			
Decachlorobiphenyl	68	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 7 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-AA	05/12/14 13:45	Sediment	GC 66	05/21/14	05/24/14 12:20	140521L03

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.48	1.00	
Beta-BHC	ND	1.5	0.39	1.00	
Delta-BHC	ND	1.5	0.38	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.49	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	ND	1.5	0.50	1.00	
2,4'-DDE	0.46	1.5	0.45	1.00	J
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.47	1.00	
4,4'-DDE	0.54	1.5	0.45	1.00	J
4,4'-DDT	ND	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.50	1.00	
Endrin	ND	1.5	0.53	1.00	
Endrin Aldehyde	ND	1.5	0.36	1.00	
Endrin Ketone	ND	1.5	0.52	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.48	1.00	
Toxaphene	ND	30	9.4	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.47	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	89	25-145			
Decachlorobiphenyl	98	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 BOTTOM	14-05-1270-8-AA	05/12/14 13:20	Sediment	GC 66	05/21/14	05/24/14 12:34	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.42	1.00	
Alpha-BHC	ND	1.3	0.43	1.00	
Beta-BHC	ND	1.3	0.35	1.00	
Delta-BHC	ND	1.3	0.34	1.00	
Gamma-BHC	ND	1.3	0.46	1.00	
Chlordane	ND	13	4.3	1.00	
Dieldrin	ND	1.3	0.44	1.00	
Trans-nonachlor	ND	1.3	0.38	1.00	
2,4'-DDD	ND	1.3	0.45	1.00	
2,4'-DDE	ND	1.3	0.40	1.00	
2,4'-DDT	ND	1.3	0.40	1.00	
4,4'-DDD	ND	1.3	0.42	1.00	
4,4'-DDE	ND	1.3	0.40	1.00	
4,4'-DDT	ND	1.3	0.44	1.00	
Endosulfan I	ND	1.3	0.35	1.00	
Endosulfan II	ND	1.3	0.37	1.00	
Endosulfan Sulfate	ND	1.3	0.45	1.00	
Endrin	ND	1.3	0.47	1.00	
Endrin Aldehyde	ND	1.3	0.32	1.00	
Endrin Ketone	ND	1.3	0.46	1.00	
Heptachlor	ND	1.3	0.43	1.00	
Heptachlor Epoxide	ND	1.3	0.47	1.00	
Methoxychlor	ND	1.3	0.43	1.00	
Toxaphene	ND	26	8.4	1.00	
Alpha Chlordane	ND	1.3	0.42	1.00	
Gamma Chlordane	ND	1.3	0.42	1.00	
Cis-nonachlor	ND	1.3	0.39	1.00	
Oxychlordane	ND	1.3	0.37	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	94	25-145			
Decachlorobiphenyl	105	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 TOP	14-05-1270-9-AA	05/12/14 12:50	Sediment	GC 66	05/21/14	05/24/14 12:48	140521L03

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.5	0.46	1.00	
Alpha-BHC	ND	1.5	0.47	1.00	
Beta-BHC	ND	1.5	0.38	1.00	
Delta-BHC	ND	1.5	0.37	1.00	
Gamma-BHC	ND	1.5	0.50	1.00	
Chlordane	ND	15	4.7	1.00	
Dieldrin	ND	1.5	0.48	1.00	
Trans-nonachlor	ND	1.5	0.42	1.00	
2,4'-DDD	ND	1.5	0.49	1.00	
2,4'-DDE	ND	1.5	0.44	1.00	
2,4'-DDT	ND	1.5	0.44	1.00	
4,4'-DDD	ND	1.5	0.46	1.00	
4,4'-DDE	0.50	1.5	0.43	1.00	J
4,4'-DDT	ND	1.5	0.49	1.00	
Endosulfan I	ND	1.5	0.38	1.00	
Endosulfan II	ND	1.5	0.41	1.00	
Endosulfan Sulfate	ND	1.5	0.49	1.00	
Endrin	ND	1.5	0.52	1.00	
Endrin Aldehyde	ND	1.5	0.36	1.00	
Endrin Ketone	ND	1.5	0.50	1.00	
Heptachlor	ND	1.5	0.47	1.00	
Heptachlor Epoxide	ND	1.5	0.52	1.00	
Methoxychlor	ND	1.5	0.47	1.00	
Toxaphene	ND	29	9.2	1.00	
Alpha Chlordane	ND	1.5	0.47	1.00	
Gamma Chlordane	ND	1.5	0.46	1.00	
Cis-nonachlor	ND	1.5	0.43	1.00	
Oxychlordane	ND	1.5	0.41	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	70	25-145			
Decachlorobiphenyl	74	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 BOTTOM	14-05-1270-10-AA	05/12/14 12:45	Sediment	GC 66	05/21/14	05/24/14 13:02	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.46	1.00	
Alpha-BHC	ND	1.5	0.48	1.00	
Beta-BHC	ND	1.5	0.39	1.00	
Delta-BHC	ND	1.5	0.38	1.00	
Gamma-BHC	ND	1.5	0.51	1.00	
Chlordane	ND	15	4.8	1.00	
Dieldrin	ND	1.5	0.49	1.00	
Trans-nonachlor	ND	1.5	0.42	1.00	
2,4'-DDD	ND	1.5	0.50	1.00	
2,4'-DDE	ND	1.5	0.45	1.00	
2,4'-DDT	ND	1.5	0.44	1.00	
4,4'-DDD	ND	1.5	0.47	1.00	
4,4'-DDE	ND	1.5	0.44	1.00	
4,4'-DDT	ND	1.5	0.49	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.41	1.00	
Endosulfan Sulfate	ND	1.5	0.50	1.00	
Endrin	ND	1.5	0.53	1.00	
Endrin Aldehyde	0.38	1.5	0.36	1.00	J
Endrin Ketone	ND	1.5	0.51	1.00	
Heptachlor	ND	1.5	0.47	1.00	
Heptachlor Epoxide	ND	1.5	0.52	1.00	
Methoxychlor	ND	1.5	0.48	1.00	
Toxaphene	ND	29	9.3	1.00	
Alpha Chlordane	ND	1.5	0.47	1.00	
Gamma Chlordane	ND	1.5	0.47	1.00	
Cis-nonachlor	ND	1.5	0.43	1.00	
Oxychlordane	ND	1.5	0.41	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	80	25-145			
Decachlorobiphenyl	89	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-AA	05/12/14 12:00	Sediment	GC 66	05/21/14	05/24/14 13:16	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.6	0.51	1.00	
Alpha-BHC	ND	1.6	0.52	1.00	
Beta-BHC	ND	1.6	0.42	1.00	
Delta-BHC	ND	1.6	0.41	1.00	
Gamma-BHC	ND	1.6	0.56	1.00	
Chlordane	ND	16	5.2	1.00	
Dieldrin	ND	1.6	0.53	1.00	
Trans-nonachlor	ND	1.6	0.46	1.00	
2,4'-DDD	ND	1.6	0.54	1.00	
2,4'-DDE	1.2	1.6	0.49	1.00	J
2,4'-DDT	ND	1.6	0.48	1.00	
4,4'-DDD	ND	1.6	0.51	1.00	
4,4'-DDE	0.93	1.6	0.48	1.00	J
4,4'-DDT	1.4	1.6	0.54	1.00	J
Endosulfan I	ND	1.6	0.42	1.00	
Endosulfan II	ND	1.6	0.45	1.00	
Endosulfan Sulfate	ND	1.6	0.54	1.00	
Endrin	ND	1.6	0.58	1.00	
Endrin Aldehyde	ND	1.6	0.39	1.00	
Endrin Ketone	ND	1.6	0.56	1.00	
Heptachlor	ND	1.6	0.52	1.00	
Heptachlor Epoxide	ND	1.6	0.57	1.00	
Methoxychlor	ND	1.6	0.52	1.00	
Toxaphene	ND	32	10	1.00	
Alpha Chlordane	ND	1.6	0.51	1.00	
Gamma Chlordane	ND	1.6	0.51	1.00	
Cis-nonachlor	ND	1.6	0.47	1.00	
Oxychlordane	ND	1.6	0.45	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	68	25-145			
Decachlorobiphenyl	72	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-AA	05/12/14 13:50	Sediment	GC 66	05/21/14	05/24/14 13:30	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.49	1.00	
Beta-BHC	ND	1.5	0.40	1.00	
Delta-BHC	ND	1.5	0.39	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.50	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	ND	1.5	0.51	1.00	
2,4'-DDE	ND	1.5	0.46	1.00	
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.48	1.00	
4,4'-DDE	0.55	1.5	0.45	1.00	J
4,4'-DDT	ND	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.51	1.00	
Endrin	ND	1.5	0.54	1.00	
Endrin Aldehyde	ND	1.5	0.37	1.00	
Endrin Ketone	ND	1.5	0.52	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.49	1.00	
Toxaphene	ND	30	9.5	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.48	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	78	25-145			
Decachlorobiphenyl	84	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 BOTTOM	14-05-1270-13-AA	05/12/14 14:00	Sediment	GC 66	05/21/14	05/24/14 13:44	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.43	1.00	
Alpha-BHC	ND	1.4	0.44	1.00	
Beta-BHC	ND	1.4	0.36	1.00	
Delta-BHC	ND	1.4	0.35	1.00	
Gamma-BHC	ND	1.4	0.47	1.00	
Chlordane	ND	14	4.4	1.00	
Dieldrin	ND	1.4	0.45	1.00	
Trans-nonachlor	ND	1.4	0.39	1.00	
2,4'-DDD	ND	1.4	0.46	1.00	
2,4'-DDE	ND	1.4	0.42	1.00	
2,4'-DDT	ND	1.4	0.41	1.00	
4,4'-DDD	ND	1.4	0.43	1.00	
4,4'-DDE	ND	1.4	0.41	1.00	
4,4'-DDT	ND	1.4	0.46	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.38	1.00	
Endosulfan Sulfate	ND	1.4	0.46	1.00	
Endrin	ND	1.4	0.49	1.00	
Endrin Aldehyde	ND	1.4	0.33	1.00	
Endrin Ketone	ND	1.4	0.47	1.00	
Heptachlor	ND	1.4	0.44	1.00	
Heptachlor Epoxide	ND	1.4	0.48	1.00	
Methoxychlor	ND	1.4	0.44	1.00	
Toxaphene	ND	27	8.6	1.00	
Alpha Chlordane	ND	1.4	0.44	1.00	
Gamma Chlordane	ND	1.4	0.43	1.00	
Cis-nonachlor	ND	1.4	0.40	1.00	
Oxychlordane	ND	1.4	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	76	25-145			
Decachlorobiphenyl	85	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-AA	05/12/14 14:45	Sediment	GC 66	05/21/14	05/24/14 13:59	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.9	0.58	1.00	
Alpha-BHC	ND	1.9	0.60	1.00	
Beta-BHC	ND	1.9	0.49	1.00	
Delta-BHC	ND	1.9	0.48	1.00	
Gamma-BHC	ND	1.9	0.64	1.00	
Chlordane	ND	19	6.1	1.00	
Dieldrin	ND	1.9	0.61	1.00	
Trans-nonachlor	ND	1.9	0.54	1.00	
2,4'-DDD	ND	1.9	0.63	1.00	
2,4'-DDE	1.2	1.9	0.57	1.00	J
2,4'-DDT	ND	1.9	0.56	1.00	
4,4'-DDD	ND	1.9	0.59	1.00	
4,4'-DDE	1.1	1.9	0.56	1.00	J
4,4'-DDT	ND	1.9	0.62	1.00	
Endosulfan I	ND	1.9	0.49	1.00	
Endosulfan II	ND	1.9	0.52	1.00	
Endosulfan Sulfate	ND	1.9	0.63	1.00	
Endrin	ND	1.9	0.67	1.00	
Endrin Aldehyde	ND	1.9	0.45	1.00	
Endrin Ketone	ND	1.9	0.65	1.00	
Heptachlor	ND	1.9	0.60	1.00	
Heptachlor Epoxide	ND	1.9	0.66	1.00	
Methoxychlor	ND	1.9	0.60	1.00	
Toxaphene	ND	37	12	1.00	
Alpha Chlordane	ND	1.9	0.60	1.00	
Gamma Chlordane	ND	1.9	0.59	1.00	
Cis-nonachlor	ND	1.9	0.55	1.00	
Oxychlordane	ND	1.9	0.52	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	63	25-145			
Decachlorobiphenyl	66	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 BOTTOM	14-05-1270-15-AA	05/12/14 14:25	Sediment	GC 66	05/21/14	05/24/14 14:13	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.45	1.00	
Alpha-BHC	ND	1.4	0.46	1.00	
Beta-BHC	ND	1.4	0.38	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.49	1.00	
Chlordane	ND	14	4.7	1.00	
Dieldrin	ND	1.4	0.47	1.00	
Trans-nonachlor	ND	1.4	0.41	1.00	
2,4'-DDD	ND	1.4	0.48	1.00	
2,4'-DDE	3.2	1.4	0.44	1.00	
2,4'-DDT	ND	1.4	0.43	1.00	
4,4'-DDD	2.4	1.4	0.45	1.00	
4,4'-DDE	2.7	1.4	0.43	1.00	
4,4'-DDT	7.5	1.4	0.48	1.00	
Endosulfan I	ND	1.4	0.37	1.00	
Endosulfan II	ND	1.4	0.40	1.00	
Endosulfan Sulfate	ND	1.4	0.48	1.00	
Endrin	ND	1.4	0.51	1.00	
Endrin Aldehyde	ND	1.4	0.35	1.00	
Endrin Ketone	ND	1.4	0.49	1.00	
Heptachlor	ND	1.4	0.46	1.00	
Heptachlor Epoxide	ND	1.4	0.51	1.00	
Methoxychlor	ND	1.4	0.46	1.00	
Toxaphene	ND	28	9.0	1.00	
Alpha Chlordane	ND	1.4	0.46	1.00	
Gamma Chlordane	ND	1.4	0.45	1.00	
Cis-nonachlor	ND	1.4	0.42	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	85	25-145			
Decachlorobiphenyl	93	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-AA	05/12/14 16:15	Sediment	GC 66	05/21/14	05/24/14 14:27	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.4	0.45	1.00	
Alpha-BHC	ND	1.4	0.47	1.00	
Beta-BHC	ND	1.4	0.38	1.00	
Delta-BHC	ND	1.4	0.37	1.00	
Gamma-BHC	ND	1.4	0.50	1.00	
Chlordane	ND	14	4.7	1.00	
Dieldrin	ND	1.4	0.47	1.00	
Trans-nonachlor	ND	1.4	0.41	1.00	
2,4'-DDD	ND	1.4	0.49	1.00	
2,4'-DDE	1.7	1.4	0.44	1.00	
2,4'-DDT	ND	1.4	0.43	1.00	
4,4'-DDD	0.50	1.4	0.45	1.00	J
4,4'-DDE	1.3	1.4	0.43	1.00	J
4,4'-DDT	1.3	1.4	0.48	1.00	J
Endosulfan I	ND	1.4	0.38	1.00	
Endosulfan II	ND	1.4	0.40	1.00	
Endosulfan Sulfate	ND	1.4	0.49	1.00	
Endrin	ND	1.4	0.52	1.00	
Endrin Aldehyde	ND	1.4	0.35	1.00	
Endrin Ketone	ND	1.4	0.50	1.00	
Heptachlor	ND	1.4	0.46	1.00	
Heptachlor Epoxide	ND	1.4	0.51	1.00	
Methoxychlor	ND	1.4	0.47	1.00	
Toxaphene	ND	29	9.1	1.00	
Alpha Chlordane	ND	1.4	0.46	1.00	
Gamma Chlordane	ND	1.4	0.46	1.00	
Cis-nonachlor	ND	1.4	0.42	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	79	25-145			
Decachlorobiphenyl	88	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 BOTTOM	14-05-1270-17-AA	05/12/14 15:50	Sediment	GC 66	05/21/14	05/24/14 14:41	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.5	0.46	1.00	
Alpha-BHC	ND	1.5	0.47	1.00	
Beta-BHC	ND	1.5	0.38	1.00	
Delta-BHC	ND	1.5	0.37	1.00	
Gamma-BHC	ND	1.5	0.50	1.00	
Chlordane	ND	15	4.7	1.00	
Dieldrin	ND	1.5	0.48	1.00	
Trans-nonachlor	ND	1.5	0.42	1.00	
2,4'-DDD	ND	1.5	0.49	1.00	
2,4'-DDE	0.61	1.5	0.44	1.00	J
2,4'-DDT	ND	1.5	0.44	1.00	
4,4'-DDD	ND	1.5	0.46	1.00	
4,4'-DDE	ND	1.5	0.43	1.00	
4,4'-DDT	ND	1.5	0.49	1.00	
Endosulfan I	ND	1.5	0.38	1.00	
Endosulfan II	ND	1.5	0.41	1.00	
Endosulfan Sulfate	ND	1.5	0.49	1.00	
Endrin	ND	1.5	0.52	1.00	
Endrin Aldehyde	ND	1.5	0.35	1.00	
Endrin Ketone	ND	1.5	0.50	1.00	
Heptachlor	ND	1.5	0.47	1.00	
Heptachlor Epoxide	ND	1.5	0.52	1.00	
Methoxychlor	ND	1.5	0.47	1.00	
Toxaphene	ND	29	9.2	1.00	
Alpha Chlordane	ND	1.5	0.47	1.00	
Gamma Chlordane	ND	1.5	0.46	1.00	
Cis-nonachlor	ND	1.5	0.43	1.00	
Oxychlordane	ND	1.5	0.41	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	84	25-145			
Decachlorobiphenyl	97	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-AA	05/12/14 15:50	Sediment	GC 66	05/21/14	05/24/14 14:55	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.4	0.44	1.00	
Alpha-BHC	ND	1.4	0.46	1.00	
Beta-BHC	ND	1.4	0.37	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.49	1.00	
Chlordane	ND	14	4.6	1.00	
Dieldrin	ND	1.4	0.46	1.00	
Trans-nonachlor	ND	1.4	0.40	1.00	
2,4'-DDD	0.65	1.4	0.48	1.00	J
2,4'-DDE	7.8	1.4	0.43	1.00	
2,4'-DDT	4.2	1.4	0.42	1.00	
4,4'-DDD	4.4	1.4	0.44	1.00	
4,4'-DDE	6.5	1.4	0.42	1.00	
4,4'-DDT	5.3	1.4	0.47	1.00	
Endosulfan I	ND	1.4	0.37	1.00	
Endosulfan II	ND	1.4	0.39	1.00	
Endosulfan Sulfate	ND	1.4	0.47	1.00	
Endrin	ND	1.4	0.50	1.00	
Endrin Aldehyde	ND	1.4	0.34	1.00	
Endrin Ketone	ND	1.4	0.49	1.00	
Heptachlor	ND	1.4	0.45	1.00	
Heptachlor Epoxide	ND	1.4	0.50	1.00	
Methoxychlor	ND	1.4	0.46	1.00	
Toxaphene	ND	28	8.9	1.00	
Alpha Chlordane	ND	1.4	0.45	1.00	
Gamma Chlordane	ND	1.4	0.45	1.00	
Cis-nonachlor	ND	1.4	0.41	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	83	25-145			
Decachlorobiphenyl	91	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 19 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 BOTTOM	14-05-1270-19-AA	05/12/14 15:40	Sediment	GC 66	05/21/14	05/24/14 16:19	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.40	1.00	
Alpha-BHC	ND	1.3	0.42	1.00	
Beta-BHC	ND	1.3	0.34	1.00	
Delta-BHC	ND	1.3	0.33	1.00	
Gamma-BHC	ND	1.3	0.44	1.00	
Chlordane	ND	13	4.2	1.00	
Dieldrin	ND	1.3	0.42	1.00	
Trans-nonachlor	ND	1.3	0.37	1.00	
2,4'-DDD	ND	1.3	0.43	1.00	
2,4'-DDE	3.3	1.3	0.39	1.00	
2,4'-DDT	ND	1.3	0.39	1.00	
4,4'-DDD	3.2	1.3	0.41	1.00	
4,4'-DDE	2.6	1.3	0.38	1.00	
4,4'-DDT	ND	1.3	0.43	1.00	
Endosulfan I	ND	1.3	0.34	1.00	
Endosulfan II	ND	1.3	0.36	1.00	
Endosulfan Sulfate	ND	1.3	0.43	1.00	
Endrin	ND	1.3	0.46	1.00	
Endrin Aldehyde	ND	1.3	0.31	1.00	
Endrin Ketone	ND	1.3	0.45	1.00	
Heptachlor	ND	1.3	0.41	1.00	
Heptachlor Epoxide	ND	1.3	0.46	1.00	
Methoxychlor	ND	1.3	0.42	1.00	
Toxaphene	ND	26	8.1	1.00	
Alpha Chlordane	ND	1.3	0.41	1.00	
Gamma Chlordane	ND	1.3	0.41	1.00	
Cis-nonachlor	ND	1.3	0.38	1.00	
Oxychlordane	ND	1.3	0.36	1.00	
 <u>Surrogate</u>	 <u>Rec. (%)</u>	 <u>Control Limits</u>	 <u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	105	25-145			
Decachlorobiphenyl	113	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-AA	05/13/14 12:15	Sediment	GC 66	05/21/14	05/24/14 16:33	140521L03

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	4.0	1.3	1.00	
Alpha-BHC	ND	4.0	1.3	1.00	
Beta-BHC	ND	4.0	1.1	1.00	
Delta-BHC	ND	4.0	1.0	1.00	
Gamma-BHC	ND	4.0	1.4	1.00	
Chlordane	ND	40	13	1.00	
Dieldrin	ND	4.0	1.3	1.00	
Trans-nonachlor	ND	4.0	1.1	1.00	
2,4'-DDD	ND	4.0	1.3	1.00	
2,4'-DDE	1.4	4.0	1.2	1.00	J
2,4'-DDT	ND	4.0	1.2	1.00	
4,4'-DDD	ND	4.0	1.3	1.00	
4,4'-DDE	2.3	4.0	1.2	1.00	J
4,4'-DDT	ND	4.0	1.3	1.00	
Endosulfan I	ND	4.0	1.0	1.00	
Endosulfan II	ND	4.0	1.1	1.00	
Endosulfan Sulfate	ND	4.0	1.3	1.00	
Endrin	ND	4.0	1.4	1.00	
Endrin Aldehyde	ND	4.0	0.97	1.00	
Endrin Ketone	ND	4.0	1.4	1.00	
Heptachlor	ND	4.0	1.3	1.00	
Heptachlor Epoxide	ND	4.0	1.4	1.00	
Methoxychlor	ND	4.0	1.3	1.00	
Toxaphene	ND	80	25	1.00	
Alpha Chlordane	ND	4.0	1.3	1.00	
Gamma Chlordane	ND	4.0	1.3	1.00	
Cis-nonachlor	ND	4.0	1.2	1.00	
Oxychlordane	ND	4.0	1.1	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	46	25-145			
Decachlorobiphenyl	42	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 BOTTOM	14-05-1270-21-AA	05/13/14 12:00	Sediment	GC 66	05/23/14	05/27/14 14:36	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.1	0.65	1.00	
Alpha-BHC	ND	2.1	0.67	1.00	
Beta-BHC	ND	2.1	0.55	1.00	
Delta-BHC	ND	2.1	0.53	1.00	
Gamma-BHC	ND	2.1	0.72	1.00	
Chlordane	ND	21	6.8	1.00	
Dieldrin	ND	2.1	0.68	1.00	
Trans-nonachlor	ND	2.1	0.60	1.00	
2,4'-DDD	ND	2.1	0.70	1.00	
2,4'-DDE	1.7	2.1	0.63	1.00	J
2,4'-DDT	ND	2.1	0.62	1.00	
4,4'-DDD	1.2	2.1	0.66	1.00	J
4,4'-DDE	1.7	2.1	0.62	1.00	J
4,4'-DDT	ND	2.1	0.69	1.00	
Endosulfan I	ND	2.1	0.54	1.00	
Endosulfan II	ND	2.1	0.58	1.00	
Endosulfan Sulfate	ND	2.1	0.70	1.00	
Endrin	ND	2.1	0.74	1.00	
Endrin Aldehyde	ND	2.1	0.51	1.00	
Endrin Ketone	ND	2.1	0.72	1.00	
Heptachlor	ND	2.1	0.67	1.00	
Heptachlor Epoxide	ND	2.1	0.74	1.00	
Methoxychlor	ND	2.1	0.67	1.00	
Toxaphene	ND	41	13	1.00	
Alpha Chlordane	ND	2.1	0.67	1.00	
Gamma Chlordane	ND	2.1	0.66	1.00	
Cis-nonachlor	ND	2.1	0.61	1.00	
Oxychlordane	ND	2.1	0.58	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	82	25-145			
Decachlorobiphenyl	87	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-AA	05/13/14 12:30	Sediment	GC 66	05/23/14	05/27/14 14:50	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	3.7	1.2	1.00	
Alpha-BHC	ND	3.7	1.2	1.00	
Beta-BHC	ND	3.7	0.97	1.00	
Delta-BHC	ND	3.7	0.94	1.00	
Gamma-BHC	ND	3.7	1.3	1.00	
Chlordane	ND	37	12	1.00	
Dieldrin	ND	3.7	1.2	1.00	
Trans-nonachlor	ND	3.7	1.1	1.00	
2,4'-DDD	ND	3.7	1.2	1.00	
2,4'-DDE	ND	3.7	1.1	1.00	
2,4'-DDT	ND	3.7	1.1	1.00	
4,4'-DDD	ND	3.7	1.2	1.00	
4,4'-DDE	1.7	3.7	1.1	1.00	J
4,4'-DDT	ND	3.7	1.2	1.00	
Endosulfan I	ND	3.7	0.97	1.00	
Endosulfan II	ND	3.7	1.0	1.00	
Endosulfan Sulfate	ND	3.7	1.2	1.00	
Endrin	ND	3.7	1.3	1.00	
Endrin Aldehyde	ND	3.7	0.90	1.00	
Endrin Ketone	ND	3.7	1.3	1.00	
Heptachlor	ND	3.7	1.2	1.00	
Heptachlor Epoxide	ND	3.7	1.3	1.00	
Methoxychlor	ND	3.7	1.2	1.00	
Toxaphene	ND	74	23	1.00	
Alpha Chlordane	ND	3.7	1.2	1.00	
Gamma Chlordane	ND	3.7	1.2	1.00	
Cis-nonachlor	ND	3.7	1.1	1.00	
Oxychlordane	ND	3.7	1.0	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	65	25-145			
Decachlorobiphenyl	74	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 BOTTOM	14-05-1270-23-AA	05/13/14 12:45	Sediment	GC 66	05/23/14	05/27/14 15:04	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	3.5	1.1	1.00	
Alpha-BHC	ND	3.5	1.1	1.00	
Beta-BHC	ND	3.5	0.92	1.00	
Delta-BHC	ND	3.5	0.89	1.00	
Gamma-BHC	ND	3.5	1.2	1.00	
Chlordane	ND	35	11	1.00	
Dieldrin	ND	3.5	1.1	1.00	
Trans-nonachlor	ND	3.5	1.0	1.00	
2,4'-DDD	ND	3.5	1.2	1.00	
2,4'-DDE	2.2	3.5	1.1	1.00	J
2,4'-DDT	ND	3.5	1.0	1.00	
4,4'-DDD	1.2	3.5	1.1	1.00	J
4,4'-DDE	2.6	3.5	1.0	1.00	J
4,4'-DDT	ND	3.5	1.2	1.00	
Endosulfan I	ND	3.5	0.91	1.00	
Endosulfan II	ND	3.5	0.97	1.00	
Endosulfan Sulfate	ND	3.5	1.2	1.00	
Endrin	ND	3.5	1.2	1.00	
Endrin Aldehyde	ND	3.5	0.85	1.00	
Endrin Ketone	ND	3.5	1.2	1.00	
Heptachlor	ND	3.5	1.1	1.00	
Heptachlor Epoxide	ND	3.5	1.2	1.00	
Methoxychlor	ND	3.5	1.1	1.00	
Toxaphene	ND	69	22	1.00	
Alpha Chlordane	ND	3.5	1.1	1.00	
Gamma Chlordane	ND	3.5	1.1	1.00	
Cis-nonachlor	ND	3.5	1.0	1.00	
Oxychlordane	ND	3.5	0.98	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	69	25-145			
Decachlorobiphenyl	82	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-AA	05/13/14 12:45	Sediment	GC 66	05/23/14	05/28/14 14:47	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	3.7	1.2	1.00	
Alpha-BHC	ND	3.7	1.2	1.00	
Beta-BHC	6.3	3.7	0.97	1.00	
Delta-BHC	6.0	3.7	0.94	1.00	
Gamma-BHC	ND	3.7	1.3	1.00	
Chlordane	ND	37	12	1.00	
Dieldrin	ND	3.7	1.2	1.00	
Trans-nonachlor	ND	3.7	1.1	1.00	
2,4'-DDD	ND	3.7	1.2	1.00	
2,4'-DDE	ND	3.7	1.1	1.00	
2,4'-DDT	ND	3.7	1.1	1.00	
4,4'-DDD	ND	3.7	1.2	1.00	
4,4'-DDE	1.5	3.7	1.1	1.00	J
4,4'-DDT	ND	3.7	1.2	1.00	
Endosulfan I	ND	3.7	0.97	1.00	
Endosulfan II	ND	3.7	1.0	1.00	
Endosulfan Sulfate	ND	3.7	1.2	1.00	
Endrin	ND	3.7	1.3	1.00	
Endrin Aldehyde	ND	3.7	0.90	1.00	
Endrin Ketone	ND	3.7	1.3	1.00	
Heptachlor	ND	3.7	1.2	1.00	
Heptachlor Epoxide	ND	3.7	1.3	1.00	
Methoxychlor	ND	3.7	1.2	1.00	
Toxaphene	ND	74	23	1.00	
Alpha Chlordane	ND	3.7	1.2	1.00	
Gamma Chlordane	ND	3.7	1.2	1.00	
Cis-nonachlor	ND	3.7	1.1	1.00	
Oxychlordane	ND	3.7	1.0	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	25	25-145			
Decachlorobiphenyl	31	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	GC 66	05/23/14	05/27/14 15:32	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.9	0.59	1.00	
Alpha-BHC	ND	1.9	0.61	1.00	
Beta-BHC	ND	1.9	0.50	1.00	
Delta-BHC	ND	1.9	0.48	1.00	
Gamma-BHC	ND	1.9	0.65	1.00	
Chlordane	ND	19	6.2	1.00	
Dieldrin	ND	1.9	0.62	1.00	
Trans-nonachlor	ND	1.9	0.54	1.00	
2,4'-DDD	ND	1.9	0.64	1.00	
2,4'-DDE	8.9	1.9	0.57	1.00	
2,4'-DDT	ND	1.9	0.57	1.00	
4,4'-DDD	9.8	1.9	0.60	1.00	
4,4'-DDE	8.2	1.9	0.56	1.00	
Endosulfan I	ND	1.9	0.49	1.00	
Endosulfan II	ND	1.9	0.53	1.00	
Endosulfan Sulfate	ND	1.9	0.64	1.00	
Endrin	ND	1.9	0.67	1.00	
Endrin Aldehyde	ND	1.9	0.46	1.00	
Endrin Ketone	ND	1.9	0.65	1.00	
Heptachlor	ND	1.9	0.61	1.00	
Heptachlor Epoxide	ND	1.9	0.67	1.00	
Methoxychlor	ND	1.9	0.61	1.00	
Toxaphene	ND	38	12	1.00	
Alpha Chlordane	ND	1.9	0.60	1.00	
Gamma Chlordane	ND	1.9	0.60	1.00	
Cis-nonachlor	ND	1.9	0.55	1.00	
Oxychlordane	ND	1.9	0.53	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	86	25-145			
Decachlorobiphenyl	93	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	GC 66	05/23/14	05/28/14 14:33	140523L11

Comment(s):
- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
4,4'-DDT	29	9.4	3.2	5.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	88	25-145			
Decachlorobiphenyl	99	24-168			

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 BOTTOM	14-05-1270-26-AA	05/13/14 13:15	Sediment	GC 66	05/23/14	05/27/14 15:47	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.3	0.41	1.00	
Alpha-BHC	ND	1.3	0.43	1.00	
Beta-BHC	ND	1.3	0.35	1.00	
Delta-BHC	ND	1.3	0.34	1.00	
Gamma-BHC	ND	1.3	0.46	1.00	
Chlordane	ND	13	4.3	1.00	
Dieldrin	ND	1.3	0.43	1.00	
Trans-nonachlor	ND	1.3	0.38	1.00	
2,4'-DDD	ND	1.3	0.45	1.00	
2,4'-DDE	0.65	1.3	0.40	1.00	J
2,4'-DDT	ND	1.3	0.40	1.00	
4,4'-DDD	ND	1.3	0.42	1.00	
4,4'-DDE	0.59	1.3	0.39	1.00	J
4,4'-DDT	ND	1.3	0.44	1.00	
Endosulfan I	ND	1.3	0.34	1.00	
Endosulfan II	ND	1.3	0.37	1.00	
Endosulfan Sulfate	ND	1.3	0.44	1.00	
Endrin	ND	1.3	0.47	1.00	
Endrin Aldehyde	ND	1.3	0.32	1.00	
Endrin Ketone	ND	1.3	0.46	1.00	
Heptachlor	ND	1.3	0.42	1.00	
Heptachlor Epoxide	ND	1.3	0.47	1.00	
Methoxychlor	ND	1.3	0.43	1.00	
Toxaphene	ND	26	8.3	1.00	
Alpha Chlordane	ND	1.3	0.42	1.00	
Gamma Chlordane	ND	1.3	0.42	1.00	
Cis-nonachlor	ND	1.3	0.39	1.00	
Oxychlordane	ND	1.3	0.37	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	108	25-145			
Decachlorobiphenyl	104	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-AA	05/13/14 09:10	Sediment	GC 66	05/23/14	05/27/14 16:01	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.4	0.44	1.00	
Alpha-BHC	ND	1.4	0.46	1.00	
Beta-BHC	ND	1.4	0.37	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.49	1.00	
Chlordane	ND	14	4.6	1.00	
Dieldrin	ND	1.4	0.46	1.00	
Trans-nonachlor	ND	1.4	0.40	1.00	
2,4'-DDD	ND	1.4	0.48	1.00	
2,4'-DDE	ND	1.4	0.43	1.00	
2,4'-DDT	ND	1.4	0.42	1.00	
4,4'-DDD	ND	1.4	0.44	1.00	
4,4'-DDE	0.47	1.4	0.42	1.00	J
4,4'-DDT	ND	1.4	0.47	1.00	
Endosulfan I	ND	1.4	0.37	1.00	
Endosulfan II	ND	1.4	0.39	1.00	
Endosulfan Sulfate	ND	1.4	0.47	1.00	
Endrin	ND	1.4	0.50	1.00	
Endrin Aldehyde	ND	1.4	0.34	1.00	
Endrin Ketone	ND	1.4	0.49	1.00	
Heptachlor	ND	1.4	0.45	1.00	
Heptachlor Epoxide	ND	1.4	0.50	1.00	
Methoxychlor	ND	1.4	0.46	1.00	
Toxaphene	ND	28	8.9	1.00	
Alpha Chlordane	ND	1.4	0.45	1.00	
Gamma Chlordane	ND	1.4	0.45	1.00	
Cis-nonachlor	ND	1.4	0.41	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	102	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 29 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 BOTTOM	14-05-1270-28-AA	05/13/14 09:20	Sediment	GC 66	05/23/14	05/27/14 16:15	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.45	1.00	
Alpha-BHC	ND	1.4	0.46	1.00	
Beta-BHC	ND	1.4	0.37	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.49	1.00	
Chlordane	ND	14	4.6	1.00	
Dieldrin	ND	1.4	0.47	1.00	
Trans-nonachlor	ND	1.4	0.41	1.00	
2,4'-DDD	ND	1.4	0.48	1.00	
2,4'-DDE	ND	1.4	0.43	1.00	
2,4'-DDT	ND	1.4	0.43	1.00	
4,4'-DDD	ND	1.4	0.45	1.00	
4,4'-DDE	ND	1.4	0.42	1.00	
4,4'-DDT	ND	1.4	0.47	1.00	
Endosulfan I	ND	1.4	0.37	1.00	
Endosulfan II	ND	1.4	0.40	1.00	
Endosulfan Sulfate	ND	1.4	0.48	1.00	
Endrin	ND	1.4	0.51	1.00	
Endrin Aldehyde	ND	1.4	0.35	1.00	
Endrin Ketone	ND	1.4	0.49	1.00	
Heptachlor	ND	1.4	0.46	1.00	
Heptachlor Epoxide	ND	1.4	0.50	1.00	
Methoxychlor	ND	1.4	0.46	1.00	
Toxaphene	ND	28	9.0	1.00	
Alpha Chlordane	ND	1.4	0.45	1.00	
Gamma Chlordane	ND	1.4	0.45	1.00	
Cis-nonachlor	ND	1.4	0.42	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	101	25-145			
Decachlorobiphenyl	107	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP DUP	14-05-1270-29-AA	05/13/14 09:40	Sediment	GC 66	05/23/14	05/27/14 16:29	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.0	0.63	1.00	
Alpha-BHC	ND	2.0	0.65	1.00	
Beta-BHC	ND	2.0	0.53	1.00	
Delta-BHC	ND	2.0	0.51	1.00	
Gamma-BHC	ND	2.0	0.69	1.00	
Chlordane	ND	20	6.5	1.00	
Dieldrin	ND	2.0	0.66	1.00	
Trans-nonachlor	ND	2.0	0.57	1.00	
2,4'-DDD	ND	2.0	0.67	1.00	
2,4'-DDE	0.71	2.0	0.61	1.00	J
2,4'-DDT	ND	2.0	0.60	1.00	
4,4'-DDD	ND	2.0	0.63	1.00	
4,4'-DDE	ND	2.0	0.60	1.00	
4,4'-DDT	ND	2.0	0.67	1.00	
Endosulfan I	ND	2.0	0.52	1.00	
Endosulfan II	ND	2.0	0.56	1.00	
Endosulfan Sulfate	ND	2.0	0.67	1.00	
Endrin	ND	2.0	0.71	1.00	
Endrin Aldehyde	ND	2.0	0.49	1.00	
Endrin Ketone	ND	2.0	0.69	1.00	
Heptachlor	ND	2.0	0.64	1.00	
Heptachlor Epoxide	ND	2.0	0.71	1.00	
Methoxychlor	ND	2.0	0.65	1.00	
Toxaphene	ND	40	13	1.00	
Alpha Chlordane	ND	2.0	0.64	1.00	
Gamma Chlordane	ND	2.0	0.63	1.00	
Cis-nonachlor	ND	2.0	0.58	1.00	
Oxychlordane	ND	2.0	0.56	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	89	25-145			
Decachlorobiphenyl	87	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 31 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP	14-05-1270-30-AA	05/13/14 10:25	Sediment	GC 66	05/23/14	05/27/14 16:43	140523L11

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	2.0	0.64	1.00	
Alpha-BHC	ND	2.0	0.66	1.00	
Beta-BHC	ND	2.0	0.54	1.00	
Delta-BHC	ND	2.0	0.52	1.00	
Gamma-BHC	ND	2.0	0.70	1.00	
Chlordane	ND	20	6.6	1.00	
Dieldrin	ND	2.0	0.67	1.00	
Trans-nonachlor	ND	2.0	0.59	1.00	
2,4'-DDD	ND	2.0	0.69	1.00	
2,4'-DDE	2.9	2.0	0.62	1.00	
2,4'-DDT	ND	2.0	0.61	1.00	
4,4'-DDD	ND	2.0	0.64	1.00	
4,4'-DDE	2.6	2.0	0.61	1.00	
4,4'-DDT	ND	2.0	0.68	1.00	
Endosulfan I	ND	2.0	0.53	1.00	
Endosulfan II	ND	2.0	0.57	1.00	
Endosulfan Sulfate	ND	2.0	0.69	1.00	
Endrin	ND	2.0	0.73	1.00	
Endrin Aldehyde	ND	2.0	0.50	1.00	
Endrin Ketone	ND	2.0	0.71	1.00	
Heptachlor	ND	2.0	0.65	1.00	
Heptachlor Epoxide	ND	2.0	0.72	1.00	
Methoxychlor	ND	2.0	0.66	1.00	
Toxaphene	ND	41	13	1.00	
Alpha Chlordane	ND	2.0	0.65	1.00	
Gamma Chlordane	ND	2.0	0.65	1.00	
Cis-nonachlor	ND	2.0	0.60	1.00	
Oxychlordane	ND	2.0	0.57	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	105	25-145			
Decachlorobiphenyl	105	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 BOTTOM	14-05-1270-31-AA	05/13/14 10:10	Sediment	GC 66	05/23/14	05/27/14 16:57	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.6	0.51	1.00	
Alpha-BHC	ND	1.6	0.52	1.00	
Beta-BHC	ND	1.6	0.42	1.00	
Delta-BHC	0.55	1.6	0.41	1.00	J
Gamma-BHC	ND	1.6	0.56	1.00	
Chlordane	ND	16	5.3	1.00	
Dieldrin	ND	1.6	0.53	1.00	
Trans-nonachlor	ND	1.6	0.46	1.00	
2,4'-DDD	ND	1.6	0.54	1.00	
2,4'-DDE	ND	1.6	0.49	1.00	
2,4'-DDT	ND	1.6	0.48	1.00	
4,4'-DDD	ND	1.6	0.51	1.00	
4,4'-DDE	ND	1.6	0.48	1.00	
4,4'-DDT	ND	1.6	0.54	1.00	
Endosulfan I	ND	1.6	0.42	1.00	
Endosulfan II	ND	1.6	0.45	1.00	
Endosulfan Sulfate	ND	1.6	0.54	1.00	
Endrin	ND	1.6	0.58	1.00	
Endrin Aldehyde	0.55	1.6	0.39	1.00	J
Endrin Ketone	ND	1.6	0.56	1.00	
Heptachlor	ND	1.6	0.52	1.00	
Heptachlor Epoxide	ND	1.6	0.57	1.00	
Methoxychlor	ND	1.6	0.52	1.00	
Toxaphene	ND	32	10	1.00	
Alpha Chlordane	ND	1.6	0.52	1.00	
Gamma Chlordane	ND	1.6	0.51	1.00	
Cis-nonachlor	ND	1.6	0.47	1.00	
Oxychlordane	ND	1.6	0.45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	89	25-145			
Decachlorobiphenyl	96	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 33 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 TOP	14-05-1270-32-AA	05/13/14 10:55	Sediment	GC 66	05/23/14	05/27/14 17:11	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	2.5	0.79	1.00	
Alpha-BHC	ND	2.5	0.82	1.00	
Beta-BHC	ND	2.5	0.67	1.00	
Delta-BHC	ND	2.5	0.64	1.00	
Gamma-BHC	ND	2.5	0.87	1.00	
Chlordane	ND	25	8.2	1.00	
Dieldrin	ND	2.5	0.83	1.00	
Trans-nonachlor	ND	2.5	0.73	1.00	
2,4'-DDD	ND	2.5	0.85	1.00	
2,4'-DDE	ND	2.5	0.77	1.00	
2,4'-DDT	ND	2.5	0.76	1.00	
4,4'-DDD	ND	2.5	0.80	1.00	
4,4'-DDE	ND	2.5	0.75	1.00	
4,4'-DDT	ND	2.5	0.84	1.00	
Endosulfan I	ND	2.5	0.66	1.00	
Endosulfan II	ND	2.5	0.70	1.00	
Endosulfan Sulfate	ND	2.5	0.85	1.00	
Endrin	ND	2.5	0.90	1.00	
Endrin Aldehyde	ND	2.5	0.62	1.00	
Endrin Ketone	ND	2.5	0.87	1.00	
Heptachlor	ND	2.5	0.81	1.00	
Heptachlor Epoxide	ND	2.5	0.90	1.00	
Methoxychlor	ND	2.5	0.82	1.00	
Toxaphene	ND	50	16	1.00	
Alpha Chlordane	ND	2.5	0.81	1.00	
Gamma Chlordane	ND	2.5	0.80	1.00	
Cis-nonachlor	ND	2.5	0.74	1.00	
Oxychlordane	ND	2.5	0.71	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	115	25-145			
Decachlorobiphenyl	114	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 BOTTOM	14-05-1270-33-AA	05/13/14 10:35	Sediment	GC 66	05/23/14	05/27/14 17:25	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.6	0.51	1.00	
Alpha-BHC	ND	1.6	0.52	1.00	
Beta-BHC	ND	1.6	0.42	1.00	
Delta-BHC	ND	1.6	0.41	1.00	
Gamma-BHC	ND	1.6	0.56	1.00	
Chlordane	ND	16	5.2	1.00	
Dieldrin	ND	1.6	0.53	1.00	
Trans-nonachlor	ND	1.6	0.46	1.00	
2,4'-DDD	ND	1.6	0.54	1.00	
2,4'-DDE	ND	1.6	0.49	1.00	
2,4'-DDT	ND	1.6	0.48	1.00	
4,4'-DDD	ND	1.6	0.51	1.00	
4,4'-DDE	ND	1.6	0.48	1.00	
4,4'-DDT	ND	1.6	0.54	1.00	
Endosulfan I	ND	1.6	0.42	1.00	
Endosulfan II	ND	1.6	0.45	1.00	
Endosulfan Sulfate	ND	1.6	0.54	1.00	
Endrin	ND	1.6	0.58	1.00	
Endrin Aldehyde	ND	1.6	0.39	1.00	
Endrin Ketone	ND	1.6	0.56	1.00	
Heptachlor	ND	1.6	0.52	1.00	
Heptachlor Epoxide	ND	1.6	0.57	1.00	
Methoxychlor	ND	1.6	0.52	1.00	
Toxaphene	ND	32	10	1.00	
Alpha Chlordane	ND	1.6	0.52	1.00	
Gamma Chlordane	ND	1.6	0.51	1.00	
Cis-nonachlor	ND	1.6	0.47	1.00	
Oxychlordane	ND	1.6	0.45	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	98	25-145			
Decachlorobiphenyl	99	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 TOP	14-05-1270-34-AA	05/13/14 11:20	Sediment	GC 66	05/23/14	05/27/14 17:39	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.8	0.87	1.00	
Alpha-BHC	ND	2.8	0.90	1.00	
Beta-BHC	ND	2.8	0.73	1.00	
Delta-BHC	ND	2.8	0.71	1.00	
Gamma-BHC	ND	2.8	0.96	1.00	
Chlordane	ND	28	9.0	1.00	
Dieldrin	ND	2.8	0.91	1.00	
Trans-nonachlor	ND	2.8	0.80	1.00	
2,4'-DDD	ND	2.8	0.94	1.00	
2,4'-DDE	ND	2.8	0.84	1.00	
2,4'-DDT	ND	2.8	0.83	1.00	
4,4'-DDD	ND	2.8	0.87	1.00	
4,4'-DDE	0.91	2.8	0.83	1.00	J
4,4'-DDT	ND	2.8	0.93	1.00	
Endosulfan I	ND	2.8	0.73	1.00	
Endosulfan II	ND	2.8	0.77	1.00	
Endosulfan Sulfate	ND	2.8	0.94	1.00	
Endrin	ND	2.8	0.99	1.00	
Endrin Aldehyde	ND	2.8	0.68	1.00	
Endrin Ketone	ND	2.8	0.96	1.00	
Heptachlor	ND	2.8	0.89	1.00	
Heptachlor Epoxide	ND	2.8	0.98	1.00	
Methoxychlor	ND	2.8	0.90	1.00	
Toxaphene	ND	55	18	1.00	
Alpha Chlordane	ND	2.8	0.89	1.00	
Gamma Chlordane	ND	2.8	0.88	1.00	
Cis-nonachlor	ND	2.8	0.81	1.00	
Oxychlordane	ND	2.8	0.78	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	90	25-145			
Decachlorobiphenyl	98	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 BOTTOM	14-05-1270-35-AA	05/13/14 11:05	Sediment	GC 66	05/23/14	05/27/14 17:53	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.45	1.00	
Alpha-BHC	ND	1.4	0.47	1.00	
Beta-BHC	ND	1.4	0.38	1.00	
Delta-BHC	ND	1.4	0.37	1.00	
Gamma-BHC	ND	1.4	0.50	1.00	
Chlordane	ND	14	4.7	1.00	
Dieldrin	ND	1.4	0.48	1.00	
Trans-nonachlor	ND	1.4	0.42	1.00	
2,4'-DDD	ND	1.4	0.49	1.00	
2,4'-DDE	ND	1.4	0.44	1.00	
2,4'-DDT	ND	1.4	0.43	1.00	
4,4'-DDD	ND	1.4	0.46	1.00	
4,4'-DDE	ND	1.4	0.43	1.00	
4,4'-DDT	ND	1.4	0.48	1.00	
Endosulfan I	ND	1.4	0.38	1.00	
Endosulfan II	ND	1.4	0.40	1.00	
Endosulfan Sulfate	ND	1.4	0.49	1.00	
Endrin	ND	1.4	0.52	1.00	
Endrin Aldehyde	ND	1.4	0.35	1.00	
Endrin Ketone	ND	1.4	0.50	1.00	
Heptachlor	ND	1.4	0.46	1.00	
Heptachlor Epoxide	ND	1.4	0.51	1.00	
Methoxychlor	ND	1.4	0.47	1.00	
Toxaphene	ND	29	9.1	1.00	
Alpha Chlordane	ND	1.4	0.46	1.00	
Gamma Chlordane	ND	1.4	0.46	1.00	
Cis-nonachlor	ND	1.4	0.42	1.00	
Oxychlordane	ND	1.4	0.41	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	99	25-145			
Decachlorobiphenyl	100	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-AA	05/13/14 13:05	Sediment	GC 66	05/23/14	05/27/14 18:07	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.4	0.43	1.00	
Alpha-BHC	ND	1.4	0.44	1.00	
Beta-BHC	ND	1.4	0.36	1.00	
Delta-BHC	ND	1.4	0.35	1.00	
Gamma-BHC	ND	1.4	0.47	1.00	
Chlordane	ND	14	4.5	1.00	
Dieldrin	ND	1.4	0.45	1.00	
Trans-nonachlor	ND	1.4	0.39	1.00	
2,4'-DDD	ND	1.4	0.46	1.00	
2,4'-DDE	ND	1.4	0.42	1.00	
2,4'-DDT	ND	1.4	0.41	1.00	
4,4'-DDD	ND	1.4	0.43	1.00	
4,4'-DDE	ND	1.4	0.41	1.00	
4,4'-DDT	ND	1.4	0.46	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.38	1.00	
Endosulfan Sulfate	ND	1.4	0.46	1.00	
Endrin	ND	1.4	0.49	1.00	
Endrin Aldehyde	ND	1.4	0.33	1.00	
Endrin Ketone	ND	1.4	0.48	1.00	
Heptachlor	ND	1.4	0.44	1.00	
Heptachlor Epoxide	ND	1.4	0.49	1.00	
Methoxychlor	ND	1.4	0.44	1.00	
Toxaphene	ND	27	8.7	1.00	
Alpha Chlordane	ND	1.4	0.44	1.00	
Gamma Chlordane	ND	1.4	0.44	1.00	
Cis-nonachlor	ND	1.4	0.40	1.00	
Oxychlordane	ND	1.4	0.39	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	113	25-145			
Decachlorobiphenyl	107	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 BOTTOM	14-05-1270-37-AA	05/13/14 14:05	Sediment	GC 66	05/23/14	05/27/14 18:22	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.42	1.00	
Alpha-BHC	ND	1.3	0.43	1.00	
Beta-BHC	ND	1.3	0.35	1.00	
Delta-BHC	ND	1.3	0.34	1.00	
Gamma-BHC	ND	1.3	0.46	1.00	
Chlordane	ND	13	4.3	1.00	
Dieldrin	ND	1.3	0.43	1.00	
Trans-nonachlor	ND	1.3	0.38	1.00	
2,4'-DDD	ND	1.3	0.45	1.00	
2,4'-DDE	ND	1.3	0.40	1.00	
2,4'-DDT	ND	1.3	0.40	1.00	
4,4'-DDD	ND	1.3	0.42	1.00	
4,4'-DDE	ND	1.3	0.39	1.00	
4,4'-DDT	ND	1.3	0.44	1.00	
Endosulfan I	ND	1.3	0.35	1.00	
Endosulfan II	ND	1.3	0.37	1.00	
Endosulfan Sulfate	ND	1.3	0.45	1.00	
Endrin	ND	1.3	0.47	1.00	
Endrin Aldehyde	ND	1.3	0.32	1.00	
Endrin Ketone	ND	1.3	0.46	1.00	
Heptachlor	ND	1.3	0.42	1.00	
Heptachlor Epoxide	ND	1.3	0.47	1.00	
Methoxychlor	ND	1.3	0.43	1.00	
Toxaphene	ND	26	8.4	1.00	
Alpha Chlordane	ND	1.3	0.42	1.00	
Gamma Chlordane	ND	1.3	0.42	1.00	
Cis-nonachlor	ND	1.3	0.39	1.00	
Oxychlordane	ND	1.3	0.37	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	99	25-145			
Decachlorobiphenyl	99	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 TOP	14-05-1270-38-AA	05/13/14 15:00	Sediment	GC 66	05/23/14	05/28/14 13:37	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.49	1.00	
Beta-BHC	ND	1.5	0.40	1.00	
Delta-BHC	ND	1.5	0.39	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.50	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	ND	1.5	0.51	1.00	
2,4'-DDE	0.85	1.5	0.46	1.00	J
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.48	1.00	
4,4'-DDE	1.1	1.5	0.45	1.00	J
4,4'-DDT	ND	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.51	1.00	
Endrin	ND	1.5	0.54	1.00	
Endrin Aldehyde	ND	1.5	0.37	1.00	
Endrin Ketone	ND	1.5	0.52	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.49	1.00	
Toxaphene	ND	30	9.5	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.48	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	106	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 40 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 BOTTOM	14-05-1270-39-AA	05/13/14 14:45	Sediment	GC 66	05/23/14	05/28/14 13:51	140523L11

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.43	1.00	
Alpha-BHC	ND	1.4	0.44	1.00	
Beta-BHC	ND	1.4	0.36	1.00	
Delta-BHC	ND	1.4	0.35	1.00	
Gamma-BHC	ND	1.4	0.47	1.00	
Chlordane	ND	14	4.5	1.00	
Dieldrin	ND	1.4	0.45	1.00	
Trans-nonachlor	ND	1.4	0.39	1.00	
2,4'-DDD	ND	1.4	0.46	1.00	
2,4'-DDE	ND	1.4	0.42	1.00	
2,4'-DDT	ND	1.4	0.41	1.00	
4,4'-DDD	ND	1.4	0.43	1.00	
4,4'-DDE	ND	1.4	0.41	1.00	
4,4'-DDT	ND	1.4	0.46	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.38	1.00	
Endosulfan Sulfate	ND	1.4	0.46	1.00	
Endrin	ND	1.4	0.49	1.00	
Endrin Aldehyde	ND	1.4	0.33	1.00	
Endrin Ketone	ND	1.4	0.48	1.00	
Heptachlor	ND	1.4	0.44	1.00	
Heptachlor Epoxide	ND	1.4	0.49	1.00	
Methoxychlor	ND	1.4	0.44	1.00	
Toxaphene	ND	27	8.7	1.00	
Alpha Chlordane	ND	1.4	0.44	1.00	
Gamma Chlordane	ND	1.4	0.43	1.00	
Cis-nonachlor	ND	1.4	0.40	1.00	
Oxychlordane	ND	1.4	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	104	25-145			
Decachlorobiphenyl	96	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 41 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	GC 51	06/09/14	06/11/14 12:00	140609L10

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.6	0.49	1.00	
Alpha-BHC	ND	1.6	0.51	1.00	
Beta-BHC	ND	1.6	0.41	1.00	
Delta-BHC	ND	1.6	0.40	1.00	
Gamma-BHC	ND	1.6	0.54	1.00	
Chlordane	ND	16	5.1	1.00	
Dieldrin	ND	1.6	0.51	1.00	
Trans-nonachlor	ND	1.6	0.45	1.00	
2,4'-DDD	ND	1.6	0.53	1.00	
2,4'-DDE	2.6	1.6	0.48	1.00	
2,4'-DDT	ND	1.6	0.47	1.00	
4,4'-DDD	0.82	1.6	0.49	1.00	J
4,4'-DDE	2.5	1.6	0.47	1.00	
4,4'-DDT	8.1	1.6	0.52	1.00	
Endosulfan I	ND	1.6	0.41	1.00	
Endosulfan II	ND	1.6	0.44	1.00	
Endosulfan Sulfate	ND	1.6	0.53	1.00	
Endrin	ND	1.6	0.56	1.00	
Endrin Aldehyde	ND	1.6	0.38	1.00	
Endrin Ketone	ND	1.6	0.54	1.00	
Heptachlor	ND	1.6	0.50	1.00	
Heptachlor Epoxide	ND	1.6	0.55	1.00	
Methoxychlor	ND	1.6	0.51	1.00	
Toxaphene	ND	31	9.9	1.00	
Alpha Chlordane	ND	1.6	0.50	1.00	
Gamma Chlordane	ND	1.6	0.50	1.00	
Cis-nonachlor	ND	1.6	0.46	1.00	
Oxychlordane	ND	1.6	0.44	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	98	25-145			
Decachlorobiphenyl	91	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	GC 51	06/09/14	06/11/14 12:15	140609L10

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.0	0.62	1.00	
Alpha-BHC	ND	2.0	0.63	1.00	
Beta-BHC	ND	2.0	0.52	1.00	
Delta-BHC	ND	2.0	0.50	1.00	
Gamma-BHC	ND	2.0	0.68	1.00	
Chlordane	ND	20	6.4	1.00	
Dieldrin	ND	2.0	0.65	1.00	
Trans-nonachlor	ND	2.0	0.56	1.00	
2,4'-DDD	ND	2.0	0.66	1.00	
2,4'-DDE	0.73	2.0	0.60	1.00	J
2,4'-DDT	ND	2.0	0.59	1.00	
4,4'-DDD	ND	2.0	0.62	1.00	
4,4'-DDE	0.93	2.0	0.59	1.00	J
4,4'-DDT	ND	2.0	0.65	1.00	
Endosulfan I	ND	2.0	0.51	1.00	
Endosulfan II	ND	2.0	0.55	1.00	
Endosulfan Sulfate	ND	2.0	0.66	1.00	
Endrin	ND	2.0	0.70	1.00	
Endrin Aldehyde	ND	2.0	0.48	1.00	
Endrin Ketone	ND	2.0	0.68	1.00	
Heptachlor	ND	2.0	0.63	1.00	
Heptachlor Epoxide	ND	2.0	0.70	1.00	
Methoxychlor	ND	2.0	0.64	1.00	
Toxaphene	ND	39	12	1.00	
Alpha Chlordane	ND	2.0	0.63	1.00	
Gamma Chlordane	ND	2.0	0.62	1.00	
Cis-nonachlor	ND	2.0	0.57	1.00	
Oxychlordane	ND	2.0	0.55	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	117	25-145			
Decachlorobiphenyl	108	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-280	N/A	Solid	GC 66	05/21/14	05/24/14 10:27	140521L03

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	119	25-145			
Decachlorobiphenyl	119	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 44 of 45

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-282	N/A	Solid	GC 66	05/23/14	05/27/14 13:54	140523L11

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	112	25-145			
Decachlorobiphenyl	113	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-288	N/A	Solid	GC 51	06/09/14	06/11/14 10:49	140609L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	123	25-145			
Decachlorobiphenyl	110	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 1 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-AA	05/12/14 09:53	Sediment	GC/MS MM	05/25/14	05/28/14 12:56	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.5	1.00	
2,4,5-Trichlorophenol	ND	15	4.8	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	4.5	15	4.0	1.00	J
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	280	740	80	1.00	J
2-Chlorophenol	ND	15	5.0	1.00	
2-Methylnaphthalene	ND	15	5.3	1.00	
2-Methylphenol	ND	15	7.8	1.00	
2-Nitrophenol	4.8	15	3.5	1.00	J
3/4-Methylphenol	ND	15	3.8	1.00	
4,6-Dinitro-2-Methylphenol	ND	740	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	740	95	1.00	
Acenaphthene	ND	15	7.0	1.00	
Acenaphthylene	ND	15	6.7	1.00	
Anthracene	ND	15	8.0	1.00	
Benzo (a) Anthracene	ND	15	7.0	1.00	
Benzo (a) Pyrene	ND	15	7.5	1.00	
Benzo (b) Fluoranthene	ND	15	7.7	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.8	1.00	
Bis(2-Ethylhexyl) Phthalate	25	15	6.0	1.00	B
Butyl Benzyl Phthalate	36	15	6.6	1.00	
Chrysene	ND	15	7.6	1.00	
Di-n-Butyl Phthalate	ND	15	7.6	1.00	
Di-n-Octyl Phthalate	ND	15	7.0	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	9.2	15	7.4	1.00	J
Dimethyl Phthalate	130	15	8.0	1.00	
Fluoranthene	ND	15	8.6	1.00	
Fluorene	ND	15	7.6	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.6	1.00	
Pentachlorophenol	260	740	1.9	1.00	J
Phenanthrene	ND	15	8.5	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.0	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.5	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.8	1.00	
2,6-Dichlorophenol	ND	15	8.8	1.00	
Benzoic Acid	220	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.6	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.3	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	46	15	5.3	1.00	
Biphenyl	ND	15	6.0	1.00	
2,6-Dimethylnaphthalene	ND	15	5.0	1.00	
Isophorone	ND	150	18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	82	32-143			
2-Fluorobiphenyl	74	14-146			
2-Fluorophenol	67	15-138			
Nitrobenzene-d5	72	18-162			
p-Terphenyl-d14	70	34-148			
Phenol-d6	69	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 3 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 TOP	14-05-1270-3-AA	05/12/14 10:30	Sediment	GC/MS MM	05/25/14	05/28/14 13:22	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.6	1.00	
2,4,5-Trichlorophenol	ND	15	4.9	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	ND	15	4.0	1.00	
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	ND	750	81	1.00	
2-Chlorophenol	ND	15	5.1	1.00	
2-Methylnaphthalene	ND	15	5.4	1.00	
2-Methylphenol	ND	15	7.9	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	750	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	750	96	1.00	
Acenaphthene	ND	15	7.1	1.00	
Acenaphthylene	ND	15	6.8	1.00	
Anthracene	ND	15	8.2	1.00	
Benzo (a) Anthracene	ND	15	7.1	1.00	
Benzo (a) Pyrene	52	15	7.6	1.00	
Benzo (b) Fluoranthene	ND	15	7.8	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.9	1.00	
Bis(2-Ethylhexyl) Phthalate	21	15	6.1	1.00	B
Butyl Benzyl Phthalate	27	15	6.7	1.00	
Chrysene	ND	15	7.7	1.00	
Di-n-Butyl Phthalate	ND	15	7.7	1.00	
Di-n-Octyl Phthalate	ND	15	7.1	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	ND	15	7.5	1.00	
Dimethyl Phthalate	110	15	8.1	1.00	
Fluoranthene	ND	15	8.8	1.00	
Fluorene	ND	15	7.7	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.7	1.00	
Pentachlorophenol	ND	750	1.9	1.00	
Phenanthrene	ND	15	8.7	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.1	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.9	1.00	
2,6-Dichlorophenol	ND	15	8.9	1.00	
Benzoic Acid	210	150	19	1.00	
DCPA	ND	15	3.6	1.00	
Dibenzothiophene	ND	15	8.7	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.4	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	46	15	5.4	1.00	
Biphenyl	ND	15	6.1	1.00	
2,6-Dimethylnaphthalene	ND	15	5.1	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	76	32-143			
2-Fluorobiphenyl	64	14-146			
2-Fluorophenol	55	15-138			
Nitrobenzene-d5	54	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	56	17-141			

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 TOP	14-05-1270-5-AA	05/12/14 11:15	Sediment	GC/MS MM	05/25/14	05/28/14 13:48	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	19	7.0	1.00	
2,4,5-Trichlorophenol	ND	19	6.1	1.00	
2,4,6-Trichlorophenol	ND	19	6.8	1.00	
2,4-Dichlorophenol	ND	19	5.1	1.00	
2,4-Dimethylphenol	ND	19	5.8	1.00	
2,4-Dinitrophenol	ND	940	100	1.00	
2-Chlorophenol	ND	19	6.4	1.00	
2-Methylnaphthalene	12	19	6.8	1.00	J
2-Methylphenol	ND	19	9.9	1.00	
2-Nitrophenol	ND	19	4.5	1.00	
3/4-Methylphenol	ND	19	4.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	940	130	1.00	
4-Chloro-3-Methylphenol	ND	19	6.7	1.00	
4-Nitrophenol	ND	940	120	1.00	
Acenaphthene	ND	19	8.9	1.00	
Acenaphthylene	ND	19	8.6	1.00	
Anthracene	ND	19	10	1.00	
Benzo (a) Anthracene	14	19	8.9	1.00	J
Benzo (a) Pyrene	11	19	9.6	1.00	J
Benzo (b) Fluoranthene	14	19	9.8	1.00	J
Benzo (g,h,i) Perylene	8.5	19	8.0	1.00	J
Benzo (k) Fluoranthene	ND	19	12	1.00	
Bis(2-Ethylhexyl) Phthalate	20	19	7.7	1.00	B
Butyl Benzyl Phthalate	27	19	8.4	1.00	
Chrysene	12	19	9.6	1.00	J
Di-n-Butyl Phthalate	ND	19	9.7	1.00	
Di-n-Octyl Phthalate	ND	19	8.9	1.00	
Dibenz (a,h) Anthracene	ND	19	7.1	1.00	
Diethyl Phthalate	ND	19	9.4	1.00	
Dimethyl Phthalate	160	19	10	1.00	
Fluoranthene	19	19	11	1.00	
Fluorene	ND	19	9.6	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	19	8.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	35	19	7.2	1.00	
Pentachlorophenol	ND	940	2.4	1.00	
Phenanthrene	ND	19	11	1.00	
Phenol	ND	19	7.0	1.00	
Pyrene	26	19	10	1.00	
1,6,7-Trimethylnaphthalene	ND	19	5.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	19	7.4	1.00	
2,6-Dichlorophenol	ND	19	11	1.00	
Benzoic Acid	270	190	24	1.00	
DCPA	ND	19	4.5	1.00	
Dibenzothiophene	ND	19	11	1.00	
Perthane	ND	19	2.5	1.00	
1-Methylphenanthrene	ND	19	6.8	1.00	
Benzo (e) Pyrene	10	19	4.6	1.00	J
Perylene	170	19	6.7	1.00	
Biphenyl	ND	19	7.7	1.00	
2,6-Dimethylnaphthalene	ND	19	6.4	1.00	
Isophorone	ND	190	24	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	74	32-143			
2-Fluorobiphenyl	56	14-146			
2-Fluorophenol	40	15-138			
Nitrobenzene-d5	38	18-162			
p-Terphenyl-d14	65	34-148			
Phenol-d6	43	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 7 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-AA	05/12/14 13:45	Sediment	GC/MS MM	05/25/14	05/28/14 14:14	140525L07

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.5	1.00	
2,4,5-Trichlorophenol	ND	15	4.8	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	ND	15	4.0	1.00	
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	ND	740	80	1.00	
2-Chlorophenol	ND	15	5.0	1.00	
2-Methylnaphthalene	ND	15	5.3	1.00	
2-Methylphenol	ND	15	7.8	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.8	1.00	
4,6-Dinitro-2-Methylphenol	ND	740	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	740	95	1.00	
Acenaphthene	ND	15	7.0	1.00	
Acenaphthylene	ND	15	6.7	1.00	
Anthracene	ND	15	8.0	1.00	
Benzo (a) Anthracene	ND	15	7.0	1.00	
Benzo (a) Pyrene	ND	15	7.5	1.00	
Benzo (b) Fluoranthene	ND	15	7.7	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.8	1.00	
Bis(2-Ethylhexyl) Phthalate	19	15	6.0	1.00	B
Butyl Benzyl Phthalate	24	15	6.6	1.00	
Chrysene	ND	15	7.6	1.00	
Di-n-Butyl Phthalate	ND	15	7.6	1.00	
Di-n-Octyl Phthalate	ND	15	7.0	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	ND	15	7.4	1.00	
Dimethyl Phthalate	150	15	8.0	1.00	
Fluoranthene	ND	15	8.6	1.00	
Fluorene	ND	15	7.6	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.6	1.00	
Pentachlorophenol	ND	740	1.9	1.00	
Phenanthrene	ND	15	8.5	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.0	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.5	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.8	1.00	
2,6-Dichlorophenol	ND	15	8.8	1.00	
Benzoic Acid	210	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.6	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.3	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	34	15	5.3	1.00	
Biphenyl	ND	15	6.0	1.00	
2,6-Dimethylnaphthalene	ND	15	5.0	1.00	
Isophorone	ND	150	18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	80	32-143			
2-Fluorobiphenyl	67	14-146			
2-Fluorophenol	55	15-138			
Nitrobenzene-d5	52	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	56	17-141			



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 TOP	14-05-1270-9-AA	05/12/14 12:50	Sediment	GC/MS MM	05/25/14	05/28/14 14:40	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.4	1.00	
2,4,5-Trichlorophenol	ND	15	4.8	1.00	
2,4,6-Trichlorophenol	ND	15	5.3	1.00	
2,4-Dichlorophenol	ND	15	3.9	1.00	
2,4-Dimethylphenol	ND	15	4.5	1.00	
2,4-Dinitrophenol	ND	730	79	1.00	
2-Chlorophenol	ND	15	4.9	1.00	
2-Methylnaphthalene	ND	15	5.2	1.00	
2-Methylphenol	ND	15	7.7	1.00	
2-Nitrophenol	ND	15	3.5	1.00	
3/4-Methylphenol	ND	15	3.8	1.00	
4,6-Dinitro-2-Methylphenol	ND	730	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.2	1.00	
4-Nitrophenol	ND	730	93	1.00	
Acenaphthene	ND	15	6.8	1.00	
Acenaphthylene	ND	15	6.6	1.00	
Anthracene	ND	15	7.9	1.00	
Benzo (a) Anthracene	ND	15	6.9	1.00	
Benzo (a) Pyrene	24	15	7.4	1.00	
Benzo (b) Fluoranthene	ND	15	7.5	1.00	
Benzo (g,h,i) Perylene	ND	15	6.2	1.00	
Benzo (k) Fluoranthene	ND	15	9.6	1.00	
Bis(2-Ethylhexyl) Phthalate	17	15	5.9	1.00	B
Butyl Benzyl Phthalate	27	15	6.5	1.00	
Chrysene	ND	15	7.4	1.00	
Di-n-Butyl Phthalate	ND	15	7.5	1.00	
Di-n-Octyl Phthalate	ND	15	6.9	1.00	
Dibenz (a,h) Anthracene	ND	15	5.5	1.00	
Diethyl Phthalate	ND	15	7.3	1.00	
Dimethyl Phthalate	190	15	7.8	1.00	
Fluoranthene	ND	15	8.5	1.00	
Fluorene	ND	15	7.5	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.5	1.00	
Pentachlorophenol	ND	730	1.9	1.00	
Phenanthrene	ND	15	8.4	1.00	
Phenol	ND	15	5.4	1.00	
Pyrene	ND	15	7.8	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.4	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.7	1.00	
2,6-Dichlorophenol	ND	15	8.7	1.00	
Benzoic Acid	210	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.5	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.2	1.00	
Benzo (e) Pyrene	ND	15	3.5	1.00	
Perylene	22	15	5.2	1.00	
Biphenyl	ND	15	5.9	1.00	
2,6-Dimethylnaphthalene	ND	15	5.0	1.00	
Isophorone	ND	150	18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	77	32-143			
2-Fluorobiphenyl	69	14-146			
2-Fluorophenol	58	15-138			
Nitrobenzene-d5	60	18-162			
p-Terphenyl-d14	72	34-148			
Phenol-d6	54	17-141			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-AA	05/12/14 12:00	Sediment	GC/MS MM	05/25/14	05/28/14 15:05	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	16	5.9	1.00	
2,4,5-Trichlorophenol	ND	16	5.2	1.00	
2,4,6-Trichlorophenol	ND	16	5.7	1.00	
2,4-Dichlorophenol	ND	16	4.3	1.00	
2,4-Dimethylphenol	ND	16	4.9	1.00	
2,4-Dinitrophenol	ND	790	86	1.00	
2-Chlorophenol	ND	16	5.4	1.00	
2-Methylnaphthalene	ND	16	5.7	1.00	
2-Methylphenol	ND	16	8.4	1.00	
2-Nitrophenol	ND	16	3.8	1.00	
3/4-Methylphenol	ND	16	4.1	1.00	
4,6-Dinitro-2-Methylphenol	ND	790	110	1.00	
4-Chloro-3-Methylphenol	ND	16	5.6	1.00	
4-Nitrophenol	ND	790	100	1.00	
Acenaphthene	ND	16	7.4	1.00	
Acenaphthylene	ND	16	7.2	1.00	
Anthracene	ND	16	8.6	1.00	
Benzo (a) Anthracene	ND	16	7.5	1.00	
Benzo (a) Pyrene	ND	16	8.0	1.00	
Benzo (b) Fluoranthene	ND	16	8.2	1.00	
Benzo (g,h,i) Perylene	ND	16	6.7	1.00	
Benzo (k) Fluoranthene	ND	16	10	1.00	
Bis(2-Ethylhexyl) Phthalate	37	16	6.5	1.00	B
Butyl Benzyl Phthalate	190	16	7.0	1.00	
Chrysene	ND	16	8.1	1.00	
Di-n-Butyl Phthalate	ND	16	8.2	1.00	
Di-n-Octyl Phthalate	ND	16	7.5	1.00	
Dibenz (a,h) Anthracene	ND	16	5.9	1.00	
Diethyl Phthalate	ND	16	7.9	1.00	
Dimethyl Phthalate	150	16	8.5	1.00	
Fluoranthene	10	16	9.2	1.00	J
Fluorene	ND	16	8.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	16	7.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	16	6.0	1.00	
Pentachlorophenol	ND	790	2.0	1.00	
Phenanthrene	ND	16	9.1	1.00	
Phenol	ND	16	5.9	1.00	
Pyrene	11	16	8.5	1.00	J
1,6,7-Trimethylnaphthalene	ND	16	4.8	1.00	
2,3,4,6-Tetrachlorophenol	ND	16	6.2	1.00	
2,6-Dichlorophenol	ND	16	9.4	1.00	
Benzoic Acid	220	160	20	1.00	
DCPA	ND	16	3.8	1.00	
Dibenzothiophene	ND	16	9.2	1.00	
Perthane	ND	16	2.1	1.00	
1-Methylphenanthrene	ND	16	5.7	1.00	
Benzo (e) Pyrene	5.1	16	3.8	1.00	J
Perylene	60	16	5.7	1.00	
Biphenyl	ND	16	6.4	1.00	
2,6-Dimethylnaphthalene	ND	16	5.4	1.00	
Isophorone	ND	160	20	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	76	32-143	
2-Fluorobiphenyl	69	14-146	
2-Fluorophenol	57	15-138	
Nitrobenzene-d5	59	18-162	
p-Terphenyl-d14	69	34-148	
Phenol-d6	48	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-AA	05/12/14 13:50	Sediment	GC/MS MM	05/25/14	05/28/14 15:31	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.6	1.00	
2,4,5-Trichlorophenol	ND	15	4.9	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	ND	15	4.0	1.00	
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	ND	750	81	1.00	
2-Chlorophenol	ND	15	5.1	1.00	
2-Methylnaphthalene	ND	15	5.4	1.00	
2-Methylphenol	ND	15	7.9	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	750	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	750	96	1.00	
Acenaphthene	ND	15	7.0	1.00	
Acenaphthylene	ND	15	6.8	1.00	
Anthracene	ND	15	8.1	1.00	
Benzo (a) Anthracene	ND	15	7.1	1.00	
Benzo (a) Pyrene	ND	15	7.6	1.00	
Benzo (b) Fluoranthene	ND	15	7.8	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.9	1.00	
Bis(2-Ethylhexyl) Phthalate	20	15	6.1	1.00	B
Butyl Benzyl Phthalate	28	15	6.6	1.00	
Chrysene	ND	15	7.6	1.00	
Di-n-Butyl Phthalate	ND	15	7.7	1.00	
Di-n-Octyl Phthalate	ND	15	7.1	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	ND	15	7.5	1.00	
Dimethyl Phthalate	170	15	8.1	1.00	
Fluoranthene	ND	15	8.7	1.00	
Fluorene	ND	15	7.7	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.7	1.00	
Pentachlorophenol	ND	750	1.9	1.00	
Phenanthrene	ND	15	8.7	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.1	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.9	1.00	
2,6-Dichlorophenol	ND	15	8.9	1.00	
Benzoic Acid	220	150	19	1.00	
DCPA	ND	15	3.6	1.00	
Dibenzothiophene	ND	15	8.7	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.4	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	29	15	5.4	1.00	
Biphenyl	ND	15	6.1	1.00	
2,6-Dimethylnaphthalene	ND	15	5.1	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	88	32-143			
2-Fluorobiphenyl	80	14-146			
2-Fluorophenol	72	15-138			
Nitrobenzene-d5	78	18-162			
p-Terphenyl-d14	74	34-148			
Phenol-d6	70	17-141			



Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 15 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-AA	05/12/14 14:45	Sediment	GC/MS MM	05/25/14	05/28/14 15:57	140525L07

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	18	6.9	1.00	
2,4,5-Trichlorophenol	ND	18	6.0	1.00	
2,4,6-Trichlorophenol	ND	18	6.7	1.00	
2,4-Dichlorophenol	ND	18	4.9	1.00	
2,4-Dimethylphenol	ND	18	5.7	1.00	
2,4-Dinitrophenol	ND	920	100	1.00	
2-Chlorophenol	ND	18	6.2	1.00	
2-Methylnaphthalene	ND	18	6.6	1.00	
2-Methylphenol	ND	18	9.7	1.00	
2-Nitrophenol	ND	18	4.4	1.00	
3/4-Methylphenol	ND	18	4.7	1.00	
4,6-Dinitro-2-Methylphenol	ND	920	130	1.00	
4-Chloro-3-Methylphenol	ND	18	6.6	1.00	
4-Nitrophenol	ND	920	120	1.00	
Acenaphthene	ND	18	8.7	1.00	
Acenaphthylene	ND	18	8.4	1.00	
Anthracene	ND	18	10	1.00	
Benzo (a) Anthracene	ND	18	8.7	1.00	
Benzo (a) Pyrene	210	18	9.3	1.00	
Benzo (b) Fluoranthene	ND	18	9.5	1.00	
Benzo (g,h,i) Perylene	ND	18	7.8	1.00	
Benzo (k) Fluoranthene	ND	18	12	1.00	
Bis(2-Ethylhexyl) Phthalate	24	18	7.5	1.00	B
Butyl Benzyl Phthalate	34	18	8.2	1.00	
Chrysene	ND	18	9.4	1.00	
Di-n-Butyl Phthalate	ND	18	9.5	1.00	
Di-n-Octyl Phthalate	ND	18	8.7	1.00	
Dibenz (a,h) Anthracene	ND	18	6.9	1.00	
Diethyl Phthalate	ND	18	9.2	1.00	
Dimethyl Phthalate	190	18	9.9	1.00	
Fluoranthene	ND	18	11	1.00	
Fluorene	ND	18	9.4	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	18	8.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	18	7.0	1.00	
Pentachlorophenol	ND	920	2.4	1.00	
Phenanthrene	ND	18	11	1.00	
Phenol	ND	18	6.8	1.00	
Pyrene	ND	18	9.9	1.00	
1,6,7-Trimethylnaphthalene	ND	18	5.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	18	7.2	1.00	
2,6-Dichlorophenol	ND	18	11	1.00	
Benzoic Acid	270	180	23	1.00	
DCPA	ND	18	4.4	1.00	
Dibenzothiophene	ND	18	11	1.00	
Perthane	ND	18	2.4	1.00	
1-Methylphenanthrene	ND	18	6.6	1.00	
Benzo (e) Pyrene	ND	18	4.5	1.00	
Perylene	180	18	6.6	1.00	
Biphenyl	ND	18	7.5	1.00	
2,6-Dimethylnaphthalene	ND	18	6.3	1.00	
Isophorone	ND	180	23	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	76	32-143	
2-Fluorobiphenyl	69	14-146	
2-Fluorophenol	47	15-138	
Nitrobenzene-d5	55	18-162	
p-Terphenyl-d14	65	34-148	
Phenol-d6	51	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-AA	05/12/14 16:15	Sediment	GC/MS MM	05/25/14	05/28/14 23:31	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	14	5.3	1.00	
2,4,5-Trichlorophenol	ND	14	4.6	1.00	
2,4,6-Trichlorophenol	ND	14	5.2	1.00	
2,4-Dichlorophenol	ND	14	3.8	1.00	
2,4-Dimethylphenol	ND	14	4.4	1.00	
2,4-Dinitrophenol	ND	710	77	1.00	
2-Chlorophenol	ND	14	4.8	1.00	
2-Methylnaphthalene	ND	14	5.1	1.00	
2-Methylphenol	ND	14	7.5	1.00	
2-Nitrophenol	ND	14	3.4	1.00	
3/4-Methylphenol	ND	14	3.7	1.00	
4,6-Dinitro-2-Methylphenol	ND	710	99	1.00	
4-Chloro-3-Methylphenol	ND	14	5.1	1.00	
4-Nitrophenol	ND	710	91	1.00	
Acenaphthene	ND	14	6.7	1.00	
Acenaphthylene	ND	14	6.5	1.00	
Anthracene	ND	14	7.7	1.00	
Benzo (a) Anthracene	13	14	6.7	1.00	J
Benzo (a) Pyrene	ND	14	7.2	1.00	
Benzo (b) Fluoranthene	11	14	7.4	1.00	J
Benzo (g,h,i) Perylene	7.4	14	6.0	1.00	J
Benzo (k) Fluoranthene	ND	14	9.4	1.00	
Bis(2-Ethylhexyl) Phthalate	18	14	5.8	1.00	B
Butyl Benzyl Phthalate	28	14	6.3	1.00	
Chrysene	8.5	14	7.3	1.00	J
Di-n-Butyl Phthalate	ND	14	7.3	1.00	
Di-n-Octyl Phthalate	ND	14	6.8	1.00	
Dibenz (a,h) Anthracene	ND	14	5.3	1.00	
Diethyl Phthalate	ND	14	7.1	1.00	
Dimethyl Phthalate	150	14	7.7	1.00	
Fluoranthene	20	14	8.3	1.00	
Fluorene	ND	14	7.3	1.00	
Indeno (1,2,3-c,d) Pyrene	7.5	14	6.5	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	14	5.4	1.00	
Pentachlorophenol	ND	710	1.8	1.00	
Phenanthrene	ND	14	8.2	1.00	
Phenol	ND	14	5.3	1.00	
Pyrene	21	14	7.7	1.00	
1,6,7-Trimethylnaphthalene	ND	14	4.3	1.00	
2,3,4,6-Tetrachlorophenol	ND	14	5.6	1.00	
2,6-Dichlorophenol	ND	14	8.5	1.00	
Benzoic Acid	200	140	18	1.00	
DCPA	ND	14	3.4	1.00	
Dibenzothiophene	ND	14	8.3	1.00	
Perthane	ND	14	1.9	1.00	
1-Methylphenanthrene	ND	14	5.1	1.00	
Benzo (e) Pyrene	7.3	14	3.4	1.00	J
Perylene	39	14	5.1	1.00	
Biphenyl	ND	14	5.8	1.00	
2,6-Dimethylnaphthalene	ND	14	4.9	1.00	
Isophorone	ND	140	18	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	80	32-143	
2-Fluorobiphenyl	73	14-146	
2-Fluorophenol	65	15-138	
Nitrobenzene-d5	67	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	61	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-AA	05/12/14 15:50	Sediment	GC/MS MM	05/25/14	05/28/14 23:57	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	14	5.2	1.00	
2,4,5-Trichlorophenol	ND	14	4.5	1.00	
2,4,6-Trichlorophenol	ND	14	5.0	1.00	
2,4-Dichlorophenol	ND	14	3.7	1.00	
2,4-Dimethylphenol	ND	14	4.3	1.00	
2,4-Dinitrophenol	ND	700	75	1.00	
2-Chlorophenol	ND	14	4.7	1.00	
2-Methylnaphthalene	ND	14	5.0	1.00	
2-Methylphenol	ND	14	7.3	1.00	
2-Nitrophenol	ND	14	3.3	1.00	
3/4-Methylphenol	ND	14	3.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	700	97	1.00	
4-Chloro-3-Methylphenol	ND	14	5.0	1.00	
4-Nitrophenol	ND	700	89	1.00	
Acenaphthene	ND	14	6.5	1.00	
Acenaphthylene	ND	14	6.3	1.00	
Anthracene	ND	14	7.6	1.00	
Benzo (a) Anthracene	6.6	14	6.6	1.00	J
Benzo (a) Pyrene	ND	14	7.1	1.00	
Benzo (b) Fluoranthene	7.6	14	7.2	1.00	J
Benzo (g,h,i) Perylene	ND	14	5.9	1.00	
Benzo (k) Fluoranthene	ND	14	9.2	1.00	
Bis(2-Ethylhexyl) Phthalate	37	14	5.7	1.00	B
Butyl Benzyl Phthalate	83	14	6.2	1.00	
Chrysene	ND	14	7.1	1.00	
Di-n-Butyl Phthalate	ND	14	7.2	1.00	
Di-n-Octyl Phthalate	ND	14	6.6	1.00	
Dibenz (a,h) Anthracene	ND	14	5.2	1.00	
Diethyl Phthalate	ND	14	7.0	1.00	
Dimethyl Phthalate	130	14	7.5	1.00	
Fluoranthene	ND	14	8.1	1.00	
Fluorene	ND	14	7.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	14	6.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	14	5.3	1.00	
Pentachlorophenol	ND	700	1.8	1.00	
Phenanthrene	ND	14	8.0	1.00	
Phenol	ND	14	5.1	1.00	
Pyrene	9.5	14	7.5	1.00	J
1,6,7-Trimethylnaphthalene	ND	14	4.2	1.00	
2,3,4,6-Tetrachlorophenol	ND	14	5.4	1.00	
2,6-Dichlorophenol	ND	14	8.3	1.00	
Benzoic Acid	200	140	17	1.00	
DCPA	ND	14	3.3	1.00	
Dibenzothiophene	ND	14	8.1	1.00	
Perthane	ND	14	1.8	1.00	
1-Methylphenanthrene	ND	14	5.0	1.00	
Benzo (e) Pyrene	5.4	14	3.4	1.00	J
Perylene	89	14	5.0	1.00	
Biphenyl	ND	14	5.7	1.00	
2,6-Dimethylnaphthalene	ND	14	4.7	1.00	
Isophorone	ND	140	17	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	89	32-143			
2-Fluorobiphenyl	80	14-146			
2-Fluorophenol	70	15-138			
Nitrobenzene-d5	74	18-162			
p-Terphenyl-d14	76	34-148			
Phenol-d6	67	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-AA	05/13/14 12:15	Sediment	GC/MS MM	05/25/14	05/29/14 00:22	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	40	15	1.00	
2,4,5-Trichlorophenol	ND	40	13	1.00	
2,4,6-Trichlorophenol	ND	40	14	1.00	
2,4-Dichlorophenol	ND	40	11	1.00	
2,4-Dimethylphenol	ND	40	12	1.00	
2,4-Dinitrophenol	ND	2000	210	1.00	
2-Chlorophenol	ND	40	13	1.00	
2-Methylnaphthalene	ND	40	14	1.00	
2-Methylphenol	ND	40	21	1.00	
2-Nitrophenol	ND	40	9.5	1.00	
3/4-Methylphenol	ND	40	10	1.00	
4,6-Dinitro-2-Methylphenol	ND	2000	270	1.00	
4-Chloro-3-Methylphenol	ND	40	14	1.00	
4-Nitrophenol	ND	2000	250	1.00	
Acenaphthene	ND	40	19	1.00	
Acenaphthylene	ND	40	18	1.00	
Anthracene	ND	40	21	1.00	
Benzo (a) Anthracene	ND	40	19	1.00	
Benzo (a) Pyrene	ND	40	20	1.00	
Benzo (b) Fluoranthene	ND	40	20	1.00	
Benzo (g,h,i) Perylene	ND	40	17	1.00	
Benzo (k) Fluoranthene	ND	40	26	1.00	
Bis(2-Ethylhexyl) Phthalate	46	40	16	1.00	B
Butyl Benzyl Phthalate	60	40	18	1.00	
Chrysene	ND	40	20	1.00	
Di-n-Butyl Phthalate	ND	40	20	1.00	
Di-n-Octyl Phthalate	ND	40	19	1.00	
Dibenz (a,h) Anthracene	ND	40	15	1.00	
Diethyl Phthalate	ND	40	20	1.00	
Dimethyl Phthalate	360	40	21	1.00	
Fluoranthene	ND	40	23	1.00	
Fluorene	ND	40	20	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	40	18	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	40	15	1.00	
Pentachlorophenol	ND	2000	5.1	1.00	
Phenanthrene	ND	40	23	1.00	
Phenol	ND	40	15	1.00	
Pyrene	22	40	21	1.00	J
1,6,7-Trimethylnaphthalene	ND	40	12	1.00	
2,3,4,6-Tetrachlorophenol	ND	40	15	1.00	
2,6-Dichlorophenol	ND	40	23	1.00	
Benzoic Acid	560	400	49	1.00	
DCPA	ND	40	9.4	1.00	
Dibenzothiophene	ND	40	23	1.00	
Perthane	ND	40	5.1	1.00	
1-Methylphenanthrene	ND	40	14	1.00	
Benzo (e) Pyrene	12	40	9.6	1.00	J
Perylene	440	40	14	1.00	
Biphenyl	ND	40	16	1.00	
2,6-Dimethylnaphthalene	ND	40	13	1.00	
Isophorone	ND	400	49	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	78	32-143			
2-Fluorobiphenyl	55	14-146			
2-Fluorophenol	48	15-138			
Nitrobenzene-d5	48	18-162			
p-Terphenyl-d14	65	34-148			
Phenol-d6	45	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-AA	05/13/14 12:30	Sediment	GC/MS MM	05/25/14	05/29/14 00:48	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	37	14	1.00	
2,4,5-Trichlorophenol	ND	37	12	1.00	
2,4,6-Trichlorophenol	ND	37	13	1.00	
2,4-Dichlorophenol	ND	37	10	1.00	
2,4-Dimethylphenol	ND	37	11	1.00	
2,4-Dinitrophenol	ND	1900	200	1.00	
2-Chlorophenol	ND	37	13	1.00	
2-Methylnaphthalene	ND	37	13	1.00	
2-Methylphenol	ND	37	20	1.00	
2-Nitrophenol	ND	37	8.9	1.00	
3/4-Methylphenol	ND	37	9.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	1900	260	1.00	
4-Chloro-3-Methylphenol	ND	37	13	1.00	
4-Nitrophenol	ND	1900	240	1.00	
Acenaphthene	ND	37	17	1.00	
Acenaphthylene	ND	37	17	1.00	
Anthracene	ND	37	20	1.00	
Benzo (a) Anthracene	ND	37	17	1.00	
Benzo (a) Pyrene	ND	37	19	1.00	
Benzo (b) Fluoranthene	20	37	19	1.00	J
Benzo (g,h,i) Perylene	ND	37	16	1.00	
Benzo (k) Fluoranthene	ND	37	25	1.00	
Bis(2-Ethylhexyl) Phthalate	67	37	15	1.00	B
Butyl Benzyl Phthalate	43	37	16	1.00	
Chrysene	ND	37	19	1.00	
Di-n-Butyl Phthalate	ND	37	19	1.00	
Di-n-Octyl Phthalate	ND	37	18	1.00	
Dibenz (a,h) Anthracene	ND	37	14	1.00	
Diethyl Phthalate	ND	37	19	1.00	
Dimethyl Phthalate	440	37	20	1.00	
Fluoranthene	23	37	22	1.00	J
Fluorene	ND	37	19	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	37	17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	37	14	1.00	
Pentachlorophenol	ND	1900	4.8	1.00	
Phenanthrene	ND	37	21	1.00	
Phenol	ND	37	14	1.00	
Pyrene	24	37	20	1.00	J
1,6,7-Trimethylnaphthalene	ND	37	11	1.00	
2,3,4,6-Tetrachlorophenol	ND	37	15	1.00	
2,6-Dichlorophenol	ND	37	22	1.00	
Benzoic Acid	540	370	46	1.00	
DCPA	ND	37	8.9	1.00	
Dibenzothiophene	ND	37	22	1.00	
Perthane	ND	37	4.8	1.00	
1-Methylphenanthrene	ND	37	13	1.00	
Benzo (e) Pyrene	13	37	9.0	1.00	J
Perylene	480	37	13	1.00	
Biphenyl	ND	37	15	1.00	
2,6-Dimethylnaphthalene	ND	37	13	1.00	
Isophorone	ND	370	46	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	91	32-143			
2-Fluorobiphenyl	60	14-146			
2-Fluorophenol	50	15-138			
Nitrobenzene-d5	47	18-162			
p-Terphenyl-d14	74	34-148			
Phenol-d6	43	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 25 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-AA	05/13/14 12:45	Sediment	GC/MS MM	05/25/14	05/29/14 01:13	140525L07

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	37	14	1.00	
2,4,5-Trichlorophenol	ND	37	12	1.00	
2,4,6-Trichlorophenol	ND	37	13	1.00	
2,4-Dichlorophenol	ND	37	9.9	1.00	
2,4-Dimethylphenol	ND	37	11	1.00	
2,4-Dinitrophenol	ND	1800	200	1.00	
2-Chlorophenol	ND	37	12	1.00	
2-Methylnaphthalene	ND	37	13	1.00	
2-Methylphenol	ND	37	19	1.00	
2-Nitrophenol	ND	37	8.8	1.00	
3/4-Methylphenol	ND	37	9.5	1.00	
4,6-Dinitro-2-Methylphenol	ND	1800	260	1.00	
4-Chloro-3-Methylphenol	ND	37	13	1.00	
4-Nitrophenol	ND	1800	240	1.00	
Acenaphthene	ND	37	17	1.00	
Acenaphthylene	ND	37	17	1.00	
Anthracene	ND	37	20	1.00	
Benzo (a) Anthracene	ND	37	17	1.00	
Benzo (a) Pyrene	ND	37	19	1.00	
Benzo (b) Fluoranthene	21	37	19	1.00	J
Benzo (g,h,i) Perylene	16	37	16	1.00	J
Benzo (k) Fluoranthene	ND	37	24	1.00	
Bis(2-Ethylhexyl) Phthalate	38	37	15	1.00	B
Butyl Benzyl Phthalate	42	37	16	1.00	
Chrysene	ND	37	19	1.00	
Di-n-Butyl Phthalate	ND	37	19	1.00	
Di-n-Octyl Phthalate	ND	37	17	1.00	
Dibenz (a,h) Anthracene	ND	37	14	1.00	
Diethyl Phthalate	ND	37	18	1.00	
Dimethyl Phthalate	450	37	20	1.00	
Fluoranthene	24	37	21	1.00	J
Fluorene	ND	37	19	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	37	17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	37	14	1.00	
Pentachlorophenol	ND	1800	4.7	1.00	
Phenanthrene	ND	37	21	1.00	
Phenol	ND	37	14	1.00	
Pyrene	25	37	20	1.00	J
1,6,7-Trimethylnaphthalene	ND	37	11	1.00	
2,3,4,6-Tetrachlorophenol	ND	37	14	1.00	
2,6-Dichlorophenol	ND	37	22	1.00	
Benzoic Acid	530	370	46	1.00	
DCPA	ND	37	8.8	1.00	
Dibenzothiophene	ND	37	21	1.00	
Perthane	ND	37	4.8	1.00	
1-Methylphenanthrene	ND	37	13	1.00	
Benzo (e) Pyrene	15	37	8.9	1.00	J
Perylene	450	37	13	1.00	
Biphenyl	ND	37	15	1.00	
2,6-Dimethylnaphthalene	ND	37	13	1.00	
Isophorone	ND	370	46	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	66	32-143	
2-Fluorobiphenyl	52	14-146	
2-Fluorophenol	40	15-138	
Nitrobenzene-d5	42	18-162	
p-Terphenyl-d14	57	34-148	
Phenol-d6	45	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	GC/MS MM	05/25/14	05/29/14 01:39	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	19	6.9	1.00	
2,4,5-Trichlorophenol	ND	19	6.1	1.00	
2,4,6-Trichlorophenol	ND	19	6.7	1.00	
2,4-Dichlorophenol	ND	19	5.0	1.00	
2,4-Dimethylphenol	ND	19	5.7	1.00	
2,4-Dinitrophenol	ND	930	100	1.00	
2-Chlorophenol	ND	19	6.3	1.00	
2-Methylnaphthalene	ND	19	6.7	1.00	
2-Methylphenol	ND	19	9.8	1.00	
2-Nitrophenol	ND	19	4.5	1.00	
3/4-Methylphenol	8.8	19	4.8	1.00	J
4,6-Dinitro-2-Methylphenol	ND	930	130	1.00	
4-Chloro-3-Methylphenol	ND	19	6.6	1.00	
4-Nitrophenol	ND	930	120	1.00	
Acenaphthene	ND	19	8.7	1.00	
Acenaphthylene	ND	19	8.5	1.00	
Anthracene	ND	19	10	1.00	
Benzo (a) Anthracene	18	19	8.8	1.00	J
Benzo (a) Pyrene	16	19	9.4	1.00	J
Benzo (b) Fluoranthene	20	19	9.6	1.00	
Benzo (g,h,i) Perylene	12	19	7.9	1.00	J
Benzo (k) Fluoranthene	ND	19	12	1.00	
Bis(2-Ethylhexyl) Phthalate	21	19	7.6	1.00	B
Butyl Benzyl Phthalate	31	19	8.2	1.00	
Chrysene	21	19	9.5	1.00	
Di-n-Butyl Phthalate	ND	19	9.6	1.00	
Di-n-Octyl Phthalate	ND	19	8.8	1.00	
Dibenz (a,h) Anthracene	ND	19	7.0	1.00	
Diethyl Phthalate	ND	19	9.3	1.00	
Dimethyl Phthalate	200	19	10	1.00	
Fluoranthene	18	19	11	1.00	J
Fluorene	ND	19	9.5	1.00	
Indeno (1,2,3-c,d) Pyrene	13	19	8.5	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	19	7.1	1.00	
Pentachlorophenol	ND	930	2.4	1.00	
Phenanthrene	12	19	11	1.00	J
Phenol	ND	19	6.9	1.00	
Pyrene	28	19	10	1.00	
1,6,7-Trimethylnaphthalene	ND	19	5.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	19	7.3	1.00	
2,6-Dichlorophenol	ND	19	11	1.00	
Benzoic Acid	270	190	23	1.00	
DCPA	ND	19	4.4	1.00	
Dibenzothiophene	ND	19	11	1.00	
Perthane	ND	19	2.4	1.00	
1-Methylphenanthrene	ND	19	6.7	1.00	
Benzo (e) Pyrene	15	19	4.5	1.00	J
Perylene	470	19	6.6	1.00	
Biphenyl	ND	19	7.6	1.00	
2,6-Dimethylnaphthalene	ND	19	6.3	1.00	
Isophorone	ND	190	23	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	67	32-143	
2-Fluorobiphenyl	53	14-146	
2-Fluorophenol	38	15-138	
Nitrobenzene-d5	39	18-162	
p-Terphenyl-d14	59	34-148	
Phenol-d6	39	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-AA	05/13/14 09:10	Sediment	GC/MS MM	05/25/14	05/29/14 02:04	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	14	5.2	1.00	
2,4,5-Trichlorophenol	ND	14	4.6	1.00	
2,4,6-Trichlorophenol	ND	14	5.1	1.00	
2,4-Dichlorophenol	ND	14	3.8	1.00	
2,4-Dimethylphenol	ND	14	4.3	1.00	
2,4-Dinitrophenol	ND	700	76	1.00	
2-Chlorophenol	ND	14	4.7	1.00	
2-Methylnaphthalene	ND	14	5.0	1.00	
2-Methylphenol	ND	14	7.4	1.00	
2-Nitrophenol	ND	14	3.4	1.00	
3/4-Methylphenol	ND	14	3.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	700	97	1.00	
4-Chloro-3-Methylphenol	ND	14	5.0	1.00	
4-Nitrophenol	ND	700	90	1.00	
Acenaphthene	ND	14	6.6	1.00	
Acenaphthylene	ND	14	6.4	1.00	
Anthracene	ND	14	7.6	1.00	
Benzo (a) Anthracene	ND	14	6.6	1.00	
Benzo (a) Pyrene	48	14	7.1	1.00	
Benzo (b) Fluoranthene	ND	14	7.3	1.00	
Benzo (g,h,i) Perylene	ND	14	5.9	1.00	
Benzo (k) Fluoranthene	ND	14	9.3	1.00	
Bis(2-Ethylhexyl) Phthalate	16	14	5.7	1.00	B
Butyl Benzyl Phthalate	19	14	6.2	1.00	
Chrysene	ND	14	7.1	1.00	
Di-n-Butyl Phthalate	ND	14	7.2	1.00	
Di-n-Octyl Phthalate	ND	14	6.6	1.00	
Dibenz (a,h) Anthracene	ND	14	5.3	1.00	
Diethyl Phthalate	7.2	14	7.0	1.00	J
Dimethyl Phthalate	200	14	7.5	1.00	
Fluoranthene	ND	14	8.2	1.00	
Fluorene	ND	14	7.2	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	14	6.4	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

Page 30 of 52

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	14	5.3	1.00	
Pentachlorophenol	ND	700	1.8	1.00	
Phenanthrene	ND	14	8.1	1.00	
Phenol	ND	14	5.2	1.00	
Pyrene	ND	14	7.5	1.00	
1,6,7-Trimethylnaphthalene	ND	14	4.3	1.00	
2,3,4,6-Tetrachlorophenol	ND	14	5.5	1.00	
2,6-Dichlorophenol	ND	14	8.3	1.00	
Benzoic Acid	200	140	17	1.00	
DCPA	ND	14	3.3	1.00	
Dibenzothiophene	ND	14	8.1	1.00	
Perthane	ND	14	1.8	1.00	
1-Methylphenanthrene	ND	14	5.0	1.00	
Benzo (e) Pyrene	ND	14	3.4	1.00	
Perylene	42	14	5.0	1.00	
Biphenyl	ND	14	5.7	1.00	
2,6-Dimethylnaphthalene	ND	14	4.8	1.00	
Isophorone	ND	140	17	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	79	32-143	
2-Fluorobiphenyl	69	14-146	
2-Fluorophenol	54	15-138	
Nitrobenzene-d5	53	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	57	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP DUP	14-05-1270-29-AA	05/13/14 09:40	Sediment	GC/MS MM	05/25/14	05/29/14 02:30	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	20	7.4	1.00	
2,4,5-Trichlorophenol	ND	20	6.4	1.00	
2,4,6-Trichlorophenol	ND	20	7.2	1.00	
2,4-Dichlorophenol	ND	20	5.3	1.00	
2,4-Dimethylphenol	ND	20	6.1	1.00	
2,4-Dinitrophenol	ND	990	110	1.00	
2-Chlorophenol	ND	20	6.7	1.00	
2-Methylnaphthalene	ND	20	7.1	1.00	
2-Methylphenol	ND	20	10	1.00	
2-Nitrophenol	ND	20	4.7	1.00	
3/4-Methylphenol	ND	20	5.1	1.00	
4,6-Dinitro-2-Methylphenol	ND	990	140	1.00	
4-Chloro-3-Methylphenol	ND	20	7.0	1.00	
4-Nitrophenol	ND	990	130	1.00	
Acenaphthene	ND	20	9.3	1.00	
Acenaphthylene	ND	20	9.0	1.00	
Anthracene	ND	20	11	1.00	
Benzo (a) Anthracene	ND	20	9.3	1.00	
Benzo (a) Pyrene	160	20	10	1.00	
Benzo (b) Fluoranthene	ND	20	10	1.00	
Benzo (g,h,i) Perylene	ND	20	8.3	1.00	
Benzo (k) Fluoranthene	ND	20	13	1.00	
Bis(2-Ethylhexyl) Phthalate	28	20	8.0	1.00	B
Butyl Benzyl Phthalate	39	20	8.8	1.00	
Chrysene	ND	20	10	1.00	
Di-n-Butyl Phthalate	ND	20	10	1.00	
Di-n-Octyl Phthalate	ND	20	9.4	1.00	
Dibenz (a,h) Anthracene	ND	20	7.4	1.00	
Diethyl Phthalate	ND	20	9.9	1.00	
Dimethyl Phthalate	190	20	11	1.00	
Fluoranthene	ND	20	12	1.00	
Fluorene	ND	20	10	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	20	9.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	20	7.5	1.00	
Pentachlorophenol	ND	990	2.5	1.00	
Phenanthrene	ND	20	11	1.00	
Phenol	ND	20	7.3	1.00	
Pyrene	ND	20	11	1.00	
1,6,7-Trimethylnaphthalene	ND	20	6.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	20	7.7	1.00	
2,6-Dichlorophenol	ND	20	12	1.00	
Benzoic Acid	290	200	25	1.00	
DCPA	ND	20	4.7	1.00	
Dibenzothiophene	ND	20	11	1.00	
Perthane	ND	20	2.6	1.00	
1-Methylphenanthrene	ND	20	7.1	1.00	
Benzo (e) Pyrene	ND	20	4.8	1.00	
Perylene	140	20	7.1	1.00	
Biphenyl	ND	20	8.0	1.00	
2,6-Dimethylnaphthalene	ND	20	6.7	1.00	
Isophorone	ND	200	25	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	64	32-143			
2-Fluorobiphenyl	56	14-146			
2-Fluorophenol	47	15-138			
Nitrobenzene-d5	50	18-162			
p-Terphenyl-d14	55	34-148			
Phenol-d6	51	17-141			

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 33 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP	14-05-1270-30-AA	05/13/14 10:25	Sediment	GC/MS MM	05/25/14	05/29/14 02:56	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	20	7.6	1.00	
2,4,5-Trichlorophenol	ND	20	6.6	1.00	
2,4,6-Trichlorophenol	ND	20	7.3	1.00	
2,4-Dichlorophenol	ND	20	5.4	1.00	
2,4-Dimethylphenol	ND	20	6.2	1.00	
2,4-Dinitrophenol	ND	1000	110	1.00	
2-Chlorophenol	ND	20	6.8	1.00	
2-Methylnaphthalene	ND	20	7.3	1.00	
2-Methylphenol	ND	20	11	1.00	
2-Nitrophenol	ND	20	4.8	1.00	
3/4-Methylphenol	ND	20	5.2	1.00	
4,6-Dinitro-2-Methylphenol	ND	1000	140	1.00	
4-Chloro-3-Methylphenol	ND	20	7.2	1.00	
4-Nitrophenol	ND	1000	130	1.00	
Acenaphthene	ND	20	9.5	1.00	
Acenaphthylene	ND	20	9.2	1.00	
Anthracene	ND	20	11	1.00	
Benzo (a) Anthracene	ND	20	9.5	1.00	
Benzo (a) Pyrene	310	20	10	1.00	
Benzo (b) Fluoranthene	ND	20	10	1.00	
Benzo (g,h,i) Perylene	ND	20	8.5	1.00	
Benzo (k) Fluoranthene	ND	20	13	1.00	
Bis(2-Ethylhexyl) Phthalate	29	20	8.2	1.00	B
Butyl Benzyl Phthalate	46	20	9.0	1.00	
Chrysene	ND	20	10	1.00	
Di-n-Butyl Phthalate	ND	20	10	1.00	
Di-n-Octyl Phthalate	ND	20	9.6	1.00	
Dibenz (a,h) Anthracene	ND	20	7.6	1.00	
Diethyl Phthalate	ND	20	10	1.00	
Dimethyl Phthalate	250	20	11	1.00	
Fluoranthene	ND	20	12	1.00	
Fluorene	ND	20	10	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	20	9.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	9.5	20	7.7	1.00	J
Pentachlorophenol	ND	1000	2.6	1.00	
Phenanthrene	ND	20	12	1.00	
Phenol	ND	20	7.5	1.00	
Pyrene	ND	20	11	1.00	
1,6,7-Trimethylnaphthalene	ND	20	6.2	1.00	
2,3,4,6-Tetrachlorophenol	ND	20	7.9	1.00	
2,6-Dichlorophenol	ND	20	12	1.00	
Benzoic Acid	300	200	25	1.00	
DCPA	ND	20	4.8	1.00	
Dibenzothiophene	ND	20	12	1.00	
Perthane	ND	20	2.6	1.00	
1-Methylphenanthrene	ND	20	7.3	1.00	
Benzo (e) Pyrene	ND	20	4.9	1.00	
Perylene	270	20	7.2	1.00	
Biphenyl	ND	20	8.2	1.00	
2,6-Dimethylnaphthalene	ND	20	6.9	1.00	
Isophorone	ND	200	25	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	84	32-143			
2-Fluorobiphenyl	67	14-146			
2-Fluorophenol	48	15-138			
Nitrobenzene-d5	49	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	55	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 TOP	14-05-1270-32-AA	05/13/14 10:55	Sediment	GC/MS MM	05/25/14	05/29/14 03:22	140525L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	25	9.3	1.00	
2,4,5-Trichlorophenol	ND	25	8.1	1.00	
2,4,6-Trichlorophenol	ND	25	9.0	1.00	
2,4-Dichlorophenol	ND	25	6.7	1.00	
2,4-Dimethylphenol	ND	25	7.7	1.00	
2,4-Dinitrophenol	ND	1200	130	1.00	
2-Chlorophenol	ND	25	8.4	1.00	
2-Methylnaphthalene	ND	25	8.9	1.00	
2-Methylphenol	ND	25	13	1.00	
2-Nitrophenol	ND	25	6.0	1.00	
3/4-Methylphenol	ND	25	6.4	1.00	
4,6-Dinitro-2-Methylphenol	ND	1200	170	1.00	
4-Chloro-3-Methylphenol	ND	25	8.9	1.00	
4-Nitrophenol	ND	1200	160	1.00	
Acenaphthene	ND	25	12	1.00	
Acenaphthylene	ND	25	11	1.00	
Anthracene	ND	25	14	1.00	
Benzo (a) Anthracene	ND	25	12	1.00	
Benzo (a) Pyrene	200	25	13	1.00	
Benzo (b) Fluoranthene	ND	25	13	1.00	
Benzo (g,h,i) Perylene	ND	25	11	1.00	
Benzo (k) Fluoranthene	ND	25	16	1.00	
Bis(2-Ethylhexyl) Phthalate	52	25	10	1.00	B
Butyl Benzyl Phthalate	59	25	11	1.00	
Chrysene	ND	25	13	1.00	
Di-n-Butyl Phthalate	ND	25	13	1.00	
Di-n-Octyl Phthalate	ND	25	12	1.00	
Dibenz (a,h) Anthracene	ND	25	9.3	1.00	
Diethyl Phthalate	ND	25	12	1.00	
Dimethyl Phthalate	320	25	13	1.00	
Fluoranthene	ND	25	15	1.00	
Fluorene	ND	25	13	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	25	11	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	25	9.5	1.00	
Pentachlorophenol	ND	1200	3.2	1.00	
Phenanthrene	ND	25	14	1.00	
Phenol	ND	25	9.2	1.00	
Pyrene	13	25	13	1.00	J
1,6,7-Trimethylnaphthalene	ND	25	7.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	25	9.7	1.00	
2,6-Dichlorophenol	ND	25	15	1.00	
Benzoic Acid	360	250	31	1.00	
DCPA	ND	25	5.9	1.00	
Dibenzothiophene	ND	25	14	1.00	
Perthane	ND	25	3.2	1.00	
1-Methylphenanthrene	ND	25	9.0	1.00	
Benzo (e) Pyrene	ND	25	6.0	1.00	
Perylene	170	25	8.9	1.00	
Biphenyl	ND	25	10	1.00	
2,6-Dimethylnaphthalene	ND	25	8.5	1.00	
Isophorone	ND	250	31	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	89	32-143			
2-Fluorobiphenyl	64	14-146			
2-Fluorophenol	50	15-138			
Nitrobenzene-d5	52	18-162			
p-Terphenyl-d14	74	34-148			
Phenol-d6	54	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 37 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 TOP	14-05-1270-34-AA	05/13/14 11:20	Sediment	GC/MS MM	05/25/14	05/29/14 03:47	140525L07

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	28	10	1.00	
2,4,5-Trichlorophenol	ND	28	9.0	1.00	
2,4,6-Trichlorophenol	ND	28	10	1.00	
2,4-Dichlorophenol	ND	28	7.4	1.00	
2,4-Dimethylphenol	ND	28	8.5	1.00	
2,4-Dinitrophenol	ND	1400	150	1.00	
2-Chlorophenol	ND	28	9.3	1.00	
2-Methylnaphthalene	ND	28	9.9	1.00	
2-Methylphenol	ND	28	15	1.00	
2-Nitrophenol	ND	28	6.6	1.00	
3/4-Methylphenol	ND	28	7.1	1.00	
4,6-Dinitro-2-Methylphenol	ND	1400	190	1.00	
4-Chloro-3-Methylphenol	ND	28	9.8	1.00	
4-Nitrophenol	ND	1400	180	1.00	
Acenaphthene	ND	28	13	1.00	
Acenaphthylene	ND	28	13	1.00	
Anthracene	ND	28	15	1.00	
Benzo (a) Anthracene	ND	28	13	1.00	
Benzo (a) Pyrene	330	28	14	1.00	
Benzo (b) Fluoranthene	ND	28	14	1.00	
Benzo (g,h,i) Perylene	ND	28	12	1.00	
Benzo (k) Fluoranthene	ND	28	18	1.00	
Bis(2-Ethylhexyl) Phthalate	69	28	11	1.00	B
Butyl Benzyl Phthalate	69	28	12	1.00	
Chrysene	ND	28	14	1.00	
Di-n-Butyl Phthalate	ND	28	14	1.00	
Di-n-Octyl Phthalate	ND	28	13	1.00	
Dibenz (a,h) Anthracene	ND	28	10	1.00	
Diethyl Phthalate	ND	28	14	1.00	
Dimethyl Phthalate	270	28	15	1.00	
Fluoranthene	19	28	16	1.00	J
Fluorene	ND	28	14	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	28	13	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	28	10	1.00	
Pentachlorophenol	ND	1400	3.5	1.00	
Phenanthrene	ND	28	16	1.00	
Phenol	ND	28	10	1.00	
Pyrene	17	28	15	1.00	J
1,6,7-Trimethylnaphthalene	ND	28	8.4	1.00	
2,3,4,6-Tetrachlorophenol	ND	28	11	1.00	
2,6-Dichlorophenol	ND	28	16	1.00	
Benzoic Acid	400	280	34	1.00	
DCPA	ND	28	6.6	1.00	
Dibenzothiophene	ND	28	16	1.00	
Perthane	ND	28	3.6	1.00	
1-Methylphenanthrene	ND	28	9.9	1.00	
Benzo (e) Pyrene	7.5	28	6.7	1.00	J
Perylene	290	28	9.8	1.00	
Biphenyl	ND	28	11	1.00	
2,6-Dimethylnaphthalene	ND	28	9.4	1.00	
Isophorone	ND	280	34	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	85	32-143			
2-Fluorobiphenyl	68	14-146			
2-Fluorophenol	49	15-138			
Nitrobenzene-d5	52	18-162			
p-Terphenyl-d14	72	34-148			
Phenol-d6	54	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-AA	05/13/14 13:05	Sediment	GC/MS MM	05/25/14	05/29/14 04:13	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	14	5.1	1.00	
2,4,5-Trichlorophenol	ND	14	4.4	1.00	
2,4,6-Trichlorophenol	ND	14	4.9	1.00	
2,4-Dichlorophenol	ND	14	3.6	1.00	
2,4-Dimethylphenol	ND	14	4.2	1.00	
2,4-Dinitrophenol	ND	680	73	1.00	
2-Chlorophenol	ND	14	4.6	1.00	
2-Methylnaphthalene	ND	14	4.9	1.00	
2-Methylphenol	ND	14	7.2	1.00	
2-Nitrophenol	ND	14	3.3	1.00	
3/4-Methylphenol	ND	14	3.5	1.00	
4,6-Dinitro-2-Methylphenol	ND	680	94	1.00	
4-Chloro-3-Methylphenol	ND	14	4.8	1.00	
4-Nitrophenol	ND	680	87	1.00	
Acenaphthene	ND	14	6.4	1.00	
Acenaphthylene	ND	14	6.2	1.00	
Anthracene	ND	14	7.4	1.00	
Benzo (a) Anthracene	ND	14	6.4	1.00	
Benzo (a) Pyrene	16	14	6.9	1.00	
Benzo (b) Fluoranthene	ND	14	7.0	1.00	
Benzo (g,h,i) Perylene	ND	14	5.7	1.00	
Benzo (k) Fluoranthene	ND	14	9.0	1.00	
Bis(2-Ethylhexyl) Phthalate	26	14	5.5	1.00	B
Butyl Benzyl Phthalate	30	14	6.0	1.00	
Chrysene	ND	14	6.9	1.00	
Di-n-Butyl Phthalate	ND	14	7.0	1.00	
Di-n-Octyl Phthalate	ND	14	6.4	1.00	
Dibenz (a,h) Anthracene	ND	14	5.1	1.00	
Diethyl Phthalate	ND	14	6.8	1.00	
Dimethyl Phthalate	140	14	7.3	1.00	
Fluoranthene	ND	14	7.9	1.00	
Fluorene	ND	14	6.9	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	14	6.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	14	5.2	1.00	
Pentachlorophenol	ND	680	1.7	1.00	
Phenanthrene	ND	14	7.8	1.00	
Phenol	ND	14	5.0	1.00	
Pyrene	ND	14	7.3	1.00	
1,6,7-Trimethylnaphthalene	ND	14	4.1	1.00	
2,3,4,6-Tetrachlorophenol	ND	14	5.3	1.00	
2,6-Dichlorophenol	ND	14	8.1	1.00	
Benzoic Acid	190	140	17	1.00	
DCPA	ND	14	3.2	1.00	
Dibenzothiophene	ND	14	7.9	1.00	
Perthane	ND	14	1.8	1.00	
1-Methylphenanthrene	ND	14	4.9	1.00	
Benzo (e) Pyrene	ND	14	3.3	1.00	
Perylene	14	14	4.8	1.00	
Biphenyl	ND	14	5.5	1.00	
2,6-Dimethylnaphthalene	ND	14	4.6	1.00	
Isophorone	ND	140	17	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	78	32-143			
2-Fluorobiphenyl	69	14-146			
2-Fluorophenol	56	15-138			
Nitrobenzene-d5	60	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	59	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 TOP	14-05-1270-38-AA	05/13/14 15:00	Sediment	GC/MS MM	05/25/14	05/29/14 04:38	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.6	1.00	
2,4,5-Trichlorophenol	ND	15	4.9	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	ND	15	4.0	1.00	
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	ND	750	81	1.00	
2-Chlorophenol	ND	15	5.1	1.00	
2-Methylnaphthalene	ND	15	5.4	1.00	
2-Methylphenol	ND	15	7.9	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	750	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	750	96	1.00	
Acenaphthene	ND	15	7.0	1.00	
Acenaphthylene	ND	15	6.8	1.00	
Anthracene	ND	15	8.1	1.00	
Benzo (a) Anthracene	ND	15	7.1	1.00	
Benzo (a) Pyrene	17	15	7.6	1.00	
Benzo (b) Fluoranthene	ND	15	7.8	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.9	1.00	
Bis(2-Ethylhexyl) Phthalate	35	15	6.1	1.00	B
Butyl Benzyl Phthalate	37	15	6.6	1.00	
Chrysene	11	15	7.6	1.00	J
Di-n-Butyl Phthalate	ND	15	7.7	1.00	
Di-n-Octyl Phthalate	ND	15	7.1	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	8.3	15	7.5	1.00	J
Dimethyl Phthalate	210	15	8.1	1.00	
Fluoranthene	ND	15	8.7	1.00	
Fluorene	ND	15	7.7	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	6.0	15	5.7	1.00	J
Pentachlorophenol	ND	750	1.9	1.00	
Phenanthrene	ND	15	8.7	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.1	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.9	1.00	
2,6-Dichlorophenol	ND	15	8.9	1.00	
Benzoic Acid	220	150	19	1.00	
DCPA	ND	15	3.6	1.00	
Dibenzothiophene	ND	15	8.7	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.4	1.00	
Benzo (e) Pyrene	4.3	15	3.6	1.00	J
Perylene	15	15	5.4	1.00	J
Biphenyl	ND	15	6.1	1.00	
2,6-Dimethylnaphthalene	ND	15	5.1	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	75	32-143			
2-Fluorobiphenyl	70	14-146			
2-Fluorophenol	60	15-138			
Nitrobenzene-d5	64	18-162			
p-Terphenyl-d14	69	34-148			
Phenol-d6	62	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	GC/MS MM	06/09/14	06/10/14 16:34	140609L12

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.7	1.00	
2,4,5-Trichlorophenol	ND	15	5.0	1.00	
2,4,6-Trichlorophenol	ND	15	5.6	1.00	
2,4-Dichlorophenol	ND	15	4.1	1.00	
2,4-Dimethylphenol	ND	15	4.7	1.00	
2,4-Dinitrophenol	ND	770	83	1.00	
2-Chlorophenol	ND	15	5.2	1.00	
2-Methylnaphthalene	ND	15	5.5	1.00	
2-Methylphenol	ND	15	8.1	1.00	
2-Nitrophenol	ND	15	3.7	1.00	
3/4-Methylphenol	ND	15	4.0	1.00	
4,6-Dinitro-2-Methylphenol	ND	770	110	1.00	
4-Chloro-3-Methylphenol	ND	15	5.5	1.00	
4-Nitrophenol	ND	770	99	1.00	
Acenaphthene	ND	15	7.2	1.00	
Acenaphthylene	ND	15	7.0	1.00	
Anthracene	ND	15	8.4	1.00	
Benzo (a) Anthracene	ND	15	7.2	1.00	
Benzo (a) Pyrene	ND	15	7.8	1.00	
Benzo (b) Fluoranthene	ND	15	8.0	1.00	
Benzo (g,h,i) Perylene	ND	15	6.5	1.00	
Benzo (k) Fluoranthene	ND	15	10	1.00	
Bis(2-Ethylhexyl) Phthalate	16	15	6.3	1.00	
Butyl Benzyl Phthalate	24	15	6.8	1.00	
Chrysene	ND	15	7.8	1.00	
Di-n-Butyl Phthalate	ND	15	7.9	1.00	
Di-n-Octyl Phthalate	ND	15	7.3	1.00	
Dibenz (a,h) Anthracene	ND	15	5.8	1.00	
Diethyl Phthalate	ND	15	7.7	1.00	
Dimethyl Phthalate	220	15	8.3	1.00	
Fluoranthene	ND	15	9.0	1.00	
Fluorene	ND	15	7.9	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	7.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.9	1.00	
Pentachlorophenol	ND	770	2.0	1.00	
Phenanthrene	ND	15	8.9	1.00	
Phenol	ND	15	5.7	1.00	
Pyrene	ND	15	8.3	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	6.0	1.00	
2,6-Dichlorophenol	ND	15	9.1	1.00	
Benzoic Acid	210	150	19	1.00	
DCPA	ND	15	3.7	1.00	
Dibenzothiophene	ND	15	8.9	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.5	1.00	
Benzo (e) Pyrene	ND	15	3.7	1.00	
Perylene	60	15	5.5	1.00	
Biphenyl	ND	15	6.3	1.00	
2,6-Dimethylnaphthalene	ND	15	5.2	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	65	32-143			
2-Fluorobiphenyl	65	14-146			
2-Fluorophenol	60	15-138			
Nitrobenzene-d5	70	18-162			
p-Terphenyl-d14	61	34-148			
Phenol-d6	64	17-141			

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 45 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	GC/MS MM	06/09/14	06/10/14 17:00	140609L12

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	20	7.3	1.00	
2,4,5-Trichlorophenol	ND	20	6.3	1.00	
2,4,6-Trichlorophenol	ND	20	7.0	1.00	
2,4-Dichlorophenol	ND	20	5.2	1.00	
2,4-Dimethylphenol	ND	20	6.0	1.00	
2,4-Dinitrophenol	ND	980	110	1.00	
2-Chlorophenol	ND	20	6.6	1.00	
2-Methylnaphthalene	ND	20	7.0	1.00	
2-Methylphenol	ND	20	10	1.00	
2-Nitrophenol	ND	20	4.7	1.00	
3/4-Methylphenol	ND	20	5.0	1.00	
4,6-Dinitro-2-Methylphenol	ND	980	140	1.00	
4-Chloro-3-Methylphenol	ND	20	6.9	1.00	
4-Nitrophenol	ND	980	120	1.00	
Acenaphthene	ND	20	9.1	1.00	
Acenaphthylene	ND	20	8.9	1.00	
Anthracene	ND	20	11	1.00	
Benzo (a) Anthracene	ND	20	9.2	1.00	
Benzo (a) Pyrene	290	20	9.9	1.00	
Benzo (b) Fluoranthene	ND	20	10	1.00	
Benzo (g,h,i) Perylene	ND	20	8.2	1.00	
Benzo (k) Fluoranthene	ND	20	13	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	20	7.9	1.00	
Butyl Benzyl Phthalate	31	20	8.6	1.00	
Chrysene	ND	20	9.9	1.00	
Di-n-Butyl Phthalate	ND	20	10	1.00	
Di-n-Octyl Phthalate	ND	20	9.2	1.00	
Dibenz (a,h) Anthracene	ND	20	7.3	1.00	
Diethyl Phthalate	ND	20	9.7	1.00	
Dimethyl Phthalate	440	20	10	1.00	
Fluoranthene	ND	20	11	1.00	
Fluorene	ND	20	10	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	20	8.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	20	7.4	1.00	
Pentachlorophenol	ND	980	2.5	1.00	
Phenanthrene	ND	20	11	1.00	
Phenol	ND	20	7.2	1.00	
Pyrene	ND	20	10	1.00	
1,6,7-Trimethylnaphthalene	ND	20	5.9	1.00	
2,3,4,6-Tetrachlorophenol	ND	20	7.6	1.00	
2,6-Dichlorophenol	ND	20	12	1.00	
Benzoic Acid	300	200	24	1.00	
DCPA	ND	20	4.7	1.00	
Dibenzothiophene	ND	20	11	1.00	
Perthane	3.8	20	2.5	1.00	J
1-Methylphenanthrene	ND	20	7.0	1.00	
Benzo (e) Pyrene	ND	20	4.7	1.00	
Perylene	260	20	6.9	1.00	
Biphenyl	ND	20	7.9	1.00	
2,6-Dimethylnaphthalene	7.2	20	6.6	1.00	J
Isophorone	ND	200	24	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	75	32-143			
2-Fluorobiphenyl	73	14-146			
2-Fluorophenol	69	15-138			
Nitrobenzene-d5	79	18-162			
p-Terphenyl-d14	64	34-148			
Phenol-d6	74	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 47 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-79	N/A	Solid	GC/MS MM	05/25/14	05/28/14 12:04	140525L07

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	5.8	10	4.1	1.00	J
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	66	32-143	
2-Fluorobiphenyl	66	14-146	
2-Fluorophenol	52	15-138	
Nitrobenzene-d5	64	18-162	
p-Terphenyl-d14	71	34-148	
Phenol-d6	56	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 49 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-80	N/A	Solid	GC/MS MM	05/25/14	05/28/14 18:23	140525L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	6.2	10	4.1	1.00	J
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	66	32-143	
2-Fluorobiphenyl	63	14-146	
2-Fluorophenol	54	15-138	
Nitrobenzene-d5	60	18-162	
p-Terphenyl-d14	71	34-148	
Phenol-d6	55	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-82	N/A	Solid	GC/MS MM	06/09/14	06/10/14 15:17	140609L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	10	4.1	1.00	
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	85	32-143	
2-Fluorobiphenyl	77	14-146	
2-Fluorophenol	86	15-138	
Nitrobenzene-d5	83	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	79	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 1 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-01 TOP	14-05-1270-1-AA	05/12/14 09:53	Sediment	GC/MS HHH	05/24/14	05/30/14 13:57	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.75	0.18	1.00	
PCB008	ND	0.75	0.13	1.00	
PCB018	ND	0.75	0.23	1.00	
PCB028	ND	0.75	0.15	1.00	
PCB031	ND	0.75	0.17	1.00	
PCB033	ND	0.75	0.16	1.00	
PCB037	ND	0.75	0.20	1.00	
PCB044	ND	0.75	0.20	1.00	
PCB049	ND	0.75	0.18	1.00	
PCB052	ND	0.75	0.14	1.00	
PCB056	ND	0.75	0.21	1.00	
PCB060	ND	0.75	0.16	1.00	
PCB066	ND	0.75	0.14	1.00	
PCB070	ND	0.75	0.12	1.00	
PCB074	ND	0.75	0.14	1.00	
PCB077	ND	0.75	0.15	1.00	
PCB081	ND	0.75	0.18	1.00	
PCB087	ND	0.75	0.15	1.00	
PCB095	ND	0.75	0.25	1.00	
PCB097	ND	0.75	0.20	1.00	
PCB099	ND	0.75	0.13	1.00	
PCB101	ND	0.75	0.12	1.00	
PCB105	ND	0.75	0.16	1.00	
PCB110	ND	0.75	0.15	1.00	
PCB114	ND	0.75	0.15	1.00	
PCB118	ND	0.75	0.20	1.00	
PCB119	ND	0.75	0.13	1.00	
PCB123	ND	0.75	0.13	1.00	
PCB126	ND	0.75	0.21	1.00	
PCB128	ND	0.75	0.15	1.00	
PCB132	ND	0.75	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.75	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.75	0.13	1.00	
PCB151	ND	0.75	0.15	1.00	
PCB153	ND	0.75	0.16	1.00	
PCB156	ND	0.75	0.15	1.00	
PCB157	ND	0.75	0.14	1.00	
PCB167	ND	0.75	0.15	1.00	
PCB168	ND	0.75	0.13	1.00	
PCB169	ND	0.75	0.12	1.00	
PCB170	ND	0.75	0.14	1.00	
PCB174	ND	0.75	0.16	1.00	
PCB177	ND	0.75	0.18	1.00	
PCB180	ND	0.75	0.091	1.00	
PCB183	ND	0.75	0.17	1.00	
PCB184	ND	0.75	0.083	1.00	
PCB187	ND	0.75	0.16	1.00	
PCB189	ND	0.75	0.13	1.00	
PCB194	ND	0.75	0.14	1.00	
PCB195	ND	0.75	0.079	1.00	
PCB200	ND	0.75	0.14	1.00	
PCB201	ND	0.75	0.085	1.00	
PCB203	ND	0.75	0.16	1.00	
PCB206	ND	0.75	0.12	1.00	
PCB209	ND	0.75	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	86	19-133	
p-Terphenyl-d14	62	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 3 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-02 TOP	14-05-1270-3-AA	05/12/14 10:30	Sediment	GC/MS HHH	05/24/14	05/30/14 23:48	140524L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.76	0.18	1.00	
PCB008	ND	0.76	0.13	1.00	
PCB018	ND	0.76	0.24	1.00	
PCB028	ND	0.76	0.15	1.00	
PCB031	ND	0.76	0.18	1.00	
PCB033	ND	0.76	0.16	1.00	
PCB037	ND	0.76	0.20	1.00	
PCB044	ND	0.76	0.20	1.00	
PCB049	ND	0.76	0.18	1.00	
PCB052	ND	0.76	0.15	1.00	
PCB056	ND	0.76	0.21	1.00	
PCB060	ND	0.76	0.16	1.00	
PCB066	ND	0.76	0.14	1.00	
PCB070	ND	0.76	0.12	1.00	
PCB074	ND	0.76	0.14	1.00	
PCB077	ND	0.76	0.15	1.00	
PCB081	ND	0.76	0.18	1.00	
PCB087	ND	0.76	0.15	1.00	
PCB095	ND	0.76	0.25	1.00	
PCB097	ND	0.76	0.21	1.00	
PCB099	ND	0.76	0.13	1.00	
PCB101	ND	0.76	0.12	1.00	
PCB105	ND	0.76	0.16	1.00	
PCB110	ND	0.76	0.16	1.00	
PCB114	ND	0.76	0.15	1.00	
PCB118	ND	0.76	0.20	1.00	
PCB119	ND	0.76	0.13	1.00	
PCB123	ND	0.76	0.13	1.00	
PCB126	ND	0.76	0.21	1.00	
PCB128	ND	0.76	0.16	1.00	
PCB132	ND	0.76	0.25	1.00	
PCB138/158	ND	1.5	0.31	1.00	
PCB141	ND	0.76	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.76	0.14	1.00	
PCB151	ND	0.76	0.16	1.00	
PCB153	ND	0.76	0.16	1.00	
PCB156	ND	0.76	0.15	1.00	
PCB157	ND	0.76	0.14	1.00	
PCB167	ND	0.76	0.15	1.00	
PCB168	ND	0.76	0.13	1.00	
PCB169	ND	0.76	0.12	1.00	
PCB170	ND	0.76	0.14	1.00	
PCB174	ND	0.76	0.16	1.00	
PCB177	ND	0.76	0.19	1.00	
PCB180	ND	0.76	0.093	1.00	
PCB183	ND	0.76	0.17	1.00	
PCB184	ND	0.76	0.085	1.00	
PCB187	ND	0.76	0.16	1.00	
PCB189	ND	0.76	0.13	1.00	
PCB194	ND	0.76	0.14	1.00	
PCB195	ND	0.76	0.080	1.00	
PCB200	ND	0.76	0.14	1.00	
PCB201	ND	0.76	0.086	1.00	
PCB203	ND	0.76	0.16	1.00	
PCB206	ND	0.76	0.13	1.00	
PCB209	ND	0.76	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	78	19-133			
p-Terphenyl-d14	90	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 5 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-03 TOP	14-05-1270-5-AA	05/12/14 11:15	Sediment	GC/MS HHH	05/24/14	05/30/14 14:54	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.96	0.23	1.00	
PCB008	ND	0.96	0.16	1.00	
PCB018	ND	0.96	0.30	1.00	
PCB028	ND	0.96	0.19	1.00	
PCB031	ND	0.96	0.22	1.00	
PCB033	ND	0.96	0.21	1.00	
PCB037	ND	0.96	0.25	1.00	
PCB044	ND	0.96	0.25	1.00	
PCB049	ND	0.96	0.23	1.00	
PCB052	ND	0.96	0.19	1.00	
PCB056	ND	0.96	0.26	1.00	
PCB060	ND	0.96	0.20	1.00	
PCB066	ND	0.96	0.18	1.00	
PCB070	ND	0.96	0.16	1.00	
PCB074	ND	0.96	0.18	1.00	
PCB077	ND	0.96	0.19	1.00	
PCB081	ND	0.96	0.23	1.00	
PCB087	ND	0.96	0.19	1.00	
PCB095	ND	0.96	0.32	1.00	
PCB097	ND	0.96	0.26	1.00	
PCB099	ND	0.96	0.16	1.00	
PCB101	ND	0.96	0.16	1.00	
PCB105	ND	0.96	0.20	1.00	
PCB110	ND	0.96	0.20	1.00	
PCB114	ND	0.96	0.19	1.00	
PCB118	ND	0.96	0.25	1.00	
PCB119	ND	0.96	0.17	1.00	
PCB123	ND	0.96	0.17	1.00	
PCB126	ND	0.96	0.26	1.00	
PCB128	ND	0.96	0.20	1.00	
PCB132	ND	0.96	0.32	1.00	
PCB138/158	ND	1.9	0.39	1.00	
PCB141	ND	0.96	0.21	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.96	0.17	1.00	
PCB151	ND	0.96	0.20	1.00	
PCB153	ND	0.96	0.20	1.00	
PCB156	ND	0.96	0.19	1.00	
PCB157	ND	0.96	0.18	1.00	
PCB167	ND	0.96	0.19	1.00	
PCB168	ND	0.96	0.16	1.00	
PCB169	ND	0.96	0.16	1.00	
PCB170	ND	0.96	0.18	1.00	
PCB174	ND	0.96	0.21	1.00	
PCB177	ND	0.96	0.24	1.00	
PCB180	ND	0.96	0.12	1.00	
PCB183	ND	0.96	0.21	1.00	
PCB184	ND	0.96	0.11	1.00	
PCB187	ND	0.96	0.20	1.00	
PCB189	ND	0.96	0.16	1.00	
PCB194	ND	0.96	0.18	1.00	
PCB195	ND	0.96	0.10	1.00	
PCB200	ND	0.96	0.18	1.00	
PCB201	ND	0.96	0.11	1.00	
PCB203	ND	0.96	0.21	1.00	
PCB206	ND	0.96	0.16	1.00	
PCB209	ND	0.96	0.20	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	362	19-133	1,2,7		
p-Terphenyl-d14	81	33-147			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 7 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-04 TOP	14-05-1270-7-AA	05/12/14 13:45	Sediment	GC/MS HHH	05/24/14	05/30/14 20:07	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.75	0.18	1.00	
PCB008	ND	0.75	0.13	1.00	
PCB018	ND	0.75	0.23	1.00	
PCB028	ND	0.75	0.15	1.00	
PCB031	ND	0.75	0.17	1.00	
PCB033	ND	0.75	0.16	1.00	
PCB037	ND	0.75	0.20	1.00	
PCB044	ND	0.75	0.20	1.00	
PCB049	ND	0.75	0.18	1.00	
PCB052	ND	0.75	0.14	1.00	
PCB056	ND	0.75	0.21	1.00	
PCB060	ND	0.75	0.16	1.00	
PCB066	ND	0.75	0.14	1.00	
PCB070	ND	0.75	0.12	1.00	
PCB074	ND	0.75	0.14	1.00	
PCB077	ND	0.75	0.15	1.00	
PCB081	ND	0.75	0.18	1.00	
PCB087	ND	0.75	0.15	1.00	
PCB095	ND	0.75	0.25	1.00	
PCB097	ND	0.75	0.20	1.00	
PCB099	ND	0.75	0.13	1.00	
PCB101	ND	0.75	0.12	1.00	
PCB105	ND	0.75	0.16	1.00	
PCB110	ND	0.75	0.15	1.00	
PCB114	ND	0.75	0.15	1.00	
PCB118	ND	0.75	0.20	1.00	
PCB119	ND	0.75	0.13	1.00	
PCB123	ND	0.75	0.13	1.00	
PCB126	ND	0.75	0.21	1.00	
PCB128	ND	0.75	0.15	1.00	
PCB132	ND	0.75	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.75	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.75	0.13	1.00	
PCB151	ND	0.75	0.15	1.00	
PCB153	ND	0.75	0.16	1.00	
PCB156	ND	0.75	0.15	1.00	
PCB157	ND	0.75	0.14	1.00	
PCB167	ND	0.75	0.15	1.00	
PCB168	ND	0.75	0.13	1.00	
PCB169	ND	0.75	0.12	1.00	
PCB170	ND	0.75	0.14	1.00	
PCB174	ND	0.75	0.16	1.00	
PCB177	ND	0.75	0.18	1.00	
PCB180	ND	0.75	0.091	1.00	
PCB183	ND	0.75	0.17	1.00	
PCB184	ND	0.75	0.083	1.00	
PCB187	ND	0.75	0.16	1.00	
PCB189	ND	0.75	0.13	1.00	
PCB194	ND	0.75	0.14	1.00	
PCB195	ND	0.75	0.079	1.00	
PCB200	ND	0.75	0.14	1.00	
PCB201	ND	0.75	0.085	1.00	
PCB203	ND	0.75	0.16	1.00	
PCB206	ND	0.75	0.12	1.00	
PCB209	ND	0.75	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	78	19-133	
p-Terphenyl-d14	79	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-05 TOP	14-05-1270-9-AA	05/12/14 12:50	Sediment	GC/MS HHH	05/24/14	05/30/14 15:53	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.72	0.17	1.00	
PCB008	ND	0.72	0.12	1.00	
PCB018	ND	0.72	0.23	1.00	
PCB028	ND	0.72	0.14	1.00	
PCB031	ND	0.72	0.17	1.00	
PCB033	ND	0.72	0.16	1.00	
PCB037	ND	0.72	0.19	1.00	
PCB044	ND	0.72	0.19	1.00	
PCB049	ND	0.72	0.17	1.00	
PCB052	ND	0.72	0.14	1.00	
PCB056	ND	0.72	0.20	1.00	
PCB060	ND	0.72	0.15	1.00	
PCB066	ND	0.72	0.13	1.00	
PCB070	ND	0.72	0.12	1.00	
PCB074	ND	0.72	0.14	1.00	
PCB077	ND	0.72	0.14	1.00	
PCB081	ND	0.72	0.18	1.00	
PCB087	ND	0.72	0.15	1.00	
PCB095	ND	0.72	0.24	1.00	
PCB097	ND	0.72	0.20	1.00	
PCB099	ND	0.72	0.12	1.00	
PCB101	ND	0.72	0.12	1.00	
PCB105	ND	0.72	0.15	1.00	
PCB110	ND	0.72	0.15	1.00	
PCB114	ND	0.72	0.14	1.00	
PCB118	ND	0.72	0.19	1.00	
PCB119	ND	0.72	0.13	1.00	
PCB123	ND	0.72	0.13	1.00	
PCB126	ND	0.72	0.20	1.00	
PCB128	ND	0.72	0.15	1.00	
PCB132	ND	0.72	0.24	1.00	
PCB138/158	ND	1.4	0.29	1.00	
PCB141	ND	0.72	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.72	0.13	1.00	
PCB151	ND	0.72	0.15	1.00	
PCB153	ND	0.72	0.15	1.00	
PCB156	ND	0.72	0.14	1.00	
PCB157	ND	0.72	0.14	1.00	
PCB167	ND	0.72	0.14	1.00	
PCB168	ND	0.72	0.12	1.00	
PCB169	ND	0.72	0.12	1.00	
PCB170	ND	0.72	0.13	1.00	
PCB174	ND	0.72	0.15	1.00	
PCB177	ND	0.72	0.18	1.00	
PCB180	ND	0.72	0.088	1.00	
PCB183	ND	0.72	0.16	1.00	
PCB184	ND	0.72	0.081	1.00	
PCB187	ND	0.72	0.15	1.00	
PCB189	ND	0.72	0.12	1.00	
PCB194	ND	0.72	0.14	1.00	
PCB195	ND	0.72	0.076	1.00	
PCB200	ND	0.72	0.14	1.00	
PCB201	ND	0.72	0.082	1.00	
PCB203	ND	0.72	0.16	1.00	
PCB206	ND	0.72	0.12	1.00	
PCB209	ND	0.72	0.15	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	81	19-133			
p-Terphenyl-d14	49	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 11 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP	14-05-1270-11-AA	05/12/14 12:00	Sediment	GC/MS HHH	05/24/14	05/30/14 16:22	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.80	0.19	1.00	
PCB008	ND	0.80	0.14	1.00	
PCB018	ND	0.80	0.25	1.00	
PCB028	ND	0.80	0.16	1.00	
PCB031	ND	0.80	0.18	1.00	
PCB033	ND	0.80	0.17	1.00	
PCB037	ND	0.80	0.21	1.00	
PCB044	ND	0.80	0.21	1.00	
PCB049	ND	0.80	0.19	1.00	
PCB052	ND	0.80	0.15	1.00	
PCB056	ND	0.80	0.22	1.00	
PCB060	ND	0.80	0.17	1.00	
PCB066	ND	0.80	0.15	1.00	
PCB070	ND	0.80	0.13	1.00	
PCB074	ND	0.80	0.15	1.00	
PCB077	ND	0.80	0.16	1.00	
PCB081	ND	0.80	0.20	1.00	
PCB087	ND	0.80	0.16	1.00	
PCB095	ND	0.80	0.27	1.00	
PCB097	ND	0.80	0.22	1.00	
PCB099	ND	0.80	0.14	1.00	
PCB101	ND	0.80	0.13	1.00	
PCB105	ND	0.80	0.17	1.00	
PCB110	ND	0.80	0.16	1.00	
PCB114	ND	0.80	0.16	1.00	
PCB118	ND	0.80	0.21	1.00	
PCB119	ND	0.80	0.14	1.00	
PCB123	ND	0.80	0.14	1.00	
PCB126	ND	0.80	0.22	1.00	
PCB128	ND	0.80	0.16	1.00	
PCB132	ND	0.80	0.26	1.00	
PCB138/158	ND	1.6	0.32	1.00	
PCB141	ND	0.80	0.18	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.80	0.14	1.00	
PCB151	ND	0.80	0.17	1.00	
PCB153	ND	0.80	0.17	1.00	
PCB156	ND	0.80	0.16	1.00	
PCB157	ND	0.80	0.15	1.00	
PCB167	ND	0.80	0.16	1.00	
PCB168	ND	0.80	0.14	1.00	
PCB169	ND	0.80	0.13	1.00	
PCB170	ND	0.80	0.15	1.00	
PCB174	ND	0.80	0.17	1.00	
PCB177	ND	0.80	0.20	1.00	
PCB180	ND	0.80	0.098	1.00	
PCB183	ND	0.80	0.18	1.00	
PCB184	ND	0.80	0.089	1.00	
PCB187	ND	0.80	0.17	1.00	
PCB189	ND	0.80	0.14	1.00	
PCB194	ND	0.80	0.15	1.00	
PCB195	ND	0.80	0.084	1.00	
PCB200	ND	0.80	0.15	1.00	
PCB201	ND	0.80	0.091	1.00	
PCB203	ND	0.80	0.17	1.00	
PCB206	ND	0.80	0.13	1.00	
PCB209	ND	0.80	0.17	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	74	19-133	
p-Terphenyl-d14	50	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 13 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-07 TOP	14-05-1270-12-AA	05/12/14 13:50	Sediment	GC/MS HHH	05/24/14	05/30/14 16:50	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.75	0.18	1.00	
PCB008	ND	0.75	0.13	1.00	
PCB018	ND	0.75	0.24	1.00	
PCB028	ND	0.75	0.15	1.00	
PCB031	ND	0.75	0.17	1.00	
PCB033	ND	0.75	0.16	1.00	
PCB037	ND	0.75	0.20	1.00	
PCB044	ND	0.75	0.20	1.00	
PCB049	ND	0.75	0.18	1.00	
PCB052	ND	0.75	0.14	1.00	
PCB056	ND	0.75	0.21	1.00	
PCB060	ND	0.75	0.16	1.00	
PCB066	ND	0.75	0.14	1.00	
PCB070	ND	0.75	0.12	1.00	
PCB074	ND	0.75	0.14	1.00	
PCB077	ND	0.75	0.15	1.00	
PCB081	ND	0.75	0.18	1.00	
PCB087	ND	0.75	0.15	1.00	
PCB095	ND	0.75	0.25	1.00	
PCB097	ND	0.75	0.20	1.00	
PCB099	ND	0.75	0.13	1.00	
PCB101	ND	0.75	0.12	1.00	
PCB105	ND	0.75	0.16	1.00	
PCB110	ND	0.75	0.15	1.00	
PCB114	ND	0.75	0.15	1.00	
PCB118	ND	0.75	0.20	1.00	
PCB119	ND	0.75	0.13	1.00	
PCB123	ND	0.75	0.13	1.00	
PCB126	ND	0.75	0.21	1.00	
PCB128	ND	0.75	0.15	1.00	
PCB132	ND	0.75	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.75	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.75	0.13	1.00	
PCB151	ND	0.75	0.15	1.00	
PCB153	ND	0.75	0.16	1.00	
PCB156	ND	0.75	0.15	1.00	
PCB157	ND	0.75	0.14	1.00	
PCB167	ND	0.75	0.15	1.00	
PCB168	ND	0.75	0.13	1.00	
PCB169	ND	0.75	0.12	1.00	
PCB170	ND	0.75	0.14	1.00	
PCB174	ND	0.75	0.16	1.00	
PCB177	ND	0.75	0.18	1.00	
PCB180	ND	0.75	0.091	1.00	
PCB183	ND	0.75	0.17	1.00	
PCB184	ND	0.75	0.084	1.00	
PCB187	ND	0.75	0.16	1.00	
PCB189	ND	0.75	0.13	1.00	
PCB194	ND	0.75	0.14	1.00	
PCB195	ND	0.75	0.079	1.00	
PCB200	ND	0.75	0.14	1.00	
PCB201	ND	0.75	0.085	1.00	
PCB203	ND	0.75	0.16	1.00	
PCB206	ND	0.75	0.12	1.00	
PCB209	ND	0.75	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	61	19-133			
p-Terphenyl-d14	69	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 15 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-08 TOP	14-05-1270-14-AA	05/12/14 14:45	Sediment	GC/MS HHH	05/24/14	05/30/14 17:18	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.94	0.22	1.00	
PCB008	ND	0.94	0.16	1.00	
PCB018	ND	0.94	0.29	1.00	
PCB028	ND	0.94	0.19	1.00	
PCB031	ND	0.94	0.22	1.00	
PCB033	ND	0.94	0.20	1.00	
PCB037	ND	0.94	0.25	1.00	
PCB044	ND	0.94	0.25	1.00	
PCB049	ND	0.94	0.22	1.00	
PCB052	ND	0.94	0.18	1.00	
PCB056	ND	0.94	0.26	1.00	
PCB060	ND	0.94	0.20	1.00	
PCB066	ND	0.94	0.17	1.00	
PCB070	ND	0.94	0.15	1.00	
PCB074	ND	0.94	0.18	1.00	
PCB077	ND	0.94	0.18	1.00	
PCB081	ND	0.94	0.23	1.00	
PCB087	ND	0.94	0.19	1.00	
PCB095	ND	0.94	0.31	1.00	
PCB097	ND	0.94	0.26	1.00	
PCB099	ND	0.94	0.16	1.00	
PCB101	ND	0.94	0.15	1.00	
PCB105	ND	0.94	0.20	1.00	
PCB110	ND	0.94	0.19	1.00	
PCB114	ND	0.94	0.19	1.00	
PCB118	ND	0.94	0.25	1.00	
PCB119	ND	0.94	0.16	1.00	
PCB123	ND	0.94	0.16	1.00	
PCB126	ND	0.94	0.26	1.00	
PCB128	ND	0.94	0.19	1.00	
PCB132	ND	0.94	0.31	1.00	
PCB138/158	ND	1.9	0.38	1.00	
PCB141	ND	0.94	0.21	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.94	0.17	1.00	
PCB151	ND	0.94	0.19	1.00	
PCB153	ND	0.94	0.19	1.00	
PCB156	ND	0.94	0.18	1.00	
PCB157	ND	0.94	0.18	1.00	
PCB167	ND	0.94	0.19	1.00	
PCB168	ND	0.94	0.16	1.00	
PCB169	ND	0.94	0.15	1.00	
PCB170	ND	0.94	0.17	1.00	
PCB174	ND	0.94	0.20	1.00	
PCB177	ND	0.94	0.23	1.00	
PCB180	ND	0.94	0.11	1.00	
PCB183	ND	0.94	0.21	1.00	
PCB184	ND	0.94	0.10	1.00	
PCB187	ND	0.94	0.20	1.00	
PCB189	ND	0.94	0.16	1.00	
PCB194	ND	0.94	0.18	1.00	
PCB195	ND	0.94	0.099	1.00	
PCB200	ND	0.94	0.18	1.00	
PCB201	ND	0.94	0.11	1.00	
PCB203	ND	0.94	0.20	1.00	
PCB206	ND	0.94	0.16	1.00	
PCB209	ND	0.94	0.20	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	40	19-133			
p-Terphenyl-d14	35	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 17 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-11 TOP	14-05-1270-16-AA	05/12/14 16:15	Sediment	GC/MS HHH	05/24/14	05/31/14 00:15	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.72	0.17	1.00	
PCB008	ND	0.72	0.12	1.00	
PCB018	ND	0.72	0.23	1.00	
PCB028	ND	0.72	0.14	1.00	
PCB031	ND	0.72	0.17	1.00	
PCB033	ND	0.72	0.16	1.00	
PCB037	ND	0.72	0.19	1.00	
PCB044	ND	0.72	0.19	1.00	
PCB049	ND	0.72	0.17	1.00	
PCB052	ND	0.72	0.14	1.00	
PCB056	ND	0.72	0.20	1.00	
PCB060	ND	0.72	0.15	1.00	
PCB066	ND	0.72	0.13	1.00	
PCB070	ND	0.72	0.12	1.00	
PCB074	ND	0.72	0.14	1.00	
PCB077	ND	0.72	0.14	1.00	
PCB081	ND	0.72	0.18	1.00	
PCB087	ND	0.72	0.15	1.00	
PCB095	ND	0.72	0.24	1.00	
PCB097	ND	0.72	0.20	1.00	
PCB099	ND	0.72	0.12	1.00	
PCB101	ND	0.72	0.12	1.00	
PCB105	ND	0.72	0.15	1.00	
PCB110	ND	0.72	0.15	1.00	
PCB114	ND	0.72	0.14	1.00	
PCB118	ND	0.72	0.19	1.00	
PCB119	ND	0.72	0.13	1.00	
PCB123	ND	0.72	0.13	1.00	
PCB126	ND	0.72	0.20	1.00	
PCB128	ND	0.72	0.15	1.00	
PCB132	ND	0.72	0.24	1.00	
PCB138/158	ND	1.4	0.29	1.00	
PCB141	ND	0.72	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.72	0.13	1.00	
PCB151	ND	0.72	0.15	1.00	
PCB153	ND	0.72	0.15	1.00	
PCB156	ND	0.72	0.14	1.00	
PCB157	ND	0.72	0.14	1.00	
PCB167	ND	0.72	0.14	1.00	
PCB168	ND	0.72	0.12	1.00	
PCB169	ND	0.72	0.12	1.00	
PCB170	ND	0.72	0.13	1.00	
PCB174	ND	0.72	0.15	1.00	
PCB177	ND	0.72	0.18	1.00	
PCB180	ND	0.72	0.088	1.00	
PCB183	ND	0.72	0.16	1.00	
PCB184	ND	0.72	0.081	1.00	
PCB187	ND	0.72	0.15	1.00	
PCB189	ND	0.72	0.12	1.00	
PCB194	ND	0.72	0.14	1.00	
PCB195	ND	0.72	0.076	1.00	
PCB200	ND	0.72	0.13	1.00	
PCB201	ND	0.72	0.082	1.00	
PCB203	ND	0.72	0.15	1.00	
PCB206	ND	0.72	0.12	1.00	
PCB209	ND	0.72	0.15	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	94	19-133			
p-Terphenyl-d14	37	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 19 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-12 TOP	14-05-1270-18-AA	05/12/14 15:50	Sediment	GC/MS HHH	05/24/14	05/31/14 00:42	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.70	0.17	1.00	
PCB008	ND	0.70	0.12	1.00	
PCB018	ND	0.70	0.22	1.00	
PCB028	ND	0.70	0.14	1.00	
PCB031	ND	0.70	0.16	1.00	
PCB033	ND	0.70	0.15	1.00	
PCB037	ND	0.70	0.18	1.00	
PCB044	ND	0.70	0.19	1.00	
PCB049	ND	0.70	0.17	1.00	
PCB052	ND	0.70	0.14	1.00	
PCB056	ND	0.70	0.19	1.00	
PCB060	ND	0.70	0.15	1.00	
PCB066	ND	0.70	0.13	1.00	
PCB070	ND	0.70	0.12	1.00	
PCB074	ND	0.70	0.13	1.00	
PCB077	ND	0.70	0.14	1.00	
PCB081	ND	0.70	0.17	1.00	
PCB087	ND	0.70	0.14	1.00	
PCB095	ND	0.70	0.23	1.00	
PCB097	ND	0.70	0.19	1.00	
PCB099	ND	0.70	0.12	1.00	
PCB101	ND	0.70	0.11	1.00	
PCB105	ND	0.70	0.15	1.00	
PCB110	ND	0.70	0.15	1.00	
PCB114	ND	0.70	0.14	1.00	
PCB118	ND	0.70	0.19	1.00	
PCB119	ND	0.70	0.12	1.00	
PCB123	ND	0.70	0.12	1.00	
PCB126	ND	0.70	0.19	1.00	
PCB128	ND	0.70	0.14	1.00	
PCB132	ND	0.70	0.23	1.00	
PCB138/158	ND	1.4	0.29	1.00	
PCB141	ND	0.70	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.70	0.13	1.00	
PCB151	ND	0.70	0.15	1.00	
PCB153	ND	0.70	0.15	1.00	
PCB156	ND	0.70	0.14	1.00	
PCB157	ND	0.70	0.14	1.00	
PCB167	ND	0.70	0.14	1.00	
PCB168	ND	0.70	0.12	1.00	
PCB169	ND	0.70	0.12	1.00	
PCB170	ND	0.70	0.13	1.00	
PCB174	ND	0.70	0.15	1.00	
PCB177	ND	0.70	0.17	1.00	
PCB180	ND	0.70	0.086	1.00	
PCB183	ND	0.70	0.16	1.00	
PCB184	ND	0.70	0.078	1.00	
PCB187	ND	0.70	0.15	1.00	
PCB189	ND	0.70	0.12	1.00	
PCB194	ND	0.70	0.13	1.00	
PCB195	ND	0.70	0.074	1.00	
PCB200	ND	0.70	0.13	1.00	
PCB201	ND	0.70	0.080	1.00	
PCB203	ND	0.70	0.15	1.00	
PCB206	ND	0.70	0.12	1.00	
PCB209	ND	0.70	0.15	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	50	19-133			
p-Terphenyl-d14	83	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-04 TOP	14-05-1270-20-AA	05/13/14 12:15	Sediment	GC/MS HHH	05/24/14	05/31/14 01:09	140524L07

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	2.0	0.48	1.00	
PCB008	ND	2.0	0.34	1.00	
PCB018	ND	2.0	0.63	1.00	
PCB028	ND	2.0	0.40	1.00	
PCB031	ND	2.0	0.46	1.00	
PCB033	ND	2.0	0.43	1.00	
PCB037	ND	2.0	0.52	1.00	
PCB044	ND	2.0	0.53	1.00	
PCB049	ND	2.0	0.47	1.00	
PCB052	ND	2.0	0.39	1.00	
PCB056	ND	2.0	0.55	1.00	
PCB060	ND	2.0	0.42	1.00	
PCB066	ND	2.0	0.37	1.00	
PCB070	ND	2.0	0.33	1.00	
PCB074	ND	2.0	0.38	1.00	
PCB077	ND	2.0	0.39	1.00	
PCB081	ND	2.0	0.49	1.00	
PCB087	ND	2.0	0.40	1.00	
PCB095	ND	2.0	0.66	1.00	
PCB097	ND	2.0	0.55	1.00	
PCB099	ND	2.0	0.34	1.00	
PCB101	ND	2.0	0.32	1.00	
PCB105	ND	2.0	0.42	1.00	
PCB110	ND	2.0	0.41	1.00	
PCB114	ND	2.0	0.40	1.00	
PCB118	ND	2.0	0.53	1.00	
PCB119	ND	2.0	0.35	1.00	
PCB123	ND	2.0	0.35	1.00	
PCB126	ND	2.0	0.55	1.00	
PCB128	ND	2.0	0.41	1.00	
PCB132	ND	2.0	0.66	1.00	
PCB138/158	ND	4.0	0.81	1.00	
PCB141	ND	2.0	0.44	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	2.0	0.36	1.00	
PCB151	ND	2.0	0.41	1.00	
PCB153	ND	2.0	0.42	1.00	
PCB156	ND	2.0	0.39	1.00	
PCB157	ND	2.0	0.38	1.00	
PCB167	ND	2.0	0.40	1.00	
PCB168	ND	2.0	0.34	1.00	
PCB169	ND	2.0	0.33	1.00	
PCB170	ND	2.0	0.37	1.00	
PCB174	ND	2.0	0.43	1.00	
PCB177	ND	2.0	0.49	1.00	
PCB180	ND	2.0	0.24	1.00	
PCB183	ND	2.0	0.45	1.00	
PCB184	ND	2.0	0.22	1.00	
PCB187	ND	2.0	0.42	1.00	
PCB189	ND	2.0	0.34	1.00	
PCB194	ND	2.0	0.38	1.00	
PCB195	ND	2.0	0.21	1.00	
PCB200	ND	2.0	0.37	1.00	
PCB201	ND	2.0	0.23	1.00	
PCB203	ND	2.0	0.43	1.00	
PCB206	ND	2.0	0.33	1.00	
PCB209	ND	2.0	0.43	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	17	19-133	1,2,6
p-Terphenyl-d14	25	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 23 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP	14-05-1270-22-AA	05/13/14 12:30	Sediment	GC/MS HHH	05/24/14	05/30/14 17:46	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.8	0.44	1.00	
PCB008	ND	1.8	0.31	1.00	
PCB018	ND	1.8	0.58	1.00	
PCB028	ND	1.8	0.36	1.00	
PCB031	ND	1.8	0.42	1.00	
PCB033	ND	1.8	0.40	1.00	
PCB037	ND	1.8	0.48	1.00	
PCB044	ND	1.8	0.48	1.00	
PCB049	ND	1.8	0.43	1.00	
PCB052	ND	1.8	0.36	1.00	
PCB056	ND	1.8	0.51	1.00	
PCB060	ND	1.8	0.39	1.00	
PCB066	ND	1.8	0.34	1.00	
PCB070	ND	1.8	0.30	1.00	
PCB074	ND	1.8	0.35	1.00	
PCB077	ND	1.8	0.36	1.00	
PCB081	ND	1.8	0.45	1.00	
PCB087	ND	1.8	0.37	1.00	
PCB095	ND	1.8	0.61	1.00	
PCB097	ND	1.8	0.50	1.00	
PCB099	ND	1.8	0.31	1.00	
PCB101	ND	1.8	0.30	1.00	
PCB105	ND	1.8	0.38	1.00	
PCB110	ND	1.8	0.38	1.00	
PCB114	ND	1.8	0.37	1.00	
PCB118	ND	1.8	0.49	1.00	
PCB119	ND	1.8	0.32	1.00	
PCB123	ND	1.8	0.32	1.00	
PCB126	ND	1.8	0.51	1.00	
PCB128	ND	1.8	0.38	1.00	
PCB132	ND	1.8	0.61	1.00	
PCB138/158	ND	3.7	0.74	1.00	
PCB141	ND	1.8	0.41	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.8	0.33	1.00	
PCB151	ND	1.8	0.38	1.00	
PCB153	ND	1.8	0.38	1.00	
PCB156	ND	1.8	0.36	1.00	
PCB157	ND	1.8	0.35	1.00	
PCB167	ND	1.8	0.37	1.00	
PCB168	ND	1.8	0.32	1.00	
PCB169	ND	1.8	0.30	1.00	
PCB170	ND	1.8	0.34	1.00	
PCB174	ND	1.8	0.39	1.00	
PCB177	ND	1.8	0.45	1.00	
PCB180	ND	1.8	0.22	1.00	
PCB183	ND	1.8	0.41	1.00	
PCB184	ND	1.8	0.21	1.00	
PCB187	ND	1.8	0.38	1.00	
PCB189	ND	1.8	0.31	1.00	
PCB194	ND	1.8	0.35	1.00	
PCB195	ND	1.8	0.19	1.00	
PCB200	ND	1.8	0.34	1.00	
PCB201	ND	1.8	0.21	1.00	
PCB203	ND	1.8	0.39	1.00	
PCB206	ND	1.8	0.30	1.00	
PCB209	ND	1.8	0.39	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	28	19-133	
p-Terphenyl-d14	23	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-05 TOP DUP	14-05-1270-24-AA	05/13/14 12:45	Sediment	GC/MS HHH	05/24/14	05/30/14 18:15	140524L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	1.8	0.44	1.00	
PCB008	ND	1.8	0.31	1.00	
PCB018	ND	1.8	0.58	1.00	
PCB028	ND	1.8	0.37	1.00	
PCB031	ND	1.8	0.43	1.00	
PCB033	ND	1.8	0.40	1.00	
PCB037	ND	1.8	0.48	1.00	
PCB044	ND	1.8	0.49	1.00	
PCB049	ND	1.8	0.44	1.00	
PCB052	ND	1.8	0.36	1.00	
PCB056	ND	1.8	0.51	1.00	
PCB060	ND	1.8	0.39	1.00	
PCB066	ND	1.8	0.34	1.00	
PCB070	ND	1.8	0.30	1.00	
PCB074	ND	1.8	0.35	1.00	
PCB077	ND	1.8	0.36	1.00	
PCB081	ND	1.8	0.45	1.00	
PCB087	ND	1.8	0.37	1.00	
PCB095	ND	1.8	0.61	1.00	
PCB097	ND	1.8	0.50	1.00	
PCB099	ND	1.8	0.31	1.00	
PCB101	ND	1.8	0.30	1.00	
PCB105	ND	1.8	0.39	1.00	
PCB110	ND	1.8	0.38	1.00	
PCB114	ND	1.8	0.37	1.00	
PCB118	ND	1.8	0.49	1.00	
PCB119	ND	1.8	0.32	1.00	
PCB123	ND	1.8	0.32	1.00	
PCB126	ND	1.8	0.51	1.00	
PCB128	ND	1.8	0.38	1.00	
PCB132	ND	1.8	0.61	1.00	
PCB138/158	ND	3.7	0.75	1.00	
PCB141	ND	1.8	0.41	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.8	0.33	1.00	
PCB151	ND	1.8	0.38	1.00	
PCB153	ND	1.8	0.38	1.00	
PCB156	ND	1.8	0.36	1.00	
PCB157	ND	1.8	0.35	1.00	
PCB167	ND	1.8	0.37	1.00	
PCB168	ND	1.8	0.32	1.00	
PCB169	ND	1.8	0.30	1.00	
PCB170	ND	1.8	0.34	1.00	
PCB174	ND	1.8	0.39	1.00	
PCB177	ND	1.8	0.45	1.00	
PCB180	ND	1.8	0.23	1.00	
PCB183	ND	1.8	0.41	1.00	
PCB184	ND	1.8	0.21	1.00	
PCB187	ND	1.8	0.39	1.00	
PCB189	ND	1.8	0.32	1.00	
PCB194	ND	1.8	0.35	1.00	
PCB195	ND	1.8	0.19	1.00	
PCB200	ND	1.8	0.34	1.00	
PCB201	ND	1.8	0.21	1.00	
PCB203	ND	1.8	0.40	1.00	
PCB206	ND	1.8	0.31	1.00	
PCB209	ND	1.8	0.39	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	23	19-133			
p-Terphenyl-d14	21	33-147	1,2,6		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-S-06 TOP	14-05-1270-25-AA	05/13/14 13:30	Sediment	GC/MS HHH	05/24/14	05/30/14 18:43	140524L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.95	0.23	1.00	
PCB008	ND	0.95	0.16	1.00	
PCB018	ND	0.95	0.30	1.00	
PCB028	ND	0.95	0.19	1.00	
PCB031	ND	0.95	0.22	1.00	
PCB033	ND	0.95	0.21	1.00	
PCB037	ND	0.95	0.25	1.00	
PCB044	ND	0.95	0.25	1.00	
PCB049	ND	0.95	0.22	1.00	
PCB052	ND	0.95	0.18	1.00	
PCB056	ND	0.95	0.26	1.00	
PCB060	ND	0.95	0.20	1.00	
PCB066	ND	0.95	0.17	1.00	
PCB070	ND	0.95	0.16	1.00	
PCB074	ND	0.95	0.18	1.00	
PCB077	ND	0.95	0.18	1.00	
PCB081	ND	0.95	0.23	1.00	
PCB087	ND	0.95	0.19	1.00	
PCB095	ND	0.95	0.31	1.00	
PCB097	ND	0.95	0.26	1.00	
PCB099	ND	0.95	0.16	1.00	
PCB101	ND	0.95	0.15	1.00	
PCB105	ND	0.95	0.20	1.00	
PCB110	ND	0.95	0.20	1.00	
PCB114	ND	0.95	0.19	1.00	
PCB118	ND	0.95	0.25	1.00	
PCB119	ND	0.95	0.16	1.00	
PCB123	ND	0.95	0.17	1.00	
PCB126	ND	0.95	0.26	1.00	
PCB128	ND	0.95	0.19	1.00	
PCB132	ND	0.95	0.31	1.00	
PCB138/158	ND	1.9	0.38	1.00	
PCB141	ND	0.95	0.21	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.95	0.17	1.00	
PCB151	ND	0.95	0.20	1.00	
PCB153	ND	0.95	0.20	1.00	
PCB156	ND	0.95	0.19	1.00	
PCB157	ND	0.95	0.18	1.00	
PCB167	ND	0.95	0.19	1.00	
PCB168	ND	0.95	0.16	1.00	
PCB169	ND	0.95	0.15	1.00	
PCB170	ND	0.95	0.18	1.00	
PCB174	ND	0.95	0.20	1.00	
PCB177	ND	0.95	0.23	1.00	
PCB180	ND	0.95	0.12	1.00	
PCB183	ND	0.95	0.21	1.00	
PCB184	ND	0.95	0.11	1.00	
PCB187	ND	0.95	0.20	1.00	
PCB189	ND	0.95	0.16	1.00	
PCB194	ND	0.95	0.18	1.00	
PCB195	ND	0.95	0.10	1.00	
PCB200	ND	0.95	0.18	1.00	
PCB201	ND	0.95	0.11	1.00	
PCB203	ND	0.95	0.20	1.00	
PCB206	ND	0.95	0.16	1.00	
PCB209	ND	0.95	0.20	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	25	19-133	
p-Terphenyl-d14	30	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 29 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP	14-05-1270-27-AA	05/13/14 09:10	Sediment	GC/MS HHH	05/24/14	05/31/14 01:37	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.71	0.17	1.00	
PCB008	ND	0.71	0.12	1.00	
PCB018	ND	0.71	0.22	1.00	
PCB028	ND	0.71	0.14	1.00	
PCB031	ND	0.71	0.16	1.00	
PCB033	ND	0.71	0.15	1.00	
PCB037	ND	0.71	0.18	1.00	
PCB044	ND	0.71	0.19	1.00	
PCB049	ND	0.71	0.17	1.00	
PCB052	ND	0.71	0.14	1.00	
PCB056	ND	0.71	0.19	1.00	
PCB060	ND	0.71	0.15	1.00	
PCB066	ND	0.71	0.13	1.00	
PCB070	ND	0.71	0.12	1.00	
PCB074	ND	0.71	0.13	1.00	
PCB077	ND	0.71	0.14	1.00	
PCB081	ND	0.71	0.17	1.00	
PCB087	ND	0.71	0.14	1.00	
PCB095	ND	0.71	0.23	1.00	
PCB097	ND	0.71	0.19	1.00	
PCB099	ND	0.71	0.12	1.00	
PCB101	ND	0.71	0.11	1.00	
PCB105	ND	0.71	0.15	1.00	
PCB110	ND	0.71	0.15	1.00	
PCB114	ND	0.71	0.14	1.00	
PCB118	ND	0.71	0.19	1.00	
PCB119	ND	0.71	0.12	1.00	
PCB123	ND	0.71	0.12	1.00	
PCB126	ND	0.71	0.19	1.00	
PCB128	ND	0.71	0.14	1.00	
PCB132	ND	0.71	0.23	1.00	
PCB138/158	ND	1.4	0.29	1.00	
PCB141	ND	0.71	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.71	0.13	1.00	
PCB151	ND	0.71	0.15	1.00	
PCB153	ND	0.71	0.15	1.00	
PCB156	ND	0.71	0.14	1.00	
PCB157	ND	0.71	0.14	1.00	
PCB167	ND	0.71	0.14	1.00	
PCB168	ND	0.71	0.12	1.00	
PCB169	ND	0.71	0.12	1.00	
PCB170	ND	0.71	0.13	1.00	
PCB174	ND	0.71	0.15	1.00	
PCB177	ND	0.71	0.17	1.00	
PCB180	ND	0.71	0.086	1.00	
PCB183	ND	0.71	0.16	1.00	
PCB184	ND	0.71	0.079	1.00	
PCB187	ND	0.71	0.15	1.00	
PCB189	ND	0.71	0.12	1.00	
PCB194	ND	0.71	0.13	1.00	
PCB195	ND	0.71	0.074	1.00	
PCB200	ND	0.71	0.13	1.00	
PCB201	ND	0.71	0.080	1.00	
PCB203	ND	0.71	0.15	1.00	
PCB206	ND	0.71	0.12	1.00	
PCB209	ND	0.71	0.15	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	44	19-133	
p-Terphenyl-d14	56	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 31 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-01 TOP DUP	14-05-1270-29-AA	05/13/14 09:40	Sediment	GC/MS HHH	05/24/14	05/31/14 02:04	140524L07

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.0	0.24	1.00	
PCB008	ND	1.0	0.17	1.00	
PCB018	ND	1.0	0.31	1.00	
PCB028	ND	1.0	0.20	1.00	
PCB031	ND	1.0	0.23	1.00	
PCB033	ND	1.0	0.22	1.00	
PCB037	ND	1.0	0.26	1.00	
PCB044	ND	1.0	0.26	1.00	
PCB049	ND	1.0	0.24	1.00	
PCB052	ND	1.0	0.19	1.00	
PCB056	ND	1.0	0.28	1.00	
PCB060	ND	1.0	0.21	1.00	
PCB066	ND	1.0	0.18	1.00	
PCB070	ND	1.0	0.16	1.00	
PCB074	ND	1.0	0.19	1.00	
PCB077	ND	1.0	0.19	1.00	
PCB081	ND	1.0	0.24	1.00	
PCB087	ND	1.0	0.20	1.00	
PCB095	ND	1.0	0.33	1.00	
PCB097	ND	1.0	0.27	1.00	
PCB099	ND	1.0	0.17	1.00	
PCB101	ND	1.0	0.16	1.00	
PCB105	ND	1.0	0.21	1.00	
PCB110	ND	1.0	0.21	1.00	
PCB114	ND	1.0	0.20	1.00	
PCB118	ND	1.0	0.27	1.00	
PCB119	ND	1.0	0.17	1.00	
PCB123	ND	1.0	0.17	1.00	
PCB126	ND	1.0	0.28	1.00	
PCB128	ND	1.0	0.21	1.00	
PCB132	ND	1.0	0.33	1.00	
PCB138/158	ND	2.0	0.41	1.00	
PCB141	ND	1.0	0.22	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.0	0.18	1.00	
PCB151	ND	1.0	0.21	1.00	
PCB153	ND	1.0	0.21	1.00	
PCB156	ND	1.0	0.20	1.00	
PCB157	ND	1.0	0.19	1.00	
PCB167	ND	1.0	0.20	1.00	
PCB168	ND	1.0	0.17	1.00	
PCB169	ND	1.0	0.16	1.00	
PCB170	ND	1.0	0.19	1.00	
PCB174	ND	1.0	0.21	1.00	
PCB177	ND	1.0	0.25	1.00	
PCB180	ND	1.0	0.12	1.00	
PCB183	ND	1.0	0.22	1.00	
PCB184	ND	1.0	0.11	1.00	
PCB187	ND	1.0	0.21	1.00	
PCB189	ND	1.0	0.17	1.00	
PCB194	ND	1.0	0.19	1.00	
PCB195	ND	1.0	0.11	1.00	
PCB200	ND	1.0	0.19	1.00	
PCB201	ND	1.0	0.11	1.00	
PCB203	ND	1.0	0.21	1.00	
PCB206	ND	1.0	0.17	1.00	
PCB209	ND	1.0	0.21	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	26	19-133	
p-Terphenyl-d14	33	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 33 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP	14-05-1270-30-AA	05/13/14 10:25	Sediment	GC/MS HHH	05/24/14	05/31/14 02:31	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.0	0.24	1.00	
PCB008	ND	1.0	0.17	1.00	
PCB018	ND	1.0	0.32	1.00	
PCB028	ND	1.0	0.20	1.00	
PCB031	ND	1.0	0.23	1.00	
PCB033	ND	1.0	0.22	1.00	
PCB037	ND	1.0	0.27	1.00	
PCB044	ND	1.0	0.27	1.00	
PCB049	ND	1.0	0.24	1.00	
PCB052	ND	1.0	0.20	1.00	
PCB056	ND	1.0	0.28	1.00	
PCB060	ND	1.0	0.22	1.00	
PCB066	ND	1.0	0.19	1.00	
PCB070	ND	1.0	0.17	1.00	
PCB074	ND	1.0	0.19	1.00	
PCB077	ND	1.0	0.20	1.00	
PCB081	ND	1.0	0.25	1.00	
PCB087	ND	1.0	0.20	1.00	
PCB095	ND	1.0	0.34	1.00	
PCB097	ND	1.0	0.28	1.00	
PCB099	ND	1.0	0.17	1.00	
PCB101	ND	1.0	0.16	1.00	
PCB105	ND	1.0	0.21	1.00	
PCB110	ND	1.0	0.21	1.00	
PCB114	ND	1.0	0.20	1.00	
PCB118	ND	1.0	0.27	1.00	
PCB119	ND	1.0	0.18	1.00	
PCB123	ND	1.0	0.18	1.00	
PCB126	ND	1.0	0.28	1.00	
PCB128	ND	1.0	0.21	1.00	
PCB132	ND	1.0	0.34	1.00	
PCB138/158	ND	2.0	0.41	1.00	
PCB141	ND	1.0	0.22	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.0	0.18	1.00	
PCB151	ND	1.0	0.21	1.00	
PCB153	ND	1.0	0.21	1.00	
PCB156	ND	1.0	0.20	1.00	
PCB157	ND	1.0	0.19	1.00	
PCB167	ND	1.0	0.20	1.00	
PCB168	ND	1.0	0.17	1.00	
PCB169	ND	1.0	0.17	1.00	
PCB170	ND	1.0	0.19	1.00	
PCB174	ND	1.0	0.22	1.00	
PCB177	ND	1.0	0.25	1.00	
PCB180	ND	1.0	0.12	1.00	
PCB183	ND	1.0	0.23	1.00	
PCB184	ND	1.0	0.11	1.00	
PCB187	ND	1.0	0.21	1.00	
PCB189	ND	1.0	0.17	1.00	
PCB194	ND	1.0	0.19	1.00	
PCB195	ND	1.0	0.11	1.00	
PCB200	ND	1.0	0.19	1.00	
PCB201	ND	1.0	0.12	1.00	
PCB203	ND	1.0	0.22	1.00	
PCB206	ND	1.0	0.17	1.00	
PCB209	ND	1.0	0.22	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	26	19-133	
p-Terphenyl-d14	52	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 35 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-03 TOP	14-05-1270-32-AA	05/13/14 10:55	Sediment	GC/MS HHH	05/23/14	05/31/14 02:58	140523L30

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.3	0.30	1.00	
PCB008	ND	1.3	0.21	1.00	
PCB018	ND	1.3	0.40	1.00	
PCB028	ND	1.3	0.25	1.00	
PCB031	ND	1.3	0.29	1.00	
PCB033	ND	1.3	0.27	1.00	
PCB037	ND	1.3	0.33	1.00	
PCB044	ND	1.3	0.33	1.00	
PCB049	ND	1.3	0.30	1.00	
PCB052	ND	1.3	0.24	1.00	
PCB056	ND	1.3	0.35	1.00	
PCB060	ND	1.3	0.27	1.00	
PCB066	ND	1.3	0.23	1.00	
PCB070	ND	1.3	0.21	1.00	
PCB074	ND	1.3	0.24	1.00	
PCB077	ND	1.3	0.25	1.00	
PCB081	ND	1.3	0.31	1.00	
PCB087	ND	1.3	0.25	1.00	
PCB095	ND	1.3	0.42	1.00	
PCB097	ND	1.3	0.34	1.00	
PCB099	ND	1.3	0.21	1.00	
PCB101	ND	1.3	0.20	1.00	
PCB105	ND	1.3	0.26	1.00	
PCB110	ND	1.3	0.26	1.00	
PCB114	ND	1.3	0.25	1.00	
PCB118	ND	1.3	0.33	1.00	
PCB119	ND	1.3	0.22	1.00	
PCB123	ND	1.3	0.22	1.00	
PCB126	ND	1.3	0.35	1.00	
PCB128	ND	1.3	0.26	1.00	
PCB132	ND	1.3	0.42	1.00	
PCB138/158	ND	2.5	0.51	1.00	
PCB141	ND	1.3	0.28	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.3	0.23	1.00	
PCB151	ND	1.3	0.26	1.00	
PCB153	ND	1.3	0.26	1.00	
PCB156	ND	1.3	0.25	1.00	
PCB157	ND	1.3	0.24	1.00	
PCB167	ND	1.3	0.25	1.00	
PCB168	ND	1.3	0.22	1.00	
PCB169	ND	1.3	0.21	1.00	
PCB170	ND	1.3	0.23	1.00	
PCB174	ND	1.3	0.27	1.00	
PCB177	ND	1.3	0.31	1.00	
PCB180	ND	1.3	0.15	1.00	
PCB183	ND	1.3	0.28	1.00	
PCB184	ND	1.3	0.14	1.00	
PCB187	ND	1.3	0.26	1.00	
PCB189	ND	1.3	0.22	1.00	
PCB194	ND	1.3	0.24	1.00	
PCB195	ND	1.3	0.13	1.00	
PCB200	ND	1.3	0.24	1.00	
PCB201	ND	1.3	0.14	1.00	
PCB203	ND	1.3	0.27	1.00	
PCB206	ND	1.3	0.21	1.00	
PCB209	ND	1.3	0.27	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	21	19-133	
p-Terphenyl-d14	15	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-04 TOP	14-05-1270-34-AA	05/13/14 11:20	Sediment	GC/MS HHH	05/23/14	05/31/14 03:25	140523L30

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.4	0.33	1.00	
PCB008	ND	1.4	0.24	1.00	
PCB018	ND	1.4	0.44	1.00	
PCB028	ND	1.4	0.28	1.00	
PCB031	ND	1.4	0.32	1.00	
PCB033	ND	1.4	0.30	1.00	
PCB037	ND	1.4	0.37	1.00	
PCB044	ND	1.4	0.37	1.00	
PCB049	ND	1.4	0.33	1.00	
PCB052	ND	1.4	0.27	1.00	
PCB056	ND	1.4	0.39	1.00	
PCB060	ND	1.4	0.30	1.00	
PCB066	ND	1.4	0.26	1.00	
PCB070	ND	1.4	0.23	1.00	
PCB074	ND	1.4	0.26	1.00	
PCB077	ND	1.4	0.27	1.00	
PCB081	ND	1.4	0.34	1.00	
PCB087	ND	1.4	0.28	1.00	
PCB095	ND	1.4	0.46	1.00	
PCB097	ND	1.4	0.38	1.00	
PCB099	ND	1.4	0.24	1.00	
PCB101	ND	1.4	0.23	1.00	
PCB105	ND	1.4	0.29	1.00	
PCB110	ND	1.4	0.29	1.00	
PCB114	ND	1.4	0.28	1.00	
PCB118	ND	1.4	0.37	1.00	
PCB119	ND	1.4	0.24	1.00	
PCB123	ND	1.4	0.24	1.00	
PCB126	ND	1.4	0.39	1.00	
PCB128	ND	1.4	0.29	1.00	
PCB132	ND	1.4	0.46	1.00	
PCB138/158	ND	2.8	0.57	1.00	
PCB141	ND	1.4	0.31	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.4	0.25	1.00	
PCB151	ND	1.4	0.29	1.00	
PCB153	ND	1.4	0.29	1.00	
PCB156	ND	1.4	0.27	1.00	
PCB157	ND	1.4	0.27	1.00	
PCB167	ND	1.4	0.28	1.00	
PCB168	ND	1.4	0.24	1.00	
PCB169	ND	1.4	0.23	1.00	
PCB170	ND	1.4	0.26	1.00	
PCB174	ND	1.4	0.30	1.00	
PCB177	ND	1.4	0.34	1.00	
PCB180	ND	1.4	0.17	1.00	
PCB183	ND	1.4	0.31	1.00	
PCB184	ND	1.4	0.16	1.00	
PCB187	ND	1.4	0.29	1.00	
PCB189	ND	1.4	0.24	1.00	
PCB194	ND	1.4	0.27	1.00	
PCB195	ND	1.4	0.15	1.00	
PCB200	ND	1.4	0.26	1.00	
PCB201	ND	1.4	0.16	1.00	
PCB203	ND	1.4	0.30	1.00	
PCB206	ND	1.4	0.23	1.00	
PCB209	ND	1.4	0.30	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	7	19-133	1,2,6
p-Terphenyl-d14	1	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-05 TOP	14-05-1270-36-AA	05/13/14 13:05	Sediment	GC/MS HHH	05/24/14	05/30/14 19:11	140524L07

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.69	0.16	1.00	
PCB008	ND	0.69	0.12	1.00	
PCB018	ND	0.69	0.22	1.00	
PCB028	ND	0.69	0.14	1.00	
PCB031	ND	0.69	0.16	1.00	
PCB033	ND	0.69	0.15	1.00	
PCB037	ND	0.69	0.18	1.00	
PCB044	ND	0.69	0.18	1.00	
PCB049	ND	0.69	0.16	1.00	
PCB052	ND	0.69	0.13	1.00	
PCB056	ND	0.69	0.19	1.00	
PCB060	ND	0.69	0.15	1.00	
PCB066	ND	0.69	0.13	1.00	
PCB070	ND	0.69	0.11	1.00	
PCB074	ND	0.69	0.13	1.00	
PCB077	ND	0.69	0.13	1.00	
PCB081	ND	0.69	0.17	1.00	
PCB087	ND	0.69	0.14	1.00	
PCB095	ND	0.69	0.23	1.00	
PCB097	ND	0.69	0.19	1.00	
PCB099	ND	0.69	0.12	1.00	
PCB101	ND	0.69	0.11	1.00	
PCB105	ND	0.69	0.14	1.00	
PCB110	ND	0.69	0.14	1.00	
PCB114	ND	0.69	0.14	1.00	
PCB118	ND	0.69	0.18	1.00	
PCB119	ND	0.69	0.12	1.00	
PCB123	ND	0.69	0.12	1.00	
PCB126	ND	0.69	0.19	1.00	
PCB128	ND	0.69	0.14	1.00	
PCB132	ND	0.69	0.23	1.00	
PCB138/158	ND	1.4	0.28	1.00	
PCB141	ND	0.69	0.15	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.69	0.12	1.00	
PCB151	ND	0.69	0.14	1.00	
PCB153	ND	0.69	0.14	1.00	
PCB156	ND	0.69	0.13	1.00	
PCB157	ND	0.69	0.13	1.00	
PCB167	ND	0.69	0.14	1.00	
PCB168	ND	0.69	0.12	1.00	
PCB169	ND	0.69	0.11	1.00	
PCB170	ND	0.69	0.13	1.00	
PCB174	ND	0.69	0.15	1.00	
PCB177	ND	0.69	0.17	1.00	
PCB180	ND	0.69	0.084	1.00	
PCB183	ND	0.69	0.15	1.00	
PCB184	ND	0.69	0.077	1.00	
PCB187	ND	0.69	0.14	1.00	
PCB189	ND	0.69	0.12	1.00	
PCB194	ND	0.69	0.13	1.00	
PCB195	ND	0.69	0.072	1.00	
PCB200	ND	0.69	0.13	1.00	
PCB201	ND	0.69	0.078	1.00	
PCB203	ND	0.69	0.15	1.00	
PCB206	ND	0.69	0.11	1.00	
PCB209	ND	0.69	0.15	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	66	19-133			
p-Terphenyl-d14	57	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-06 TOP	14-05-1270-38-AA	05/13/14 15:00	Sediment	GC/MS HHH	05/23/14	05/30/14 19:39	140523L30

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.75	0.18	1.00	
PCB008	ND	0.75	0.13	1.00	
PCB018	ND	0.75	0.24	1.00	
PCB028	ND	0.75	0.15	1.00	
PCB031	ND	0.75	0.17	1.00	
PCB033	ND	0.75	0.16	1.00	
PCB037	ND	0.75	0.20	1.00	
PCB044	ND	0.75	0.20	1.00	
PCB049	ND	0.75	0.18	1.00	
PCB052	ND	0.75	0.14	1.00	
PCB056	ND	0.75	0.21	1.00	
PCB060	ND	0.75	0.16	1.00	
PCB066	ND	0.75	0.14	1.00	
PCB070	ND	0.75	0.12	1.00	
PCB074	ND	0.75	0.14	1.00	
PCB077	ND	0.75	0.15	1.00	
PCB081	ND	0.75	0.18	1.00	
PCB087	ND	0.75	0.15	1.00	
PCB095	ND	0.75	0.25	1.00	
PCB097	ND	0.75	0.20	1.00	
PCB099	ND	0.75	0.13	1.00	
PCB101	ND	0.75	0.12	1.00	
PCB105	ND	0.75	0.16	1.00	
PCB110	ND	0.75	0.15	1.00	
PCB114	ND	0.75	0.15	1.00	
PCB118	ND	0.75	0.20	1.00	
PCB119	ND	0.75	0.13	1.00	
PCB123	ND	0.75	0.13	1.00	
PCB126	ND	0.75	0.21	1.00	
PCB128	ND	0.75	0.15	1.00	
PCB132	ND	0.75	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.75	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.75	0.13	1.00	
PCB151	ND	0.75	0.15	1.00	
PCB153	ND	0.75	0.16	1.00	
PCB156	ND	0.75	0.15	1.00	
PCB157	ND	0.75	0.14	1.00	
PCB167	ND	0.75	0.15	1.00	
PCB168	ND	0.75	0.13	1.00	
PCB169	ND	0.75	0.12	1.00	
PCB170	ND	0.75	0.14	1.00	
PCB174	ND	0.75	0.16	1.00	
PCB177	ND	0.75	0.18	1.00	
PCB180	ND	0.75	0.091	1.00	
PCB183	ND	0.75	0.17	1.00	
PCB184	ND	0.75	0.084	1.00	
PCB187	ND	0.75	0.16	1.00	
PCB189	ND	0.75	0.13	1.00	
PCB194	ND	0.75	0.14	1.00	
PCB195	ND	0.75	0.079	1.00	
PCB200	ND	0.75	0.14	1.00	
PCB201	ND	0.75	0.085	1.00	
PCB203	ND	0.75	0.16	1.00	
PCB206	ND	0.75	0.12	1.00	
PCB209	ND	0.75	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	54	19-133			
p-Terphenyl-d14	44	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-N-06 TOP LAB DUP	14-05-1270-40-AA	05/12/14 12:00	Sediment	GC/MS HHH	06/09/14	06/11/14 04:56	140609L02

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.77	0.18	1.00	
PCB008	ND	0.77	0.13	1.00	
PCB018	ND	0.77	0.24	1.00	
PCB028	ND	0.77	0.15	1.00	
PCB031	ND	0.77	0.18	1.00	
PCB033	ND	0.77	0.17	1.00	
PCB037	ND	0.77	0.20	1.00	
PCB044	ND	0.77	0.20	1.00	
PCB049	ND	0.77	0.18	1.00	
PCB052	ND	0.77	0.15	1.00	
PCB056	ND	0.77	0.21	1.00	
PCB060	ND	0.77	0.16	1.00	
PCB066	ND	0.77	0.14	1.00	
PCB070	ND	0.77	0.13	1.00	
PCB074	ND	0.77	0.14	1.00	
PCB077	ND	0.77	0.15	1.00	
PCB081	ND	0.77	0.19	1.00	
PCB087	ND	0.77	0.15	1.00	
PCB095	ND	0.77	0.25	1.00	
PCB097	ND	0.77	0.21	1.00	
PCB099	ND	0.77	0.13	1.00	
PCB101	ND	0.77	0.12	1.00	
PCB105	ND	0.77	0.16	1.00	
PCB110	ND	0.77	0.16	1.00	
PCB114	ND	0.77	0.15	1.00	
PCB118	ND	0.77	0.20	1.00	
PCB119	ND	0.77	0.13	1.00	
PCB123	ND	0.77	0.13	1.00	
PCB126	ND	0.77	0.21	1.00	
PCB128	ND	0.77	0.16	1.00	
PCB132	ND	0.77	0.25	1.00	
PCB138/158	ND	1.5	0.31	1.00	
PCB141	ND	0.77	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.77	0.14	1.00	
PCB151	ND	0.77	0.16	1.00	
PCB153	ND	0.77	0.16	1.00	
PCB156	ND	0.77	0.15	1.00	
PCB157	ND	0.77	0.15	1.00	
PCB167	ND	0.77	0.15	1.00	
PCB168	ND	0.77	0.13	1.00	
PCB169	ND	0.77	0.13	1.00	
PCB170	ND	0.77	0.14	1.00	
PCB174	ND	0.77	0.16	1.00	
PCB177	ND	0.77	0.19	1.00	
PCB180	ND	0.77	0.094	1.00	
PCB183	ND	0.77	0.17	1.00	
PCB184	ND	0.77	0.086	1.00	
PCB187	ND	0.77	0.16	1.00	
PCB189	ND	0.77	0.13	1.00	
PCB194	ND	0.77	0.15	1.00	
PCB195	ND	0.77	0.081	1.00	
PCB200	ND	0.77	0.14	1.00	
PCB201	ND	0.77	0.087	1.00	
PCB203	ND	0.77	0.16	1.00	
PCB206	ND	0.77	0.13	1.00	
PCB209	ND	0.77	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	205	19-133	1,2,7		
p-Terphenyl-d14	16	33-147	1,2,6		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-N-02 TOP LAB DUP	14-05-1270-41-AA	05/13/14 10:25	Sediment	GC/MS HHH	06/09/14	06/11/14 18:39	140609L02

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.98	0.23	1.00	
PCB008	ND	0.98	0.17	1.00	
PCB018	ND	0.98	0.31	1.00	
PCB028	ND	0.98	0.19	1.00	
PCB031	ND	0.98	0.23	1.00	
PCB033	ND	0.98	0.21	1.00	
PCB037	ND	0.98	0.26	1.00	
PCB044	ND	0.98	0.26	1.00	
PCB049	ND	0.98	0.23	1.00	
PCB052	ND	0.98	0.19	1.00	
PCB056	ND	0.98	0.27	1.00	
PCB060	ND	0.98	0.21	1.00	
PCB066	ND	0.98	0.18	1.00	
PCB070	ND	0.98	0.16	1.00	
PCB074	ND	0.98	0.18	1.00	
PCB077	ND	0.98	0.19	1.00	
PCB081	ND	0.98	0.24	1.00	
PCB087	ND	0.98	0.20	1.00	
PCB095	ND	0.98	0.32	1.00	
PCB097	ND	0.98	0.27	1.00	
PCB099	ND	0.98	0.17	1.00	
PCB101	ND	0.98	0.16	1.00	
PCB105	ND	0.98	0.20	1.00	
PCB110	ND	0.98	0.20	1.00	
PCB114	ND	0.98	0.19	1.00	
PCB118	ND	0.98	0.26	1.00	
PCB119	ND	0.98	0.17	1.00	
PCB123	ND	0.98	0.17	1.00	
PCB126	ND	0.98	0.27	1.00	
PCB128	ND	0.98	0.20	1.00	
PCB132	ND	0.98	0.32	1.00	
PCB138/158	ND	2.0	0.40	1.00	
PCB141	ND	0.98	0.22	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.98	0.17	1.00	
PCB151	ND	0.98	0.20	1.00	
PCB153	ND	0.98	0.20	1.00	
PCB156	ND	0.98	0.19	1.00	
PCB157	ND	0.98	0.19	1.00	
PCB167	ND	0.98	0.19	1.00	
PCB168	ND	0.98	0.17	1.00	
PCB169	ND	0.98	0.16	1.00	
PCB170	ND	0.98	0.18	1.00	
PCB174	ND	0.98	0.21	1.00	
PCB177	ND	0.98	0.24	1.00	
PCB180	ND	0.98	0.12	1.00	
PCB183	ND	0.98	0.22	1.00	
PCB184	ND	0.98	0.11	1.00	
PCB187	ND	0.98	0.20	1.00	
PCB189	ND	0.98	0.17	1.00	
PCB194	ND	0.98	0.19	1.00	
PCB195	ND	0.98	0.10	1.00	
PCB200	ND	0.98	0.18	1.00	
PCB201	ND	0.98	0.11	1.00	
PCB203	ND	0.98	0.21	1.00	
PCB206	ND	0.98	0.16	1.00	
PCB209	ND	0.98	0.21	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	107	19-133	
p-Terphenyl-d14	102	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 47 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-184	N/A	Solid	GC/MS HHH	05/23/14	05/30/14 21:02	140523L30

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 48 of 52

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	54	19-133			
p-Terphenyl-d14	86	33-147			

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 49 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-181	N/A	Solid	GC/MS HHH	05/24/14	05/27/14 19:46	140524L07

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	96	19-133			
p-Terphenyl-d14	97	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1270
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 51 of 52

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-187	N/A	Solid	GC/MS HHH	06/09/14	06/10/14 20:17	140609L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	100	19-133			
p-Terphenyl-d14	102	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

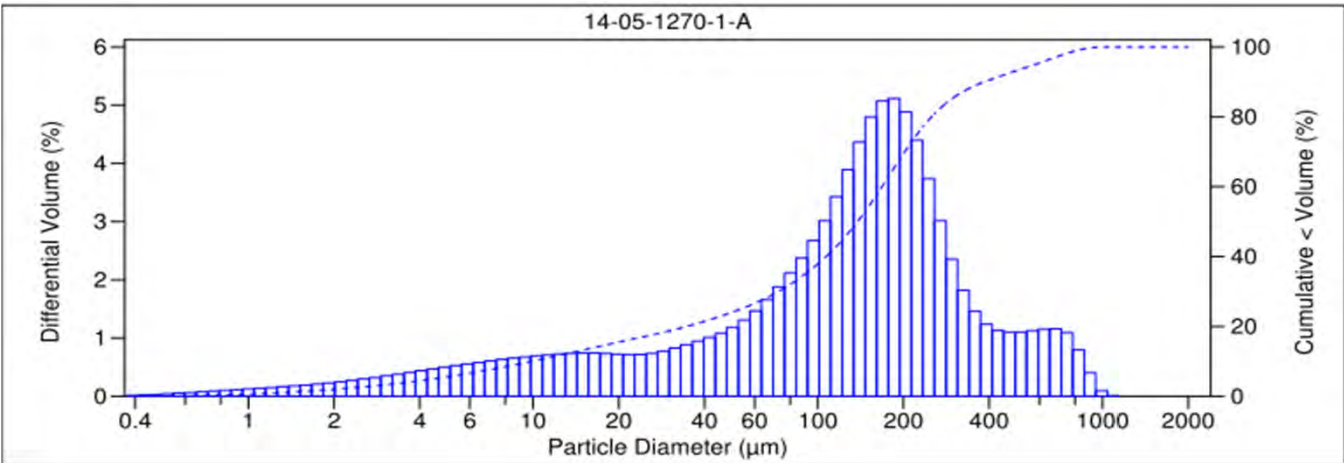
Date Sampled: 05/12/14
 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-01 TOP		Fine Sand	0.176

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.05	6.75	13.40	34.11	18.41	22.91	4.37	27.28



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

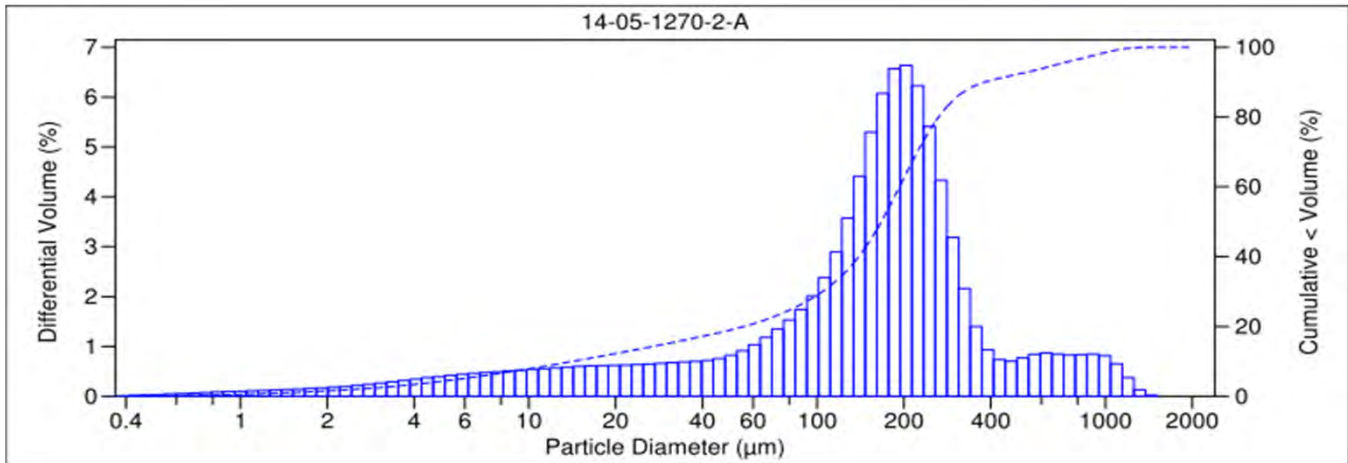
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Date Received: 05/16/14
Work Order No: 14-05-1270
Date Analyzed: 05/21/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-01 BOTTOM		Fine Sand	0.205

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	1.55	6.20	15.20	41.59	14.20	17.90	3.38	21.27



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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

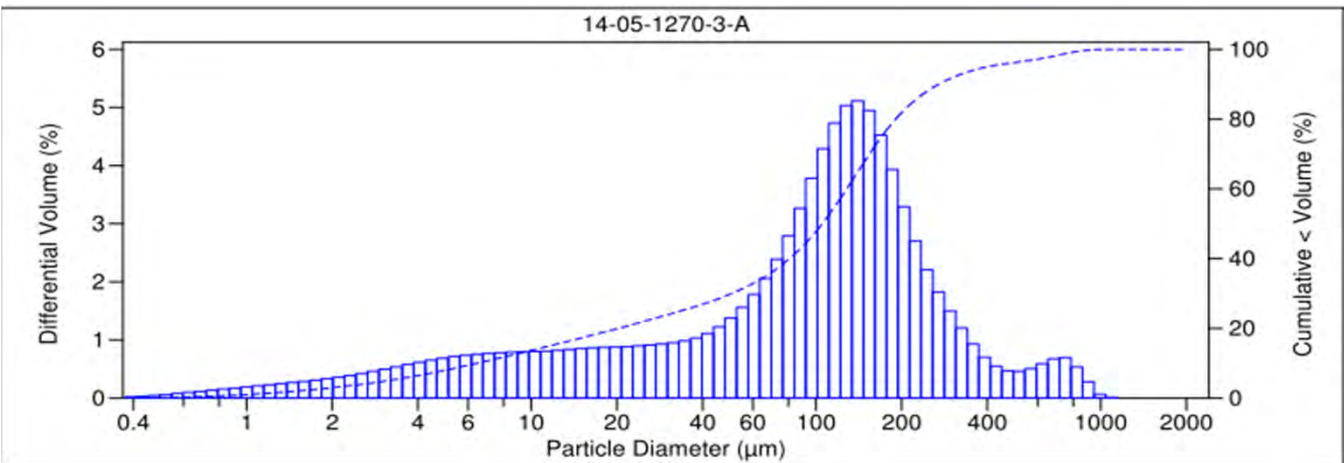
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 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-02 TOP		Fine Sand	0.134

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.04	3.73	7.91	29.80	24.90	27.30	6.31	33.62



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

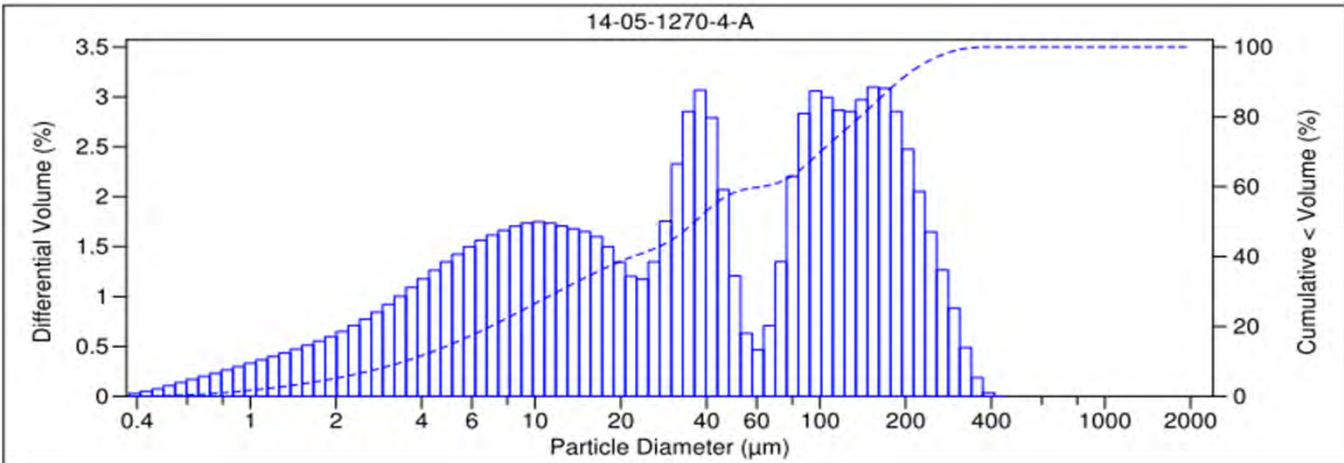
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 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-02 BOTTOM		Very Fine Sand	0.071

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.37	19.81	16.81	48.62	11.38	60.01



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

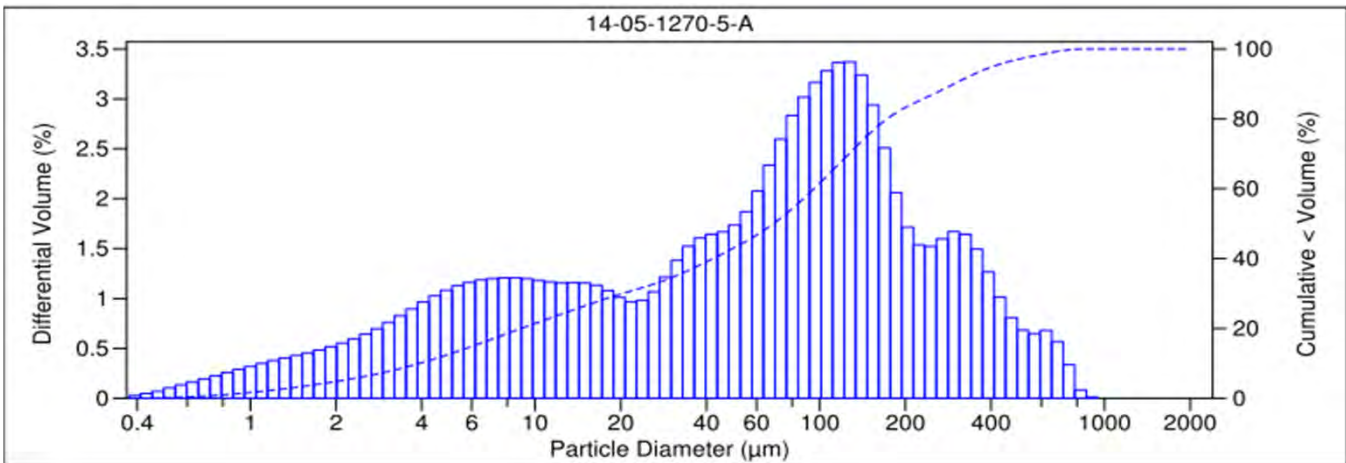
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 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-03 TOP		Very Fine Sand	0.112

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	2.93	10.10	17.50	21.80	37.70	9.96	47.66



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

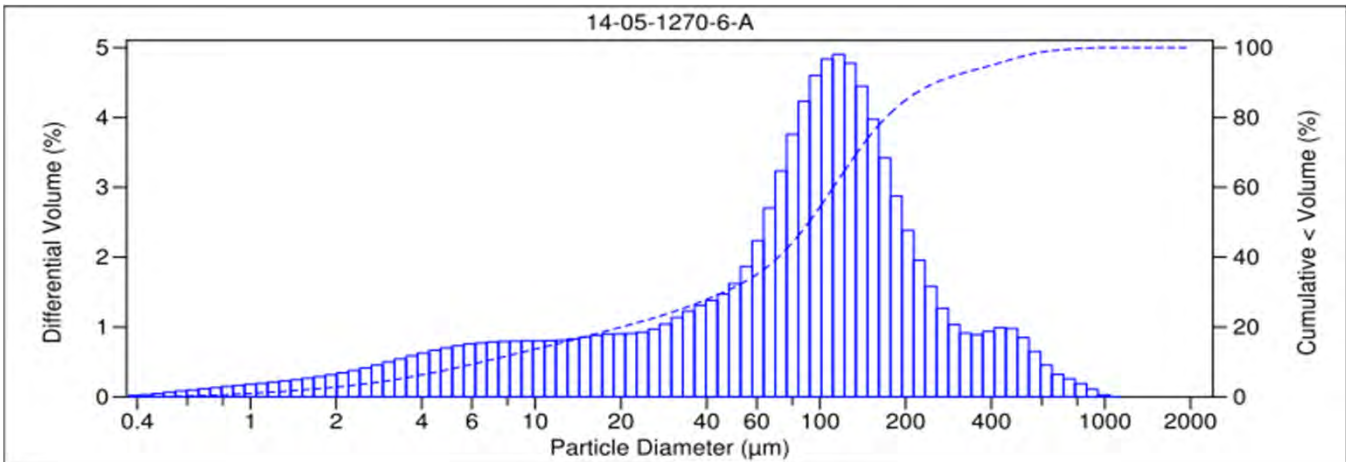
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Date Received: 05/16/14
Work Order No: 14-05-1270
Date Analyzed: 05/21/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-03 BOTTOM		Very Fine Sand	0.120

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.02	2.75	7.61	23.69	29.89	29.89	6.16	36.05



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

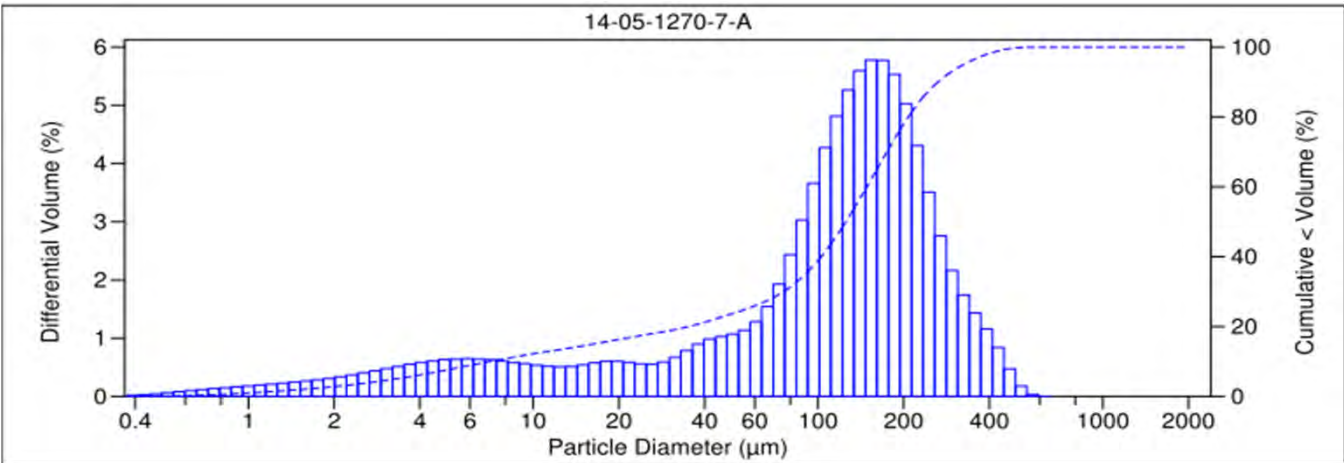
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Date Received: 05/16/14
Work Order No: 14-05-1270
Date Analyzed: 05/21/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-04 TOP		Fine Sand	0.134

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.19	11.70	38.29	23.29	20.49	6.04	26.53



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

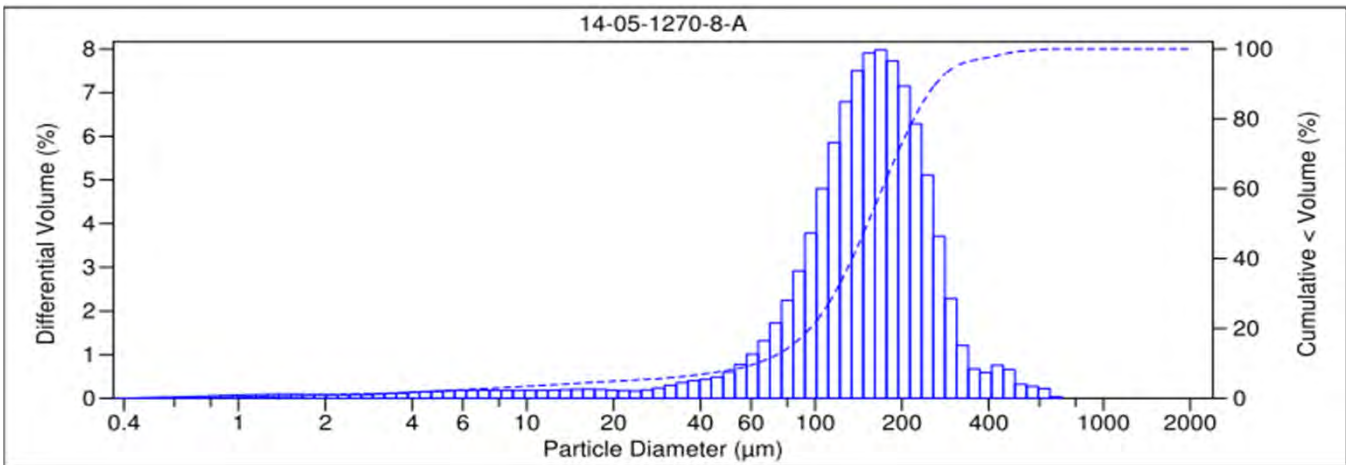
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 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-04 BOTTOM		Fine Sand	0.162

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.82	11.50	53.09	24.60	8.28	1.71	9.99



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

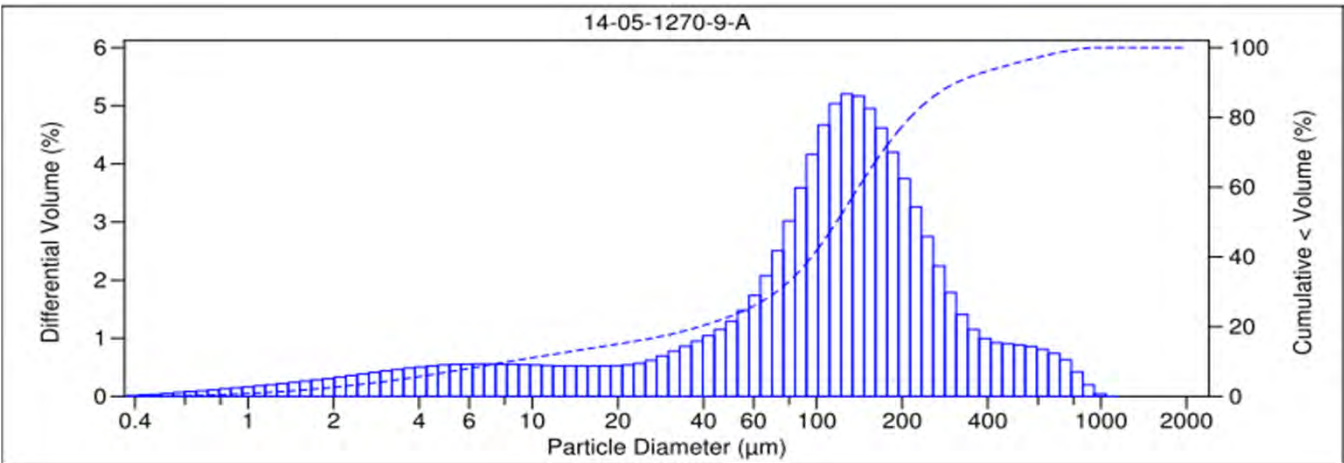
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 Date Received: 05/16/14
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-05 TOP		Fine Sand	0.151

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.02	4.47	10.40	31.70	26.70	21.10	5.61	26.71



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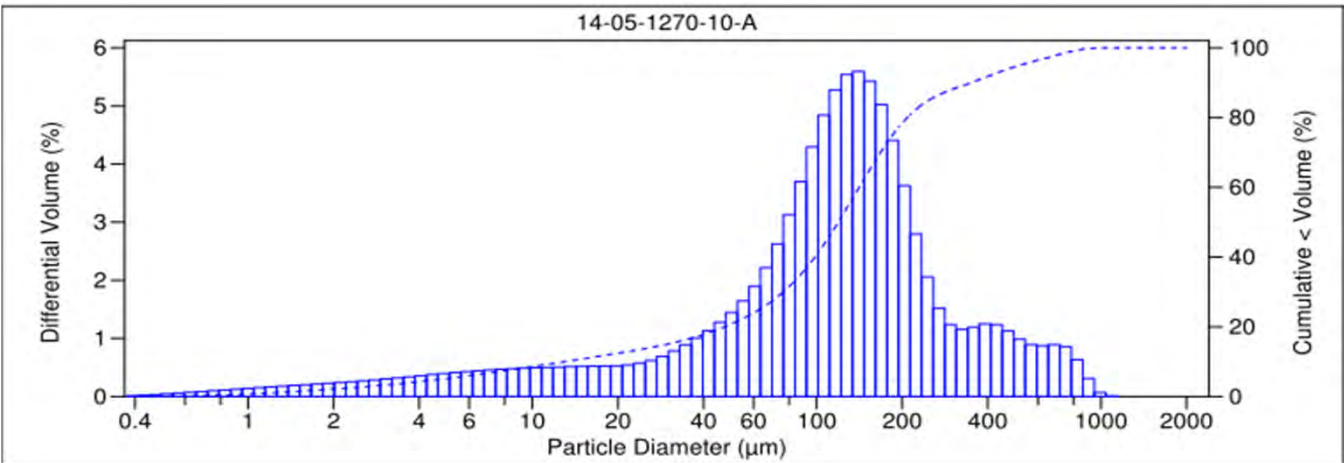
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-05 BOTTOM		Fine Sand	0.158

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.04	5.38	9.48	32.39	27.89	20.59	4.24	24.83



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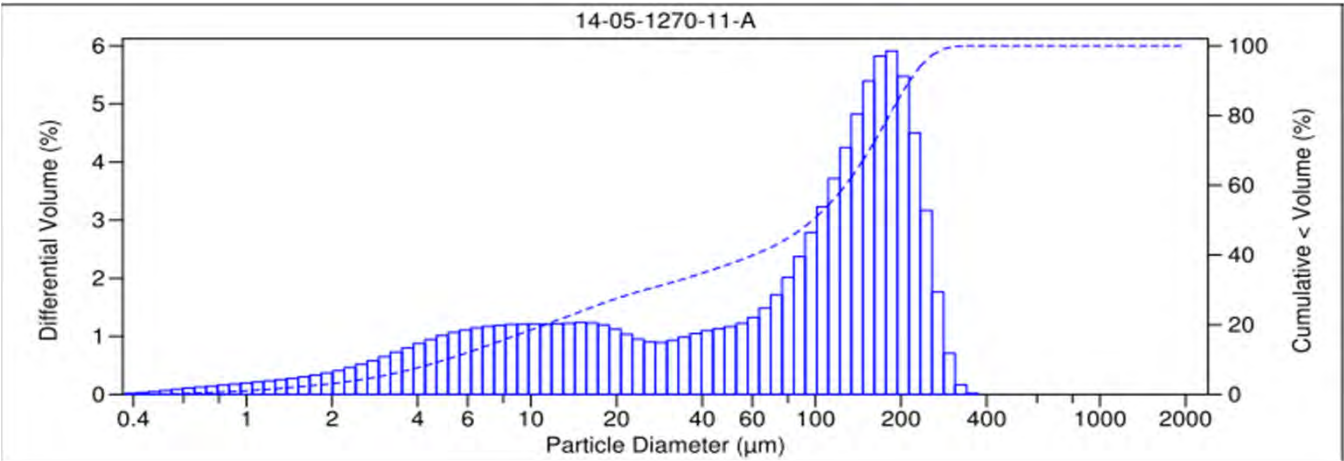
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-06 TOP		Very Fine Sand	0.101

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.62	37.27	18.69	32.98	7.45	40.42



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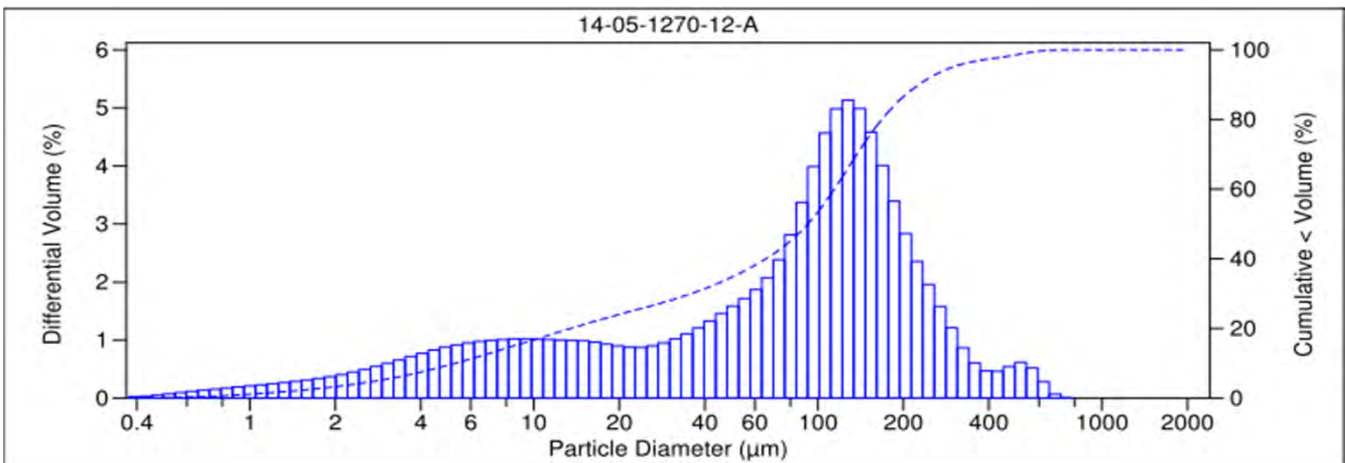
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-07 TOP		Very Fine Sand	0.108

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	1.42	6.42	27.29	25.89	31.69	7.30	38.99



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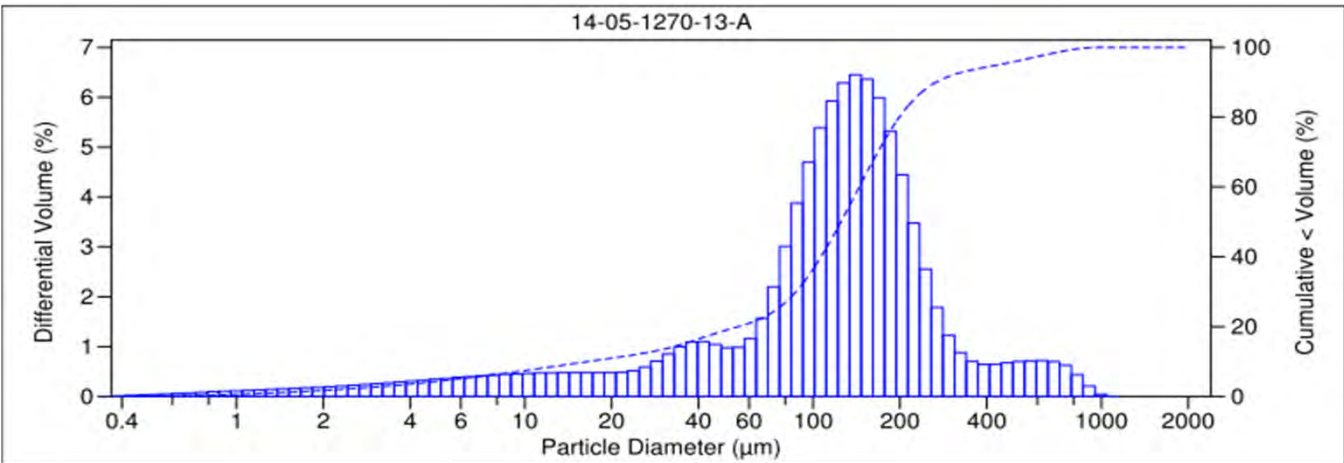
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-07 BOTTOM		Fine Sand	0.151

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.03	4.06	7.45	38.42	28.51	18.01	3.52	21.53



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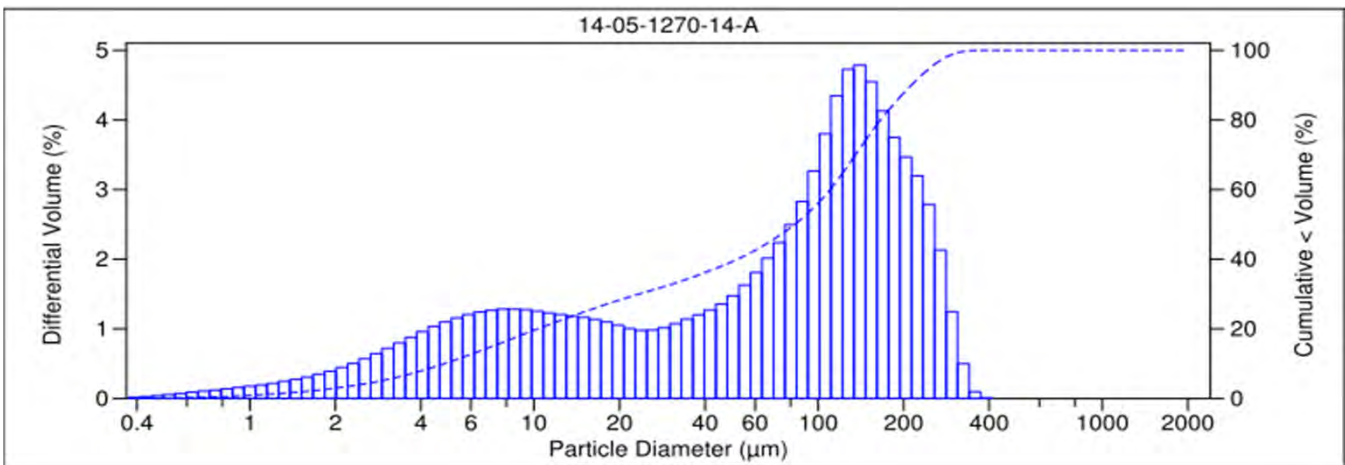
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-08 TOP		Very Fine Sand	0.094

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	4.83	29.30	22.50	35.70	7.68	43.38



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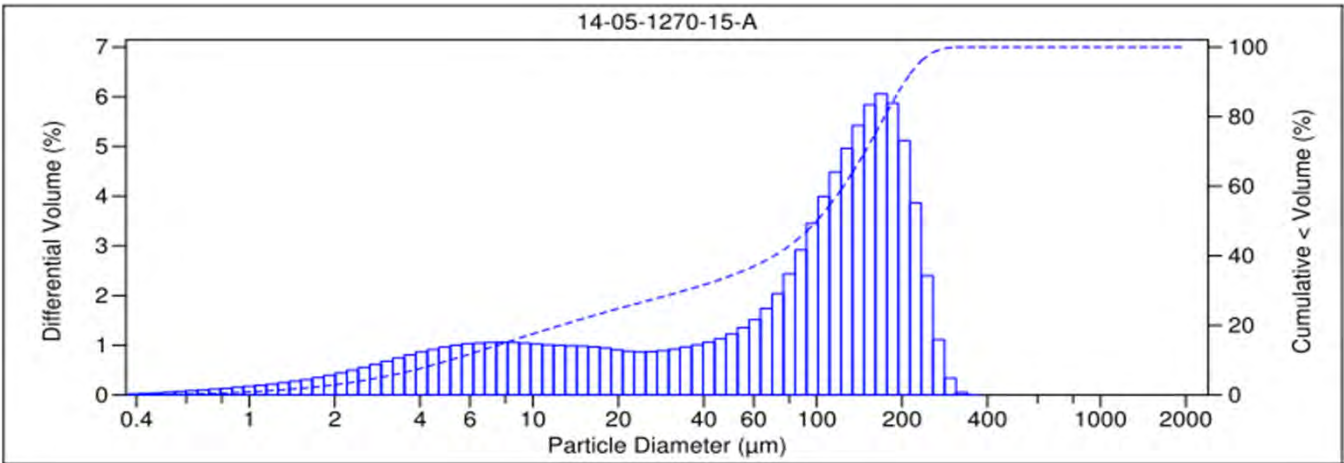
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-N-08 BOTTOM		Very Fine Sand	0.100

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	2.24	37.51	22.61	30.21	7.43	37.64



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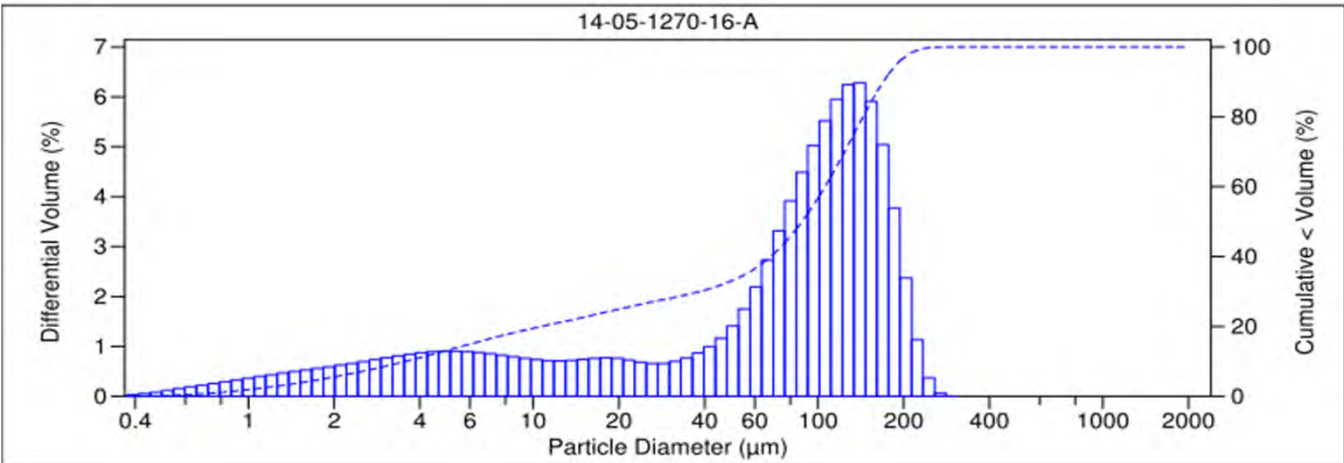
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-11 TOP		Very Fine Sand	0.086

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.18	29.39	32.99	26.59	10.86	37.45



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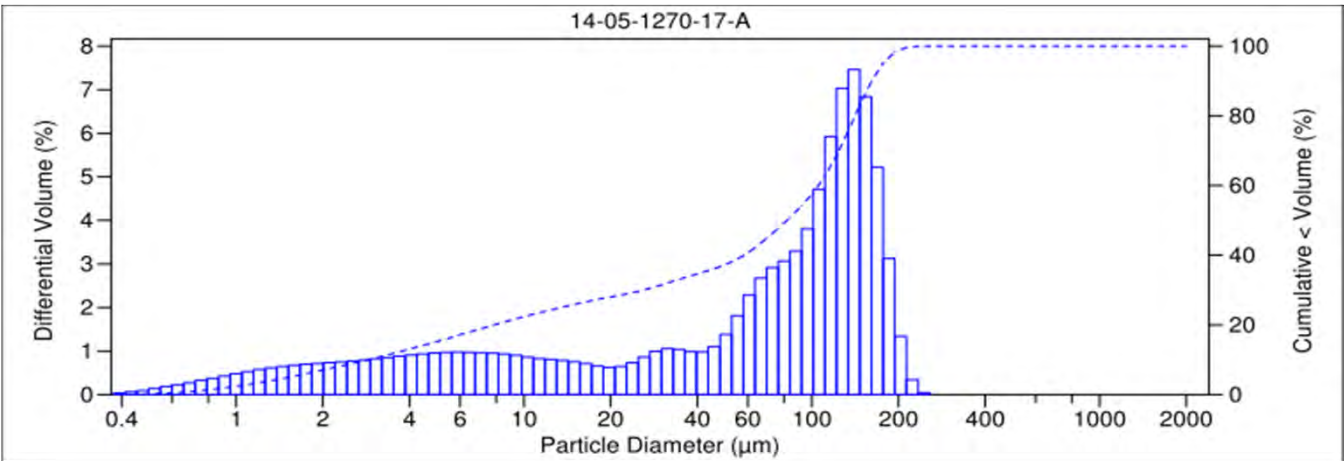
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-11 BOTTOM		Very Fine Sand	0.081

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.02	29.51	28.61	29.01	12.86	41.87



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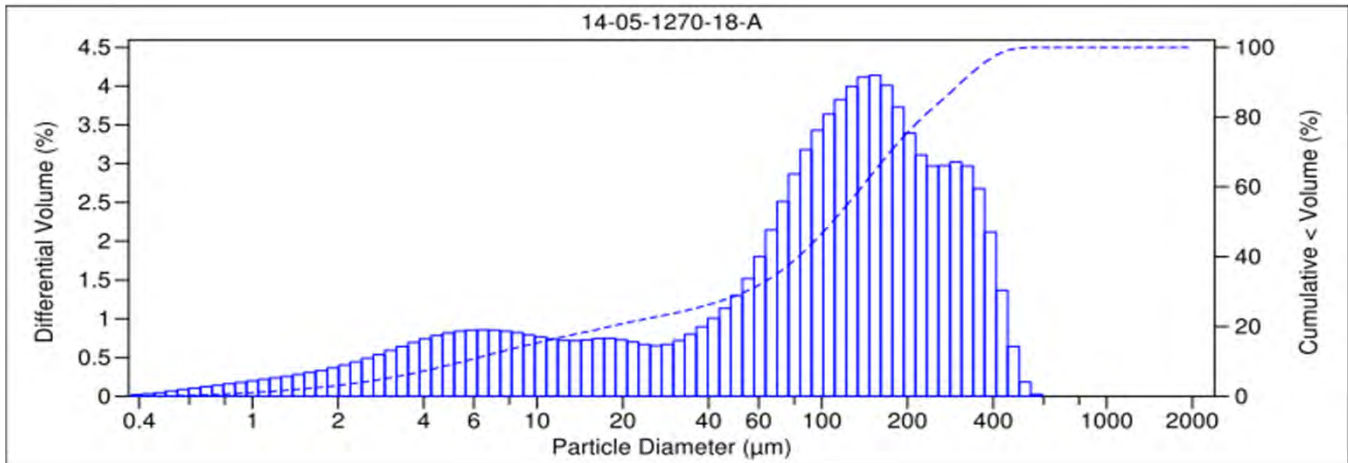
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-12 TOP		Fine Sand	0.133

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.19	16.69	27.48	22.99	25.58	7.07	32.65



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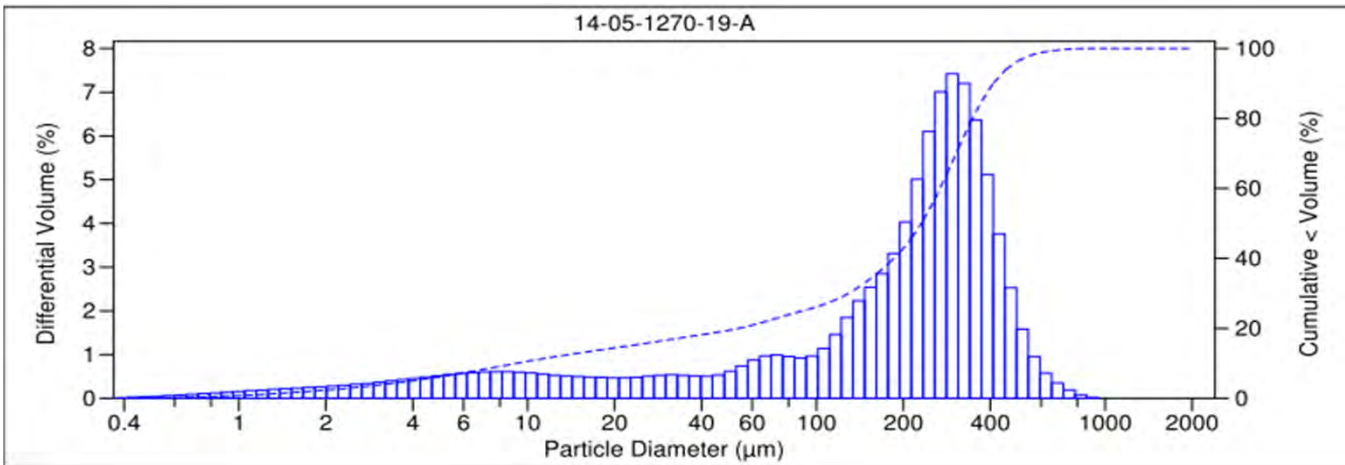
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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-12 BOTTOM		Fine Sand	0.222

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	3.55	41.48	25.59	8.06	16.39	4.94	21.33



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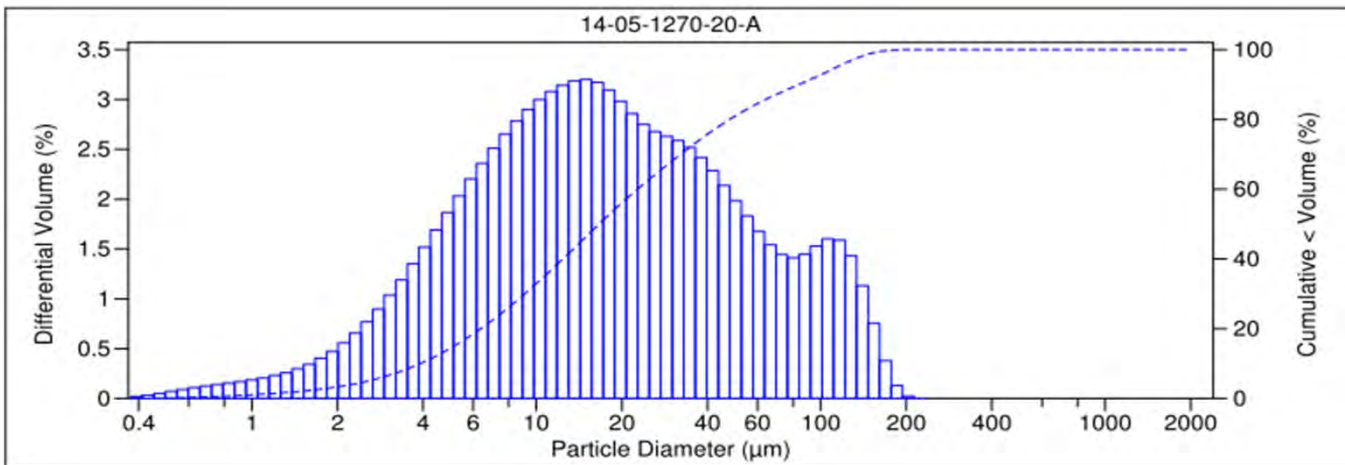
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-04 TOP		Silt	0.031

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	3.48	11.20	75.30	10.01	85.32



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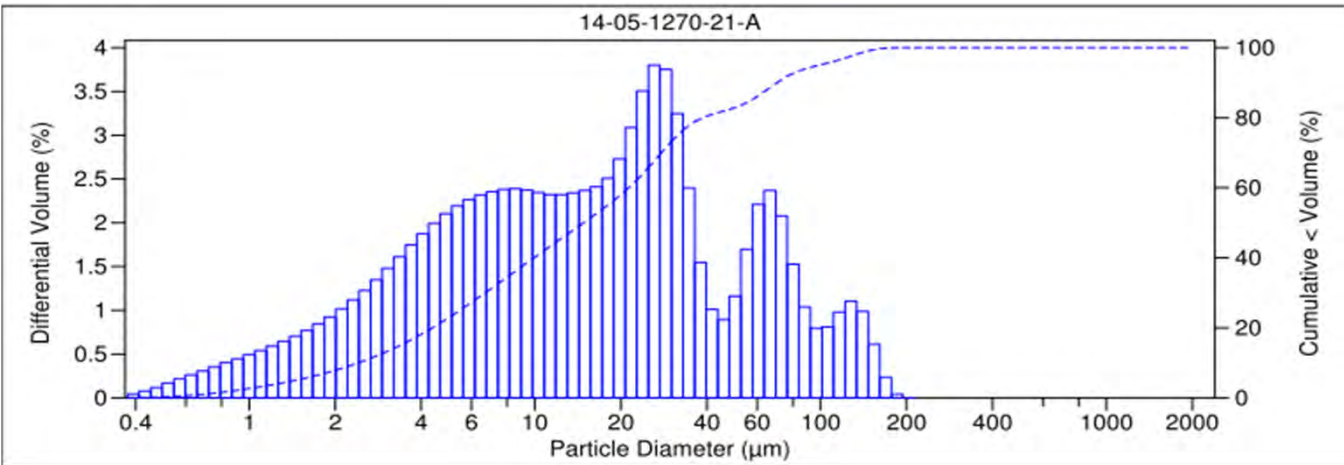
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-04 BOTTOM		Silt	0.027

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	2.70	10.30	69.28	17.72	87.00



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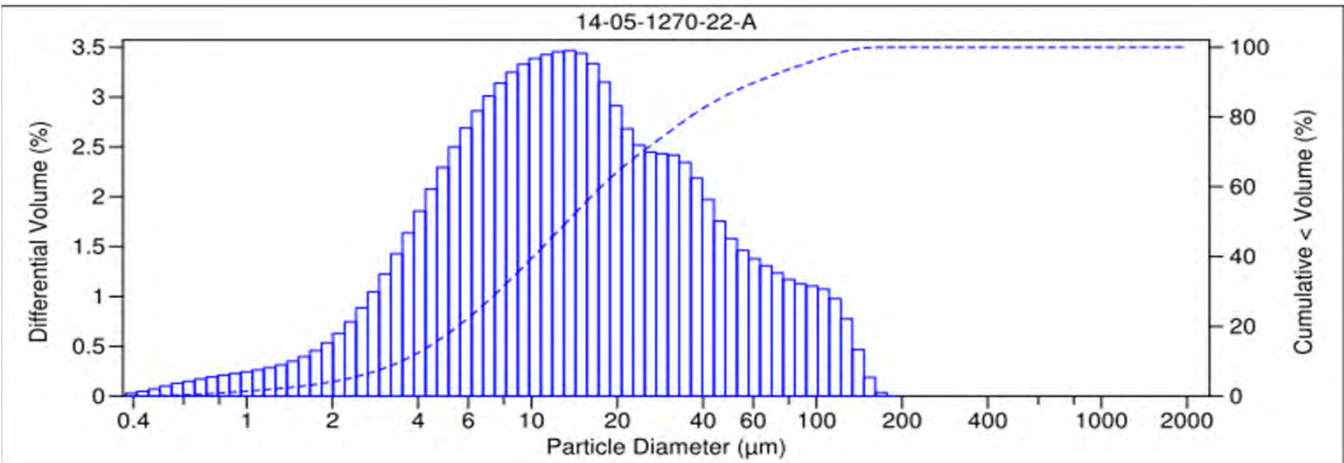
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-05 TOP		Silt	0.024

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	1.27	8.43	78.29	12.01	90.30



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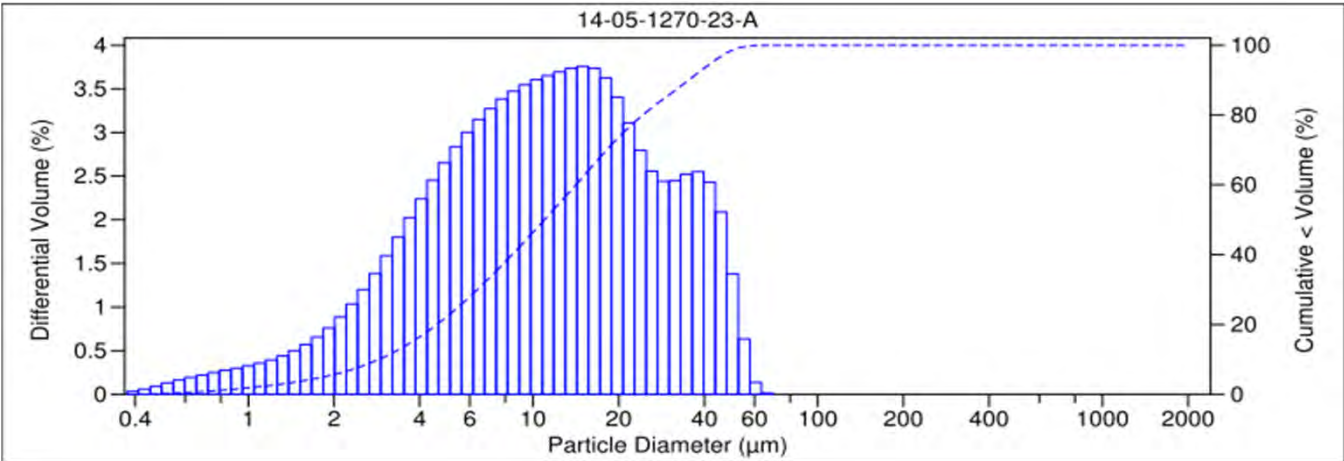
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-05 BOTTOM		Silt	0.015

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.00	0.04	83.98	15.98	99.96



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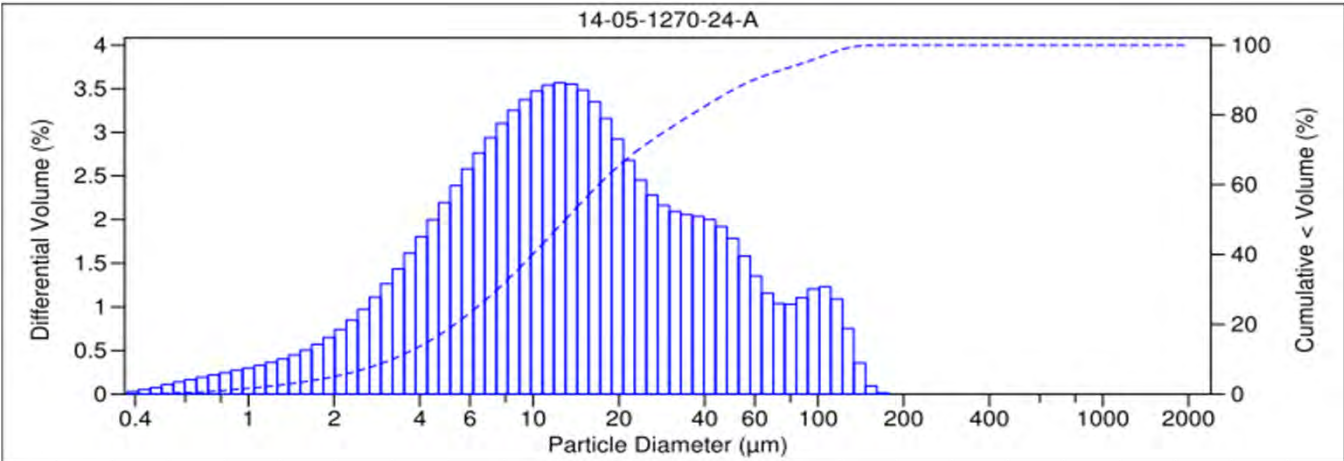
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-05 TOP DUP		Silt	0.023

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	1.01	8.28	77.40	13.31	90.71



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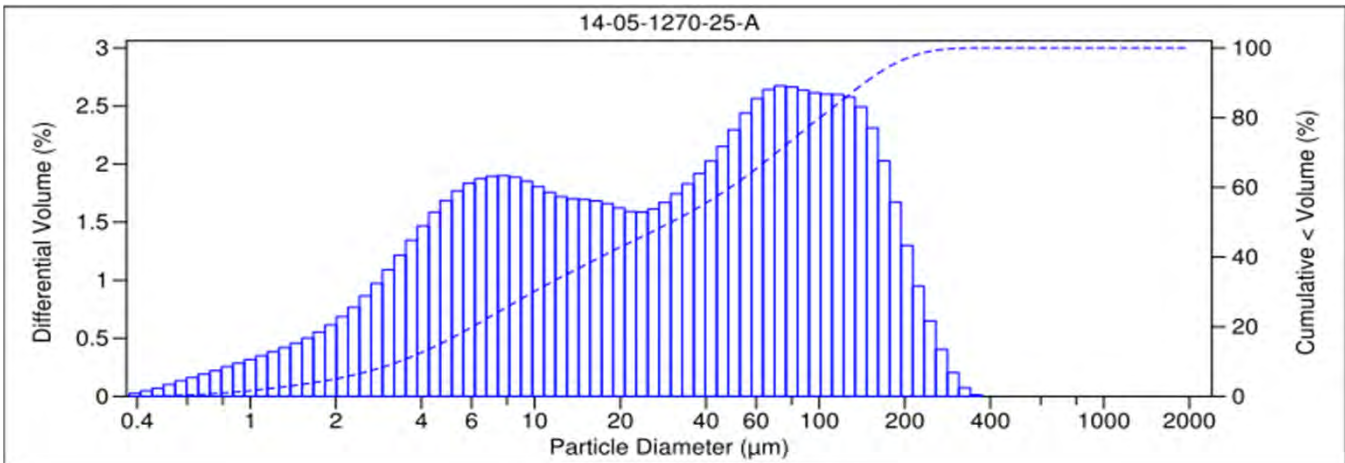
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-06 TOP		Silt	0.054

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.90	13.11	19.51	54.24	12.24	66.48



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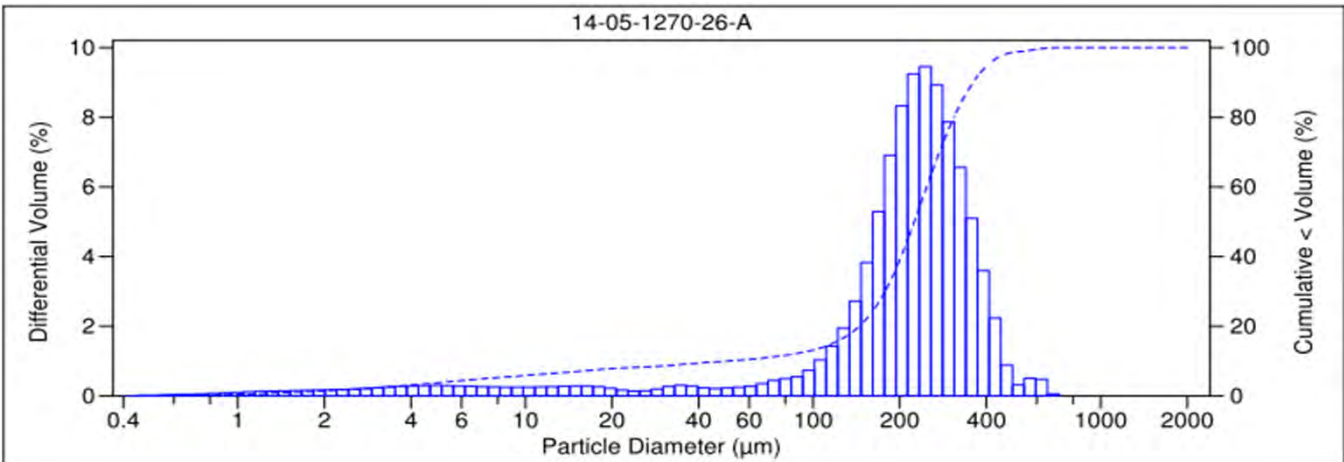
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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-06 BOTTOM		Fine Sand	0.224

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	1.32	38.12	44.32	5.62	7.53	3.08	10.62



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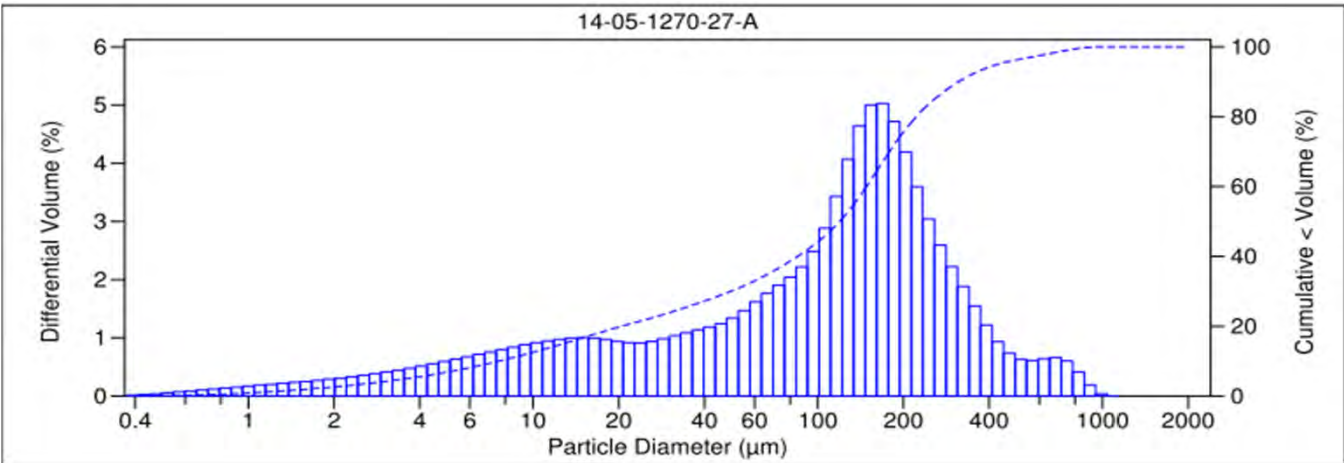
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-01 TOP		Fine Sand	0.147

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.02	3.70	12.19	32.28	18.09	28.28	5.44	33.72



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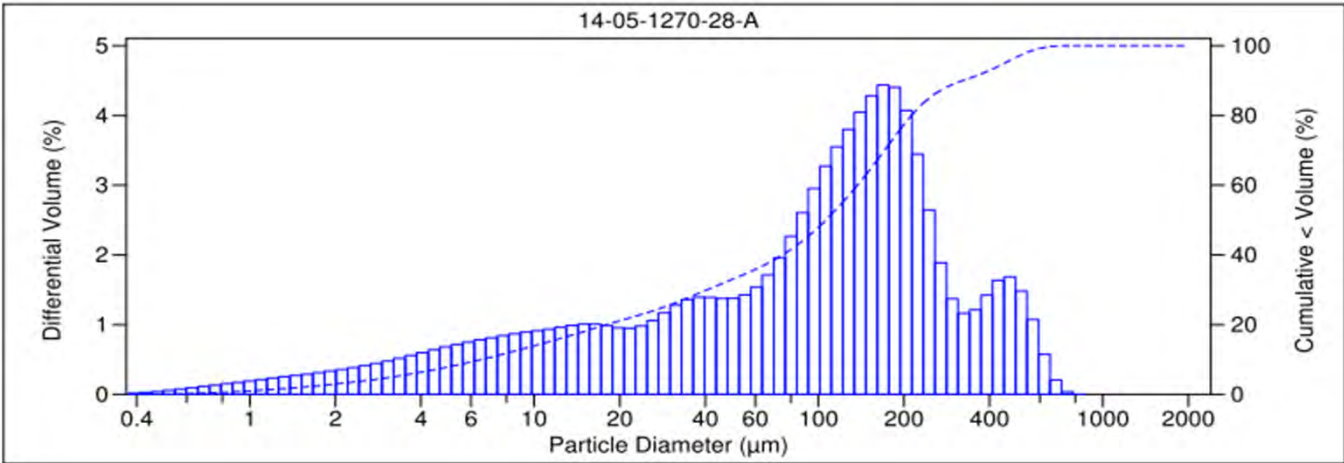
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-01 BOTTOM		Fine Sand	0.137

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	3.18	11.40	29.30	19.60	30.30	6.22	36.52



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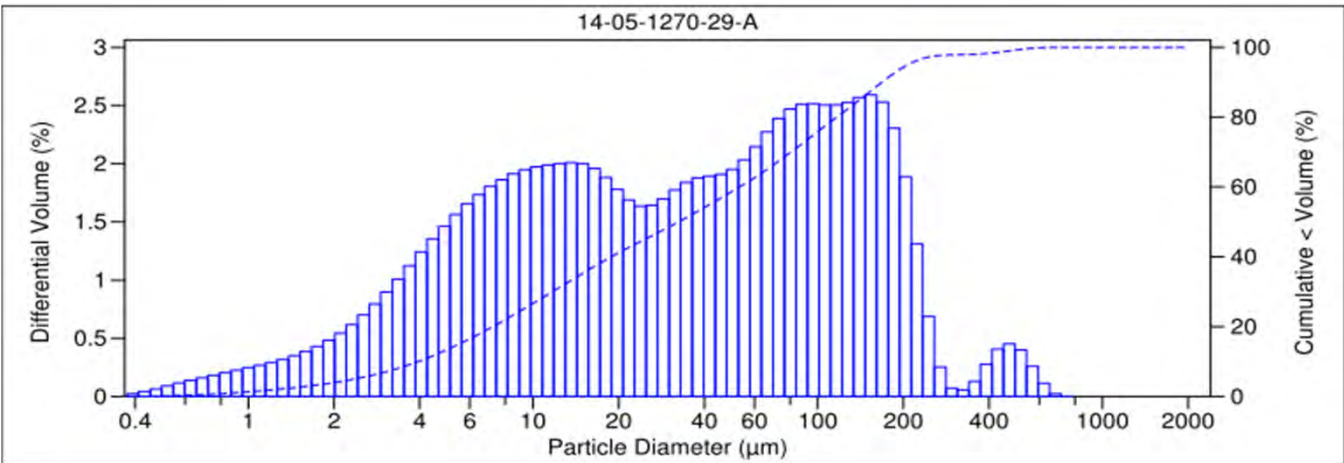
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-01 TOP DUP		Very Fine Sand	0.066

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.75	1.92	15.51	18.21	53.72	9.89	63.61



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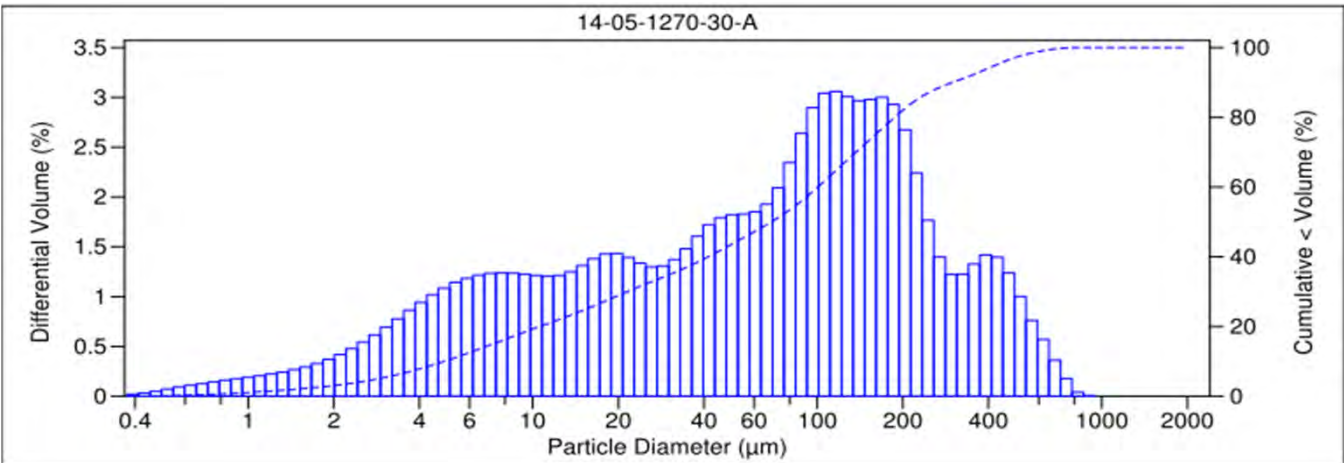
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-02 TOP		Very Fine Sand	0.115

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	2.79	9.90	20.20	19.10	40.39	7.62	48.02



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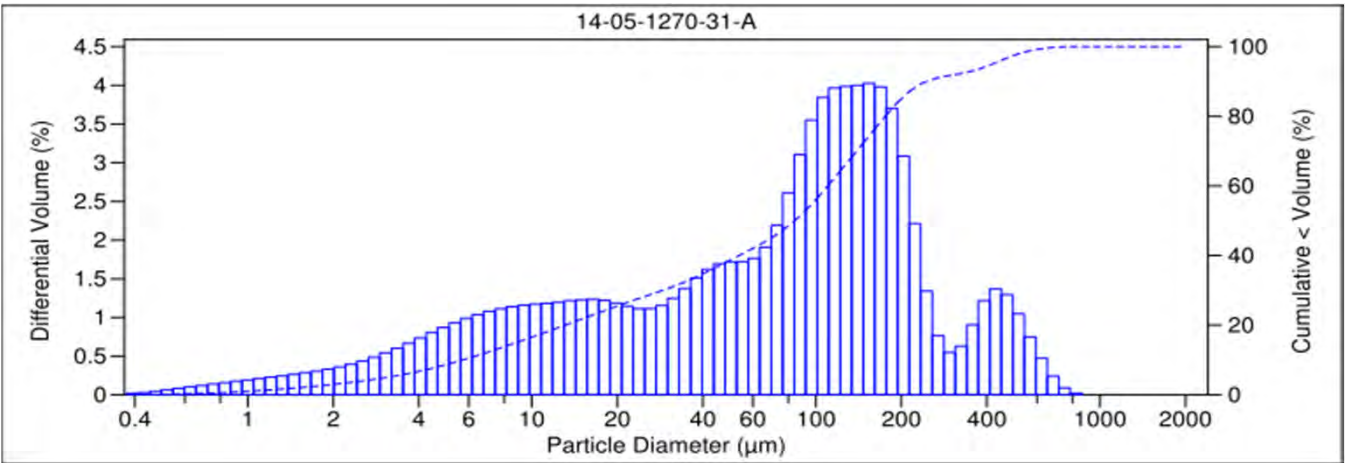
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-02 BOTTOM		Very Fine Sand	0.115

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	2.48	7.27	24.89	22.49	36.29	6.58	42.87



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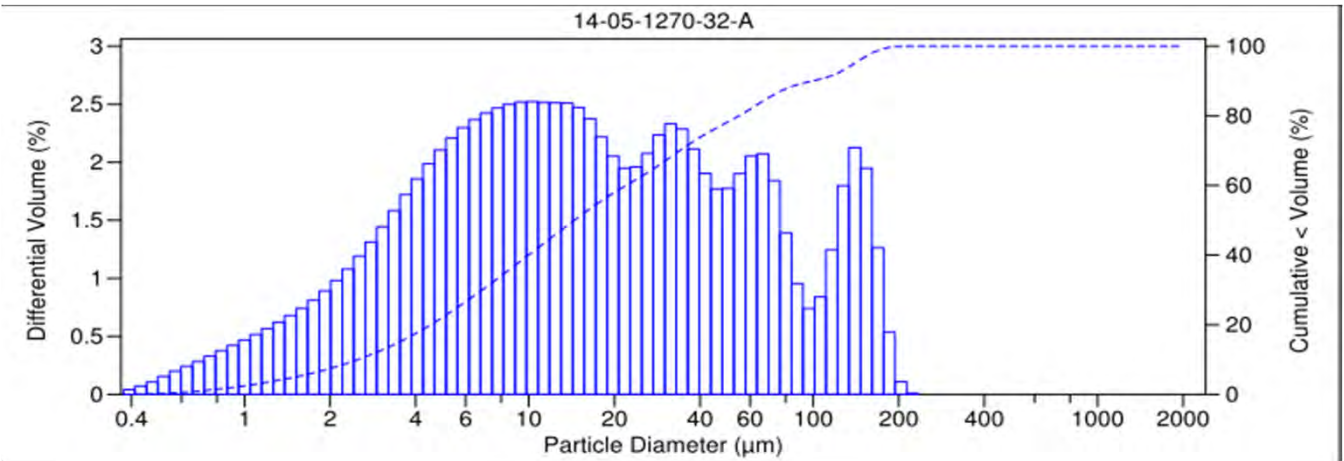
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-03 TOP		Silt	0.033

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	7.32	9.90	65.69	17.09	82.78



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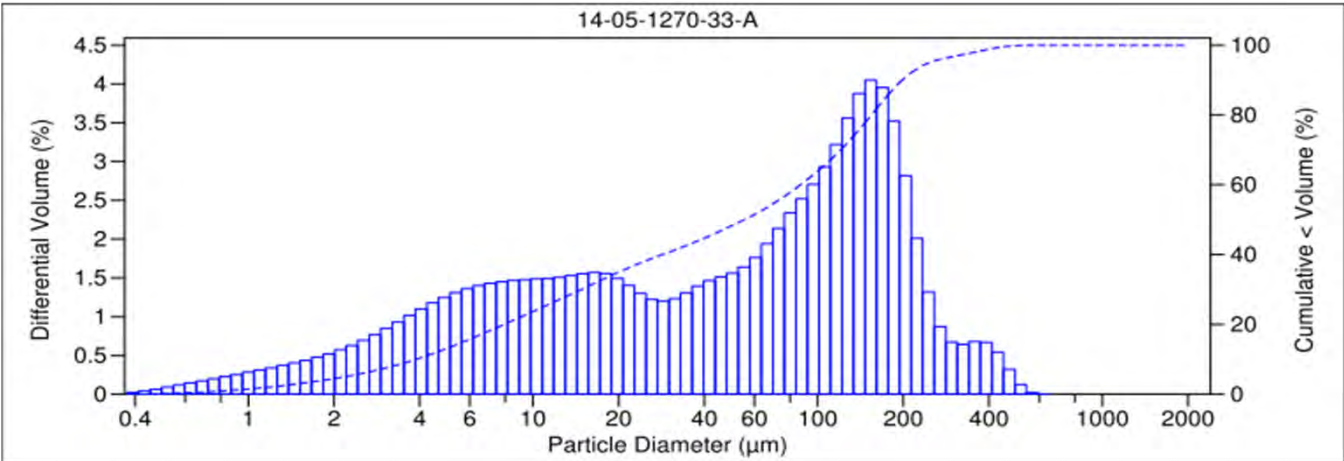
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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-03 BOTTOM		Very Fine Sand	0.085

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.13	4.81	23.79	18.99	42.19	10.08	52.27



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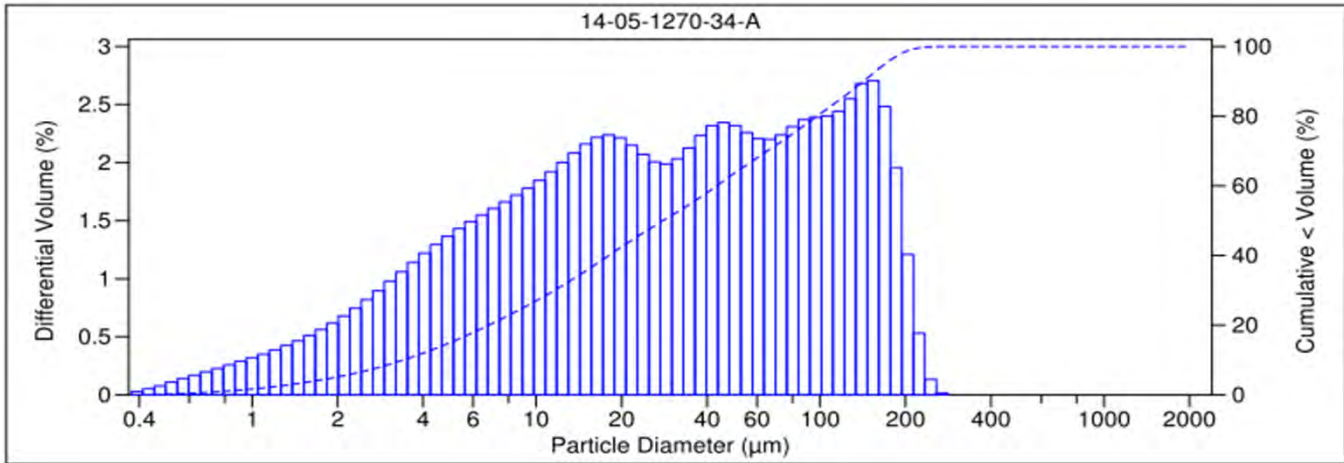
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 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-04 TOP		Silt	0.052

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.02	5.26	67.81	22.37	4.54	26.91



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

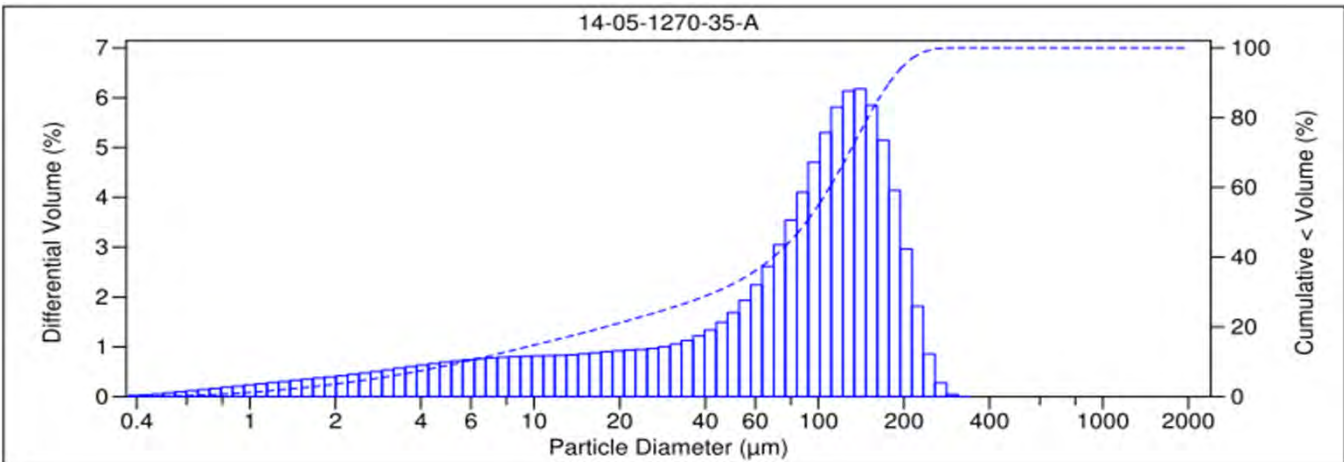
Date Sampled: 05/13/14
Date Received: 05/16/14
Work Order No: 14-05-1270
Date Analyzed: 05/21/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-N-04 BOTTOM		Very Fine Sand	0.091

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.58	31.20	31.10	29.80	7.31	37.11



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

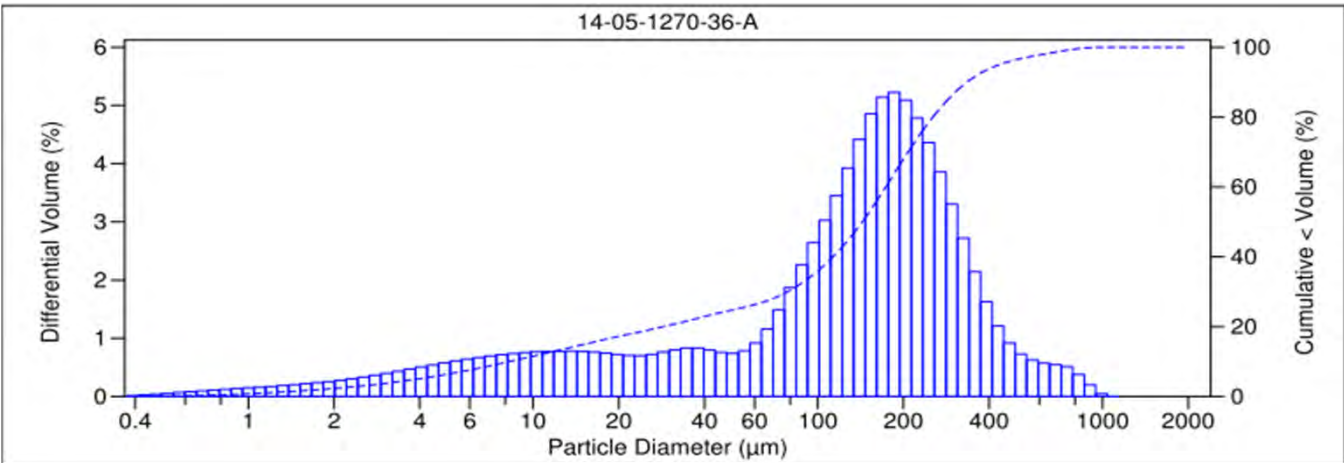
Date Sampled: 05/13/14
 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-05 TOP		Fine Sand	0.166

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.03	3.50	17.21	35.43	17.11	21.72	4.99	26.71



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

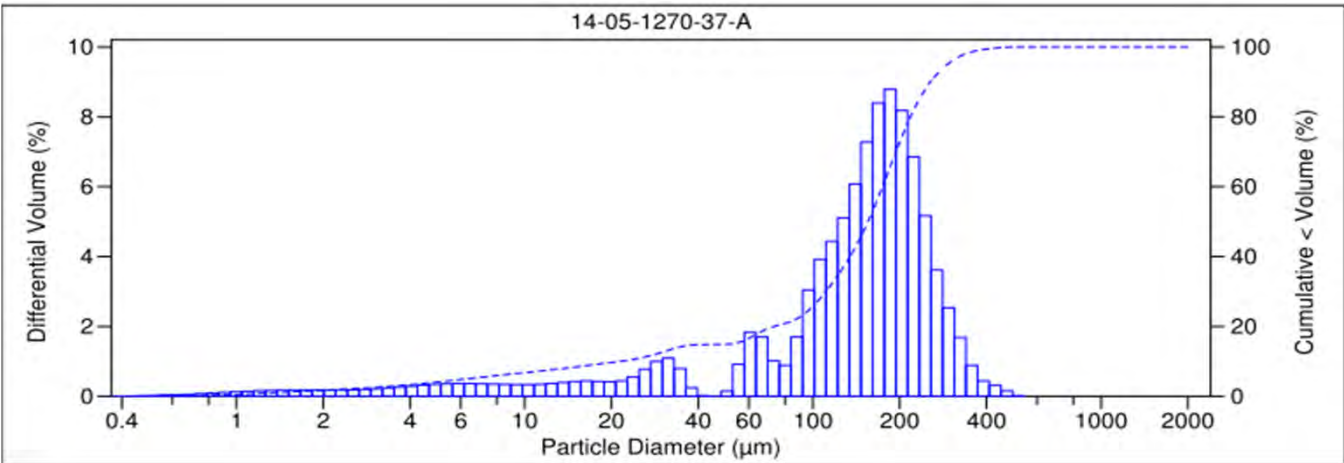
Date Sampled: 05/13/14
Date Received: 05/16/14
Work Order No: 14-05-1270
Date Analyzed: 05/21/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-05 BOTTOM		Fine Sand	0.151

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.01	11.20	52.90	18.40	14.20	3.29	17.49



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

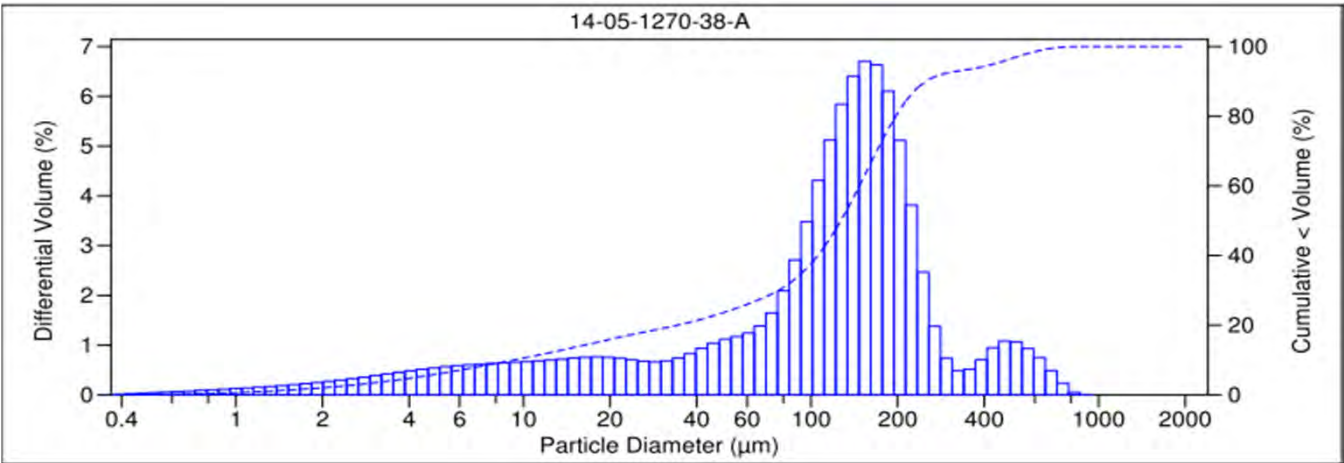
Date Sampled: 05/13/14
 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-06 TOP		Fine Sand	0.142

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	3.39	6.74	40.81	22.50	21.90	4.65	26.55



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PARTICLE SIZE SUMMARY

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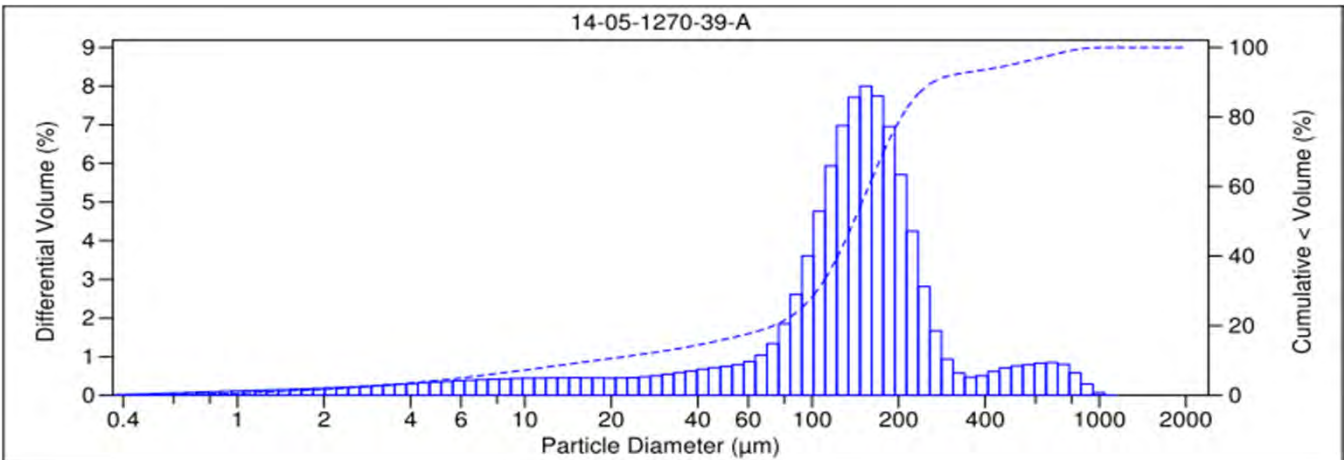
Date Sampled: 05/13/14
 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/21/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-06 BOTTOM		Fine Sand	0.163

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.04	4.85	6.44	47.48	23.09	14.69	3.42	18.11



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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

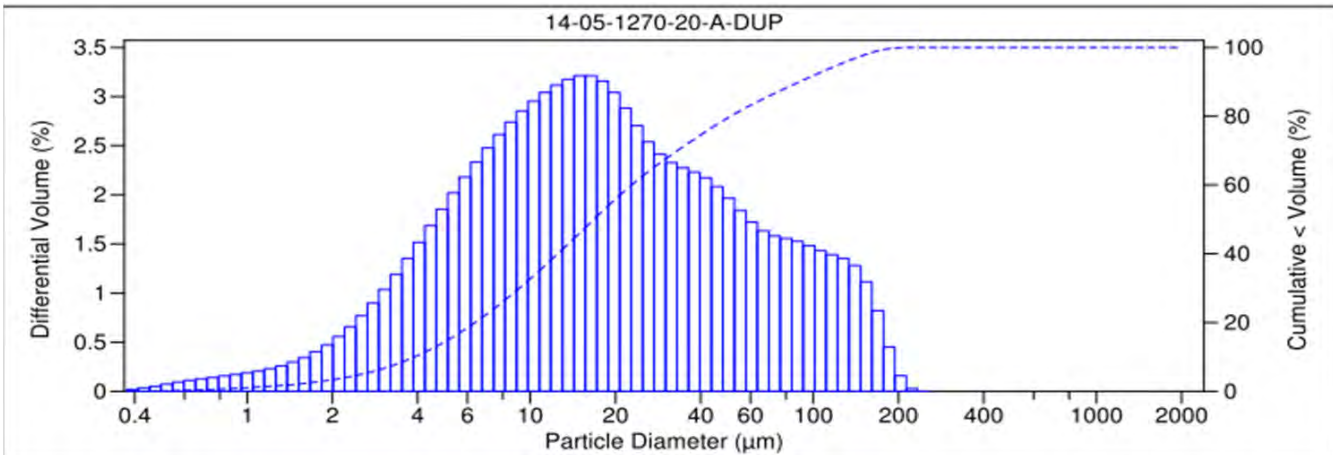
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Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-S-04 TOP (Particle Size Dup)		Silt	0.033

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	4.84	11.20	73.92	10.04	83.96



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
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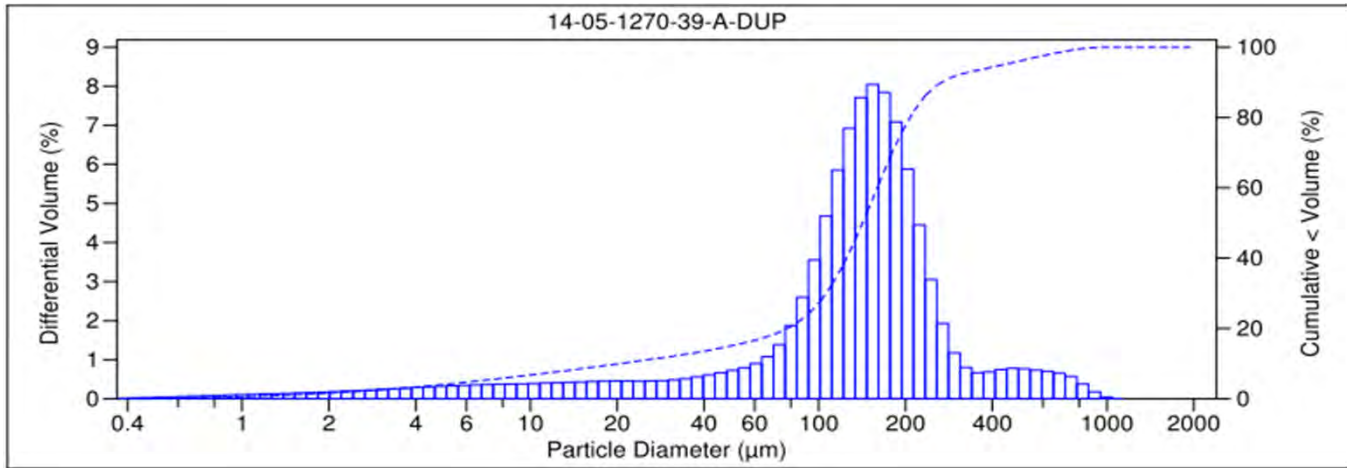
Date Sampled: 05/13/14
 Date Received: 05/16/14
 Work Order No: 14-05-1270
 Date Analyzed: 05/22/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-06 BOTTOM (Particle Size Dup)		Fine Sand	0.162

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.02	3.91	7.81	48.19	23.00	13.80	3.28	17.07



V 3.0

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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-N-06 TOP	Sample	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCS2
CB-N-06 TOP	Matrix Spike	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCS2
CB-N-06 TOP	Matrix Spike Duplicate	Sediment	TOC 4	05/19/14	05/20/14 15:09	E0519TOCS2

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.5700	3.000	3.790	107	3.750	106	75-125	1	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-N-02 BOTTOM	Sample	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCS1
JB-N-02 BOTTOM	Matrix Spike	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCS1
JB-N-02 BOTTOM	Matrix Spike Duplicate	Sediment	TOC 4	05/21/14	05/21/14 18:30	E0521TOCS1

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.9100	3.000	4.080	106	3.980	102	75-125	2	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
CB-N-06 TOP LAB DUP	Sample	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1				
CB-N-06 TOP LAB DUP	Matrix Spike	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1				
CB-N-06 TOP LAB DUP	Matrix Spike Duplicate	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.4800	3.000	3.300	94	3.290	94	75-125	0	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
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Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-N-01 TOP	Sample	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCS1
CB-N-01 TOP	Matrix Spike	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCS1
CB-N-01 TOP	Matrix Spike Duplicate	Sediment	TOC 5	05/19/14	05/20/14 10:59	E0519TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.7200	3.000	3.290	86	3.650	98	75-125	10	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SR-S-04 BOTTOM	Sample	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCS1
SR-S-04 BOTTOM	Matrix Spike	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCS1
SR-S-04 BOTTOM	Matrix Spike Duplicate	Sediment	TOC 5	05/20/14	05/20/14 19:13	E0520TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.7800	3.000	3.340	85	3.270	83	75-125	2	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14	06/09/14 20:20	140609S01
14-06-0596-1	Matrix Spike	Sediment	ICP/MS 03	06/09/14	06/09/14 19:54	140609S01
14-06-0596-1	Matrix Spike Duplicate	Sediment	ICP/MS 03	06/09/14	06/09/14 19:57	140609S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	5.134	25.00	30.56	102	27.37	89	80-120	11	0-20	
Cadmium	0.1976	25.00	27.86	111	24.68	98	80-120	12	0-20	
Chromium	38.20	25.00	69.05	123	63.57	101	80-120	8	0-20	3
Copper	24.21	25.00	51.51	109	47.75	94	80-120	8	0-20	
Lead	11.56	25.00	39.95	114	36.18	98	80-120	10	0-20	
Nickel	38.78	25.00	66.61	111	61.55	91	80-120	8	0-20	
Selenium	0.3452	25.00	28.65	113	25.60	101	80-120	11	0-20	
Silver	0.1535	12.50	13.87	110	12.43	98	80-120	11	0-20	
Zinc	58.83	25.00	91.48	131	81.38	90	80-120	12	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1383-4	Sample	Sediment	ICP/MS 04	05/20/14	05/21/14 19:35	140520S05
14-05-1383-4	Matrix Spike	Sediment	ICP/MS 04	05/20/14	05/21/14 14:51	140520S05
14-05-1383-4	Matrix Spike Duplicate	Sediment	ICP/MS 04	05/20/14	05/21/14 14:55	140520S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.9767	25.00	26.77	103	27.60	106	80-120	3	0-20	
Cadmium	ND	25.00	27.70	111	27.66	111	80-120	0	0-20	
Chromium	4.393	25.00	32.07	111	31.44	108	80-120	2	0-20	
Copper	1.693	25.00	28.82	109	28.84	109	80-120	0	0-20	
Lead	2.085	25.00	28.14	104	28.32	105	80-120	1	0-20	
Nickel	2.773	25.00	29.45	107	29.12	105	80-120	1	0-20	
Selenium	ND	25.00	27.13	109	27.26	109	80-120	0	0-20	
Silver	ND	12.50	13.45	108	13.69	110	80-120	2	0-20	
Zinc	13.77	25.00	43.68	120	49.22	142	80-120	12	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-S-12 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14	05/21/14 17:39	140520S06
CB-S-12 BOTTOM	Matrix Spike	Sediment	ICP/MS 04	05/20/14	05/21/14 17:25	140520S06
CB-S-12 BOTTOM	Matrix Spike Duplicate	Sediment	ICP/MS 04	05/20/14	05/21/14 17:29	140520S06

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	0.5255	25.00	26.63	104	25.98	102	80-120	3	0-20	
Cadmium	ND	25.00	27.32	109	26.88	108	80-120	2	0-20	
Chromium	4.118	25.00	30.59	106	29.48	101	80-120	4	0-20	
Copper	1.694	25.00	29.08	110	28.38	107	80-120	2	0-20	
Lead	2.442	25.00	29.56	108	28.64	105	80-120	3	0-20	
Nickel	2.280	25.00	28.98	107	28.50	105	80-120	2	0-20	
Selenium	0.1170	25.00	26.25	105	25.83	103	80-120	2	0-20	
Silver	ND	12.50	13.43	107	13.34	107	80-120	1	0-20	
Zinc	16.67	25.00	52.42	143	49.75	132	80-120	5	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-S-12 BOTTOM	Sample	Sediment	Mercury 05	05/21/14	05/21/14 18:32	140521S04
CB-S-12 BOTTOM	Matrix Spike	Sediment	Mercury 05	05/21/14	05/21/14 18:39	140521S04
CB-S-12 BOTTOM	Matrix Spike Duplicate	Sediment	Mercury 05	05/21/14	05/21/14 18:41	140521S04

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	0.04830	0.8350	0.8186	92	0.8866	100	76-136	8	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
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Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-15	Sample	Sediment	Mercury 05	05/21/14	05/21/14 18:43	140521S05
14-05-1271-15	Matrix Spike	Sediment	Mercury 05	05/21/14	05/21/14 18:45	140521S05
14-05-1271-15	Matrix Spike Duplicate	Sediment	Mercury 05	05/21/14	05/21/14 18:48	140521S05

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.7953	95	0.8696	104	76-136	9	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1383-4	Sample	Sediment	Mercury 05	05/21/14	05/21/14 18:50	140521S06
14-05-1383-4	Matrix Spike	Sediment	Mercury 05	05/21/14	05/21/14 18:52	140521S06
14-05-1383-4	Matrix Spike Duplicate	Sediment	Mercury 05	05/21/14	05/21/14 18:54	140521S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.8083	97	0.8773	105	76-136	8	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0537-4	Sample	Solid	Mercury 05	06/09/14	06/10/14 13:29	140609S08
14-06-0537-4	Matrix Spike	Solid	Mercury 05	06/09/14	06/10/14 13:32	140609S08
14-06-0537-4	Matrix Spike Duplicate	Solid	Mercury 05	06/09/14	06/10/14 13:34	140609S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9798	117	0.9691	116	71-137	1	0-14	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-18	Sample	Sediment	GC 51	06/09/14	06/11/14 12:29	140609S10
14-05-1271-18	Matrix Spike	Sediment	GC 51	06/09/14	06/11/14 11:32	140609S10
14-05-1271-18	Matrix Spike Duplicate	Sediment	GC 51	06/09/14	06/11/14 11:46	140609S10

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	3.310	66	2.897	58	50-135	13	0-25	
Alpha-BHC	ND	5.000	4.047	81	3.724	74	50-135	8	0-25	
Beta-BHC	ND	5.000	3.892	78	3.743	75	50-135	4	0-25	
Delta-BHC	ND	5.000	3.699	74	3.601	72	50-135	3	0-25	
Gamma-BHC	ND	5.000	3.801	76	3.191	64	50-135	17	0-25	
Dieldrin	ND	5.000	3.612	72	3.181	64	50-135	13	0-25	
4,4'-DDD	ND	5.000	3.577	72	3.124	62	50-135	14	0-25	
4,4'-DDE	1.258	5.000	3.703	49	3.234	40	50-135	14	0-25	3
4,4'-DDT	ND	5.000	3.882	78	3.511	70	50-135	10	0-25	
Endosulfan I	ND	5.000	3.505	70	2.910	58	50-135	19	0-25	
Endosulfan II	ND	5.000	3.803	76	3.466	69	50-135	9	0-25	
Endosulfan Sulfate	ND	5.000	3.845	77	3.172	63	50-135	19	0-25	
Endrin	ND	5.000	3.896	78	3.365	67	50-135	15	0-25	
Endrin Aldehyde	ND	5.000	3.361	67	2.795	56	50-135	18	0-25	
Endrin Ketone	ND	5.000	3.820	76	3.281	66	50-135	15	0-25	
Heptachlor	ND	5.000	3.692	74	3.410	68	50-135	8	0-25	
Heptachlor Epoxide	ND	5.000	3.476	70	3.008	60	50-135	14	0-25	
Methoxychlor	ND	5.000	3.957	79	3.422	68	50-135	15	0-25	
Alpha Chlordane	ND	5.000	3.395	68	2.938	59	50-135	14	0-25	
Gamma Chlordane	ND	5.000	3.304	66	2.889	58	50-135	13	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-N-04 BOTTOM	Sample	Sediment	GC 66	05/21/14	05/24/14 12:34	140521S03
CB-N-04 BOTTOM	Matrix Spike	Sediment	GC 66	05/21/14	05/24/14 16:47	140521S03
CB-N-04 BOTTOM	Matrix Spike Duplicate	Sediment	GC 66	05/21/14	05/24/14 17:01	140521S03

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	4.857	97	4.754	95	50-135	2	0-25	
Alpha-BHC	ND	5.000	5.052	101	4.756	95	50-135	6	0-25	
Beta-BHC	ND	5.000	4.853	97	4.952	99	50-135	2	0-25	
Delta-BHC	ND	5.000	5.592	112	5.284	106	50-135	6	0-25	
Gamma-BHC	ND	5.000	4.834	97	4.702	94	50-135	3	0-25	
Dieldrin	ND	5.000	5.259	105	5.243	105	50-135	0	0-25	
4,4'-DDD	ND	5.000	5.175	104	5.581	112	50-135	8	0-25	
4,4'-DDE	ND	5.000	5.088	102	5.178	104	50-135	2	0-25	
4,4'-DDT	ND	5.000	4.818	96	5.037	101	50-135	4	0-25	
Endosulfan I	ND	5.000	5.052	101	4.999	100	50-135	1	0-25	
Endosulfan II	ND	5.000	5.461	109	5.685	114	50-135	4	0-25	
Endosulfan Sulfate	ND	5.000	5.392	108	5.464	109	50-135	1	0-25	
Endrin	ND	5.000	4.888	98	4.930	99	50-135	1	0-25	
Endrin Aldehyde	ND	5.000	5.038	101	4.774	95	50-135	5	0-25	
Endrin Ketone	ND	5.000	5.586	112	5.895	118	50-135	5	0-25	
Heptachlor	ND	5.000	5.175	103	4.957	99	50-135	4	0-25	
Heptachlor Epoxide	ND	5.000	4.723	94	4.777	96	50-135	1	0-25	
Methoxychlor	ND	5.000	5.089	102	5.450	109	50-135	7	0-25	
Alpha Chlordane	ND	5.000	4.808	96	4.882	98	50-135	2	0-25	
Gamma Chlordane	ND	5.000	5.004	100	5.048	101	50-135	1	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-N-01 BOTTOM	Sample	Sediment	GC 66	05/23/14	05/27/14 16:15	140523S11
JB-N-01 BOTTOM	Matrix Spike	Sediment	GC 66	05/23/14	05/28/14 14:05	140523S11
JB-N-01 BOTTOM	Matrix Spike Duplicate	Sediment	GC 66	05/23/14	05/28/14 14:19	140523S11

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	4.794	96	4.861	97	50-135	1	0-25	
Alpha-BHC	ND	5.000	4.989	100	5.054	101	50-135	1	0-25	
Beta-BHC	ND	5.000	3.402	68	3.270	65	50-135	4	0-25	
Delta-BHC	ND	5.000	7.824	156	6.910	138	50-135	12	0-25	3
Gamma-BHC	ND	5.000	4.322	86	4.362	87	50-135	1	0-25	
Dieldrin	ND	5.000	5.672	113	5.565	111	50-135	2	0-25	
4,4'-DDD	ND	5.000	5.085	102	5.227	105	50-135	3	0-25	
4,4'-DDE	ND	5.000	4.794	96	4.914	98	50-135	2	0-25	
4,4'-DDT	ND	5.000	3.662	73	3.620	72	50-135	1	0-25	
Endosulfan I	ND	5.000	4.698	94	4.892	98	50-135	4	0-25	
Endosulfan II	ND	5.000	4.852	97	5.345	107	50-135	10	0-25	
Endosulfan Sulfate	ND	5.000	4.783	96	5.142	103	50-135	7	0-25	
Endrin	ND	5.000	4.532	91	4.530	91	50-135	0	0-25	
Endrin Aldehyde	ND	5.000	4.660	93	4.773	95	50-135	2	0-25	
Endrin Ketone	ND	5.000	4.292	86	3.964	79	50-135	8	0-25	
Heptachlor	ND	5.000	4.382	88	4.338	87	50-135	1	0-25	
Heptachlor Epoxide	ND	5.000	4.788	96	4.893	98	50-135	2	0-25	
Methoxychlor	ND	5.000	3.771	75	3.475	69	50-135	8	0-25	
Alpha Chlordane	ND	5.000	4.623	92	4.726	95	50-135	2	0-25	
Gamma Chlordane	ND	5.000	4.553	91	4.573	91	50-135	0	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-N-01 TOP	Sample	Sediment	GC/MS MM	05/25/14	05/29/14 02:04	140525S07
JB-N-01 TOP	Matrix Spike	Sediment	GC/MS MM	05/25/14	05/29/14 05:04	140525S07
JB-N-01 TOP	Matrix Spike Duplicate	Sediment	GC/MS MM	05/25/14	05/29/14 05:29	140525S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	890.8	89	909.6	91	40-160	2	0-20	
2,4-Dichlorophenol	ND	1000	888.5	89	875.1	88	40-160	2	0-20	
2-Methylphenol	ND	1000	773.2	77	769.3	77	40-160	0	0-20	
2-Nitrophenol	ND	1000	861.8	86	867.3	87	40-160	1	0-20	
4-Chloro-3-Methylphenol	ND	1000	915.8	92	902.5	90	40-160	1	0-20	
Acenaphthene	ND	1000	852.7	85	847.8	85	40-106	1	0-20	
Benzo (a) Pyrene	33.88	1000	831.6	80	840.1	81	17-163	1	0-20	
Chrysene	ND	1000	789.5	79	808.8	81	17-168	2	0-20	
Di-n-Butyl Phthalate	ND	1000	1011	101	997.0	100	40-160	1	0-20	
Dimethyl Phthalate	145.1	1000	835.4	69	848.7	70	40-160	2	0-20	
Fluoranthene	ND	1000	856.2	86	837.5	84	26-137	2	0-20	
Fluorene	ND	1000	853.0	85	853.3	85	59-121	0	0-20	
Naphthalene	ND	1000	857.4	86	844.7	84	21-133	1	0-20	
Phenanthrene	ND	1000	875.8	88	877.6	88	54-120	0	0-20	
Phenol	ND	1000	827.4	83	840.8	84	40-160	2	0-20	
Pyrene	ND	1000	861.4	86	846.7	85	6-156	2	0-46	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-10	Sample	Sediment	GC/MS MM	05/25/14	05/29/14 07:37	140525S08
14-05-1271-10	Matrix Spike	Sediment	GC/MS MM	05/25/14	05/29/14 12:51	140525S08
14-05-1271-10	Matrix Spike Duplicate	Sediment	GC/MS MM	05/25/14	05/29/14 13:17	140525S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	695.0	70	721.0	72	40-160	4	0-20	
2,4-Dichlorophenol	ND	1000	693.0	69	689.1	69	40-160	1	0-20	
2-Methylphenol	ND	1000	653.7	65	646.6	65	40-160	1	0-20	
2-Nitrophenol	ND	1000	621.4	62	639.8	64	40-160	3	0-20	
4-Chloro-3-Methylphenol	ND	1000	700.6	70	711.5	71	40-160	2	0-20	
Acenaphthene	ND	1000	677.8	68	691.1	69	40-106	2	0-20	
Benzo (a) Pyrene	13.99	1000	654.1	64	657.6	64	17-163	1	0-20	
Chrysene	ND	1000	643.1	64	627.0	63	17-168	3	0-20	
Di-n-Butyl Phthalate	ND	1000	703.2	70	617.4	62	40-160	13	0-20	
Dimethyl Phthalate	94.94	1000	620.6	53	636.9	54	40-160	3	0-20	
Fluoranthene	ND	1000	628.5	63	621.9	62	26-137	1	0-20	
Fluorene	ND	1000	667.6	67	701.9	70	59-121	5	0-20	
Naphthalene	ND	1000	672.6	67	678.9	68	21-133	1	0-20	
Phenanthrene	ND	1000	700.7	70	696.4	70	54-120	1	0-20	
Phenol	ND	1000	683.8	68	676.9	68	40-160	1	0-20	
Pyrene	ND	1000	712.9	71	685.6	69	6-156	4	0-46	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
14-05-1271-18	Sample	Sediment	GC/MS MM	06/09/14	06/10/14 17:26	140609S12				
14-05-1271-18	Matrix Spike	Sediment	GC/MS MM	06/09/14	06/10/14 17:51	140609S12				
14-05-1271-18	Matrix Spike Duplicate	Sediment	GC/MS MM	06/09/14	06/10/14 18:17	140609S12				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	717.2	72	711.2	71	40-160	1	0-20	
2,4-Dichlorophenol	ND	1000	730.5	73	729.3	73	40-160	0	0-20	
2-Methylphenol	ND	1000	520.4	52	532.4	53	40-160	2	0-20	
2-Nitrophenol	ND	1000	796.8	80	792.3	79	40-160	1	0-20	
4-Chloro-3-Methylphenol	ND	1000	821.7	82	828.5	83	40-160	1	0-20	
Acenaphthene	ND	1000	618.3	62	616.5	62	40-106	0	0-20	
Benzo (a) Pyrene	27.41	1000	595.9	57	595.1	57	17-163	0	0-20	
Chrysene	ND	1000	602.7	60	605.4	61	17-168	0	0-20	
Di-n-Butyl Phthalate	ND	1000	571.8	57	564.7	56	40-160	1	0-20	
Dimethyl Phthalate	252.9	1000	1014	76	1034	78	40-160	2	0-20	
Fluoranthene	ND	1000	577.3	58	579.8	58	26-137	0	0-20	
Fluorene	ND	1000	593.8	59	591.5	59	59-121	0	0-20	
Naphthalene	ND	1000	694.7	69	693.6	69	21-133	0	0-20	
Phenanthrene	ND	1000	490.6	49	465.2	47	54-120	5	0-20	3
Phenol	ND	1000	879.8	88	893.0	89	40-160	1	0-20	
Pyrene	ND	1000	602.4	60	628.2	63	6-156	4	0-46	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-06 TOP	Sample	Sediment	GC/MS HHH	05/23/14	05/30/14 19:39	140523S30
JB-S-06 TOP	Matrix Spike	Sediment	GC/MS HHH	05/23/14	05/31/14 04:48	140523S30
JB-S-06 TOP	Matrix Spike Duplicate	Sediment	GC/MS HHH	05/23/14	05/31/14 05:15	140523S30

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	18.06	72	29.83	119	50-125	49	0-30	4
PCB018	ND	25.00	13.80	55	22.54	90	50-125	48	0-30	4
PCB028	ND	25.00	14.66	59	24.08	96	50-125	49	0-30	4
PCB044	ND	25.00	13.59	54	21.32	85	50-125	44	0-30	4
PCB052	ND	25.00	12.39	50	20.15	81	50-125	48	0-30	4
PCB066	ND	25.00	15.78	63	24.62	98	50-125	44	0-30	4
PCB077	ND	25.00	16.53	66	25.87	103	50-125	44	0-30	4
PCB101	ND	25.00	12.73	51	19.43	78	50-125	42	0-30	4
PCB105	ND	25.00	14.97	60	23.16	93	50-125	43	0-30	4
PCB118	ND	25.00	14.87	59	23.26	93	50-125	44	0-30	4
PCB126	ND	25.00	15.79	63	24.01	96	50-125	41	0-30	4
PCB128	ND	25.00	11.78	47	17.78	71	50-125	41	0-30	3,4
PCB153	ND	25.00	12.28	49	18.41	74	50-125	40	0-30	3,4
PCB170	ND	25.00	12.22	49	18.30	73	50-125	40	0-30	3,4
PCB180	ND	25.00	13.42	54	19.52	78	50-125	37	0-30	4
PCB187	ND	25.00	12.56	50	18.77	75	50-125	40	0-30	4
PCB195	ND	25.00	16.00	64	22.80	91	50-125	35	0-30	4
PCB206	ND	25.00	13.95	56	18.73	75	50-125	29	0-30	4
PCB209	ND	25.00	13.62	54	17.51	70	50-125	25	0-30	4

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1001-6	Sample	Solid	GC/MS HHH	05/24/14	05/27/14 21:38	140524S07
14-05-1001-6	Matrix Spike	Solid	GC/MS HHH	05/24/14	05/27/14 22:05	140524S07
14-05-1001-6	Matrix Spike Duplicate	Solid	GC/MS HHH	05/24/14	05/27/14 22:33	140524S07

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	21.95	88	22.50	90	50-125	2	0-30	
PCB018	ND	25.00	18.07	72	18.58	74	50-125	3	0-30	
PCB028	ND	25.00	19.45	78	19.64	79	50-125	1	0-30	
PCB044	ND	25.00	18.55	74	18.76	75	50-125	1	0-30	
PCB052	ND	25.00	17.19	69	17.31	69	50-125	1	0-30	
PCB066	ND	25.00	21.31	85	21.27	85	50-125	0	0-30	
PCB077	ND	25.00	20.09	80	20.27	81	50-125	1	0-30	
PCB101	ND	25.00	18.04	72	18.24	73	50-125	1	0-30	
PCB105	ND	25.00	19.95	80	20.35	81	50-125	2	0-30	
PCB118	ND	25.00	20.73	83	20.89	84	50-125	1	0-30	
PCB126	ND	25.00	19.86	79	20.08	80	50-125	1	0-30	
PCB128	ND	25.00	16.31	65	16.57	66	50-125	2	0-30	
PCB153	ND	25.00	17.66	71	17.80	71	50-125	1	0-30	
PCB170	ND	25.00	16.79	67	17.10	68	50-125	2	0-30	
PCB180	ND	25.00	18.58	74	18.84	75	50-125	1	0-30	
PCB187	ND	25.00	18.01	72	18.27	73	50-125	1	0-30	
PCB195	ND	25.00	21.85	87	22.09	88	50-125	1	0-30	
PCB206	ND	25.00	19.07	76	19.55	78	50-125	2	0-30	
PCB209	ND	25.00	19.38	78	19.85	79	50-125	2	0-30	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-8	Sample	Sediment	GC/MS HHH	06/09/14	06/11/14 03:24	140609S02
14-06-0596-8	Matrix Spike	Sediment	GC/MS HHH	06/09/14	06/11/14 14:51	140609S02
14-06-0596-8	Matrix Spike Duplicate	Sediment	GC/MS HHH	06/09/14	06/11/14 15:22	140609S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	19.76	79	17.40	70	50-125	13	0-30	
PCB018	ND	25.00	16.74	67	14.79	59	50-125	12	0-30	
PCB028	ND	25.00	19.08	76	16.80	67	50-125	13	0-30	
PCB044	ND	25.00	18.31	73	15.73	63	50-125	15	0-30	
PCB052	ND	25.00	16.79	67	14.76	59	50-125	13	0-30	
PCB066	ND	25.00	21.90	88	18.85	75	50-125	15	0-30	
PCB077	ND	25.00	21.71	87	18.01	72	50-125	19	0-30	
PCB101	ND	25.00	18.61	74	15.88	64	50-125	16	0-30	
PCB105	ND	25.00	21.68	87	18.02	72	50-125	18	0-30	
PCB118	ND	25.00	22.99	92	18.79	75	50-125	20	0-30	
PCB126	ND	25.00	20.55	82	17.70	71	50-125	15	0-30	
PCB128	ND	25.00	16.77	67	14.66	59	50-125	13	0-30	
PCB153	ND	25.00	19.85	79	15.91	64	50-125	22	0-30	
PCB170	ND	25.00	18.76	75	16.62	66	50-125	12	0-30	
PCB180	ND	25.00	19.86	79	17.16	69	50-125	15	0-30	
PCB187	ND	25.00	19.20	77	16.45	66	50-125	15	0-30	
PCB195	ND	25.00	23.95	96	21.42	86	50-125	11	0-30	
PCB206	ND	25.00	20.35	81	17.76	71	50-125	14	0-30	
PCB209	ND	25.00	22.26	89	19.49	78	50-125	13	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:20	140609S01
14-06-0596-1	PDS	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:00	140609S01
Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.134	25.00	28.69	94	75-125	
Cadmium	0.1976	25.00	25.10	100	75-125	
Chromium	38.20	25.00	62.56	97	75-125	
Copper	24.21	25.00	47.32	92	75-125	
Lead	11.56	25.00	36.00	98	75-125	
Nickel	38.78	25.00	61.76	92	75-125	
Selenium	0.3452	25.00	28.88	114	75-125	
Silver	0.1535	12.50	12.53	99	75-125	
Zinc	58.83	25.00	83.22	98	75-125	

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-05-1383-4	Sample	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 19:35	140520S05
14-05-1383-4	PDS	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 14:58	140520S05

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	0.9767	25.00	28.12	109	75-125	
Cadmium	ND	25.00	26.95	108	75-125	
Chromium	4.393	25.00	30.20	103	75-125	
Copper	1.693	25.00	28.98	109	75-125	
Lead	2.085	25.00	27.99	104	75-125	
Nickel	2.773	25.00	28.60	103	75-125	
Selenium	ND	25.00	28.90	116	75-125	
Silver	ND	12.50	13.37	107	75-125	
Zinc	13.77	25.00	43.84	120	75-125	

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
CB-S-12 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 17:39	140520S06
CB-S-12 BOTTOM	PDS	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 17:32	140520S06

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>PDS Conc.</u>	<u>PDS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic	0.5255	25.00	27.89	109	75-125	
Cadmium	ND	25.00	27.00	108	75-125	
Chromium	4.118	25.00	29.40	101	75-125	
Copper	1.694	25.00	28.97	109	75-125	
Lead	2.442	25.00	28.61	105	75-125	
Nickel	2.280	25.00	28.65	105	75-125	
Selenium	0.1170	25.00	26.51	106	75-125	
Silver	ND	12.50	13.49	108	75-125	
Zinc	16.67	25.00	45.34	115	75-125	



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Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
CB-N-01 TOP	Sample	Sediment	N/A	05/19/14 00:00	05/20/14 15:00	E0520TSD2
CB-N-01 TOP	Sample Duplicate	Sediment	N/A	05/19/14 00:00	05/20/14 15:00	E0520TSD2

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	66.70	66.90	0	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SR-S-04 BOTTOM	Sample	Sediment	N/A	05/19/14 00:00	05/20/14 16:00	E0520TSD3
SR-S-04 BOTTOM	Sample Duplicate	Sediment	N/A	05/19/14 00:00	05/20/14 16:00	E0520TSD3

<u>Parameter</u>	<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total	48.10	49.20	2	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-05-1271-18	Sample	Sediment	N/A	06/06/14 00:00	06/09/14 13:00	E0609TSD2
14-05-1271-18	Sample Duplicate	Sediment	N/A	06/06/14 00:00	06/09/14 13:00	E0609TSD2

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	64.60	64.60	0	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1043	LCS	Solid	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2			
099-06-013-1043	LCSD	Solid	TOC 4	05/19/14	05/20/14 15:09	E0519TOCL2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6254	104	0.6211	104	80-120	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1045	LCS	Solid	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1			
099-06-013-1045	LCSD	Solid	TOC 4	05/21/14	05/21/14 18:30	E0521TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6378	106	0.6292	105	80-120	1	0-20	



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1055	LCS	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
099-06-013-1055	LCSD	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6070	101	0.6024	100	80-120	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1042	LCS	Solid	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1			
099-06-013-1042	LCSD	Solid	TOC 5	05/19/14	05/20/14 10:59	E0519TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.5776	96	0.5578	93	80-120	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1044	LCS	Solid	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1			
099-06-013-1044	LCSD	Solid	TOC 5	05/20/14	05/20/14 19:13	E0520TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.5719	95	0.5546	92	80-120	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-212	LCS	Solid	ICP/MS 03	06/09/14	06/09/14 19:48	140609L01E			
099-15-254-212	LCSD	Solid	ICP/MS 03	06/09/14	06/10/14 15:02	140609L01E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	26.37	105	24.85	99	80-120	6	0-20	
Cadmium	25.00	26.75	107	25.41	102	80-120	5	0-20	
Chromium	25.00	25.16	101	24.94	100	80-120	1	0-20	
Copper	25.00	26.54	106	26.22	105	80-120	1	0-20	
Lead	25.00	26.30	105	25.07	100	80-120	5	0-20	
Nickel	25.00	25.54	102	24.92	100	80-120	2	0-20	
Selenium	25.00	28.56	114	26.59	106	80-120	7	0-20	
Silver	12.50	11.41	91	12.80	102	80-120	12	0-20	
Zinc	25.00	28.80	115	26.11	104	80-120	10	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-207	LCS	Solid	ICP/MS 04	05/20/14	05/21/14 13:06	140520L05E			
099-15-254-207	LCSD	Solid	ICP/MS 04	05/20/14	05/21/14 14:45	140520L05E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.71	103	26.95	108	80-120	5	0-20	
Cadmium	25.00	25.32	101	26.31	105	80-120	4	0-20	
Chromium	25.00	24.59	98	25.80	103	80-120	5	0-20	
Copper	25.00	27.22	109	27.49	110	80-120	1	0-20	
Lead	25.00	25.24	101	25.77	103	80-120	2	0-20	
Nickel	25.00	25.49	102	25.89	104	80-120	2	0-20	
Selenium	25.00	24.92	100	25.55	102	80-120	3	0-20	
Silver	12.50	13.27	106	13.51	108	80-120	2	0-20	
Zinc	25.00	27.68	111	28.63	115	80-120	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-208	LCS	Solid	ICP/MS 04	05/20/14	05/21/14 13:10	140520L06E			
099-15-254-208	LCSD	Solid	ICP/MS 04	05/20/14	05/21/14 14:48	140520L06E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.43	102	25.90	104	80-120	2	0-20	
Cadmium	25.00	24.57	98	25.66	103	80-120	4	0-20	
Chromium	25.00	24.65	99	25.67	103	80-120	4	0-20	
Copper	25.00	25.83	103	27.06	108	80-120	5	0-20	
Lead	25.00	24.67	99	25.14	101	80-120	2	0-20	
Nickel	25.00	24.73	99	25.15	101	80-120	2	0-20	
Selenium	25.00	25.59	102	25.50	102	80-120	0	0-20	
Silver	12.50	12.64	101	13.28	106	80-120	5	0-20	
Zinc	25.00	26.64	107	28.14	113	80-120	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-23	LCS	Solid	Mercury 05	05/21/14	05/21/14 18:19	140521L04E			
099-16-278-23	LCSD	Solid	Mercury 05	05/21/14	05/21/14 18:21	140521L04E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8713	104	0.8520	102	82-124	2	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-22	LCS	Solid	Mercury 05	05/21/14	05/21/14 18:23	140521L05E			
099-16-278-22	LCSD	Solid	Mercury 05	05/21/14	05/21/14 18:25	140521L05E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8860	106	0.8843	106	82-124	0	0-16	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-21	LCS	Solid	Mercury 05	05/21/14	05/21/14 18:28	140521L06E			
099-16-278-21	LCSD	Solid	Mercury 05	05/21/14	05/21/14 18:30	140521L06E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8868	106	0.8591	103	82-124	3	0-16	



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-16-278-28	LCS	Solid	Mercury 05	06/09/14	06/10/14 13:27	140609L08E
099-16-278-28	LCSD	Solid	Mercury 05	06/09/14	06/11/14 13:09	140609L08E

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.9064	109	0.9079	109	82-124	0	0-16	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-288	LCS	Solid	GC 51	06/09/14	06/11/14 11:03	140609L10				
099-12-858-288	LCSD	Solid	GC 51	06/09/14	06/11/14 11:17	140609L10				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	4.922	98	4.725	94	50-135	36-149	4	0-25	
Alpha-BHC	5.000	5.462	109	5.219	104	50-135	36-149	5	0-25	
Beta-BHC	5.000	4.963	99	4.750	95	50-135	36-149	4	0-25	
Delta-BHC	5.000	4.869	97	4.656	93	50-135	36-149	4	0-25	
Gamma-BHC	5.000	5.461	109	5.229	105	50-135	36-149	4	0-25	
Dieldrin	5.000	4.992	100	4.812	96	50-135	36-149	4	0-25	
4,4'-DDD	5.000	4.794	96	4.611	92	50-135	36-149	4	0-25	
4,4'-DDE	5.000	4.727	95	4.521	90	50-135	36-149	4	0-25	
4,4'-DDT	5.000	5.134	103	4.943	99	50-135	36-149	4	0-25	
Endosulfan I	5.000	5.125	102	4.975	99	50-135	36-149	3	0-25	
Endosulfan II	5.000	5.162	103	4.988	100	50-135	36-149	3	0-25	
Endosulfan Sulfate	5.000	4.845	97	4.676	94	50-135	36-149	4	0-25	
Endrin	5.000	5.144	103	4.808	96	50-135	36-149	7	0-25	
Endrin Aldehyde	5.000	5.002	100	4.956	99	50-135	36-149	1	0-25	
Endrin Ketone	5.000	5.152	103	5.015	100	50-135	36-149	3	0-25	
Heptachlor	5.000	5.428	109	5.202	104	50-135	36-149	4	0-25	
Heptachlor Epoxide	5.000	4.696	94	4.452	89	50-135	36-149	5	0-25	
Methoxychlor	5.000	4.971	99	4.820	96	50-135	36-149	3	0-25	
Alpha Chlordane	5.000	4.801	96	4.634	93	50-135	36-149	4	0-25	
Gamma Chlordane	5.000	4.814	96	4.660	93	50-135	36-149	3	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-280	LCS	Solid	GC 66	05/21/14	05/24/14 10:42	140521L03				
099-12-858-280	LCSD	Solid	GC 66	05/21/14	05/24/14 16:05	140521L03				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	6.353	127	6.194	124	50-135	36-149	3	0-25	
Alpha-BHC	5.000	6.144	123	6.114	122	50-135	36-149	0	0-25	
Beta-BHC	5.000	6.644	133	6.247	125	50-135	36-149	6	0-25	
Delta-BHC	5.000	5.782	116	5.662	113	50-135	36-149	2	0-25	
Gamma-BHC	5.000	6.043	121	6.117	122	50-135	36-149	1	0-25	
Dieldrin	5.000	6.288	126	6.140	123	50-135	36-149	2	0-25	
4,4'-DDD	5.000	6.392	128	6.230	125	50-135	36-149	3	0-25	
4,4'-DDE	5.000	6.219	124	6.094	122	50-135	36-149	2	0-25	
4,4'-DDT	5.000	5.939	119	5.975	120	50-135	36-149	1	0-25	
Endosulfan I	5.000	6.222	124	6.082	122	50-135	36-149	2	0-25	
Endosulfan II	5.000	6.715	134	6.498	130	50-135	36-149	3	0-25	
Endosulfan Sulfate	5.000	5.825	116	5.834	117	50-135	36-149	0	0-25	
Endrin	5.000	5.859	117	5.642	113	50-135	36-149	4	0-25	
Endrin Aldehyde	5.000	6.164	123	6.169	123	50-135	36-149	0	0-25	
Endrin Ketone	5.000	6.631	133	6.568	131	50-135	36-149	1	0-25	
Heptachlor	5.000	6.398	128	6.320	126	50-135	36-149	1	0-25	
Heptachlor Epoxide	5.000	5.977	120	5.830	117	50-135	36-149	3	0-25	
Methoxychlor	5.000	5.665	113	6.003	120	50-135	36-149	6	0-25	
Alpha Chlordane	5.000	6.072	121	5.922	118	50-135	36-149	3	0-25	
Gamma Chlordane	5.000	6.216	124	5.989	120	50-135	36-149	4	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-282	LCS	Solid	GC 66	05/23/14	05/27/14 14:08	140523L11				
099-12-858-282	LCSD	Solid	GC 66	05/23/14	05/27/14 14:22	140523L11				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	5.211	104	5.244	105	50-135	36-149	1	0-25	
Alpha-BHC	5.000	5.060	101	5.147	103	50-135	36-149	2	0-25	
Beta-BHC	5.000	5.471	109	5.461	109	50-135	36-149	0	0-25	
Delta-BHC	5.000	4.744	95	4.777	96	50-135	36-149	1	0-25	
Gamma-BHC	5.000	4.996	100	5.040	101	50-135	36-149	1	0-25	
Dieldrin	5.000	5.146	103	5.202	104	50-135	36-149	1	0-25	
4,4'-DDD	5.000	5.190	104	5.227	105	50-135	36-149	1	0-25	
4,4'-DDE	5.000	5.148	103	5.228	105	50-135	36-149	2	0-25	
4,4'-DDT	5.000	4.948	99	5.012	100	50-135	36-149	1	0-25	
Endosulfan I	5.000	5.267	105	5.371	107	50-135	36-149	2	0-25	
Endosulfan II	5.000	5.441	109	5.505	110	50-135	36-149	1	0-25	
Endosulfan Sulfate	5.000	4.794	96	4.830	97	50-135	36-149	1	0-25	
Endrin	5.000	4.584	92	4.666	93	50-135	36-149	2	0-25	
Endrin Aldehyde	5.000	5.222	104	5.255	105	50-135	36-149	1	0-25	
Endrin Ketone	5.000	5.454	109	5.484	110	50-135	36-149	1	0-25	
Heptachlor	5.000	5.282	106	5.320	106	50-135	36-149	1	0-25	
Heptachlor Epoxide	5.000	4.806	96	4.903	98	50-135	36-149	2	0-25	
Methoxychlor	5.000	4.826	97	4.880	98	50-135	36-149	1	0-25	
Alpha Chlordane	5.000	5.018	100	5.068	101	50-135	36-149	1	0-25	
Gamma Chlordane	5.000	5.146	103	5.206	104	50-135	36-149	1	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-79	LCS	Solid	GC/MS MM	05/25/14	05/28/14 12:30	140525L07				
099-14-256-79	LCSD	Solid	GC/MS MM	05/25/14	05/28/14 20:32	140525L07				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	784.0	78	820.6	82	40-160	20-180	5	0-20	
2,4-Dichlorophenol	1000	825.2	83	839.8	84	40-160	20-180	2	0-20	
2-Methylphenol	1000	699.8	70	742.3	74	40-160	20-180	6	0-20	
2-Nitrophenol	1000	771.5	77	820.3	82	40-160	20-180	6	0-20	
4-Chloro-3-Methylphenol	1000	860.2	86	848.5	85	40-160	20-180	1	0-20	
Acenaphthene	1000	800.1	80	802.1	80	48-108	38-118	0	0-11	
Benzo (a) Pyrene	1000	828.9	83	808.2	81	17-163	0-187	3	0-20	
Chrysene	1000	767.8	77	749.0	75	17-168	0-193	2	0-20	
Di-n-Butyl Phthalate	1000	990.1	99	981.5	98	40-160	20-180	1	0-20	
Dimethyl Phthalate	1000	794.4	79	808.6	81	40-160	20-180	2	0-20	
Fluoranthene	1000	800.5	80	792.1	79	26-137	8-156	1	0-20	
Fluorene	1000	760.5	76	796.4	80	59-121	49-131	5	0-20	
Naphthalene	1000	828.7	83	830.4	83	21-133	2-152	0	0-20	
Phenanthrene	1000	784.9	78	804.2	80	54-120	43-131	2	0-20	
Phenol	1000	725.6	73	784.0	78	40-160	20-180	8	0-20	
Pyrene	1000	790.4	79	817.2	82	28-106	15-119	3	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-80	LCS	Solid	GC/MS MM	05/25/14	05/28/14 18:49	140525L08				
099-14-256-80	LCSD	Solid	GC/MS MM	05/25/14	05/28/14 19:15	140525L08				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	785.2	79	800.8	80	40-160	20-180	2	0-20	
2,4-Dichlorophenol	1000	794.1	79	792.9	79	40-160	20-180	0	0-20	
2-Methylphenol	1000	711.3	71	718.9	72	40-160	20-180	1	0-20	
2-Nitrophenol	1000	774.5	77	786.9	79	40-160	20-180	2	0-20	
4-Chloro-3-Methylphenol	1000	811.3	81	826.8	83	40-160	20-180	2	0-20	
Acenaphthene	1000	776.6	78	774.5	77	48-108	38-118	0	0-11	
Benzo (a) Pyrene	1000	786.0	79	763.8	76	17-163	0-187	3	0-20	
Chrysene	1000	734.1	73	710.5	71	17-168	0-193	3	0-20	
Di-n-Butyl Phthalate	1000	947.3	95	956.9	96	40-160	20-180	1	0-20	
Dimethyl Phthalate	1000	779.3	78	795.2	80	40-160	20-180	2	0-20	
Fluoranthene	1000	761.1	76	772.7	77	26-137	8-156	2	0-20	
Fluorene	1000	759.9	76	774.4	77	59-121	49-131	2	0-20	
Naphthalene	1000	790.9	79	779.8	78	21-133	2-152	1	0-20	
Phenanthrene	1000	789.1	79	787.1	79	54-120	43-131	0	0-20	
Phenol	1000	752.0	75	762.8	76	40-160	20-180	1	0-20	
Pyrene	1000	775.9	78	768.8	77	28-106	15-119	1	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-82	LCS	Solid	GC/MS MM	06/09/14	06/10/14 15:42	140609L12				
099-14-256-82	LCSD	Solid	GC/MS MM	06/09/14	06/10/14 16:08	140609L12				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	540.0	54	611.7	61	40-160	20-180	12	0-20	
2,4-Dichlorophenol	1000	654.6	65	740.6	74	40-160	20-180	12	0-20	
2-Methylphenol	1000	658.8	66	729.6	73	40-160	20-180	10	0-20	
2-Nitrophenol	1000	618.2	62	713.9	71	40-160	20-180	14	0-20	
4-Chloro-3-Methylphenol	1000	788.2	79	904.6	90	40-160	20-180	14	0-20	
Acenaphthene	1000	729.6	73	790.0	79	48-108	38-118	8	0-11	
Benzo (a) Pyrene	1000	724.2	72	798.4	80	17-163	0-187	10	0-20	
Chrysene	1000	684.8	68	751.6	75	17-168	0-193	9	0-20	
Di-n-Butyl Phthalate	1000	906.9	91	1062	106	40-160	20-180	16	0-20	
Dimethyl Phthalate	1000	890.5	89	977.2	98	40-160	20-180	9	0-20	
Fluoranthene	1000	708.3	71	776.7	78	26-137	8-156	9	0-20	
Fluorene	1000	713.3	71	765.3	77	59-121	49-131	7	0-20	
Naphthalene	1000	744.7	74	815.1	82	21-133	2-152	9	0-20	
Phenanthrene	1000	723.0	72	815.1	82	54-120	43-131	12	0-20	
Phenol	1000	718.3	72	778.6	78	40-160	20-180	8	0-20	
Pyrene	1000	743.4	74	831.1	83	28-106	15-119	11	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-184	LCS	Solid	GC/MS HHH	05/23/14	05/31/14 11:46	140523L30				
099-14-341-184	LCSD	Solid	GC/MS HHH	05/23/14	05/30/14 21:57	140523L30				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	30.08	120	27.39	110	50-125	38-138	9	0-30	
PCB018	25.00	23.77	95	22.91	92	50-125	38-138	4	0-30	
PCB028	25.00	25.62	102	25.04	100	50-125	38-138	2	0-30	
PCB044	25.00	22.70	91	24.02	96	50-125	38-138	6	0-30	
PCB052	25.00	20.89	84	21.92	88	50-125	38-138	5	0-30	
PCB066	25.00	26.11	104	27.52	110	50-125	38-138	5	0-30	
PCB077	25.00	25.01	100	26.05	104	50-125	38-138	4	0-30	
PCB101	25.00	22.52	90	23.64	95	50-125	38-138	5	0-30	
PCB105	25.00	24.48	98	25.12	100	50-125	38-138	3	0-30	
PCB118	25.00	25.17	101	26.34	105	50-125	38-138	5	0-30	
PCB126	25.00	24.21	97	24.21	97	50-125	38-138	0	0-30	
PCB128	25.00	19.89	80	18.93	76	50-125	38-138	5	0-30	
PCB153	25.00	21.98	88	22.64	91	50-125	38-138	3	0-30	
PCB170	25.00	21.34	85	22.52	90	50-125	38-138	5	0-30	
PCB180	25.00	22.70	91	21.92	88	50-125	38-138	4	0-30	
PCB187	25.00	22.12	88	22.84	91	50-125	38-138	3	0-30	
PCB195	25.00	27.12	108	28.30	113	50-125	38-138	4	0-30	
PCB206	25.00	27.54	110	24.91	100	50-125	38-138	10	0-30	
PCB209	25.00	26.37	105	25.25	101	50-125	38-138	4	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1270
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-181	LCS	Solid	GC/MS HHH	05/24/14	05/27/14 18:50	140524L07				
099-14-341-181	LCSD	Solid	GC/MS HHH	05/24/14	05/27/14 19:18	140524L07				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	23.96	96	23.82	95	50-125	38-138	1	0-30	
PCB018	25.00	19.93	80	19.64	79	50-125	38-138	1	0-30	
PCB028	25.00	20.70	83	20.45	82	50-125	38-138	1	0-30	
PCB044	25.00	20.27	81	19.57	78	50-125	38-138	4	0-30	
PCB052	25.00	18.44	74	18.22	73	50-125	38-138	1	0-30	
PCB066	25.00	22.83	91	22.09	88	50-125	38-138	3	0-30	
PCB077	25.00	21.77	87	21.40	86	50-125	38-138	2	0-30	
PCB101	25.00	19.64	79	19.19	77	50-125	38-138	2	0-30	
PCB105	25.00	21.40	86	20.94	84	50-125	38-138	2	0-30	
PCB118	25.00	21.99	88	21.79	87	50-125	38-138	1	0-30	
PCB126	25.00	21.26	85	20.97	84	50-125	38-138	1	0-30	
PCB128	25.00	17.37	69	17.31	69	50-125	38-138	0	0-30	
PCB153	25.00	19.15	77	18.92	76	50-125	38-138	1	0-30	
PCB170	25.00	19.04	76	18.51	74	50-125	38-138	3	0-30	
PCB180	25.00	20.10	80	19.82	79	50-125	38-138	1	0-30	
PCB187	25.00	19.77	79	19.46	78	50-125	38-138	2	0-30	
PCB195	25.00	24.46	98	23.96	96	50-125	38-138	2	0-30	
PCB206	25.00	20.68	83	20.42	82	50-125	38-138	1	0-30	
PCB209	25.00	20.66	83	20.75	83	50-125	38-138	0	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1270
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-187	LCS	Solid	GC/MS HHH	06/09/14	06/10/14 22:40	140609L02				
099-14-341-187	LCSD	Solid	GC/MS HHH	06/09/14	06/10/14 23:13	140609L02				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	26.06	104	25.21	101	50-125	38-138	3	0-30	
PCB018	25.00	21.98	88	20.52	82	50-125	38-138	7	0-30	
PCB028	25.00	22.71	91	23.61	94	50-125	38-138	4	0-30	
PCB044	25.00	21.47	86	22.09	88	50-125	38-138	3	0-30	
PCB052	25.00	19.58	78	19.20	77	50-125	38-138	2	0-30	
PCB066	25.00	24.38	98	24.32	97	50-125	38-138	0	0-30	
PCB077	25.00	22.97	92	24.15	97	50-125	38-138	5	0-30	
PCB101	25.00	21.46	86	20.78	83	50-125	38-138	3	0-30	
PCB105	25.00	21.04	84	21.01	84	50-125	38-138	0	0-30	
PCB118	25.00	21.59	86	24.62	98	50-125	38-138	13	0-30	
PCB126	25.00	20.69	83	21.54	86	50-125	38-138	4	0-30	
PCB128	25.00	16.29	65	19.75	79	50-125	38-138	19	0-30	
PCB153	25.00	18.49	74	19.10	76	50-125	38-138	3	0-30	
PCB170	25.00	24.75	99	21.85	87	50-125	38-138	12	0-30	
PCB180	25.00	19.19	77	20.85	83	50-125	38-138	8	0-30	
PCB187	25.00	20.16	81	18.88	76	50-125	38-138	7	0-30	
PCB195	25.00	29.10	116	29.02	116	50-125	38-138	0	0-30	
PCB206	25.00	24.16	97	23.81	95	50-125	38-138	1	0-30	
PCB209	25.00	25.72	103	23.44	94	50-125	38-138	9	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 14-05-1270

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSO or PES/PESO associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



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CHAIN OF CUSTODY
 36261
 DATE 5/14/14 PAGE 1 OF 3

PROJECT NAME / SURVEY / PROJECT NUMBER	ANALYSIS/TEST REQUESTED	CONTAINER TYPE / VOLUME	TOTAL NUMBER OF CONTAINERS	FOR WESTON USE ONLY				
ADENR - MOBILE BAY								
DAN MCCOY								
WESTON SOLUTIONS								
SEE ABOVE								
SITE ID (Location)	SAMPLE ID	DATE	TIME	MATRIX	CONTAINER TYPE / VOLUME	TOTAL NUMBER OF CONTAINERS	ANALYSIS/TEST REQUESTED	FOR WESTON USE ONLY
CB-N-01 Top	CB-N-01 Top	5/14/14	0953	SED.	1-16oz JAR			
CB-N-01 Bottom	CB-N-01 Bottom		1008					
CB-N-02 Top	CB-N-02 Top		1030					
CB-N-02 Bottom	CB-N-02 Bottom		1045					
CB-N-03 Top	CB-N-03 Top		1115					
CB-N-03 Bottom	CB-N-03 Bottom		1140					
CB-N-04 Top	CB-N-04 Top		1345					
CB-N-04 Bottom	CB-N-04 Bottom		1320					
CB-N-05 Top	CB-N-05 Top		1250					
CB-N-05 Bottom	CB-N-05 Bottom		1245					
CB-N-06 Top	CB-N-06 Top		1200					
CB-N-07 Top	CB-N-07 Top		1350					
CB-N-07 Bottom	CB-N-07 Bottom		1400					
CB-N-08 Top	CB-N-08 Top		1445					
CB-N-08 Bottom	CB-N-08 Bottom		1425					
CB-S-11 Top	CB-S-11 Top		1615					
Sample Matrix Codes: EW=fresh water GW=ground water SLT=salt water SW=storm water WW=waste water SED=sediment A=air BIO=biologic SS=soil T=issue O=other (specify) Container Code: G=glass P=plastic B=bags O=other Shipped By: <input type="checkbox"/> Courier <input checked="" type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> USPS <input type="checkbox"/> Client drop off <input type="checkbox"/> Other Turnaround Time: <input type="checkbox"/> 2-day <input type="checkbox"/> 5-day <input type="checkbox"/> 7-day <input type="checkbox"/> 10-day <input checked="" type="checkbox"/> 14-day <input type="checkbox"/> Standard <input type="checkbox"/> Other Reporting Requirements: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EDD <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Other								
COMMENTS / SPECIAL INSTRUCTIONS *SEE ATTACHED ANALYSES TABLE								
SAMPLED BY: PRINT SIGNATURE CHRIS WARRNÉ DAN MCCOY								
RELINQUISHED BY	Signature	Firm	Date/Time	RECEIVED BY	Signature	Firm	Date/Time	
1. DAN MCCOY	<i>[Signature]</i>	WESTON	5/14/14					
2. J. PATEL	<i>[Signature]</i>	CFL	5/14/14			CFL	5/14/14 1040	
3.								
4.								
5.								
6.								



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CHAIN OF CUSTODY
 36262
 DATE 5/14/14 PAGE 2 OF 3

PROJECT NAME / SURVEY / PROJECT NUMBER
 APCUR - MOBILE BAY
 PROJECT MANAGER / CONTACT
 DAN MCCOY
 CLIENT
 WESTON SOLUTIONS
 ADDRESS
 SEE ABOVE
 PHONE / FAX / EMAIL

SITE ID (Location)	SAMPLE ID	DATE	TIME	MATRIX	CONTAINER TYPE / VOLUME	TOTAL NUMBER OF CONTAINER	ANALYSIS/TEST REQUESTED	FOR WESTON USE ONLY
CB-S-11 Bottom	CB-S-11 Bottom	5/12/14	15:50	SED	1-16oz JAR			
CB-S-12 Top	CB-S-12 Top	↓	15:50					
CB-S-12 Bottom	CB-S-12 Bottom	↓	15:40					
SR-S-04 Top	SR-S-04 Top	5/13/14	12:15					
SR-S-04 Bottom	SR-S-04 Bottom		12:00					
SR-S-05 Top	SR-S-05 Top		12:30					
SR-S-05 Bottom	SR-S-05 Bottom		12:45					
SR-S-05 Top Dup	SR-S-05 Top Dup		12:45					
SR-S-06 Top	SR-S-06 Top		13:30					
SR-S-06 Bottom	SR-S-06 Bottom		13:15					
JB-N-01 Top	JB-N-01 Top		09:10					
JB-N-01 Bottom	JB-N-01 Bottom		09:20					
JB-N-01 Top Dup	JB-N-01 Top Dup		09:40					
JB-N-02 Top	JB-N-02 Top		10:25					
JB-N-02 Bottom	JB-N-02 Bottom		10:10					
JB-N-03 Top	JB-N-03 Top		10:55					

SAMPLED BY: PRINT
 CHRIS WARR & DAN MCCOY
 SIGNATURE
 COMMENTS / SPECIAL INSTRUCTIONS
 *SEE ATTACHED ANALYSES TABLE

RELINQUISHED BY	Firm	Date/Time	RECEIVED BY	Firm	Date/Time
DAN MCCOY	WESTON	5/15/14 14:15	J. PATEL	CEL	5/16/14 10:40
J. PATEL	CEL				

PRINT NAME	SIGNATURE	DATE/TIME
DAN MCCOY	[Signature]	
J. PATEL	[Signature]	



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CHAIN OF CUSTODY
 36264

DATE 5/14/14 PAGE 3 OF 3

PROJECT NAME / SURVEY / PROJECT NUMBER: ADCAR - MOBILE BAY
 PROJECT MANAGER / CONTACT: DAN MCCOY
 CLIENT: WESTON SOLUTIONS
 ADDRESS: SEE ABOVE
 PHONE / FAX / EMAIL: "

SITE ID (Location)	SAMPLE ID	DATE	TIME	MATRIX	CONTAINER TYPE / VOLUME	TOTAL NUMBER OF CONTAINERS	ANALYSIS/TEST REQUESTED	FOR WESTON USE ONLY
JB-N-03 Bottom	JB-N-03 Bottom	5/13/14	1035	SED	1-16oz JAR			
JB-N-04 Top	JB-N-04 Top		1120					
JB-N-04 Bottom	JB-N-04 Bottom		1105					
JB-S-05 Top	JB-S-05 Top		1350					
JB-S-05 Bottom	JB-S-05 Bottom		1405					
JB-S-06 Top	JB-S-06 Top		1500					
JB-S-06 Bottom	JB-S-06 Bottom		1445					

SAMPLED BY: PRINT SIGNATURE: [Signature]
 COMMENTS / SPECIAL INSTRUCTIONS: * SEE ATTACHED TABLE

RELINQUISHED BY	RECEIVED BY
Print Name: <u>DAN MCCOY</u> Signature: <u>[Signature]</u> Firm: <u>WESTON</u> Date/Time: <u>5/15/14 14:56</u>	Print Name: <u>J. PATEL</u> Signature: <u>[Signature]</u> Firm: <u>CEL</u> Date/Time: <u>5/14/14 10:40</u>
1. <u>DAN MCCOY</u>	
2.	
3.	
4.	
5.	
6.	

The physical analyses listed in Table 1 will be performed at all 29 sites at both depth profiles to provide the most information possible for development of a transport model. Additionally, the role of sediment in chemical pollution is tied both to the particle size of sediment and to the amount of particulate organic carbon associated with the sediment. Collecting physical parameters at all sites will provide data for comparison with chemical results in a cost-effective manner since physical analyses are less expensive than chemical analyses. Assumptions regarding chemistry results may be able to be made at stations which have similar physical parameter analytical results. For example, finer grained sediment generally contains greater concentrations of metals. If the chemical data are plotted against grain-size information, distinct patterns may emerge. There is a strong positive correlation between increasing chemical concentration and the increasing percentage of fine-grained material (Horowitz 1985).

Table 1. Physical Parameters

Physical Analysis	Method	Depth Profile
Percent Solids	SM 2540B	Upper and Lower
Total Organic Carbon (TOC)	EPA 9060A	Upper and Lower
Laser Particle Size	ASTM D4464(M)	Upper and Lower

TOP AND BOTTOM SAMPLES

Sediment from each of the 29 sample locations will also be analyzed for chemical constituents as presented in Table 2 below. The primary constituents (metals, mercury, and pesticides) will be analyzed at both depth profiles at the 29 locations. The secondary constituents (polychlorinated biphenyls [PCBs] and PAHs, phenols, and phthalates) will also be analyzed at each of the 29 locations, but only for the upper depth profile in order to provide the greatest cost/benefit. It is anticipated that the upper sediment profile will have a higher probability of contamination due to the relatively low depositional rate for sediment in the project area.

Table 2. Chemical Parameters

Chemical Analysis	Method	Depth Profile
Trace Metals	EPA 6020, ICP/MS	Upper and Lower
Mercury	EPA 7471	Upper and Lower
Organochlorine Pesticides	EPA 8081A	Upper and Lower
PCB Congeners	EPA 8270C SIM	Upper
PAHs, Phenols, Phthalates	EPA 8270C SIM	Upper

TOP AND BOTTOM SAMPLES

TOP SAMPLES ONLY

1.4.2 Water Quality Parameters

Crews will be equipped with a water quality meter to record general conditions at each sampling location. Parameters that will be measured include water depth, temperature, conductivity, salinity, hydrogen ion concentration (pH), dissolved oxygen (DO), and turbidity. Water quality readings and general field observations will be recorded onto field datasheets (Appendix A).

1 From
Date 5/15/14
Sender's Name DAN MCCOY Phone 760 458-4877
Company WESTON SOLUTIONS
Address 5817 DRYDEN PINE SUITE 101 Dept./Floor/Suite/Room
City CARLSBAD State CA ZIP 92008

2 Your Internal Billing Reference
3 To ATTN: BOB CLARK Phone 714 895-5494
Recipient's Name
Company CAI SCIENCE

Address 7740 LINCOLN WAY Dept./Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address _____
Use this line for the HOLD location address or for continuation of your shipping address.
City GARDEN GROVE State CA ZIP 92841

HOLD Weekday
FedEx location address
REQUIRED. NOT available for
FedEx First Overnight.

HOLD Saturday
FedEx location address
REQUIRED. Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations.

4 Express Package Service *To most locations.
NOTE: Service order has changed. Please select carefully. **Packages up to 150 lbs.**
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day	2 or 3 Business Days
<input type="checkbox"/> FedEx First Overnight Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	<input type="checkbox"/> FedEx 2Day A.M. Second business morning.* Saturday Delivery NOT available.
<input checked="" type="checkbox"/> FedEx Priority Overnight Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.	<input type="checkbox"/> FedEx 2Day Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
<input type="checkbox"/> FedEx Standard Overnight Next business afternoon.* Saturday Delivery NOT available.	<input type="checkbox"/> FedEx Express Saver Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit \$500.

FedEx Envelope*
 FedEx Pak*
 FedEx Box
 FedEx Tube
 Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required
Package may be left without obtaining a signature for delivery.

Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

No
 Yes As per attached Shipper's Declaration.
 Yes Shipper's Declaration not required.
 Dry Ice Dry Ice, 9 UN 1845 _____ x _____ kg

Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Sender Acct. No. in Section 1 will be billed
 Recipient
 Third Party
 Credit Card
 Cash/Check

Total Packages _____ Total Weight _____ lbs. Credit Card Acct. _____

Our liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.



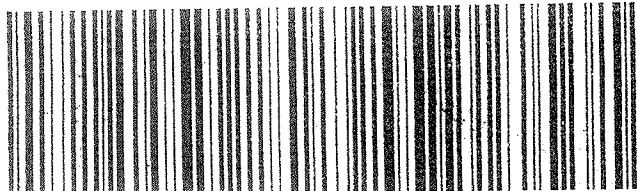
8054 6947 2832

FedEx
MPS# **8677 5801 7447**
0260

FRI - 16 MAY 10:30A
PRIORITY OVERNIGHT

XH APVA

92841
CA-US
SNA



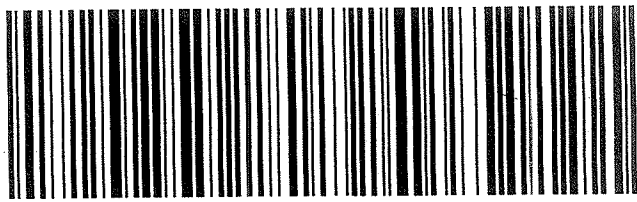
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MASTER

FRI - 16 MAY 10:30A
PRIORITY OVERNIGHT

XH APVA

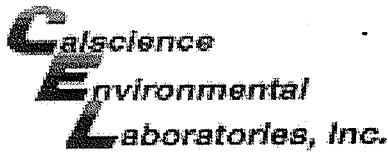
92841
CA-US
SNA



FID 613048 15MAY14 MOBA 51AC1/6203/65DD

1270

fedex.com 1800 FedEx 1800 463 3339



WORK ORDER #: 14-05-1270

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weston

DATE: 05/16/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C - 6.0 °C, not frozen except sediment/tissue)

Temperature 2.6 °C - 0.3 °C (CF) = 2.3 °C [] Blank [x] Sample

[] Sample(s) outside temperature criteria (PM/APM contacted by: _____)

[] Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

[] Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: [] Air [] Filter

Checked by: 15

CUSTODY SEALS INTACT:

[] Cooler [] _____ [] No (Not Intact) [x] Not Present [] N/A

Checked by: 15

[] Sample [] _____ [] No (Not Intact) [x] Not Present

Checked by: 812

SAMPLE CONDITION:

Chain-Of-Custody (COC) document(s) received with samples..... [x] Yes [] No [] N/A

COC document(s) received complete..... [x] Yes [] No [] N/A

[] Collection date/time, matrix, and/or # of containers logged in based on sample labels.

[] No analysis requested. [] Not relinquished. [] No date/time relinquished.

Sampler's name indicated on COC..... [x] Yes [] No [] N/A

Sample container label(s) consistent with COC..... [] Yes [x] No [] N/A

Sample container(s) intact and good condition..... [x] Yes [] No [] N/A

Proper containers and sufficient volume for analyses requested..... [x] Yes [] No [] N/A

Analyses received within holding time..... [x] Yes [] No [] N/A

Aqueous samples received within 15-minute holding time

[] pH [] Residual Chlorine [] Dissolved Sulfides [] Dissolved Oxygen..... [] Yes [] No [x] N/A

Proper preservation noted on COC or sample container..... [] Yes [] No [x] N/A

[] Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace..... [] Yes [] No [x] N/A

Tedlar bag(s) free of condensation..... [] Yes [] No [x] N/A

CONTAINER TYPE:

Solid: [] 4ozCGJ [x] 8ozCGJ [] 16ozCGJ [] Sleeve (____) [] EnCores® [] TerraCores® [] _____

Aqueous: [] VOA [] VOAh [] VOAna2 [] 125AGB [] 125AGBh [] 125AGBp [] 1AGB [] 1AGBna2 [] 1AGBs

[] 500AGB [] 500AGJ [] 500AGJs [] 250AGB [] 250CGB [] 250CGBs [] 1PB [] 1PBna [] 500PB

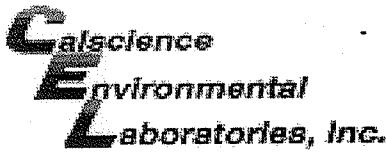
[] 250PB [] 250PBn [] 125PB [] 125PBzanna [] 100PJ [] 100PJna2 [] _____ [] _____ [] _____

Air: [] Tedlar® [] Canister Other: [] _____ Trip Blank Lot#: _____ Labeled/Checked by: 812

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 802

Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 u: Ultra-pure zanna: ZnAc2+NaOH f: Filtered Scanned by: 802





WORK ORDER #: 14-05-1270

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weston

DATE: 05/16/14

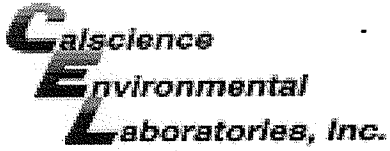
TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C - 6.0 °C, not frozen except sediment/tissue)
Temperature 2.9 °C - 0.3 °C (CF) = 2.6 °C
Sample checked by: 15

CUSTODY SEALS INTACT:
Cooler No (Not Intact) Not Present N/A Checked by: 15
Sample No (Not Intact) Not Present Checked by: 812

SAMPLE CONDITION:
Chain-Of-Custody (COC) document(s) received with samples... [X] Yes [] No [] N/A
COC document(s) received complete... [X] Yes [] No [] N/A
Collection date/time, matrix, and/or # of containers logged in based on sample labels. []
No analysis requested. [] Not relinquished. [] No date/time relinquished. []
Sampler's name indicated on COC... [X] Yes [] No [] N/A
Sample container label(s) consistent with COC... [X] Yes [] No [] N/A
Sample container(s) intact and good condition... [X] Yes [] No [] N/A
Proper containers and sufficient volume for analyses requested... [X] Yes [] No [] N/A
Analyses received within holding time... [X] Yes [] No [] N/A
Aqueous samples received within 15-minute holding time
pH [] Residual Chlorine [] Dissolved Sulfides [] Dissolved Oxygen [] [X] N/A
Proper preservation noted on COC or sample container... [] Yes [] No [X] N/A
Unpreserved vials received for Volatiles analysis []
Volatile analysis container(s) free of headspace... [] Yes [] No [X] N/A
Tedlar bag(s) free of condensation... [] Yes [] No [X] N/A

CONTAINER TYPE:
Solid: [] 4ozCGJ [X] 8ozCGJ [] 16ozCGJ [] Sleeve () [] EnCores® [] TerraCores® []
Aqueous: [] VOA [] VOA h [] VOAn2 [] 125AGB [] 125AGBh [] 125AGBp [] 1AGB [] 1AGBna2 [] 1AGBs
[] 500AGB [] 500AGJ [] 500AGJs [] 250AGB [] 250CGB [] 250CGBs [] 1PB [] 1PBna [] 500PB
[] 250PB [] 250PBn [] 125PB [] 125PBz nna [] 100PJ [] 100PJna2 [] [] [] []
Air: [] Tedlar® [] Canister Other: [] Trip Blank Lot#: Labeled/Checked by: 812
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 812
Preservative: h: HCL n: HNO3 na2:Na2S2O3 na: NaOH p: H3PO4 s: H2SO4 u: Ultra-pure znna: ZnAc2+NaOH f: Filtered Scanned by: 812

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WORK ORDER #: 14-05-1270

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- Improper preservative used – list test
- No preservative noted on COC or label – list test & notify lab
- Sample labels illegible – note test/container type
- Sample label(s) do not match COC – Note in comments
 - Sample ID
 - Date and/or Time Collected
 - Project Information
 - # of Container(s)
 - Analysis
- Sample container(s) compromised – Note in comments
 - Water present in sample container
 - Broken
- Sample container(s) not labeled
- Air sample container(s) compromised – Note in comments
 - Flat
 - Very low in volume
 - Leaking (Not transferred - duplicate bag submitted)
 - Leaking (transferred into Calscience Tedlar® Bag*)
 - Leaking (transferred into Client's Tedlar® Bag*)
- Other: _____

labeled as
 (-14) CB-N-08 Top @ 1425
 (-15) CB-N-08 Bottom @ 1445

HEADSPACE – Containers with Bubble > 6mm or 1/4 inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

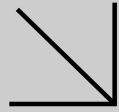
*Transferred at Client's request.

Initial / Date: 05/16/14

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Supplemental Report 1

The original report has been revised/corrected.

**WORK ORDER NUMBER: 14-05-1271***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Weston Solutions**Client Project Name:** ADCNR Mobile Bay**Attention:** Dan McCoy
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Approved for release on 06/13/2014 by:
Danielle Gonsman
Project Manager

ResultLink ▶

Email your PM ▶



Eurofins Calscience, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

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 Work Order Number: 14-05-1271

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CASE NARRATIVE**Calscience Work Order No.: 14-05-1271****Project ID: ADCNR – Mobile Bay**

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

Seventeen sediment samples were received for this project on May 16, 2014. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was between 1.8 and 1.9°C. All samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers and then stored in refrigeration units pending chemistry.

Tests Performed

Total Solids by SM 2540B
Trace Metals by EPA 6020
Mercury by EPA 7471A
Total Organic Carbon by EPA 9060A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Particle Size by ASTM D4464 (M)

Data Summary

The sediment samples were homogenized prior to analysis.

Holding times

All holding times were met.

The laboratory duplicate was analyzed outside the EPA Method recommended solid sample holding time for SVOCs, Pesticides, PCBs and Total Solids. However, the samples were frozen after collection (prior to holding time expiration) at -18°C. Calscience follows SWAMP criteria and the Puget Sound Protocol (USEPA/PSWQAT, 1997, Table 2) for holding times in sediment samples, which states holding times may be extended up to six months to one year (two years for metals) if stored frozen at -18°C after collection. Therefore, the sample results have not been flagged as exceeding the EPA Method recommended holding times.

Blanks

Concentrations of target analytes in the method blank were found to be below reporting limits for all analyses with the exception of the following.

A trace amount of Copper was detected in one of the EPA 6020 Method Blanks. However, the copper concentrations in the samples were 10 times or more than that of the Method Blank, therefore the results are released with the appropriate qualifiers.

A trace amount (below the RL) of Bis (2-ethylhexyl) phthalate was detected in one of the EPA 8270C Method Blanks. If detected in the samples, the results have been flagged with a "B" qualifier.

Reporting Limits

The Method Detection Limits were met.

Laboratory Control Samples

A Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were performed for each applicable test. All parameters were within established control limits.

Matrix Spikes

Matrix spiking was performed at the required frequencies using both project and non-project samples. Unless otherwise noted, all parameters for the project sample matrix spikes were within the control limits specified. Only Work Order specific matrix spike samples are discussed in this report.

The Zinc MSD recovery was above the established control limits in matrix spike sample JB-S-10 BOTTOM. Since the MS/LCS/LCSD recoveries were in control, the results are released with no further action.

For QC sample JB-S-07 BOTTOM, the Endosulfan sulfate and delta-BHC MS/MSD recoveries were above the established control limits. Since the LCS/LCSDs were in control, the results are released with no further action.

The 4,4-DDE MS and MSD recoveries were below the control limits due to the concentration detected in sample JB-S-10 TOP LAB DUP. Since the LCS/LCSDs were in control, the results are released with no further action.

For matrix spike sample JB-S-10 TOP LAB DUP, the Phenanthrene MS and MSD recoveries were below the control limits. Yet, the LCS and LCSD recoveries were acceptable, so the results are released as-is.

The PCB195 MS recovery was just above the control limits in QC sample JB-S-08 TOP. The results are released with no further action since the MSD/LCS/LCSD recoveries were in control.

Surrogates

Surrogate recoveries for all applicable tests and samples were within acceptable control limits with the following exceptions.

One of the PCB surrogates, 2-Fluorobiphenyl, was outside of the established control limits for one sample. The results were confirmed by re-analysis and are released with no further action since the PCBs were ND.

Laboratory Duplicate

Laboratory Duplicates were performed at the required frequencies. Sample JB-S-10 TOP was used as the Lab Dup. The RPDs for all analyses were within control limits.

Acronyms

LCS - Laboratory Control Sample
PDS - Post Digestion Spike
MS/MSD- Matrix Spike/Matrix Spike Duplicate
ME-Marginal Exceedance
RPD- Relative Percent Difference

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/16/14. They were assigned to Work Order 14-05-1271.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Weston Solutions	Work Order:	14-05-1271
5817 Dryden Place, Suite 101	Project Name:	ADCNR Mobile Bay
Carlsbad, CA 92008-9999	PO Number:	
	Date/Time Received:	05/16/14 10:40
	Number of Containers:	19

Attn: Dan McCoy

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
SR-N-01 TOP	14-05-1271-1	05/15/14 09:15	1	Sediment
SR-N-01 BOTTOM	14-05-1271-2	05/15/14 09:15	1	Sediment
SR-N-02 TOP	14-05-1271-3	05/15/14 09:00	1	Sediment
SR-N-02 BOTTOM	14-05-1271-4	05/15/14 08:45	1	Sediment
SR-N-03 TOP	14-05-1271-5	05/15/14 08:15	1	Sediment
SR-N-03 BOTTOM	14-05-1271-6	05/15/14 08:30	1	Sediment
SR-N-03 BOTTOM DUP	14-05-1271-7	05/15/14 08:30	1	Sediment
JB-S-07 TOP	14-05-1271-8	05/15/14 11:00	1	Sediment
JB-S-07 BOTTOM	14-05-1271-9	05/15/14 10:55	1	Sediment
JB-S-08 TOP	14-05-1271-10	05/15/14 10:45	1	Sediment
JB-S-08 BOTTOM	14-05-1271-11	05/15/14 10:30	1	Sediment
JB-S-09 TOP	14-05-1271-12	05/15/14 10:10	1	Sediment
JB-S-09 BOTTOM	14-05-1271-13	05/15/14 10:00	1	Sediment
JB-S-10 TOP	14-05-1271-14	05/15/14 11:20	1	Sediment
JB-S-10 BOTTOM	14-05-1271-15	05/15/14 11:10	1	Sediment
JB-S-11 TOP	14-05-1271-16	05/15/14 11:40	1	Sediment
JB-S-11 BOTTOM	14-05-1271-17	05/15/14 11:45	1	Sediment
JB-S-10 TOP LAB DUP	14-05-1271-18	05/15/14 11:20	1	Sediment
JB-S-11 Bottom (Particle size dup)	14-05-1271-19	05/15/14 11:45	1	Sediment

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-A	05/15/14 09:15	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.6	0.11	0.026	1.00	

SR-N-01 BOTTOM	14-05-1271-2-A	05/15/14 09:15	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.1	0.088	0.021	1.00	

SR-N-02 TOP	14-05-1271-3-A	05/15/14 09:00	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	2.5	0.15	0.035	1.00	

SR-N-02 BOTTOM	14-05-1271-4-A	05/15/14 08:45	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	2.1	0.12	0.029	1.00	

SR-N-03 TOP	14-05-1271-5-A	05/15/14 08:15	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	2.6	0.17	0.042	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM	14-05-1271-6-A	05/15/14 08:30	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.5	0.11	0.028	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-A	05/15/14 08:30	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.6	0.11	0.027	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 TOP	14-05-1271-8-A	05/15/14 11:00	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.70	0.075	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 BOTTOM	14-05-1271-9-A	05/15/14 10:55	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.33	0.068	0.016	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-A	05/15/14 10:45	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.57	0.073	0.018	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	EPA 9060A
	Units:	%

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 BOTTOM	14-05-1271-11-A	05/15/14 10:30	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.51	0.068	0.016	1.00	

JB-S-09 TOP	14-05-1271-12-A	05/15/14 10:10	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	1.6	0.10	0.025	1.00	

JB-S-09 BOTTOM	14-05-1271-13-A	05/15/14 10:00	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.65	0.068	0.016	1.00	

JB-S-10 TOP	14-05-1271-14-A	05/15/14 11:20	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.85	0.078	0.019	1.00	

JB-S-10 BOTTOM	14-05-1271-15-A	05/15/14 11:10	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.61	0.068	0.017	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-A	05/15/14 11:40	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	1.3	0.074	0.018	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 BOTTOM	14-05-1271-17-A	05/15/14 11:45	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.71	0.071	0.017	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-A	05/15/14 11:20	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	0.84	0.077	0.019	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-013-1039	N/A	Solid	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-013-1040	N/A	Solid	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-013-1055	N/A	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Carbon, Total Organic	ND	0.050	0.012	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: N/A
 Method: SM 2540 B (M)
 Units: %

Project: ADCNR Mobile Bay

Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-A	05/15/14 09:15	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	47.3	0.100	0.100	1.00	

SR-N-01 BOTTOM	14-05-1271-2-A	05/15/14 09:15	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	56.8	0.100	0.100	1.00	

SR-N-02 TOP	14-05-1271-3-A	05/15/14 09:00	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	34.3	0.100	0.100	1.00	

SR-N-02 BOTTOM	14-05-1271-4-A	05/15/14 08:45	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	42.1	0.100	0.100	1.00	

SR-N-03 TOP	14-05-1271-5-A	05/15/14 08:15	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	28.6	0.100	0.100	1.00	

SR-N-03 BOTTOM	14-05-1271-6-A	05/15/14 08:30	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	43.5	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	SM 2540 B (M)
	Units:	%

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-A	05/15/14 08:30	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	44.4	0.100	0.100	1.00	

JB-S-07 TOP	14-05-1271-8-A	05/15/14 11:00	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	67.0	0.100	0.100	1.00	

JB-S-07 BOTTOM	14-05-1271-9-A	05/15/14 10:55	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	73.8	0.100	0.100	1.00	

JB-S-08 TOP	14-05-1271-10-A	05/15/14 10:45	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	68.8	0.100	0.100	1.00	

JB-S-08 BOTTOM	14-05-1271-11-A	05/15/14 10:30	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	73.9	0.100	0.100	1.00	

JB-S-09 TOP	14-05-1271-12-A	05/15/14 10:10	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	48.2	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: SM 2540 B (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 BOTTOM	14-05-1271-13-A	05/15/14 10:00	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	73.9	0.100	0.100	1.00	

JB-S-10 TOP	14-05-1271-14-A	05/15/14 11:20	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	63.9	0.100	0.100	1.00	

JB-S-10 BOTTOM	14-05-1271-15-A	05/15/14 11:10	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	73.4	0.100	0.100	1.00	

JB-S-11 TOP	14-05-1271-16-A	05/15/14 11:40	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	67.5	0.100	0.100	1.00	

JB-S-11 BOTTOM	14-05-1271-17-A	05/15/14 11:45	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	70.1	0.100	0.100	1.00	

JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	N/A	06/06/14	06/09/14 13:00	E0609TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	64.6	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	SM 2540 B (M)
	Units:	%

Project: ADCNR Mobile Bay Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-05-019-2580	N/A	Solid	N/A	05/19/14	05/20/14 13:00	E0520TSB1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Method Blank	099-05-019-2603	N/A	Solid	N/A	06/06/14	06/09/14 13:00	E0609TSB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-AA	05/15/14 09:15	Sediment	ICP/MS 04	05/20/14	05/21/14 15:46	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	3.88	0.211	0.185	1.00	
Cadmium	0.433	0.211	0.121	1.00	
Chromium	25.2	0.211	0.131	1.00	
Copper	12.6	0.211	0.0886	1.00	B
Lead	14.6	0.211	0.139	1.00	
Nickel	13.6	0.211	0.107	1.00	
Selenium	0.686	0.211	0.154	1.00	
Silver	0.105	0.211	0.0662	1.00	J
Zinc	76.7	2.11	1.68	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 BOTTOM	14-05-1271-2-AA	05/15/14 09:15	Sediment	ICP/MS 04	05/20/14	05/21/14 15:50	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	4.35	0.176	0.154	1.00	
Cadmium	0.363	0.176	0.101	1.00	
Chromium	25.9	0.176	0.109	1.00	
Copper	11.6	0.176	0.0738	1.00	B
Lead	15.8	0.176	0.116	1.00	
Nickel	12.5	0.176	0.0891	1.00	
Selenium	0.470	0.176	0.129	1.00	
Silver	0.0866	0.176	0.0551	1.00	J
Zinc	83.6	1.76	1.40	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 TOP	14-05-1271-3-AA	05/15/14 09:00	Sediment	ICP/MS 04	05/20/14	05/21/14 15:53	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	6.72	0.292	0.255	1.00	
Cadmium	0.588	0.292	0.167	1.00	
Chromium	34.2	0.292	0.181	1.00	
Copper	26.2	0.292	0.122	1.00	B
Lead	22.0	0.292	0.192	1.00	
Nickel	17.0	0.292	0.148	1.00	
Selenium	0.841	0.292	0.213	1.00	
Silver	0.129	0.292	0.0913	1.00	J
Zinc	108	2.92	2.32	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 BOTTOM	14-05-1271-4-AA	05/15/14 08:45	Sediment	ICP/MS 04	05/20/14	05/21/14 15:56	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	7.16	0.238	0.207	1.00	
Cadmium	0.570	0.238	0.136	1.00	
Chromium	39.0	0.238	0.147	1.00	
Copper	19.6	0.238	0.0996	1.00	B
Lead	27.1	0.238	0.157	1.00	
Nickel	18.3	0.238	0.120	1.00	
Selenium	0.934	0.238	0.174	1.00	
Silver	0.148	0.238	0.0743	1.00	J
Zinc	154	2.38	1.89	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 TOP	14-05-1271-5-AA	05/15/14 08:15	Sediment	ICP/MS 04	05/20/14	05/21/14 16:10	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	8.03	0.350	0.305	1.00	
Cadmium	0.825	0.350	0.200	1.00	
Chromium	41.8	0.350	0.217	1.00	
Copper	29.3	0.350	0.147	1.00	B
Lead	74.4	0.350	0.230	1.00	
Nickel	19.6	0.350	0.177	1.00	
Selenium	1.19	0.350	0.255	1.00	
Silver	0.145	0.350	0.109	1.00	J
Zinc	205	3.50	2.78	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM	14-05-1271-6-AA	05/15/14 08:30	Sediment	ICP/MS 04	05/20/14	05/21/14 16:14	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	6.67	0.230	0.201	1.00	
Cadmium	0.564	0.230	0.132	1.00	
Chromium	31.5	0.230	0.143	1.00	
Copper	21.2	0.230	0.0964	1.00	B
Lead	39.0	0.230	0.151	1.00	
Nickel	14.0	0.230	0.116	1.00	
Selenium	0.772	0.230	0.168	1.00	
Silver	0.111	0.230	0.0720	1.00	J
Zinc	154	2.30	1.83	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

Page 4 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-AA	05/15/14 08:30	Sediment	ICP/MS 04	05/20/14	05/21/14 16:17	140520L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	5.92	0.225	0.197	1.00	
Cadmium	0.528	0.225	0.129	1.00	
Chromium	32.5	0.225	0.140	1.00	
Copper	20.5	0.225	0.0944	1.00	B
Lead	34.9	0.225	0.148	1.00	
Nickel	13.4	0.225	0.114	1.00	
Selenium	0.660	0.225	0.165	1.00	
Silver	0.114	0.225	0.0705	1.00	J
Zinc	143	2.25	1.79	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 TOP	14-05-1271-8-AA	05/15/14 11:00	Sediment	ICP/MS 04	05/20/14	05/21/14 16:20	140520L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.763	0.149	0.130	1.00	
Cadmium	0.116	0.149	0.0854	1.00	J
Chromium	6.98	0.149	0.0926	1.00	
Copper	2.68	0.149	0.0626	1.00	B
Lead	3.78	0.149	0.0984	1.00	
Nickel	3.78	0.149	0.0756	1.00	
Selenium	0.122	0.149	0.109	1.00	J
Silver	ND	0.149	0.0467	1.00	
Zinc	20.2	1.49	1.19	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 BOTTOM	14-05-1271-9-AA	05/15/14 10:55	Sediment	ICP/MS 04	05/20/14	05/21/14 16:24	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.562	0.136	0.118	1.00	
Cadmium	0.107	0.136	0.0775	1.00	J
Chromium	6.17	0.136	0.0841	1.00	
Copper	1.99	0.136	0.0568	1.00	B
Lead	2.75	0.136	0.0893	1.00	
Nickel	3.45	0.136	0.0686	1.00	
Selenium	ND	0.136	0.0990	1.00	
Silver	ND	0.136	0.0424	1.00	
Zinc	18.2	1.36	1.08	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-AA	05/15/14 10:45	Sediment	ICP/MS 04	05/20/14	05/21/14 16:27	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.944	0.145	0.127	1.00	
Cadmium	0.157	0.145	0.0832	1.00	
Chromium	10.2	0.145	0.0902	1.00	
Copper	3.18	0.145	0.0609	1.00	B
Lead	4.20	0.145	0.0958	1.00	
Nickel	4.33	0.145	0.0736	1.00	
Selenium	ND	0.145	0.106	1.00	
Silver	ND	0.145	0.0455	1.00	
Zinc	22.9	1.45	1.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 BOTTOM	14-05-1271-11-AA	05/15/14 10:30	Sediment	ICP/MS 04	05/20/14	05/21/14 16:31	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.478	0.135	0.118	1.00	
Cadmium	0.104	0.135	0.0774	1.00	J
Chromium	5.58	0.135	0.0840	1.00	
Copper	1.62	0.135	0.0567	1.00	B
Lead	2.29	0.135	0.0892	1.00	
Nickel	2.99	0.135	0.0685	1.00	
Selenium	ND	0.135	0.0989	1.00	
Silver	ND	0.135	0.0424	1.00	
Zinc	16.1	1.35	1.08	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 TOP	14-05-1271-12-AA	05/15/14 10:10	Sediment	ICP/MS 04	05/20/14	05/21/14 16:34	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.89	0.207	0.181	1.00	
Cadmium	0.282	0.207	0.119	1.00	
Chromium	16.7	0.207	0.129	1.00	
Copper	7.69	0.207	0.0870	1.00	B
Lead	9.40	0.207	0.137	1.00	
Nickel	9.10	0.207	0.105	1.00	
Selenium	0.445	0.207	0.152	1.00	
Silver	ND	0.207	0.0649	1.00	
Zinc	59.8	2.07	1.65	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 BOTTOM	14-05-1271-13-AA	05/15/14 10:00	Sediment	ICP/MS 04	05/20/14	05/21/14 16:37	140520L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.33	0.135	0.118	1.00	
Cadmium	0.174	0.135	0.0774	1.00	
Chromium	7.91	0.135	0.0840	1.00	
Copper	2.44	0.135	0.0567	1.00	B
Lead	3.39	0.135	0.0892	1.00	
Nickel	4.62	0.135	0.0685	1.00	
Selenium	0.117	0.135	0.0989	1.00	J
Silver	ND	0.135	0.0424	1.00	
Zinc	25.9	1.35	1.08	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP	14-05-1271-14-AA	05/15/14 11:20	Sediment	ICP/MS 04	05/20/14	05/21/14 16:41	140520L04E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.65	0.156	0.137	1.00	
Cadmium	0.153	0.156	0.0896	1.00	J
Chromium	8.70	0.156	0.0971	1.00	
Copper	3.75	0.156	0.0656	1.00	B
Lead	4.79	0.156	0.103	1.00	
Nickel	4.74	0.156	0.0792	1.00	
Selenium	0.284	0.156	0.114	1.00	
Silver	ND	0.156	0.0490	1.00	
Zinc	28.3	1.56	1.24	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 BOTTOM	14-05-1271-15-AA	05/15/14 11:10	Sediment	ICP/MS 04	05/20/14	05/21/14 15:43	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	1.13	0.136	0.119	1.00	
Cadmium	0.135	0.136	0.0780	1.00	J
Chromium	7.59	0.136	0.0846	1.00	
Copper	2.55	0.136	0.0571	1.00	B
Lead	3.25	0.136	0.0898	1.00	
Nickel	4.12	0.136	0.0690	1.00	
Selenium	0.154	0.136	0.0995	1.00	
Silver	ND	0.136	0.0426	1.00	
Zinc	22.3	1.36	1.08	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-AA	05/15/14 11:40	Sediment	ICP/MS 04	05/20/14	05/21/14 17:19	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	2.68	0.148	0.129	1.00	
Cadmium	0.193	0.148	0.0848	1.00	
Chromium	8.86	0.148	0.0920	1.00	
Copper	3.83	0.148	0.0621	1.00	B
Lead	5.01	0.148	0.0976	1.00	
Nickel	5.20	0.148	0.0750	1.00	
Selenium	0.226	0.148	0.108	1.00	
Silver	ND	0.148	0.0464	1.00	
Zinc	26.8	1.48	1.18	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 BOTTOM	14-05-1271-17-AA	05/15/14 11:45	Sediment	ICP/MS 04	05/20/14	05/21/14 17:22	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.64	0.143	0.125	1.00	
Cadmium	0.192	0.143	0.0816	1.00	
Chromium	9.13	0.143	0.0885	1.00	
Copper	3.59	0.143	0.0598	1.00	B
Lead	4.81	0.143	0.0940	1.00	
Nickel	4.96	0.143	0.0722	1.00	
Selenium	0.204	0.143	0.104	1.00	
Silver	ND	0.143	0.0446	1.00	
Zinc	29.2	1.43	1.13	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	ICP/MS 03	06/09/14	06/09/14 21:31	140609L01E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.34	0.155	0.135	1.00	
Cadmium	0.160	0.155	0.0886	1.00	
Chromium	7.19	0.155	0.0961	1.00	
Copper	3.76	0.155	0.0649	1.00	
Lead	5.14	0.155	0.102	1.00	
Nickel	4.77	0.155	0.0784	1.00	
Selenium	ND	0.155	0.113	1.00	
Silver	ND	0.155	0.0485	1.00	
Zinc	28.6	1.55	1.23	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-254-206	N/A	Solid	ICP/MS 04	05/20/14	05/21/14 12:53	140520L04E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	0.0580	0.100	0.0419	1.00	J
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-254-212	N/A	Solid	ICP/MS 03	06/09/14	06/09/14 19:44	140609L01E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	ND	0.100	0.0419	1.00	
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-AA	05/15/14 09:15	Sediment	Mercury 05	05/21/14	05/21/14 20:39	140521L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0467	0.0445	0.0131	1.00	

SR-N-01 BOTTOM	14-05-1271-2-AA	05/15/14 09:15	Sediment	Mercury 05	05/21/14	05/21/14 20:41	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0933	0.0346	0.0102	1.00	

SR-N-02 TOP	14-05-1271-3-AA	05/15/14 09:00	Sediment	Mercury 05	05/21/14	05/21/14 20:44	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0808	0.0564	0.0166	1.00	

SR-N-02 BOTTOM	14-05-1271-4-AA	05/15/14 08:45	Sediment	Mercury 05	05/21/14	05/21/14 20:46	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.156	0.0475	0.0139	1.00	

SR-N-03 TOP	14-05-1271-5-AA	05/15/14 08:15	Sediment	Mercury 05	05/21/14	05/21/14 20:53	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.119	0.0677	0.0199	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM	14-05-1271-6-AA	05/15/14 08:30	Sediment	Mercury 05	05/21/14	05/21/14 20:55	140521L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.157	0.0412	0.0121	1.00	

SR-N-03 BOTTOM DUP	14-05-1271-7-AA	05/15/14 08:30	Sediment	Mercury 05	05/21/14	05/21/14 20:57	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.256	0.0466	0.0137	1.00	

JB-S-07 TOP	14-05-1271-8-AA	05/15/14 11:00	Sediment	Mercury 05	05/21/14	05/21/14 20:59	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0284	0.00835	1.00	

JB-S-07 BOTTOM	14-05-1271-9-AA	05/15/14 10:55	Sediment	Mercury 05	05/21/14	05/21/14 21:02	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0254	0.00746	1.00	

JB-S-08 TOP	14-05-1271-10-AA	05/15/14 10:45	Sediment	Mercury 05	05/21/14	05/21/14 21:04	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00847	0.0277	0.00813	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 BOTTOM	14-05-1271-11-AA	05/15/14 10:30	Sediment	Mercury 05	05/21/14	05/21/14 21:06	140521L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0258	0.00757	1.00	

JB-S-09 TOP	14-05-1271-12-AA	05/15/14 10:10	Sediment	Mercury 05	05/21/14	05/21/14 21:08	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0448	0.0402	0.0118	1.00	

JB-S-09 BOTTOM	14-05-1271-13-AA	05/15/14 10:00	Sediment	Mercury 05	05/21/14	05/21/14 21:11	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00780	0.0258	0.00757	1.00	J

JB-S-10 TOP	14-05-1271-14-AA	05/15/14 11:20	Sediment	Mercury 05	05/21/14	05/21/14 21:13	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0157	0.0264	0.00776	1.00	J

JB-S-10 BOTTOM	14-05-1271-15-AA	05/15/14 11:10	Sediment	Mercury 05	05/21/14	05/21/14 18:43	140521L05E
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0272	0.00800	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A
Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-AA	05/15/14 11:40	Sediment	Mercury 05	05/21/14	05/21/14 21:19	140521L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.00984	0.0296	0.00870	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 BOTTOM	14-05-1271-17-AA	05/15/14 11:45	Sediment	Mercury 05	05/21/14	05/21/14 21:22	140521L05E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0101	0.0276	0.00811	1.00	J

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	Mercury 05	06/09/14	06/10/14 14:10	140609L08E

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0374	0.0305	0.00894	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-278-22	N/A	Solid	Mercury 05	05/21/14	05/21/14 18:14	140521L05E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0200	0.00587	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-278-28	N/A	Solid	Mercury 05	06/09/14	06/10/14 13:25	140609L08E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0200	0.00587	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-A	05/15/14 09:15	Sediment	LPSA 1	N/A	05/20/14 09:58	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	16.44	
Silt (0.00391 to 0.0625mm)	70.12	
Total Silt and Clay (0 to 0.0625mm)	86.56	
Very Fine Sand (0.0625 to 0.125mm)	13.40	
Fine Sand (0.125 to 0.25mm)	0.040	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-N-01 BOTTOM	14-05-1271-2-A	05/15/14 09:15	Sediment	LPSA 1	N/A	05/20/14 10:04	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	19.35	
Silt (0.00391 to 0.0625mm)	58.03	
Total Silt and Clay (0 to 0.0625mm)	77.38	
Very Fine Sand (0.0625 to 0.125mm)	15.91	
Fine Sand (0.125 to 0.25mm)	6.71	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-N-02 TOP	14-05-1271-3-A	05/15/14 09:00	Sediment	LPSA 1	N/A	05/20/14 10:10	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	12.08	
Silt (0.00391 to 0.0625mm)	74.73	
Total Silt and Clay (0 to 0.0625mm)	86.81	
Very Fine Sand (0.0625 to 0.125mm)	11.20	
Fine Sand (0.125 to 0.25mm)	1.98	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 BOTTOM	14-05-1271-4-A	05/15/14 08:45	Sediment	LPSA 1	N/A	05/20/14 10:18	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	20.23	
Silt (0.00391 to 0.0625mm)	78.64	
Total Silt and Clay (0 to 0.0625mm)	98.87	
Very Fine Sand (0.0625 to 0.125mm)	1.13	
Fine Sand (0.125 to 0.25mm)	ND	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-N-03 TOP	14-05-1271-5-A	05/15/14 08:15	Sediment	LPSA 1	N/A	05/20/14 10:24	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	14.48	
Silt (0.00391 to 0.0625mm)	77.55	
Total Silt and Clay (0 to 0.0625mm)	92.03	
Very Fine Sand (0.0625 to 0.125mm)	7.76	
Fine Sand (0.125 to 0.25mm)	0.21	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

SR-N-03 BOTTOM	14-05-1271-6-A	05/15/14 08:30	Sediment	LPSA 1	N/A	05/20/14 10:30	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	18.24	
Silt (0.00391 to 0.0625mm)	75.19	
Total Silt and Clay (0 to 0.0625mm)	93.43	
Very Fine Sand (0.0625 to 0.125mm)	4.01	
Fine Sand (0.125 to 0.25mm)	2.56	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-A	05/15/14 08:30	Sediment	LPSA 1	N/A	05/20/14 10:36	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	19.84	
Silt (0.00391 to 0.0625mm)	73.57	
Total Silt and Clay (0 to 0.0625mm)	93.41	
Very Fine Sand (0.0625 to 0.125mm)	6.56	
Fine Sand (0.125 to 0.25mm)	0.030	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-07 TOP	14-05-1271-8-A	05/15/14 11:00	Sediment	LPSA 1	N/A	05/20/14 10:48	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	5.30	
Silt (0.00391 to 0.0625mm)	26.80	
Total Silt and Clay (0 to 0.0625mm)	32.10	
Very Fine Sand (0.0625 to 0.125mm)	23.50	
Fine Sand (0.125 to 0.25mm)	41.30	
Medium Sand (0.25 to 0.5mm)	3.09	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-07 BOTTOM	14-05-1271-9-A	05/15/14 10:55	Sediment	LPSA 1	N/A	05/20/14 10:55	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	4.29	
Silt (0.00391 to 0.0625mm)	19.69	
Total Silt and Clay (0 to 0.0625mm)	23.98	
Very Fine Sand (0.0625 to 0.125mm)	26.79	
Fine Sand (0.125 to 0.25mm)	45.99	
Medium Sand (0.25 to 0.5mm)	3.24	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-A	05/15/14 10:45	Sediment	LPSA 1	N/A	05/20/14 11:03	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.28	
Silt (0.00391 to 0.0625mm)	15.98	
Total Silt and Clay (0 to 0.0625mm)	19.26	
Very Fine Sand (0.0625 to 0.125mm)	26.17	
Fine Sand (0.125 to 0.25mm)	51.94	
Medium Sand (0.25 to 0.5mm)	2.63	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-08 BOTTOM	14-05-1271-11-A	05/15/14 10:30	Sediment	LPSA 1	N/A	05/20/14 13:12	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	2.23	
Silt (0.00391 to 0.0625mm)	11.40	
Total Silt and Clay (0 to 0.0625mm)	13.63	
Very Fine Sand (0.0625 to 0.125mm)	25.29	
Fine Sand (0.125 to 0.25mm)	56.39	
Medium Sand (0.25 to 0.5mm)	4.69	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-09 TOP	14-05-1271-12-A	05/15/14 10:10	Sediment	LPSA 1	N/A	05/20/14 13:18	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	8.26	
Silt (0.00391 to 0.0625mm)	50.82	
Total Silt and Clay (0 to 0.0625mm)	59.08	
Very Fine Sand (0.0625 to 0.125mm)	26.21	
Fine Sand (0.125 to 0.25mm)	14.71	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

Page 5 of 6

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 BOTTOM	14-05-1271-13-A	05/15/14 10:00	Sediment	LPSA 1	N/A	05/20/14 13:28	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	2.35	
Silt (0.00391 to 0.0625mm)	12.80	
Total Silt and Clay (0 to 0.0625mm)	15.15	
Very Fine Sand (0.0625 to 0.125mm)	36.09	
Fine Sand (0.125 to 0.25mm)	45.39	
Medium Sand (0.25 to 0.5mm)	3.38	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-10 TOP	14-05-1271-14-A	05/15/14 11:20	Sediment	LPSA 1	N/A	05/20/14 13:34	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	6.79	
Silt (0.00391 to 0.0625mm)	32.88	
Total Silt and Clay (0 to 0.0625mm)	39.67	
Very Fine Sand (0.0625 to 0.125mm)	19.29	
Fine Sand (0.125 to 0.25mm)	37.28	
Medium Sand (0.25 to 0.5mm)	3.76	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-10 BOTTOM	14-05-1271-15-A	05/15/14 11:10	Sediment	LPSA 1	N/A	05/20/14 13:40	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	3.55	
Silt (0.00391 to 0.0625mm)	16.94	
Total Silt and Clay (0 to 0.0625mm)	20.48	
Very Fine Sand (0.0625 to 0.125mm)	28.76	
Fine Sand (0.125 to 0.25mm)	46.80	
Medium Sand (0.25 to 0.5mm)	3.96	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: N/A
 Method: ASTM D4464 (M)
 Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-A	05/15/14 11:40	Sediment	LPSA 1	N/A	05/20/14 13:54	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	5.90	
Silt (0.00391 to 0.0625mm)	26.19	
Total Silt and Clay (0 to 0.0625mm)	32.09	
Very Fine Sand (0.0625 to 0.125mm)	24.89	
Fine Sand (0.125 to 0.25mm)	36.89	
Medium Sand (0.25 to 0.5mm)	6.14	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-11 BOTTOM	14-05-1271-17-A	05/15/14 11:45	Sediment	LPSA 1	N/A	05/20/14 14:06	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	8.78	
Silt (0.00391 to 0.0625mm)	26.38	
Total Silt and Clay (0 to 0.0625mm)	35.16	
Very Fine Sand (0.0625 to 0.125mm)	27.58	
Fine Sand (0.125 to 0.25mm)	36.58	
Medium Sand (0.25 to 0.5mm)	0.68	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

JB-S-11 Bottom (Particle size dup)	14-05-1271-19-A	05/15/14 11:45	Sediment	LPSA 1	N/A	05/20/14 14:22	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	10.84	
Silt (0.00391 to 0.0625mm)	31.62	
Total Silt and Clay (0 to 0.0625mm)	42.46	
Very Fine Sand (0.0625 to 0.125mm)	29.22	
Fine Sand (0.125 to 0.25mm)	28.32	
Medium Sand (0.25 to 0.5mm)	0.010	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

Page 1 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-AA	05/15/14 09:15	Sediment	GC 51	05/25/14	05/28/14 11:28	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.1	0.67	1.00	
Alpha-BHC	ND	2.1	0.69	1.00	
Beta-BHC	ND	2.1	0.56	1.00	
Delta-BHC	ND	2.1	0.54	1.00	
Gamma-BHC	ND	2.1	0.73	1.00	
Chlordane	ND	21	6.9	1.00	
Dieldrin	ND	2.1	0.70	1.00	
Trans-nonachlor	ND	2.1	0.61	1.00	
2,4'-DDD	ND	2.1	0.72	1.00	
2,4'-DDE	5.2	2.1	0.65	1.00	
2,4'-DDT	ND	2.1	0.64	1.00	
4,4'-DDD	2.0	2.1	0.67	1.00	J
4,4'-DDE	5.0	2.1	0.63	1.00	
4,4'-DDT	ND	2.1	0.71	1.00	
Endosulfan I	ND	2.1	0.56	1.00	
Endosulfan II	ND	2.1	0.59	1.00	
Endosulfan Sulfate	ND	2.1	0.72	1.00	
Endrin	ND	2.1	0.76	1.00	
Endrin Aldehyde	ND	2.1	0.52	1.00	
Endrin Ketone	ND	2.1	0.74	1.00	
Heptachlor	ND	2.1	0.68	1.00	
Heptachlor Epoxide	ND	2.1	0.75	1.00	
Methoxychlor	ND	2.1	0.69	1.00	
Toxaphene	ND	42	13	1.00	
Alpha Chlordane	ND	2.1	0.68	1.00	
Gamma Chlordane	ND	2.1	0.67	1.00	
Cis-nonachlor	ND	2.1	0.62	1.00	
Oxychlordane	ND	2.1	0.60	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	112	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

Page 2 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 BOTTOM	14-05-1271-2-AA	05/15/14 09:15	Sediment	GC 51	05/25/14	05/28/14 11:43	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.8	0.55	1.00	
Alpha-BHC	ND	1.8	0.57	1.00	
Beta-BHC	ND	1.8	0.47	1.00	
Delta-BHC	ND	1.8	0.45	1.00	
Gamma-BHC	ND	1.8	0.61	1.00	
Chlordane	ND	18	5.8	1.00	
Dieldrin	ND	1.8	0.58	1.00	
Trans-nonachlor	ND	1.8	0.51	1.00	
2,4'-DDD	ND	1.8	0.60	1.00	
2,4'-DDT	ND	1.8	0.53	1.00	
4,4'-DDT	ND	1.8	0.59	1.00	
Endosulfan I	ND	1.8	0.46	1.00	
Endosulfan II	ND	1.8	0.49	1.00	
Endosulfan Sulfate	ND	1.8	0.59	1.00	
Endrin	ND	1.8	0.63	1.00	
Endrin Aldehyde	ND	1.8	0.43	1.00	
Endrin Ketone	ND	1.8	0.61	1.00	
Heptachlor	ND	1.8	0.57	1.00	
Heptachlor Epoxide	ND	1.8	0.63	1.00	
Methoxychlor	ND	1.8	0.57	1.00	
Toxaphene	ND	35	11	1.00	
Alpha Chlordane	ND	1.8	0.56	1.00	
Gamma Chlordane	ND	1.8	0.56	1.00	
Cis-nonachlor	ND	1.8	0.52	1.00	
Oxychlordane	ND	1.8	0.50	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	112	25-145			
Decachlorobiphenyl	118	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 3 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 BOTTOM	14-05-1271-2-AA	05/15/14 09:15	Sediment	GC 51	05/25/14	05/28/14 18:38	140525L01

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDE	15	3.5	1.1	2.00	
4,4'-DDD	16	3.5	1.1	2.00	
4,4'-DDE	17	3.5	1.1	2.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,5,6-Tetrachloro-m-Xylene	116	25-145	
Decachlorobiphenyl	117	24-168	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

Page 4 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 TOP	14-05-1271-3-AA	05/15/14 09:00	Sediment	GC 51	05/25/14	05/28/14 11:57	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.9	0.92	1.00	
Alpha-BHC	ND	2.9	0.94	1.00	
Beta-BHC	ND	2.9	0.77	1.00	
Delta-BHC	ND	2.9	0.74	1.00	
Gamma-BHC	ND	2.9	1.0	1.00	
Chlordane	ND	29	9.5	1.00	
Dieldrin	ND	2.9	0.96	1.00	
Trans-nonachlor	ND	2.9	0.84	1.00	
2,4'-DDD	ND	2.9	0.99	1.00	
2,4'-DDE	14	2.9	0.89	1.00	
2,4'-DDT	ND	2.9	0.87	1.00	
4,4'-DDD	5.9	2.9	0.92	1.00	
4,4'-DDE	14	2.9	0.87	1.00	
4,4'-DDT	ND	2.9	0.97	1.00	
Endosulfan I	ND	2.9	0.76	1.00	
Endosulfan II	ND	2.9	0.81	1.00	
Endosulfan Sulfate	ND	2.9	0.98	1.00	
Endrin	ND	2.9	1.0	1.00	
Endrin Aldehyde	ND	2.9	0.71	1.00	
Endrin Ketone	ND	2.9	1.0	1.00	
Heptachlor	ND	2.9	0.94	1.00	
Heptachlor Epoxide	ND	2.9	1.0	1.00	
Methoxychlor	ND	2.9	0.94	1.00	
Toxaphene	ND	58	18	1.00	
Alpha Chlordane	ND	2.9	0.93	1.00	
Gamma Chlordane	ND	2.9	0.92	1.00	
Cis-nonachlor	ND	2.9	0.85	1.00	
Oxychlordane	ND	2.9	0.82	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	137	25-145			
Decachlorobiphenyl	135	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

Page 5 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 BOTTOM	14-05-1271-4-AA	05/15/14 08:45	Sediment	GC 51	05/25/14	05/28/14 12:11	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	2.4	0.74	1.00	
Alpha-BHC	ND	2.4	0.77	1.00	
Beta-BHC	ND	2.4	0.62	1.00	
Delta-BHC	ND	2.4	0.61	1.00	
Gamma-BHC	ND	2.4	0.82	1.00	
Chlordane	ND	24	7.7	1.00	
Dieldrin	ND	2.4	0.78	1.00	
Trans-nonachlor	ND	2.4	0.68	1.00	
2,4'-DDD	ND	2.4	0.80	1.00	
2,4'-DDT	ND	2.4	0.71	1.00	
4,4'-DDE	15	2.4	0.71	1.00	
4,4'-DDT	ND	2.4	0.79	1.00	
Endosulfan I	ND	2.4	0.62	1.00	
Endosulfan II	ND	2.4	0.66	1.00	
Endosulfan Sulfate	ND	2.4	0.80	1.00	
Endrin	ND	2.4	0.85	1.00	
Endrin Aldehyde	ND	2.4	0.58	1.00	
Endrin Ketone	ND	2.4	0.82	1.00	
Heptachlor	ND	2.4	0.76	1.00	
Heptachlor Epoxide	ND	2.4	0.84	1.00	
Methoxychlor	ND	2.4	0.77	1.00	
Toxaphene	ND	47	15	1.00	
Alpha Chlordane	ND	2.4	0.76	1.00	
Gamma Chlordane	ND	2.4	0.75	1.00	
Cis-nonachlor	ND	2.4	0.69	1.00	
Oxychlordane	ND	2.4	0.67	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,5,6-Tetrachloro-m-Xylene	112	25-145	
Decachlorobiphenyl	109	24-168	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 BOTTOM	14-05-1271-4-AA	05/15/14 08:45	Sediment	GC 51	05/25/14	05/28/14 18:52	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDE	14	4.7	1.4	2.00	
4,4'-DDD	22	4.7	1.5	2.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,5,6-Tetrachloro-m-Xylene	122	25-145	
Decachlorobiphenyl	110	24-168	

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 TOP	14-05-1271-5-AA	05/15/14 08:15	Sediment	GC 51	05/25/14	05/28/14 12:26	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	3.5	1.1	1.00	
Alpha-BHC	ND	3.5	1.1	1.00	
Beta-BHC	ND	3.5	0.92	1.00	
Delta-BHC	ND	3.5	0.89	1.00	
Gamma-BHC	ND	3.5	1.2	1.00	
Chlordane	ND	35	11	1.00	
Dieldrin	ND	3.5	1.2	1.00	
Trans-nonachlor	ND	3.5	1.0	1.00	
2,4'-DDD	ND	3.5	1.2	1.00	
2,4'-DDE	ND	3.5	1.1	1.00	
2,4'-DDT	ND	3.5	1.1	1.00	
4,4'-DDD	1.9	3.5	1.1	1.00	J
4,4'-DDE	4.3	3.5	1.0	1.00	
4,4'-DDT	ND	3.5	1.2	1.00	
Endosulfan I	ND	3.5	0.92	1.00	
Endosulfan II	ND	3.5	0.98	1.00	
Endosulfan Sulfate	ND	3.5	1.2	1.00	
Endrin	ND	3.5	1.3	1.00	
Endrin Aldehyde	ND	3.5	0.85	1.00	
Endrin Ketone	ND	3.5	1.2	1.00	
Heptachlor	ND	3.5	1.1	1.00	
Heptachlor Epoxide	ND	3.5	1.2	1.00	
Methoxychlor	ND	3.5	1.1	1.00	
Toxaphene	ND	70	22	1.00	
Alpha Chlordane	ND	3.5	1.1	1.00	
Gamma Chlordane	ND	3.5	1.1	1.00	
Cis-nonachlor	ND	3.5	1.0	1.00	
Oxychlordane	ND	3.5	0.98	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	120	25-145			
Decachlorobiphenyl	108	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM	14-05-1271-6-AA	05/15/14 08:30	Sediment	GC 51	05/25/14	05/28/14 12:40	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	2.3	0.72	1.00	
Alpha-BHC	ND	2.3	0.74	1.00	
Beta-BHC	ND	2.3	0.60	1.00	
Delta-BHC	ND	2.3	0.59	1.00	
Gamma-BHC	ND	2.3	0.79	1.00	
Chlordane	ND	23	7.5	1.00	
Dieldrin	ND	2.3	0.75	1.00	
Trans-nonachlor	ND	2.3	0.66	1.00	
2,4'-DDD	ND	2.3	0.78	1.00	
2,4'-DDT	ND	2.3	0.69	1.00	
4,4'-DDT	ND	2.3	0.77	1.00	
Endosulfan I	ND	2.3	0.60	1.00	
Endosulfan II	ND	2.3	0.64	1.00	
Endosulfan Sulfate	ND	2.3	0.77	1.00	
Endrin	ND	2.3	0.82	1.00	
Endrin Aldehyde	ND	2.3	0.56	1.00	
Endrin Ketone	ND	2.3	0.79	1.00	
Heptachlor	ND	2.3	0.74	1.00	
Heptachlor Epoxide	ND	2.3	0.81	1.00	
Methoxychlor	ND	2.3	0.74	1.00	
Toxaphene	ND	46	15	1.00	
Alpha Chlordane	ND	2.3	0.73	1.00	
Gamma Chlordane	ND	2.3	0.73	1.00	
Cis-nonachlor	ND	2.3	0.67	1.00	
Oxychlordane	ND	2.3	0.64	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	115	25-145			
Decachlorobiphenyl	110	24-168			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 9 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM	14-05-1271-6-AA	05/15/14 08:30	Sediment	GC 51	05/25/14	05/28/14 19:07	140525L01

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDE	18	4.6	1.4	2.00	
4,4'-DDD	18	4.6	1.4	2.00	
4,4'-DDE	18	4.6	1.4	2.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,5,6-Tetrachloro-m-Xylene	116	25-145	
Decachlorobiphenyl	110	24-168	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-AA	05/15/14 08:30	Sediment	GC 51	05/25/14	05/28/14 13:09	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.2	0.71	1.00	
Alpha-BHC	ND	2.2	0.73	1.00	
Beta-BHC	ND	2.2	0.59	1.00	
Delta-BHC	ND	2.2	0.58	1.00	
Gamma-BHC	ND	2.2	0.78	1.00	
Chlordane	ND	22	7.3	1.00	
Dieldrin	ND	2.2	0.74	1.00	
Trans-nonachlor	ND	2.2	0.65	1.00	
2,4'-DDD	ND	2.2	0.76	1.00	
2,4'-DDT	ND	2.2	0.68	1.00	
4,4'-DDT	ND	2.2	0.75	1.00	
Endosulfan I	ND	2.2	0.59	1.00	
Endosulfan II	ND	2.2	0.63	1.00	
Endosulfan Sulfate	ND	2.2	0.76	1.00	
Endrin	ND	2.2	0.81	1.00	
Endrin Aldehyde	ND	2.2	0.55	1.00	
Endrin Ketone	ND	2.2	0.78	1.00	
Heptachlor	ND	2.2	0.72	1.00	
Heptachlor Epoxide	ND	2.2	0.80	1.00	
Methoxychlor	ND	2.2	0.73	1.00	
Toxaphene	ND	45	14	1.00	
Alpha Chlordane	ND	2.2	0.72	1.00	
Gamma Chlordane	ND	2.2	0.71	1.00	
Cis-nonachlor	ND	2.2	0.66	1.00	
Oxychlordane	ND	2.2	0.63	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	123	25-145			
Decachlorobiphenyl	113	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 11 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 BOTTOM DUP	14-05-1271-7-AA	05/15/14 08:30	Sediment	GC 51	05/25/14	05/28/14 19:21	140525L01

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
2,4'-DDE	35	11	3.4	5.00	
4,4'-DDD	41	11	3.6	5.00	
4,4'-DDE	33	11	3.4	5.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,5,6-Tetrachloro-m-Xylene	117	25-145	
Decachlorobiphenyl	111	24-168	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 TOP	14-05-1271-8-AA	05/15/14 11:00	Sediment	GC 51	05/25/14	05/28/14 13:23	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.48	1.00	
Beta-BHC	ND	1.5	0.39	1.00	
Delta-BHC	ND	1.5	0.38	1.00	
Gamma-BHC	ND	1.5	0.52	1.00	
Chlordane	ND	15	4.9	1.00	
Dieldrin	ND	1.5	0.49	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	ND	1.5	0.50	1.00	
2,4'-DDE	2.4	1.5	0.45	1.00	
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	ND	1.5	0.47	1.00	
4,4'-DDE	2.5	1.5	0.45	1.00	
4,4'-DDT	ND	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.42	1.00	
Endosulfan Sulfate	ND	1.5	0.50	1.00	
Endrin	ND	1.5	0.53	1.00	
Endrin Aldehyde	ND	1.5	0.36	1.00	
Endrin Ketone	ND	1.5	0.52	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.48	1.00	
Toxaphene	ND	30	9.4	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.47	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	127	25-145			
Decachlorobiphenyl	120	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 BOTTOM	14-05-1271-9-AA	05/15/14 10:55	Sediment	GC 51	05/25/14	05/28/14 13:37	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.42	1.00	
Alpha-BHC	ND	1.3	0.44	1.00	
Beta-BHC	ND	1.3	0.36	1.00	
Delta-BHC	ND	1.3	0.35	1.00	
Gamma-BHC	ND	1.3	0.47	1.00	
Chlordane	ND	13	4.4	1.00	
Dieldrin	ND	1.3	0.44	1.00	
Trans-nonachlor	ND	1.3	0.39	1.00	
2,4'-DDD	ND	1.3	0.46	1.00	
2,4'-DDE	ND	1.3	0.41	1.00	
2,4'-DDT	ND	1.3	0.41	1.00	
4,4'-DDD	ND	1.3	0.43	1.00	
4,4'-DDE	ND	1.3	0.40	1.00	
4,4'-DDT	ND	1.3	0.45	1.00	
Endosulfan I	ND	1.3	0.35	1.00	
Endosulfan II	ND	1.3	0.38	1.00	
Endosulfan Sulfate	ND	1.3	0.46	1.00	
Endrin	ND	1.3	0.48	1.00	
Endrin Aldehyde	ND	1.3	0.33	1.00	
Endrin Ketone	ND	1.3	0.47	1.00	
Heptachlor	ND	1.3	0.43	1.00	
Heptachlor Epoxide	ND	1.3	0.48	1.00	
Methoxychlor	ND	1.3	0.44	1.00	
Toxaphene	ND	27	8.6	1.00	
Alpha Chlordane	ND	1.3	0.43	1.00	
Gamma Chlordane	ND	1.3	0.43	1.00	
Cis-nonachlor	ND	1.3	0.40	1.00	
Oxychlordane	ND	1.3	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	117	25-145			
Decachlorobiphenyl	107	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-AA	05/15/14 10:45	Sediment	GC 51	05/25/14	05/28/14 13:52	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.46	1.00	
Alpha-BHC	ND	1.5	0.47	1.00	
Beta-BHC	ND	1.5	0.38	1.00	
Delta-BHC	ND	1.5	0.37	1.00	
Gamma-BHC	ND	1.5	0.50	1.00	
Chlordane	ND	15	4.7	1.00	
Dieldrin	ND	1.5	0.48	1.00	
Trans-nonachlor	ND	1.5	0.42	1.00	
2,4'-DDD	ND	1.5	0.49	1.00	
2,4'-DDE	ND	1.5	0.44	1.00	
2,4'-DDT	ND	1.5	0.44	1.00	
4,4'-DDD	ND	1.5	0.46	1.00	
4,4'-DDE	2.0	1.5	0.43	1.00	
4,4'-DDT	ND	1.5	0.49	1.00	
Endosulfan I	ND	1.5	0.38	1.00	
Endosulfan II	ND	1.5	0.41	1.00	
Endosulfan Sulfate	ND	1.5	0.49	1.00	
Endrin	ND	1.5	0.52	1.00	
Endrin Aldehyde	ND	1.5	0.35	1.00	
Endrin Ketone	ND	1.5	0.50	1.00	
Heptachlor	ND	1.5	0.47	1.00	
Heptachlor Epoxide	ND	1.5	0.52	1.00	
Methoxychlor	ND	1.5	0.47	1.00	
Toxaphene	ND	29	9.2	1.00	
Alpha Chlordane	ND	1.5	0.47	1.00	
Gamma Chlordane	2.2	1.5	0.46	1.00	
Cis-nonachlor	ND	1.5	0.43	1.00	
Oxychlordane	ND	1.5	0.41	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	116	25-145			
Decachlorobiphenyl	98	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 BOTTOM	14-05-1271-11-AA	05/15/14 10:30	Sediment	GC 51	05/25/14	05/28/14 14:06	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.42	1.00	
Alpha-BHC	ND	1.3	0.44	1.00	
Beta-BHC	ND	1.3	0.36	1.00	
Delta-BHC	ND	1.3	0.34	1.00	
Gamma-BHC	ND	1.3	0.47	1.00	
Chlordane	ND	13	4.4	1.00	
Dieldrin	ND	1.3	0.44	1.00	
Trans-nonachlor	ND	1.3	0.39	1.00	
2,4'-DDD	ND	1.3	0.46	1.00	
2,4'-DDE	ND	1.3	0.41	1.00	
2,4'-DDT	ND	1.3	0.40	1.00	
4,4'-DDD	ND	1.3	0.43	1.00	
4,4'-DDE	0.43	1.3	0.40	1.00	J
4,4'-DDT	ND	1.3	0.45	1.00	
Endosulfan I	ND	1.3	0.35	1.00	
Endosulfan II	ND	1.3	0.38	1.00	
Endosulfan Sulfate	ND	1.3	0.46	1.00	
Endrin	ND	1.3	0.48	1.00	
Endrin Aldehyde	ND	1.3	0.33	1.00	
Endrin Ketone	ND	1.3	0.47	1.00	
Heptachlor	ND	1.3	0.43	1.00	
Heptachlor Epoxide	ND	1.3	0.48	1.00	
Methoxychlor	ND	1.3	0.44	1.00	
Toxaphene	ND	27	8.5	1.00	
Alpha Chlordane	ND	1.3	0.43	1.00	
Gamma Chlordane	ND	1.3	0.43	1.00	
Cis-nonachlor	ND	1.3	0.40	1.00	
Oxychlordane	ND	1.3	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	102	25-145			
Decachlorobiphenyl	90	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 TOP	14-05-1271-12-AA	05/15/14 10:10	Sediment	GC 51	05/25/14	05/28/14 14:20	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.1	0.65	1.00	
Alpha-BHC	ND	2.1	0.67	1.00	
Beta-BHC	ND	2.1	0.55	1.00	
Delta-BHC	ND	2.1	0.53	1.00	
Gamma-BHC	ND	2.1	0.72	1.00	
Chlordane	ND	21	6.8	1.00	
Dieldrin	ND	2.1	0.68	1.00	
Trans-nonachlor	ND	2.1	0.60	1.00	
2,4'-DDD	ND	2.1	0.70	1.00	
2,4'-DDE	7.4	2.1	0.63	1.00	
2,4'-DDT	ND	2.1	0.62	1.00	
4,4'-DDD	ND	2.1	0.65	1.00	
4,4'-DDE	5.1	2.1	0.62	1.00	
4,4'-DDT	ND	2.1	0.69	1.00	
Endosulfan I	ND	2.1	0.54	1.00	
Endosulfan II	ND	2.1	0.58	1.00	
Endosulfan Sulfate	ND	2.1	0.70	1.00	
Endrin	ND	2.1	0.74	1.00	
Endrin Aldehyde	ND	2.1	0.51	1.00	
Endrin Ketone	ND	2.1	0.72	1.00	
Heptachlor	ND	2.1	0.67	1.00	
Heptachlor Epoxide	ND	2.1	0.74	1.00	
Methoxychlor	ND	2.1	0.67	1.00	
Toxaphene	ND	41	13	1.00	
Alpha Chlordane	ND	2.1	0.66	1.00	
Gamma Chlordane	ND	2.1	0.66	1.00	
Cis-nonachlor	ND	2.1	0.61	1.00	
Oxychlordane	ND	2.1	0.58	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	109	25-145			
Decachlorobiphenyl	105	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 BOTTOM	14-05-1271-13-AA	05/15/14 10:00	Sediment	GC 51	05/25/14	05/28/14 14:35	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.3	0.42	1.00	
Alpha-BHC	ND	1.3	0.44	1.00	
Beta-BHC	ND	1.3	0.36	1.00	
Delta-BHC	ND	1.3	0.34	1.00	
Gamma-BHC	ND	1.3	0.47	1.00	
Chlordane	ND	13	4.4	1.00	
Dieldrin	ND	1.3	0.44	1.00	
Trans-nonachlor	ND	1.3	0.39	1.00	
2,4'-DDD	ND	1.3	0.46	1.00	
2,4'-DDE	ND	1.3	0.41	1.00	
2,4'-DDT	ND	1.3	0.40	1.00	
4,4'-DDD	ND	1.3	0.43	1.00	
4,4'-DDE	ND	1.3	0.40	1.00	
4,4'-DDT	ND	1.3	0.45	1.00	
Endosulfan I	ND	1.3	0.35	1.00	
Endosulfan II	0.68	1.3	0.38	1.00	J
Endosulfan Sulfate	ND	1.3	0.46	1.00	
Endrin	ND	1.3	0.48	1.00	
Endrin Aldehyde	ND	1.3	0.33	1.00	
Endrin Ketone	ND	1.3	0.47	1.00	
Heptachlor	ND	1.3	0.43	1.00	
Heptachlor Epoxide	ND	1.3	0.48	1.00	
Methoxychlor	ND	1.3	0.44	1.00	
Toxaphene	ND	27	8.5	1.00	
Alpha Chlordane	ND	1.3	0.43	1.00	
Gamma Chlordane	ND	1.3	0.43	1.00	
Cis-nonachlor	ND	1.3	0.40	1.00	
Oxychlordane	ND	1.3	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	135	25-145			
Decachlorobiphenyl	128	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP	14-05-1271-14-AA	05/15/14 11:20	Sediment	GC 51	05/25/14	05/28/14 14:49	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.6	0.49	1.00	
Alpha-BHC	0.91	1.6	0.51	1.00	J
Beta-BHC	ND	1.6	0.41	1.00	
Delta-BHC	ND	1.6	0.40	1.00	
Gamma-BHC	ND	1.6	0.54	1.00	
Chlordane	ND	16	5.1	1.00	
Dieldrin	ND	1.6	0.51	1.00	
Trans-nonachlor	ND	1.6	0.45	1.00	
2,4'-DDD	ND	1.6	0.53	1.00	
2,4'-DDE	2.8	1.6	0.48	1.00	
2,4'-DDT	ND	1.6	0.47	1.00	
4,4'-DDD	0.97	1.6	0.49	1.00	J
4,4'-DDE	3.1	1.6	0.47	1.00	
4,4'-DDT	ND	1.6	0.52	1.00	
Endosulfan I	ND	1.6	0.41	1.00	
Endosulfan II	ND	1.6	0.44	1.00	
Endosulfan Sulfate	ND	1.6	0.53	1.00	
Endrin	ND	1.6	0.56	1.00	
Endrin Aldehyde	ND	1.6	0.38	1.00	
Endrin Ketone	ND	1.6	0.54	1.00	
Heptachlor	ND	1.6	0.50	1.00	
Heptachlor Epoxide	ND	1.6	0.56	1.00	
Methoxychlor	ND	1.6	0.51	1.00	
Toxaphene	ND	31	9.9	1.00	
Alpha Chlordane	ND	1.6	0.50	1.00	
Gamma Chlordane	ND	1.6	0.50	1.00	
Cis-nonachlor	ND	1.6	0.46	1.00	
Oxychlordane	ND	1.6	0.44	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	98	25-145			
Decachlorobiphenyl	105	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 BOTTOM	14-05-1271-15-AA	05/15/14 11:10	Sediment	GC 51	05/25/14	05/28/14 15:03	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.43	1.00	
Alpha-BHC	ND	1.4	0.44	1.00	
Beta-BHC	ND	1.4	0.36	1.00	
Delta-BHC	ND	1.4	0.35	1.00	
Gamma-BHC	ND	1.4	0.47	1.00	
Chlordane	ND	14	4.4	1.00	
Dieldrin	ND	1.4	0.45	1.00	
Trans-nonachlor	ND	1.4	0.39	1.00	
2,4'-DDD	ND	1.4	0.46	1.00	
2,4'-DDE	ND	1.4	0.41	1.00	
2,4'-DDT	ND	1.4	0.41	1.00	
4,4'-DDD	ND	1.4	0.43	1.00	
4,4'-DDE	0.56	1.4	0.41	1.00	J
4,4'-DDT	ND	1.4	0.45	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.38	1.00	
Endosulfan Sulfate	ND	1.4	0.46	1.00	
Endrin	ND	1.4	0.49	1.00	
Endrin Aldehyde	ND	1.4	0.33	1.00	
Endrin Ketone	ND	1.4	0.47	1.00	
Heptachlor	ND	1.4	0.44	1.00	
Heptachlor Epoxide	ND	1.4	0.48	1.00	
Methoxychlor	ND	1.4	0.44	1.00	
Toxaphene	ND	27	8.6	1.00	
Alpha Chlordane	ND	1.4	0.44	1.00	
Gamma Chlordane	ND	1.4	0.43	1.00	
Cis-nonachlor	ND	1.4	0.40	1.00	
Oxychlordane	ND	1.4	0.38	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	119	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-AA	05/15/14 11:40	Sediment	GC 51	05/25/14	05/28/14 15:18	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.47	1.00	
Alpha-BHC	ND	1.5	0.48	1.00	
Beta-BHC	ND	1.5	0.39	1.00	
Delta-BHC	ND	1.5	0.38	1.00	
Gamma-BHC	ND	1.5	0.51	1.00	
Chlordane	ND	15	4.8	1.00	
Dieldrin	ND	1.5	0.49	1.00	
Trans-nonachlor	ND	1.5	0.43	1.00	
2,4'-DDD	0.78	1.5	0.50	1.00	J
2,4'-DDE	2.6	1.5	0.45	1.00	
2,4'-DDT	ND	1.5	0.45	1.00	
4,4'-DDD	5.3	1.5	0.47	1.00	
4,4'-DDE	3.2	1.5	0.44	1.00	
4,4'-DDT	3.6	1.5	0.50	1.00	
Endosulfan I	ND	1.5	0.39	1.00	
Endosulfan II	ND	1.5	0.41	1.00	
Endosulfan Sulfate	ND	1.5	0.50	1.00	
Endrin	ND	1.5	0.53	1.00	
Endrin Aldehyde	ND	1.5	0.36	1.00	
Endrin Ketone	ND	1.5	0.51	1.00	
Heptachlor	ND	1.5	0.48	1.00	
Heptachlor Epoxide	ND	1.5	0.53	1.00	
Methoxychlor	ND	1.5	0.48	1.00	
Toxaphene	ND	30	9.4	1.00	
Alpha Chlordane	ND	1.5	0.48	1.00	
Gamma Chlordane	ND	1.5	0.47	1.00	
Cis-nonachlor	ND	1.5	0.44	1.00	
Oxychlordane	ND	1.5	0.42	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	124	25-145			
Decachlorobiphenyl	130	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 BOTTOM	14-05-1271-17-AA	05/15/14 11:45	Sediment	GC 51	05/25/14	05/28/14 15:32	140525L01

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.45	1.00	
Alpha-BHC	ND	1.4	0.46	1.00	
Beta-BHC	ND	1.4	0.38	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.49	1.00	
Chlordane	ND	14	4.7	1.00	
Dieldrin	ND	1.4	0.47	1.00	
Trans-nonachlor	ND	1.4	0.41	1.00	
2,4'-DDD	ND	1.4	0.48	1.00	
2,4'-DDE	2.2	1.4	0.43	1.00	
2,4'-DDT	ND	1.4	0.43	1.00	
4,4'-DDD	1.1	1.4	0.45	1.00	J
4,4'-DDE	2.1	1.4	0.43	1.00	
4,4'-DDT	ND	1.4	0.48	1.00	
Endosulfan I	ND	1.4	0.37	1.00	
Endosulfan II	ND	1.4	0.40	1.00	
Endosulfan Sulfate	ND	1.4	0.48	1.00	
Endrin	ND	1.4	0.51	1.00	
Endrin Aldehyde	ND	1.4	0.35	1.00	
Endrin Ketone	ND	1.4	0.49	1.00	
Heptachlor	ND	1.4	0.46	1.00	
Heptachlor Epoxide	ND	1.4	0.51	1.00	
Methoxychlor	ND	1.4	0.46	1.00	
Toxaphene	ND	28	9.0	1.00	
Alpha Chlordane	ND	1.4	0.46	1.00	
Gamma Chlordane	ND	1.4	0.45	1.00	
Cis-nonachlor	ND	1.4	0.42	1.00	
Oxychlordane	ND	1.4	0.40	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	119	25-145			
Decachlorobiphenyl	112	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	GC 51	06/09/14	06/11/14 12:29	140609L10

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.49	1.00	
Alpha-BHC	ND	1.5	0.50	1.00	
Beta-BHC	ND	1.5	0.41	1.00	
Delta-BHC	ND	1.5	0.40	1.00	
Gamma-BHC	ND	1.5	0.53	1.00	
Chlordane	ND	15	5.0	1.00	
Dieldrin	ND	1.5	0.51	1.00	
Trans-nonachlor	ND	1.5	0.44	1.00	
2,4'-DDD	ND	1.5	0.52	1.00	
2,4'-DDE	1.8	1.5	0.47	1.00	
2,4'-DDT	ND	1.5	0.46	1.00	
4,4'-DDD	0.60	1.5	0.49	1.00	J
4,4'-DDE	1.9	1.5	0.46	1.00	
4,4'-DDT	0.62	1.5	0.52	1.00	J
Endosulfan I	ND	1.5	0.40	1.00	
Endosulfan II	ND	1.5	0.43	1.00	
Endosulfan Sulfate	ND	1.5	0.52	1.00	
Endrin	ND	1.5	0.55	1.00	
Endrin Aldehyde	ND	1.5	0.38	1.00	
Endrin Ketone	ND	1.5	0.54	1.00	
Heptachlor	ND	1.5	0.50	1.00	
Heptachlor Epoxide	ND	1.5	0.55	1.00	
Methoxychlor	ND	1.5	0.50	1.00	
Toxaphene	ND	31	9.8	1.00	
Alpha Chlordane	ND	1.5	0.50	1.00	
Gamma Chlordane	ND	1.5	0.49	1.00	
Cis-nonachlor	ND	1.5	0.45	1.00	
Oxychlordane	ND	1.5	0.43	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	102	25-145			
Decachlorobiphenyl	96	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-283	N/A	Solid	GC 51	05/25/14	05/28/14 10:45	140525L01

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	127	25-145			
Decachlorobiphenyl	114	24-168			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-288	N/A	Solid	GC 51	06/09/14	06/11/14 10:49	140609L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	123	25-145			
Decachlorobiphenyl	110	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-AA	05/15/14 09:15	Sediment	GC/MS MM	05/25/14	05/29/14 05:55	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	21	7.8	1.00	
2,4,5-Trichlorophenol	ND	21	6.8	1.00	
2,4,6-Trichlorophenol	ND	21	7.6	1.00	
2,4-Dichlorophenol	ND	21	5.6	1.00	
2,4-Dimethylphenol	ND	21	6.4	1.00	
2,4-Dinitrophenol	ND	1000	110	1.00	
2-Chlorophenol	ND	21	7.0	1.00	
2-Methylnaphthalene	ND	21	7.5	1.00	
2-Methylphenol	ND	21	11	1.00	
2-Nitrophenol	ND	21	5.0	1.00	
3/4-Methylphenol	ND	21	5.4	1.00	
4,6-Dinitro-2-Methylphenol	ND	1000	140	1.00	
4-Chloro-3-Methylphenol	ND	21	7.4	1.00	
4-Nitrophenol	ND	1000	130	1.00	
Acenaphthene	ND	21	9.8	1.00	
Acenaphthylene	ND	21	9.5	1.00	
Anthracene	ND	21	11	1.00	
Benzo (a) Anthracene	12	21	9.8	1.00	J
Benzo (a) Pyrene	710	21	11	1.00	
Benzo (b) Fluoranthene	16	21	11	1.00	J
Benzo (g,h,i) Perylene	11	21	8.8	1.00	J
Benzo (k) Fluoranthene	ND	21	14	1.00	
Bis(2-Ethylhexyl) Phthalate	38	21	8.5	1.00	B
Butyl Benzyl Phthalate	54	21	9.3	1.00	
Chrysene	15	21	11	1.00	J
Di-n-Butyl Phthalate	ND	21	11	1.00	
Di-n-Octyl Phthalate	ND	21	9.9	1.00	
Dibenz (a,h) Anthracene	ND	21	7.8	1.00	
Diethyl Phthalate	13	21	10	1.00	J
Dimethyl Phthalate	180	21	11	1.00	
Fluoranthene	12	21	12	1.00	J
Fluorene	ND	21	11	1.00	
Indeno (1,2,3-c,d) Pyrene	11	21	9.5	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	21	7.9	1.00	
Pentachlorophenol	ND	1000	2.7	1.00	
Phenanthrene	ND	21	12	1.00	
Phenol	ND	21	7.7	1.00	
Pyrene	22	21	11	1.00	
1,6,7-Trimethylnaphthalene	ND	21	6.4	1.00	
2,3,4,6-Tetrachlorophenol	ND	21	8.2	1.00	
2,6-Dichlorophenol	ND	21	12	1.00	
Benzoic Acid	310	210	26	1.00	
DCPA	ND	21	5.0	1.00	
Dibenzothiophene	ND	21	12	1.00	
Perthane	ND	21	2.7	1.00	
1-Methylphenanthrene	ND	21	7.5	1.00	
Benzo (e) Pyrene	12	21	5.0	1.00	J
Perylene	620	21	7.5	1.00	
Biphenyl	ND	21	8.5	1.00	
2,6-Dimethylnaphthalene	ND	21	7.1	1.00	
Isophorone	ND	210	26	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	83	32-143			
2-Fluorobiphenyl	52	14-146			
2-Fluorophenol	35	15-138			
Nitrobenzene-d5	26	18-162			
p-Terphenyl-d14	68	34-148			
Phenol-d6	40	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 TOP	14-05-1271-3-AA	05/15/14 09:00	Sediment	GC/MS MM	05/25/14	05/29/14 06:20	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	29	11	1.00	
2,4,5-Trichlorophenol	ND	29	9.4	1.00	
2,4,6-Trichlorophenol	ND	29	10	1.00	
2,4-Dichlorophenol	ND	29	7.8	1.00	
2,4-Dimethylphenol	ND	29	8.9	1.00	
2,4-Dinitrophenol	ND	1500	160	1.00	
2-Chlorophenol	ND	29	9.8	1.00	
2-Methylnaphthalene	ND	29	10	1.00	
2-Methylphenol	ND	29	15	1.00	
2-Nitrophenol	ND	29	6.9	1.00	
3/4-Methylphenol	ND	29	7.5	1.00	
4,6-Dinitro-2-Methylphenol	ND	1500	200	1.00	
4-Chloro-3-Methylphenol	ND	29	10	1.00	
4-Nitrophenol	ND	1500	190	1.00	
Acenaphthene	ND	29	14	1.00	
Acenaphthylene	ND	29	13	1.00	
Anthracene	ND	29	16	1.00	
Benzo (a) Anthracene	19	29	14	1.00	J
Benzo (a) Pyrene	20	29	15	1.00	J
Benzo (b) Fluoranthene	30	29	15	1.00	
Benzo (g,h,i) Perylene	18	29	12	1.00	J
Benzo (k) Fluoranthene	ND	29	19	1.00	
Bis(2-Ethylhexyl) Phthalate	47	29	12	1.00	B
Butyl Benzyl Phthalate	92	29	13	1.00	
Chrysene	25	29	15	1.00	J
Di-n-Butyl Phthalate	ND	29	15	1.00	
Di-n-Octyl Phthalate	ND	29	14	1.00	
Dibenz (a,h) Anthracene	ND	29	11	1.00	
Diethyl Phthalate	ND	29	14	1.00	
Dimethyl Phthalate	240	29	16	1.00	
Fluoranthene	23	29	17	1.00	J
Fluorene	ND	29	15	1.00	
Indeno (1,2,3-c,d) Pyrene	18	29	13	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	29	11	1.00	
Pentachlorophenol	ND	1500	3.7	1.00	
Phenanthrene	ND	29	17	1.00	
Phenol	ND	29	11	1.00	
Pyrene	43	29	16	1.00	
1,6,7-Trimethylnaphthalene	ND	29	8.8	1.00	
2,3,4,6-Tetrachlorophenol	ND	29	11	1.00	
2,6-Dichlorophenol	ND	29	17	1.00	
Benzoic Acid	420	290	36	1.00	
DCPA	ND	29	6.9	1.00	
Dibenzothiophene	ND	29	17	1.00	
Perthane	ND	29	3.8	1.00	
1-Methylphenanthrene	ND	29	10	1.00	
Benzo (e) Pyrene	20	29	7.0	1.00	J
Perylene	790	29	10	1.00	
Biphenyl	ND	29	12	1.00	
2,6-Dimethylnaphthalene	ND	29	9.9	1.00	
Isophorone	ND	290	36	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	84	32-143			
2-Fluorobiphenyl	45	14-146			
2-Fluorophenol	29	15-138			
Nitrobenzene-d5	20	18-162			
p-Terphenyl-d14	70	34-148			
Phenol-d6	40	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 TOP	14-05-1271-5-AA	05/15/14 08:15	Sediment	GC/MS MM	05/25/14	05/29/14 06:46	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	35	13	1.00	
2,4,5-Trichlorophenol	ND	35	11	1.00	
2,4,6-Trichlorophenol	ND	35	13	1.00	
2,4-Dichlorophenol	ND	35	9.3	1.00	
2,4-Dimethylphenol	ND	35	11	1.00	
2,4-Dinitrophenol	ND	1700	190	1.00	
2-Chlorophenol	ND	35	12	1.00	
2-Methylnaphthalene	ND	35	12	1.00	
2-Methylphenol	ND	35	18	1.00	
2-Nitrophenol	ND	35	8.3	1.00	
3/4-Methylphenol	ND	35	8.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	1700	240	1.00	
4-Chloro-3-Methylphenol	ND	35	12	1.00	
4-Nitrophenol	ND	1700	220	1.00	
Acenaphthene	ND	35	16	1.00	
Acenaphthylene	ND	35	16	1.00	
Anthracene	ND	35	19	1.00	
Benzo (a) Anthracene	59	35	16	1.00	
Benzo (a) Pyrene	71	35	18	1.00	
Benzo (b) Fluoranthene	91	35	18	1.00	
Benzo (g,h,i) Perylene	52	35	15	1.00	
Benzo (k) Fluoranthene	34	35	23	1.00	J
Bis(2-Ethylhexyl) Phthalate	56	35	14	1.00	B
Butyl Benzyl Phthalate	82	35	15	1.00	
Chrysene	78	35	18	1.00	
Di-n-Butyl Phthalate	ND	35	18	1.00	
Di-n-Octyl Phthalate	ND	35	16	1.00	
Dibenz (a,h) Anthracene	ND	35	13	1.00	
Diethyl Phthalate	ND	35	17	1.00	
Dimethyl Phthalate	280	35	19	1.00	
Fluoranthene	ND	35	20	1.00	
Fluorene	ND	35	18	1.00	
Indeno (1,2,3-c,d) Pyrene	55	35	16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	35	13	1.00	
Pentachlorophenol	ND	1700	4.4	1.00	
Phenanthrene	ND	35	20	1.00	
Phenol	ND	35	13	1.00	
Pyrene	120	35	19	1.00	
1,6,7-Trimethylnaphthalene	ND	35	11	1.00	
2,3,4,6-Tetrachlorophenol	ND	35	14	1.00	
2,6-Dichlorophenol	ND	35	21	1.00	
Benzoic Acid	530	350	43	1.00	
DCPA	ND	35	8.3	1.00	
Dibenzothiophene	ND	35	20	1.00	
Perthane	ND	35	4.5	1.00	
1-Methylphenanthrene	ND	35	12	1.00	
Benzo (e) Pyrene	66	35	8.4	1.00	
Perylene	800	35	12	1.00	
Biphenyl	ND	35	14	1.00	
2,6-Dimethylnaphthalene	ND	35	12	1.00	
Isophorone	ND	350	43	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	84	32-143			
2-Fluorobiphenyl	50	14-146			
2-Fluorophenol	32	15-138			
Nitrobenzene-d5	22	18-162			
p-Terphenyl-d14	68	34-148			
Phenol-d6	43	17-141			

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 TOP	14-05-1271-8-AA	05/15/14 11:00	Sediment	GC/MS MM	05/25/14	05/29/14 07:11	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.5	1.00	
2,4,5-Trichlorophenol	ND	15	4.8	1.00	
2,4,6-Trichlorophenol	ND	15	5.4	1.00	
2,4-Dichlorophenol	ND	15	4.0	1.00	
2,4-Dimethylphenol	ND	15	4.6	1.00	
2,4-Dinitrophenol	ND	740	80	1.00	
2-Chlorophenol	ND	15	5.0	1.00	
2-Methylnaphthalene	ND	15	5.3	1.00	
2-Methylphenol	ND	15	7.8	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.8	1.00	
4,6-Dinitro-2-Methylphenol	ND	740	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.3	1.00	
4-Nitrophenol	ND	740	95	1.00	
Acenaphthene	ND	15	7.0	1.00	
Acenaphthylene	ND	15	6.7	1.00	
Anthracene	ND	15	8.0	1.00	
Benzo (a) Anthracene	ND	15	7.0	1.00	
Benzo (a) Pyrene	26	15	7.5	1.00	
Benzo (b) Fluoranthene	ND	15	7.7	1.00	
Benzo (g,h,i) Perylene	ND	15	6.3	1.00	
Benzo (k) Fluoranthene	ND	15	9.8	1.00	
Bis(2-Ethylhexyl) Phthalate	32	15	6.0	1.00	B
Butyl Benzyl Phthalate	53	15	6.6	1.00	
Chrysene	ND	15	7.6	1.00	
Di-n-Butyl Phthalate	ND	15	7.6	1.00	
Di-n-Octyl Phthalate	ND	15	7.0	1.00	
Dibenz (a,h) Anthracene	ND	15	5.6	1.00	
Diethyl Phthalate	12	15	7.4	1.00	J
Dimethyl Phthalate	150	15	8.0	1.00	
Fluoranthene	ND	15	8.6	1.00	
Fluorene	ND	15	7.6	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.6	1.00	
Pentachlorophenol	ND	740	1.9	1.00	
Phenanthrene	ND	15	8.5	1.00	
Phenol	ND	15	5.5	1.00	
Pyrene	ND	15	8.0	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.5	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.8	1.00	
2,6-Dichlorophenol	ND	15	8.8	1.00	
Benzoic Acid	230	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.6	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.3	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	23	15	5.3	1.00	
Biphenyl	ND	15	6.0	1.00	
2,6-Dimethylnaphthalene	5.4	15	5.0	1.00	J
Isophorone	ND	150	18	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	84	32-143			
2-Fluorobiphenyl	69	14-146			
2-Fluorophenol	55	15-138			
Nitrobenzene-d5	53	18-162			
p-Terphenyl-d14	73	34-148			
Phenol-d6	60	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-AA	05/15/14 10:45	Sediment	GC/MS MM	05/25/14	05/29/14 07:37	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.4	1.00	
2,4,5-Trichlorophenol	ND	15	4.7	1.00	
2,4,6-Trichlorophenol	ND	15	5.3	1.00	
2,4-Dichlorophenol	ND	15	3.9	1.00	
2,4-Dimethylphenol	ND	15	4.5	1.00	
2,4-Dinitrophenol	ND	730	78	1.00	
2-Chlorophenol	ND	15	4.9	1.00	
2-Methylnaphthalene	ND	15	5.2	1.00	
2-Methylphenol	ND	15	7.6	1.00	
2-Nitrophenol	ND	15	3.5	1.00	
3/4-Methylphenol	ND	15	3.7	1.00	
4,6-Dinitro-2-Methylphenol	ND	730	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.2	1.00	
4-Nitrophenol	ND	730	93	1.00	
Acenaphthene	ND	15	6.8	1.00	
Acenaphthylene	ND	15	6.6	1.00	
Anthracene	ND	15	7.9	1.00	
Benzo (a) Anthracene	ND	15	6.8	1.00	
Benzo (a) Pyrene	20	15	7.3	1.00	
Benzo (b) Fluoranthene	ND	15	7.5	1.00	
Benzo (g,h,i) Perylene	ND	15	6.1	1.00	
Benzo (k) Fluoranthene	ND	15	9.6	1.00	
Bis(2-Ethylhexyl) Phthalate	28	15	5.9	1.00	B
Butyl Benzyl Phthalate	49	15	6.4	1.00	
Chrysene	ND	15	7.4	1.00	
Di-n-Butyl Phthalate	ND	15	7.5	1.00	
Di-n-Octyl Phthalate	ND	15	6.9	1.00	
Dibenz (a,h) Anthracene	ND	15	5.4	1.00	
Diethyl Phthalate	13	15	7.2	1.00	J
Dimethyl Phthalate	140	15	7.8	1.00	
Fluoranthene	ND	15	8.5	1.00	
Fluorene	ND	15	7.4	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

Page 10 of 22

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.5	1.00	
Pentachlorophenol	ND	730	1.9	1.00	
Phenanthrene	ND	15	8.4	1.00	
Phenol	ND	15	5.4	1.00	
Pyrene	ND	15	7.8	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.4	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.7	1.00	
2,6-Dichlorophenol	ND	15	8.6	1.00	
Benzoic Acid	220	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.4	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.2	1.00	
Benzo (e) Pyrene	ND	15	3.5	1.00	
Perylene	18	15	5.2	1.00	
Biphenyl	ND	15	5.9	1.00	
2,6-Dimethylnaphthalene	ND	15	4.9	1.00	
Isophorone	ND	150	18	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	80	32-143	
2-Fluorobiphenyl	54	14-146	
2-Fluorophenol	36	15-138	
Nitrobenzene-d5	27	18-162	
p-Terphenyl-d14	73	34-148	
Phenol-d6	41	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 TOP	14-05-1271-12-AA	05/15/14 10:10	Sediment	GC/MS MM	05/25/14	05/29/14 08:02	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	21	7.8	1.00	
2,4,5-Trichlorophenol	ND	21	6.8	1.00	
2,4,6-Trichlorophenol	ND	21	7.5	1.00	
2,4-Dichlorophenol	ND	21	5.6	1.00	
2,4-Dimethylphenol	ND	21	6.4	1.00	
2,4-Dinitrophenol	ND	1000	110	1.00	
2-Chlorophenol	ND	21	7.0	1.00	
2-Methylnaphthalene	ND	21	7.5	1.00	
2-Methylphenol	ND	21	11	1.00	
2-Nitrophenol	ND	21	5.0	1.00	
3/4-Methylphenol	ND	21	5.4	1.00	
4,6-Dinitro-2-Methylphenol	ND	1000	140	1.00	
4-Chloro-3-Methylphenol	ND	21	7.4	1.00	
4-Nitrophenol	ND	1000	130	1.00	
Acenaphthene	ND	21	9.8	1.00	
Acenaphthylene	ND	21	9.5	1.00	
Anthracene	ND	21	11	1.00	
Benzo (a) Anthracene	ND	21	9.8	1.00	
Benzo (a) Pyrene	96	21	11	1.00	
Benzo (b) Fluoranthene	ND	21	11	1.00	
Benzo (g,h,i) Perylene	ND	21	8.8	1.00	
Benzo (k) Fluoranthene	ND	21	14	1.00	
Bis(2-Ethylhexyl) Phthalate	45	21	8.5	1.00	B
Butyl Benzyl Phthalate	64	21	9.2	1.00	
Chrysene	ND	21	11	1.00	
Di-n-Butyl Phthalate	ND	21	11	1.00	
Di-n-Octyl Phthalate	ND	21	9.9	1.00	
Dibenz (a,h) Anthracene	ND	21	7.8	1.00	
Diethyl Phthalate	ND	21	10	1.00	
Dimethyl Phthalate	190	21	11	1.00	
Fluoranthene	ND	21	12	1.00	
Fluorene	ND	21	11	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	21	9.5	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	21	7.9	1.00	
Pentachlorophenol	ND	1000	2.7	1.00	
Phenanthrene	ND	21	12	1.00	
Phenol	ND	21	7.7	1.00	
Pyrene	ND	21	11	1.00	
1,6,7-Trimethylnaphthalene	ND	21	6.3	1.00	
2,3,4,6-Tetrachlorophenol	ND	21	8.1	1.00	
2,6-Dichlorophenol	ND	21	12	1.00	
Benzoic Acid	310	210	26	1.00	
DCPA	ND	21	5.0	1.00	
Dibenzothiophene	ND	21	12	1.00	
Perthane	ND	21	2.7	1.00	
1-Methylphenanthrene	ND	21	7.5	1.00	
Benzo (e) Pyrene	ND	21	5.0	1.00	
Perylene	86	21	7.4	1.00	
Biphenyl	ND	21	8.5	1.00	
2,6-Dimethylnaphthalene	ND	21	7.1	1.00	
Isophorone	ND	210	26	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	82	32-143			
2-Fluorobiphenyl	47	14-146			
2-Fluorophenol	30	15-138			
Nitrobenzene-d5	21	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	42	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 13 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP	14-05-1271-14-AA	05/15/14 11:20	Sediment	GC/MS MM	05/25/14	05/29/14 08:28	140525L08

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	15	5.8	1.00	
2,4,5-Trichlorophenol	ND	15	5.0	1.00	
2,4,6-Trichlorophenol	ND	15	5.6	1.00	
2,4-Dichlorophenol	ND	15	4.1	1.00	
2,4-Dimethylphenol	ND	15	4.8	1.00	
2,4-Dinitrophenol	ND	770	84	1.00	
2-Chlorophenol	ND	15	5.2	1.00	
2-Methylnaphthalene	ND	15	5.6	1.00	
2-Methylphenol	ND	15	8.2	1.00	
2-Nitrophenol	ND	15	3.7	1.00	
3/4-Methylphenol	ND	15	4.0	1.00	
4,6-Dinitro-2-Methylphenol	ND	770	110	1.00	
4-Chloro-3-Methylphenol	ND	15	5.5	1.00	
4-Nitrophenol	ND	770	99	1.00	
Acenaphthene	ND	15	7.3	1.00	
Acenaphthylene	ND	15	7.0	1.00	
Anthracene	ND	15	8.4	1.00	
Benzo (a) Anthracene	ND	15	7.3	1.00	
Benzo (a) Pyrene	43	15	7.8	1.00	
Benzo (b) Fluoranthene	ND	15	8.0	1.00	
Benzo (g,h,i) Perylene	ND	15	6.5	1.00	
Benzo (k) Fluoranthene	ND	15	10	1.00	
Bis(2-Ethylhexyl) Phthalate	33	15	6.3	1.00	B
Butyl Benzyl Phthalate	54	15	6.9	1.00	
Chrysene	ND	15	7.9	1.00	
Di-n-Butyl Phthalate	ND	15	8.0	1.00	
Di-n-Octyl Phthalate	ND	15	7.3	1.00	
Dibenz (a,h) Anthracene	ND	15	5.8	1.00	
Diethyl Phthalate	ND	15	7.7	1.00	
Dimethyl Phthalate	140	15	8.3	1.00	
Fluoranthene	ND	15	9.0	1.00	
Fluorene	ND	15	7.9	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	7.1	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.9	1.00	
Pentachlorophenol	ND	770	2.0	1.00	
Phenanthrene	ND	15	8.9	1.00	
Phenol	ND	15	5.7	1.00	
Pyrene	ND	15	8.3	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	6.0	1.00	
2,6-Dichlorophenol	ND	15	9.2	1.00	
Benzoic Acid	220	150	19	1.00	
DCPA	ND	15	3.7	1.00	
Dibenzothiophene	ND	15	9.0	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.6	1.00	
Benzo (e) Pyrene	ND	15	3.7	1.00	
Perylene	39	15	5.5	1.00	
Biphenyl	ND	15	6.3	1.00	
2,6-Dimethylnaphthalene	ND	15	5.3	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	83	32-143			
2-Fluorobiphenyl	68	14-146			
2-Fluorophenol	52	15-138			
Nitrobenzene-d5	42	18-162			
p-Terphenyl-d14	71	34-148			
Phenol-d6	54	17-141			

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-AA	05/15/14 11:40	Sediment	GC/MS MM	05/25/14	05/29/14 08:53	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.5	1.00	
2,4,5-Trichlorophenol	ND	15	4.8	1.00	
2,4,6-Trichlorophenol	ND	15	5.3	1.00	
2,4-Dichlorophenol	ND	15	3.9	1.00	
2,4-Dimethylphenol	ND	15	4.5	1.00	
2,4-Dinitrophenol	ND	740	79	1.00	
2-Chlorophenol	ND	15	5.0	1.00	
2-Methylnaphthalene	ND	15	5.3	1.00	
2-Methylphenol	ND	15	7.8	1.00	
2-Nitrophenol	ND	15	3.5	1.00	
3/4-Methylphenol	ND	15	3.8	1.00	
4,6-Dinitro-2-Methylphenol	ND	740	100	1.00	
4-Chloro-3-Methylphenol	ND	15	5.2	1.00	
4-Nitrophenol	ND	740	94	1.00	
Acenaphthene	ND	15	6.9	1.00	
Acenaphthylene	ND	15	6.7	1.00	
Anthracene	ND	15	8.0	1.00	
Benzo (a) Anthracene	ND	15	6.9	1.00	
Benzo (a) Pyrene	110	15	7.5	1.00	
Benzo (b) Fluoranthene	ND	15	7.6	1.00	
Benzo (g,h,i) Perylene	ND	15	6.2	1.00	
Benzo (k) Fluoranthene	ND	15	9.7	1.00	
Bis(2-Ethylhexyl) Phthalate	35	15	6.0	1.00	B
Butyl Benzyl Phthalate	57	15	6.5	1.00	
Chrysene	ND	15	7.5	1.00	
Di-n-Butyl Phthalate	ND	15	7.6	1.00	
Di-n-Octyl Phthalate	ND	15	7.0	1.00	
Dibenz (a,h) Anthracene	ND	15	5.5	1.00	
Diethyl Phthalate	9.8	15	7.4	1.00	J
Dimethyl Phthalate	110	15	7.9	1.00	
Fluoranthene	ND	15	8.6	1.00	
Fluorene	ND	15	7.5	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	6.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.6	1.00	
Pentachlorophenol	ND	740	1.9	1.00	
Phenanthrene	ND	15	8.5	1.00	
Phenol	ND	15	5.4	1.00	
Pyrene	ND	15	7.9	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.5	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.8	1.00	
2,6-Dichlorophenol	ND	15	8.7	1.00	
Benzoic Acid	210	150	18	1.00	
DCPA	ND	15	3.5	1.00	
Dibenzothiophene	ND	15	8.5	1.00	
Perthane	ND	15	1.9	1.00	
1-Methylphenanthrene	ND	15	5.3	1.00	
Benzo (e) Pyrene	ND	15	3.6	1.00	
Perylene	97	15	5.2	1.00	
Biphenyl	ND	15	6.0	1.00	
2,6-Dimethylnaphthalene	ND	15	5.0	1.00	
Isophorone	ND	150	18	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	81	32-143	
2-Fluorobiphenyl	60	14-146	
2-Fluorophenol	44	15-138	
Nitrobenzene-d5	39	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	49	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	GC/MS MM	06/09/14	06/10/14 17:26	140609L12

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	15	5.7	1.00	
2,4,5-Trichlorophenol	ND	15	5.0	1.00	
2,4,6-Trichlorophenol	ND	15	5.6	1.00	
2,4-Dichlorophenol	ND	15	4.1	1.00	
2,4-Dimethylphenol	ND	15	4.7	1.00	
2,4-Dinitrophenol	ND	770	83	1.00	
2-Chlorophenol	ND	15	5.2	1.00	
2-Methylnaphthalene	ND	15	5.5	1.00	
2-Methylphenol	ND	15	8.1	1.00	
2-Nitrophenol	ND	15	3.7	1.00	
3/4-Methylphenol	ND	15	4.0	1.00	
4,6-Dinitro-2-Methylphenol	ND	770	110	1.00	
4-Chloro-3-Methylphenol	ND	15	5.5	1.00	
4-Nitrophenol	ND	770	99	1.00	
Acenaphthene	ND	15	7.2	1.00	
Acenaphthylene	ND	15	7.0	1.00	
Anthracene	ND	15	8.3	1.00	
Benzo (a) Anthracene	ND	15	7.2	1.00	
Benzo (a) Pyrene	42	15	7.8	1.00	
Benzo (b) Fluoranthene	ND	15	8.0	1.00	
Benzo (g,h,i) Perylene	ND	15	6.5	1.00	
Benzo (k) Fluoranthene	ND	15	10	1.00	
Bis(2-Ethylhexyl) Phthalate	15	15	6.3	1.00	J
Butyl Benzyl Phthalate	15	15	6.8	1.00	J
Chrysene	ND	15	7.8	1.00	
Di-n-Butyl Phthalate	ND	15	7.9	1.00	
Di-n-Octyl Phthalate	ND	15	7.3	1.00	
Dibenz (a,h) Anthracene	ND	15	5.8	1.00	
Diethyl Phthalate	ND	15	7.7	1.00	
Dimethyl Phthalate	390	15	8.3	1.00	
Fluoranthene	ND	15	9.0	1.00	
Fluorene	ND	15	7.9	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	15	7.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.8	1.00	
Pentachlorophenol	ND	770	2.0	1.00	
Phenanthrene	ND	15	8.9	1.00	
Phenol	ND	15	5.7	1.00	
Pyrene	ND	15	8.3	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	6.0	1.00	
2,6-Dichlorophenol	ND	15	9.1	1.00	
Benzoic Acid	230	150	19	1.00	
DCPA	ND	15	3.7	1.00	
Dibenzothiophene	ND	15	8.9	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.5	1.00	
Benzo (e) Pyrene	ND	15	3.7	1.00	
Perylene	37	15	5.5	1.00	
Biphenyl	ND	15	6.2	1.00	
2,6-Dimethylnaphthalene	9.2	15	5.2	1.00	J
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	68	32-143			
2-Fluorobiphenyl	65	14-146			
2-Fluorophenol	62	15-138			
Nitrobenzene-d5	70	18-162			
p-Terphenyl-d14	62	34-148			
Phenol-d6	70	17-141			

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-80	N/A	Solid	GC/MS MM	05/25/14	05/28/14 18:23	140525L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	6.2	10	4.1	1.00	J
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	66	32-143	
2-Fluorobiphenyl	63	14-146	
2-Fluorophenol	54	15-138	
Nitrobenzene-d5	60	18-162	
p-Terphenyl-d14	71	34-148	
Phenol-d6	55	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-82	N/A	Solid	GC/MS MM	06/09/14	06/10/14 15:17	140609L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	10	4.1	1.00	
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	85	32-143	
2-Fluorobiphenyl	77	14-146	
2-Fluorophenol	86	15-138	
Nitrobenzene-d5	83	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	79	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

Page 1 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-01 TOP	14-05-1271-1-AA	05/15/14 09:15	Sediment	GC/MS HHH	05/28/14	05/29/14 12:10	140528L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	1.1	0.25	1.00	
PCB008	ND	1.1	0.18	1.00	
PCB018	ND	1.1	0.33	1.00	
PCB028	ND	1.1	0.21	1.00	
PCB031	ND	1.1	0.24	1.00	
PCB033	ND	1.1	0.23	1.00	
PCB037	ND	1.1	0.28	1.00	
PCB044	ND	1.1	0.28	1.00	
PCB049	ND	1.1	0.25	1.00	
PCB052	ND	1.1	0.20	1.00	
PCB056	ND	1.1	0.29	1.00	
PCB060	ND	1.1	0.22	1.00	
PCB066	ND	1.1	0.19	1.00	
PCB070	ND	1.1	0.17	1.00	
PCB074	ND	1.1	0.20	1.00	
PCB077	ND	1.1	0.21	1.00	
PCB081	ND	1.1	0.26	1.00	
PCB087	ND	1.1	0.21	1.00	
PCB095	ND	1.1	0.35	1.00	
PCB097	ND	1.1	0.29	1.00	
PCB099	ND	1.1	0.18	1.00	
PCB101	ND	1.1	0.17	1.00	
PCB105	ND	1.1	0.22	1.00	
PCB110	ND	1.1	0.22	1.00	
PCB114	ND	1.1	0.21	1.00	
PCB118	ND	1.1	0.28	1.00	
PCB119	ND	1.1	0.18	1.00	
PCB123	ND	1.1	0.18	1.00	
PCB126	ND	1.1	0.29	1.00	
PCB128	ND	1.1	0.22	1.00	
PCB132	ND	1.1	0.35	1.00	
PCB138/158	ND	2.1	0.43	1.00	
PCB141	ND	1.1	0.23	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.1	0.19	1.00	
PCB151	ND	1.1	0.22	1.00	
PCB153	ND	1.1	0.22	1.00	
PCB156	ND	1.1	0.21	1.00	
PCB157	ND	1.1	0.20	1.00	
PCB167	ND	1.1	0.21	1.00	
PCB168	ND	1.1	0.18	1.00	
PCB169	ND	1.1	0.17	1.00	
PCB170	ND	1.1	0.19	1.00	
PCB174	ND	1.1	0.22	1.00	
PCB177	ND	1.1	0.26	1.00	
PCB180	ND	1.1	0.13	1.00	
PCB183	ND	1.1	0.23	1.00	
PCB184	ND	1.1	0.12	1.00	
PCB187	ND	1.1	0.22	1.00	
PCB189	ND	1.1	0.18	1.00	
PCB194	ND	1.1	0.20	1.00	
PCB195	ND	1.1	0.11	1.00	
PCB200	ND	1.1	0.20	1.00	
PCB201	ND	1.1	0.12	1.00	
PCB203	ND	1.1	0.23	1.00	
PCB206	ND	1.1	0.17	1.00	
PCB209	ND	1.1	0.22	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	123	19-133	
p-Terphenyl-d14	67	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 3 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-02 TOP	14-05-1271-3-AA	05/15/14 09:00	Sediment	GC/MS HHH	05/28/14	05/29/14 13:09	140528L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.4	0.34	1.00	
PCB008	ND	1.4	0.24	1.00	
PCB018	ND	1.4	0.45	1.00	
PCB028	ND	1.4	0.29	1.00	
PCB031	ND	1.4	0.33	1.00	
PCB033	ND	1.4	0.31	1.00	
PCB037	ND	1.4	0.38	1.00	
PCB044	ND	1.4	0.38	1.00	
PCB049	ND	1.4	0.34	1.00	
PCB052	ND	1.4	0.28	1.00	
PCB056	ND	1.4	0.40	1.00	
PCB060	ND	1.4	0.31	1.00	
PCB066	ND	1.4	0.26	1.00	
PCB070	ND	1.4	0.24	1.00	
PCB074	ND	1.4	0.27	1.00	
PCB077	ND	1.4	0.28	1.00	
PCB081	ND	1.4	0.35	1.00	
PCB087	ND	1.4	0.29	1.00	
PCB095	ND	1.4	0.48	1.00	
PCB097	ND	1.4	0.39	1.00	
PCB099	ND	1.4	0.25	1.00	
PCB101	ND	1.4	0.23	1.00	
PCB105	ND	1.4	0.30	1.00	
PCB110	ND	1.4	0.30	1.00	
PCB114	ND	1.4	0.29	1.00	
PCB118	ND	1.4	0.38	1.00	
PCB119	ND	1.4	0.25	1.00	
PCB123	ND	1.4	0.25	1.00	
PCB126	ND	1.4	0.40	1.00	
PCB128	ND	1.4	0.30	1.00	
PCB132	ND	1.4	0.48	1.00	
PCB138/158	ND	2.9	0.59	1.00	
PCB141	ND	1.4	0.32	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.4	0.26	1.00	
PCB151	ND	1.4	0.30	1.00	
PCB153	ND	1.4	0.30	1.00	
PCB156	ND	1.4	0.28	1.00	
PCB157	ND	1.4	0.28	1.00	
PCB167	ND	1.4	0.29	1.00	
PCB168	ND	1.4	0.25	1.00	
PCB169	ND	1.4	0.24	1.00	
PCB170	ND	1.4	0.27	1.00	
PCB174	ND	1.4	0.31	1.00	
PCB177	ND	1.4	0.36	1.00	
PCB180	ND	1.4	0.18	1.00	
PCB183	ND	1.4	0.32	1.00	
PCB184	ND	1.4	0.16	1.00	
PCB187	ND	1.4	0.30	1.00	
PCB189	ND	1.4	0.25	1.00	
PCB194	ND	1.4	0.28	1.00	
PCB195	ND	1.4	0.15	1.00	
PCB200	ND	1.4	0.27	1.00	
PCB201	ND	1.4	0.16	1.00	
PCB203	ND	1.4	0.31	1.00	
PCB206	ND	1.4	0.24	1.00	
PCB209	ND	1.4	0.31	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	110	19-133	
p-Terphenyl-d14	84	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
SR-N-03 TOP	14-05-1271-5-AA	05/15/14 08:15	Sediment	GC/MS HHH	05/28/14	05/29/14 14:05	140528L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	1.7	0.41	1.00	
PCB008	ND	1.7	0.29	1.00	
PCB018	ND	1.7	0.54	1.00	
PCB028	ND	1.7	0.34	1.00	
PCB031	ND	1.7	0.40	1.00	
PCB033	ND	1.7	0.38	1.00	
PCB037	ND	1.7	0.45	1.00	
PCB044	ND	1.7	0.46	1.00	
PCB049	ND	1.7	0.41	1.00	
PCB052	ND	1.7	0.34	1.00	
PCB056	ND	1.7	0.48	1.00	
PCB060	ND	1.7	0.37	1.00	
PCB066	ND	1.7	0.32	1.00	
PCB070	ND	1.7	0.28	1.00	
PCB074	ND	1.7	0.33	1.00	
PCB077	ND	1.7	0.34	1.00	
PCB081	ND	1.7	0.42	1.00	
PCB087	ND	1.7	0.35	1.00	
PCB095	ND	1.7	0.57	1.00	
PCB097	ND	1.7	0.47	1.00	
PCB099	ND	1.7	0.29	1.00	
PCB101	ND	1.7	0.28	1.00	
PCB105	ND	1.7	0.36	1.00	
PCB110	ND	1.7	0.36	1.00	
PCB114	ND	1.7	0.35	1.00	
PCB118	ND	1.7	0.46	1.00	
PCB119	ND	1.7	0.30	1.00	
PCB123	ND	1.7	0.30	1.00	
PCB126	ND	1.7	0.48	1.00	
PCB128	ND	1.7	0.35	1.00	
PCB132	ND	1.7	0.57	1.00	
PCB138/158	ND	3.5	0.70	1.00	
PCB141	ND	1.7	0.38	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.7	0.31	1.00	
PCB151	ND	1.7	0.36	1.00	
PCB153	ND	1.7	0.36	1.00	
PCB156	ND	1.7	0.34	1.00	
PCB157	ND	1.7	0.33	1.00	
PCB167	ND	1.7	0.35	1.00	
PCB168	ND	1.7	0.30	1.00	
PCB169	ND	1.7	0.28	1.00	
PCB170	ND	1.7	0.32	1.00	
PCB174	ND	1.7	0.37	1.00	
PCB177	ND	1.7	0.43	1.00	
PCB180	ND	1.7	0.21	1.00	
PCB183	ND	1.7	0.39	1.00	
PCB184	ND	1.7	0.19	1.00	
PCB187	ND	1.7	0.36	1.00	
PCB189	ND	1.7	0.30	1.00	
PCB194	ND	1.7	0.33	1.00	
PCB195	ND	1.7	0.18	1.00	
PCB200	ND	1.7	0.32	1.00	
PCB201	ND	1.7	0.20	1.00	
PCB203	ND	1.7	0.37	1.00	
PCB206	ND	1.7	0.29	1.00	
PCB209	ND	1.7	0.37	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	124	19-133			
p-Terphenyl-d14	90	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 7 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-07 TOP	14-05-1271-8-AA	05/15/14 11:00	Sediment	GC/MS HHH	05/28/14	05/29/14 15:29	140528L08

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.74	0.18	1.00	
PCB008	ND	0.74	0.13	1.00	
PCB018	ND	0.74	0.23	1.00	
PCB028	ND	0.74	0.15	1.00	
PCB031	ND	0.74	0.17	1.00	
PCB033	ND	0.74	0.16	1.00	
PCB037	ND	0.74	0.19	1.00	
PCB044	ND	0.74	0.20	1.00	
PCB049	ND	0.74	0.18	1.00	
PCB052	ND	0.74	0.14	1.00	
PCB056	ND	0.74	0.20	1.00	
PCB060	ND	0.74	0.16	1.00	
PCB066	ND	0.74	0.14	1.00	
PCB070	ND	0.74	0.12	1.00	
PCB074	ND	0.74	0.14	1.00	
PCB077	ND	0.74	0.14	1.00	
PCB081	ND	0.74	0.18	1.00	
PCB087	ND	0.74	0.15	1.00	
PCB095	ND	0.74	0.25	1.00	
PCB097	ND	0.74	0.20	1.00	
PCB099	ND	0.74	0.13	1.00	
PCB101	ND	0.74	0.12	1.00	
PCB105	ND	0.74	0.16	1.00	
PCB110	ND	0.74	0.15	1.00	
PCB114	ND	0.74	0.15	1.00	
PCB118	ND	0.74	0.20	1.00	
PCB119	ND	0.74	0.13	1.00	
PCB123	ND	0.74	0.13	1.00	
PCB126	ND	0.74	0.21	1.00	
PCB128	ND	0.74	0.15	1.00	
PCB132	ND	0.74	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.74	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.74	0.13	1.00	
PCB151	ND	0.74	0.15	1.00	
PCB153	ND	0.74	0.15	1.00	
PCB156	ND	0.74	0.15	1.00	
PCB157	ND	0.74	0.14	1.00	
PCB167	ND	0.74	0.15	1.00	
PCB168	ND	0.74	0.13	1.00	
PCB169	ND	0.74	0.12	1.00	
PCB170	ND	0.74	0.14	1.00	
PCB174	ND	0.74	0.16	1.00	
PCB177	ND	0.74	0.18	1.00	
PCB180	ND	0.74	0.091	1.00	
PCB183	ND	0.74	0.17	1.00	
PCB184	ND	0.74	0.083	1.00	
PCB187	ND	0.74	0.16	1.00	
PCB189	ND	0.74	0.13	1.00	
PCB194	ND	0.74	0.14	1.00	
PCB195	ND	0.74	0.078	1.00	
PCB200	ND	0.74	0.14	1.00	
PCB201	ND	0.74	0.085	1.00	
PCB203	ND	0.74	0.16	1.00	
PCB206	ND	0.74	0.12	1.00	
PCB209	ND	0.74	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	251	19-133	1,2,7		
p-Terphenyl-d14	98	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-08 TOP	14-05-1271-10-AA	05/15/14 10:45	Sediment	GC/MS HHH	05/28/14	05/29/14 16:24	140528L08

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.72	0.17	1.00	
PCB008	ND	0.72	0.12	1.00	
PCB018	ND	0.72	0.23	1.00	
PCB028	ND	0.72	0.14	1.00	
PCB031	ND	0.72	0.17	1.00	
PCB033	ND	0.72	0.16	1.00	
PCB037	ND	0.72	0.19	1.00	
PCB044	ND	0.72	0.19	1.00	
PCB049	ND	0.72	0.17	1.00	
PCB052	ND	0.72	0.14	1.00	
PCB056	ND	0.72	0.20	1.00	
PCB060	ND	0.72	0.15	1.00	
PCB066	ND	0.72	0.13	1.00	
PCB070	ND	0.72	0.12	1.00	
PCB074	ND	0.72	0.14	1.00	
PCB077	ND	0.72	0.14	1.00	
PCB081	ND	0.72	0.18	1.00	
PCB087	ND	0.72	0.15	1.00	
PCB095	ND	0.72	0.24	1.00	
PCB097	ND	0.72	0.20	1.00	
PCB099	ND	0.72	0.12	1.00	
PCB101	ND	0.72	0.12	1.00	
PCB105	ND	0.72	0.15	1.00	
PCB110	ND	0.72	0.15	1.00	
PCB114	ND	0.72	0.14	1.00	
PCB118	ND	0.72	0.19	1.00	
PCB119	ND	0.72	0.12	1.00	
PCB123	ND	0.72	0.13	1.00	
PCB126	ND	0.72	0.20	1.00	
PCB128	ND	0.72	0.15	1.00	
PCB132	ND	0.72	0.24	1.00	
PCB138/158	ND	1.4	0.29	1.00	
PCB141	ND	0.72	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.72	0.13	1.00	
PCB151	ND	0.72	0.15	1.00	
PCB153	ND	0.72	0.15	1.00	
PCB156	ND	0.72	0.14	1.00	
PCB157	ND	0.72	0.14	1.00	
PCB167	ND	0.72	0.14	1.00	
PCB168	ND	0.72	0.12	1.00	
PCB169	ND	0.72	0.12	1.00	
PCB170	ND	0.72	0.13	1.00	
PCB174	ND	0.72	0.15	1.00	
PCB177	ND	0.72	0.18	1.00	
PCB180	ND	0.72	0.088	1.00	
PCB183	ND	0.72	0.16	1.00	
PCB184	ND	0.72	0.080	1.00	
PCB187	ND	0.72	0.15	1.00	
PCB189	ND	0.72	0.12	1.00	
PCB194	ND	0.72	0.14	1.00	
PCB195	ND	0.72	0.076	1.00	
PCB200	ND	0.72	0.13	1.00	
PCB201	ND	0.72	0.082	1.00	
PCB203	ND	0.72	0.15	1.00	
PCB206	ND	0.72	0.12	1.00	
PCB209	ND	0.72	0.15	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	99	19-133	
p-Terphenyl-d14	118	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 11 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-09 TOP	14-05-1271-12-AA	05/15/14 10:10	Sediment	GC/MS HHH	05/28/14	05/29/14 23:42	140528L08

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	1.0	0.24	1.00	
PCB008	ND	1.0	0.17	1.00	
PCB018	ND	1.0	0.32	1.00	
PCB028	ND	1.0	0.20	1.00	
PCB031	ND	1.0	0.24	1.00	
PCB033	ND	1.0	0.22	1.00	
PCB037	ND	1.0	0.27	1.00	
PCB044	ND	1.0	0.27	1.00	
PCB049	ND	1.0	0.24	1.00	
PCB052	ND	1.0	0.20	1.00	
PCB056	ND	1.0	0.28	1.00	
PCB060	ND	1.0	0.22	1.00	
PCB066	ND	1.0	0.19	1.00	
PCB070	ND	1.0	0.17	1.00	
PCB074	ND	1.0	0.19	1.00	
PCB077	ND	1.0	0.20	1.00	
PCB081	ND	1.0	0.25	1.00	
PCB087	ND	1.0	0.21	1.00	
PCB095	ND	1.0	0.34	1.00	
PCB097	ND	1.0	0.28	1.00	
PCB099	ND	1.0	0.17	1.00	
PCB101	ND	1.0	0.17	1.00	
PCB105	ND	1.0	0.22	1.00	
PCB110	ND	1.0	0.21	1.00	
PCB114	ND	1.0	0.20	1.00	
PCB118	ND	1.0	0.27	1.00	
PCB119	ND	1.0	0.18	1.00	
PCB123	ND	1.0	0.18	1.00	
PCB126	ND	1.0	0.28	1.00	
PCB128	ND	1.0	0.21	1.00	
PCB132	ND	1.0	0.34	1.00	
PCB138/158	ND	2.1	0.42	1.00	
PCB141	ND	1.0	0.23	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.0	0.18	1.00	
PCB151	ND	1.0	0.21	1.00	
PCB153	ND	1.0	0.21	1.00	
PCB156	ND	1.0	0.20	1.00	
PCB157	ND	1.0	0.20	1.00	
PCB167	ND	1.0	0.21	1.00	
PCB168	ND	1.0	0.18	1.00	
PCB169	ND	1.0	0.17	1.00	
PCB170	ND	1.0	0.19	1.00	
PCB174	ND	1.0	0.22	1.00	
PCB177	ND	1.0	0.25	1.00	
PCB180	ND	1.0	0.13	1.00	
PCB183	ND	1.0	0.23	1.00	
PCB184	ND	1.0	0.11	1.00	
PCB187	ND	1.0	0.22	1.00	
PCB189	ND	1.0	0.18	1.00	
PCB194	ND	1.0	0.20	1.00	
PCB195	ND	1.0	0.11	1.00	
PCB200	ND	1.0	0.19	1.00	
PCB201	ND	1.0	0.12	1.00	
PCB203	ND	1.0	0.22	1.00	
PCB206	ND	1.0	0.17	1.00	
PCB209	ND	1.0	0.22	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	114	19-133	
p-Terphenyl-d14	122	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP	14-05-1271-14-AA	05/15/14 11:20	Sediment	GC/MS HHH	05/28/14	05/30/14 00:36	140528L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.77	0.18	1.00	
PCB008	ND	0.77	0.13	1.00	
PCB018	ND	0.77	0.24	1.00	
PCB028	ND	0.77	0.15	1.00	
PCB031	ND	0.77	0.18	1.00	
PCB033	ND	0.77	0.17	1.00	
PCB037	ND	0.77	0.20	1.00	
PCB044	ND	0.77	0.20	1.00	
PCB049	ND	0.77	0.18	1.00	
PCB052	ND	0.77	0.15	1.00	
PCB056	ND	0.77	0.21	1.00	
PCB060	ND	0.77	0.16	1.00	
PCB066	ND	0.77	0.14	1.00	
PCB070	ND	0.77	0.13	1.00	
PCB074	ND	0.77	0.15	1.00	
PCB077	ND	0.77	0.15	1.00	
PCB081	ND	0.77	0.19	1.00	
PCB087	ND	0.77	0.16	1.00	
PCB095	ND	0.77	0.26	1.00	
PCB097	ND	0.77	0.21	1.00	
PCB099	ND	0.77	0.13	1.00	
PCB101	ND	0.77	0.13	1.00	
PCB105	ND	0.77	0.16	1.00	
PCB110	ND	0.77	0.16	1.00	
PCB114	ND	0.77	0.15	1.00	
PCB118	ND	0.77	0.21	1.00	
PCB119	ND	0.77	0.13	1.00	
PCB123	ND	0.77	0.14	1.00	
PCB126	ND	0.77	0.21	1.00	
PCB128	ND	0.77	0.16	1.00	
PCB132	ND	0.77	0.26	1.00	
PCB138/158	ND	1.5	0.31	1.00	
PCB141	ND	0.77	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.77	0.14	1.00	
PCB151	ND	0.77	0.16	1.00	
PCB153	ND	0.77	0.16	1.00	
PCB156	ND	0.77	0.15	1.00	
PCB157	ND	0.77	0.15	1.00	
PCB167	ND	0.77	0.15	1.00	
PCB168	ND	0.77	0.13	1.00	
PCB169	ND	0.77	0.13	1.00	
PCB170	ND	0.77	0.14	1.00	
PCB174	ND	0.77	0.17	1.00	
PCB177	ND	0.77	0.19	1.00	
PCB180	ND	0.77	0.095	1.00	
PCB183	ND	0.77	0.17	1.00	
PCB184	ND	0.77	0.087	1.00	
PCB187	ND	0.77	0.16	1.00	
PCB189	ND	0.77	0.13	1.00	
PCB194	ND	0.77	0.15	1.00	
PCB195	ND	0.77	0.082	1.00	
PCB200	ND	0.77	0.14	1.00	
PCB201	ND	0.77	0.088	1.00	
PCB203	ND	0.77	0.17	1.00	
PCB206	ND	0.77	0.13	1.00	
PCB209	ND	0.77	0.17	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	82	19-133			
p-Terphenyl-d14	90	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-11 TOP	14-05-1271-16-AA	05/15/14 11:40	Sediment	GC/MS HHH	05/28/14	05/30/14 01:30	140528L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.73	0.17	1.00	
PCB008	ND	0.73	0.12	1.00	
PCB018	ND	0.73	0.23	1.00	
PCB028	ND	0.73	0.15	1.00	
PCB031	ND	0.73	0.17	1.00	
PCB033	ND	0.73	0.16	1.00	
PCB037	ND	0.73	0.19	1.00	
PCB044	ND	0.73	0.19	1.00	
PCB049	ND	0.73	0.17	1.00	
PCB052	ND	0.73	0.14	1.00	
PCB056	ND	0.73	0.20	1.00	
PCB060	ND	0.73	0.16	1.00	
PCB066	ND	0.73	0.13	1.00	
PCB070	ND	0.73	0.12	1.00	
PCB074	ND	0.73	0.14	1.00	
PCB077	ND	0.73	0.14	1.00	
PCB081	ND	0.73	0.18	1.00	
PCB087	ND	0.73	0.15	1.00	
PCB095	ND	0.73	0.24	1.00	
PCB097	ND	0.73	0.20	1.00	
PCB099	ND	0.73	0.12	1.00	
PCB101	ND	0.73	0.12	1.00	
PCB105	ND	0.73	0.15	1.00	
PCB110	ND	0.73	0.15	1.00	
PCB114	ND	0.73	0.15	1.00	
PCB118	ND	0.73	0.19	1.00	
PCB119	ND	0.73	0.13	1.00	
PCB123	ND	0.73	0.13	1.00	
PCB126	ND	0.73	0.20	1.00	
PCB128	ND	0.73	0.15	1.00	
PCB132	ND	0.73	0.24	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.73	0.16	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.73	0.13	1.00	
PCB151	ND	0.73	0.15	1.00	
PCB153	ND	0.73	0.15	1.00	
PCB156	ND	0.73	0.14	1.00	
PCB157	ND	0.73	0.14	1.00	
PCB167	ND	0.73	0.15	1.00	
PCB168	ND	0.73	0.13	1.00	
PCB169	ND	0.73	0.12	1.00	
PCB170	ND	0.73	0.14	1.00	
PCB174	ND	0.73	0.16	1.00	
PCB177	ND	0.73	0.18	1.00	
PCB180	ND	0.73	0.090	1.00	
PCB183	ND	0.73	0.16	1.00	
PCB184	ND	0.73	0.082	1.00	
PCB187	ND	0.73	0.15	1.00	
PCB189	ND	0.73	0.13	1.00	
PCB194	ND	0.73	0.14	1.00	
PCB195	ND	0.73	0.077	1.00	
PCB200	ND	0.73	0.14	1.00	
PCB201	ND	0.73	0.084	1.00	
PCB203	ND	0.73	0.16	1.00	
PCB206	ND	0.73	0.12	1.00	
PCB209	ND	0.73	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	87	19-133	
p-Terphenyl-d14	77	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
JB-S-10 TOP LAB DUP	14-05-1271-18-AA	05/15/14 11:20	Sediment	GC/MS HHH	06/09/14	06/11/14 18:06	140609L02

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.77	0.18	1.00	
PCB008	ND	0.77	0.13	1.00	
PCB018	ND	0.77	0.24	1.00	
PCB028	ND	0.77	0.15	1.00	
PCB031	ND	0.77	0.18	1.00	
PCB033	ND	0.77	0.17	1.00	
PCB037	ND	0.77	0.20	1.00	
PCB044	ND	0.77	0.20	1.00	
PCB049	ND	0.77	0.18	1.00	
PCB052	ND	0.77	0.15	1.00	
PCB056	ND	0.77	0.21	1.00	
PCB060	ND	0.77	0.16	1.00	
PCB066	ND	0.77	0.14	1.00	
PCB070	ND	0.77	0.13	1.00	
PCB074	ND	0.77	0.14	1.00	
PCB077	ND	0.77	0.15	1.00	
PCB081	ND	0.77	0.19	1.00	
PCB087	ND	0.77	0.15	1.00	
PCB095	ND	0.77	0.25	1.00	
PCB097	ND	0.77	0.21	1.00	
PCB099	ND	0.77	0.13	1.00	
PCB101	ND	0.77	0.12	1.00	
PCB105	ND	0.77	0.16	1.00	
PCB110	ND	0.77	0.16	1.00	
PCB114	ND	0.77	0.15	1.00	
PCB118	ND	0.77	0.20	1.00	
PCB119	ND	0.77	0.13	1.00	
PCB123	ND	0.77	0.13	1.00	
PCB126	ND	0.77	0.21	1.00	
PCB128	ND	0.77	0.16	1.00	
PCB132	ND	0.77	0.25	1.00	
PCB138/158	ND	1.5	0.31	1.00	
PCB141	ND	0.77	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.77	0.14	1.00	
PCB151	ND	0.77	0.16	1.00	
PCB153	ND	0.77	0.16	1.00	
PCB156	ND	0.77	0.15	1.00	
PCB157	ND	0.77	0.15	1.00	
PCB167	ND	0.77	0.15	1.00	
PCB168	ND	0.77	0.13	1.00	
PCB169	ND	0.77	0.13	1.00	
PCB170	ND	0.77	0.14	1.00	
PCB174	ND	0.77	0.16	1.00	
PCB177	ND	0.77	0.19	1.00	
PCB180	ND	0.77	0.094	1.00	
PCB183	ND	0.77	0.17	1.00	
PCB184	ND	0.77	0.086	1.00	
PCB187	ND	0.77	0.16	1.00	
PCB189	ND	0.77	0.13	1.00	
PCB194	ND	0.77	0.15	1.00	
PCB195	ND	0.77	0.081	1.00	
PCB200	ND	0.77	0.14	1.00	
PCB201	ND	0.77	0.087	1.00	
PCB203	ND	0.77	0.16	1.00	
PCB206	ND	0.77	0.13	1.00	
PCB209	ND	0.77	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	104	19-133			
p-Terphenyl-d14	99	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-182	N/A	Solid	GC/MS HHH	05/28/14	05/29/14 05:16	140528L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	106	19-133			
p-Terphenyl-d14	107	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/16/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1271
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 21 of 22

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-187	N/A	Solid	GC/MS HHH	06/09/14	06/10/14 20:17	140609L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	100	19-133			
p-Terphenyl-d14	102	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

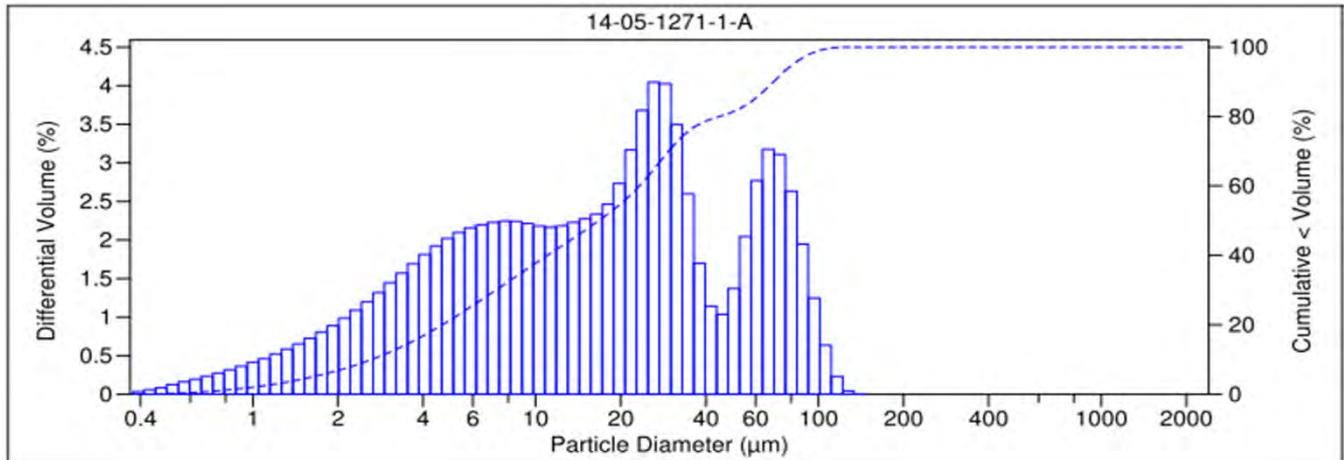
Date Sampled: 05/15/14
 Date Received: 05/16/14
 Work Order No: 14-05-1271
 Date Analyzed: 05/20/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

Page 1 of 17

Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-01 TOP		Silt	0.026

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.04	13.40	70.12	16.44	86.56



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

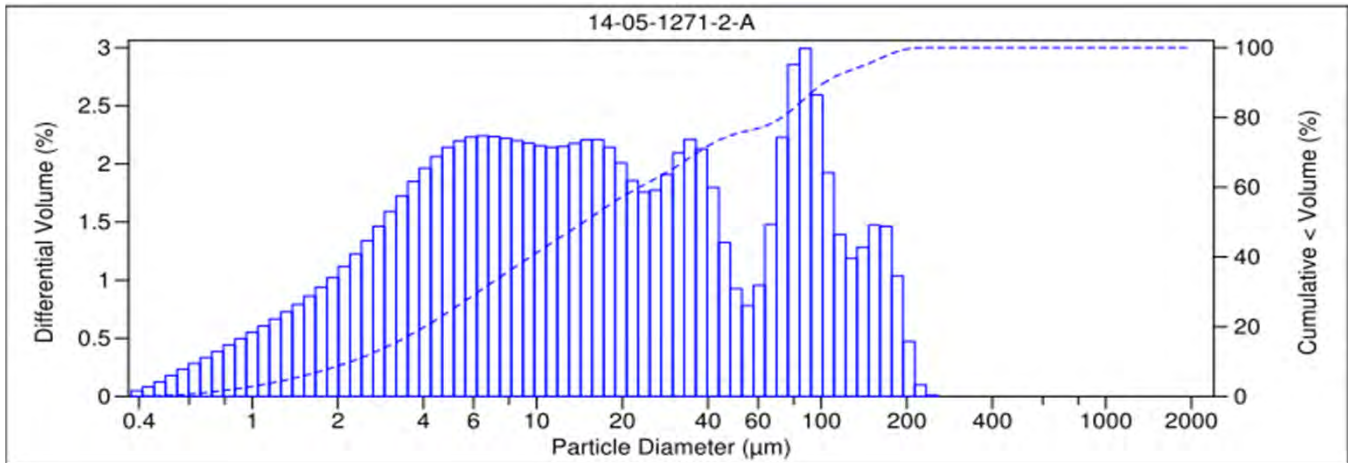
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

Page 2 of 17

Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-01 BOTTOM		Silt	0.036

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	6.71	15.91	58.03	19.35	77.38



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

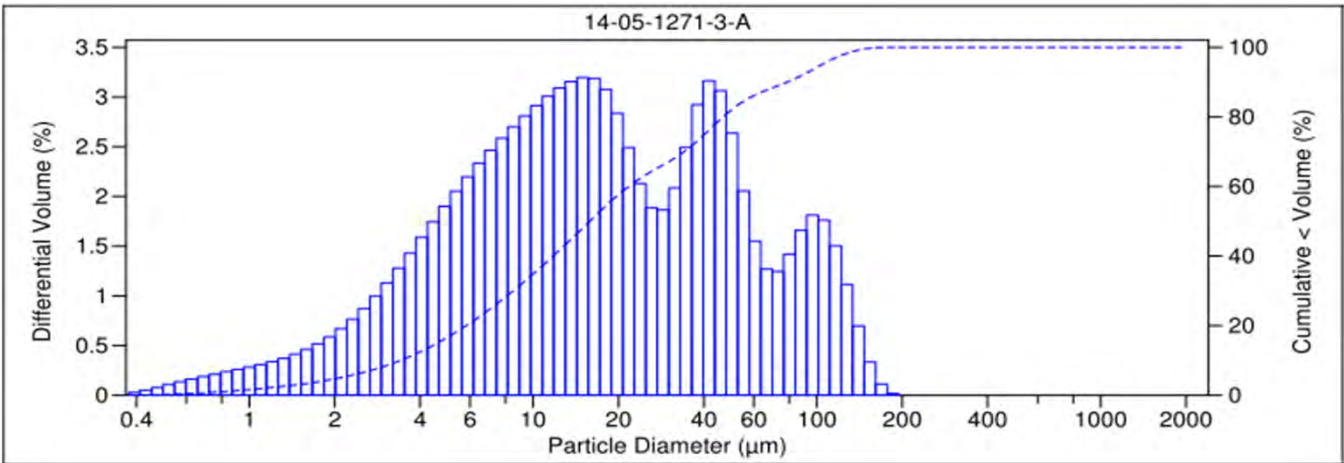
Date Sampled: 05/15/14
 Date Received: 05/16/14
 Work Order No: 14-05-1271
 Date Analyzed: 05/20/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

Page 3 of 17

Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-02 TOP		Silt	0.029

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	1.98	11.20	74.73	12.08	86.81



V 3.0

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PARTICLE SIZE SUMMARY
(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

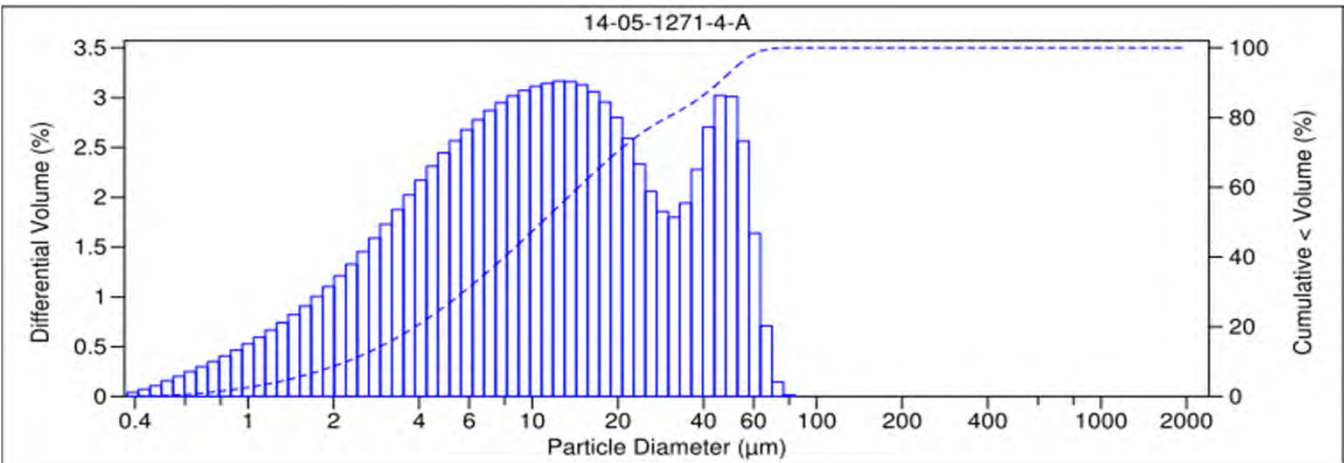
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

Page 4 of 17

Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-02 BOTTOM		Silt	0.017

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.00	1.13	78.64	20.23	98.87



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

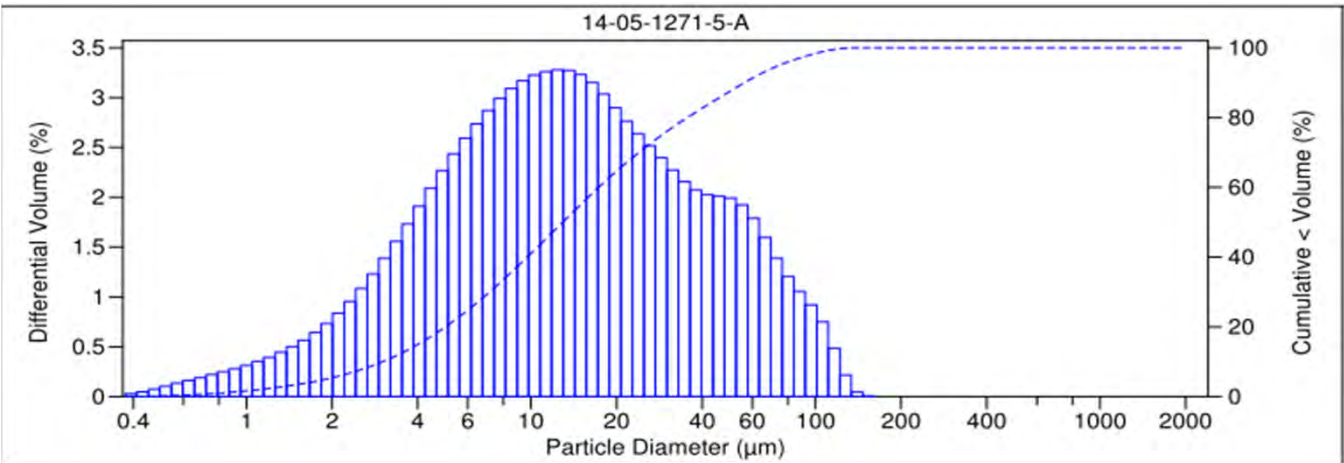
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 Work Order No: 14-05-1271
 Date Analyzed: 05/20/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-03 TOP		Silt	0.022

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.21	7.76	77.55	14.48	92.03



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

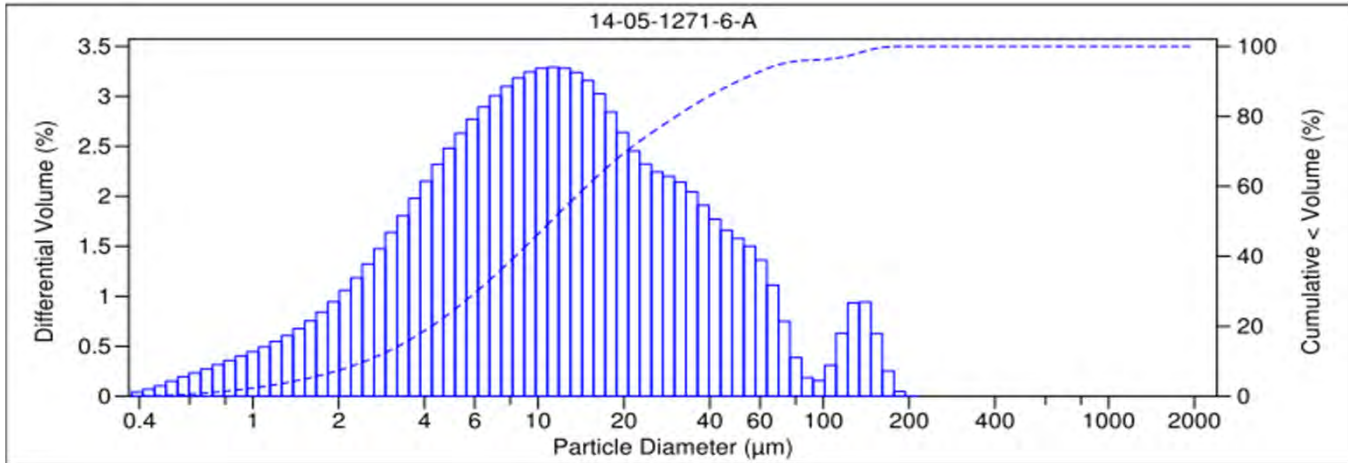
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-03 BOTTOM		Silt	0.021

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	2.56	4.01	75.19	18.24	93.43



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

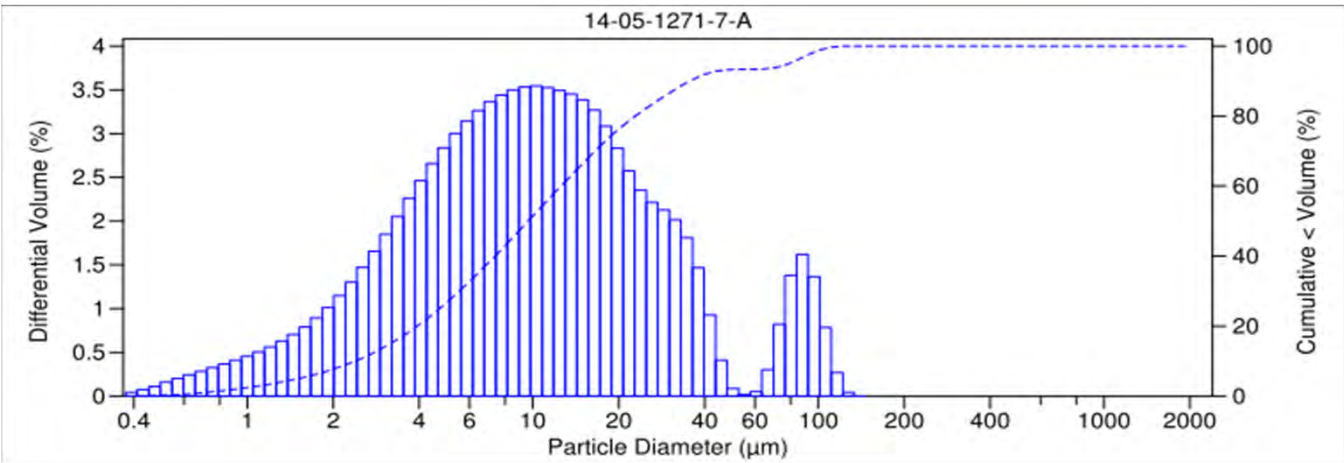
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 Work Order No: 14-05-1271
 Date Analyzed: 05/20/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
SR-N-03 BOTTOM DUP		Silt	0.017

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.03	6.56	73.57	19.84	93.41



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

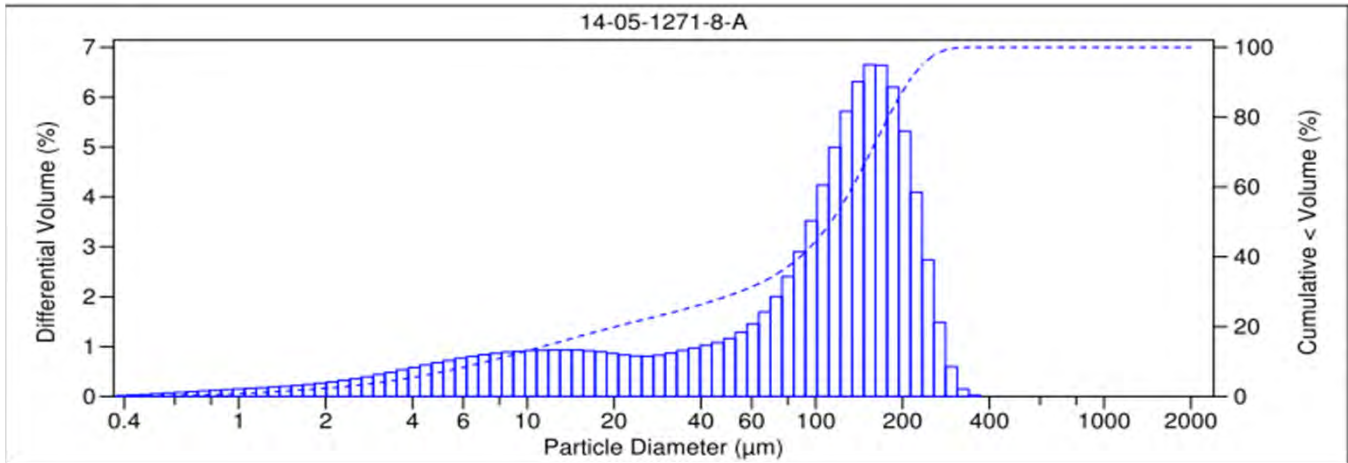
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Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-07 TOP		Very Fine Sand	0.109

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.09	41.30	23.50	26.80	5.30	32.10



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

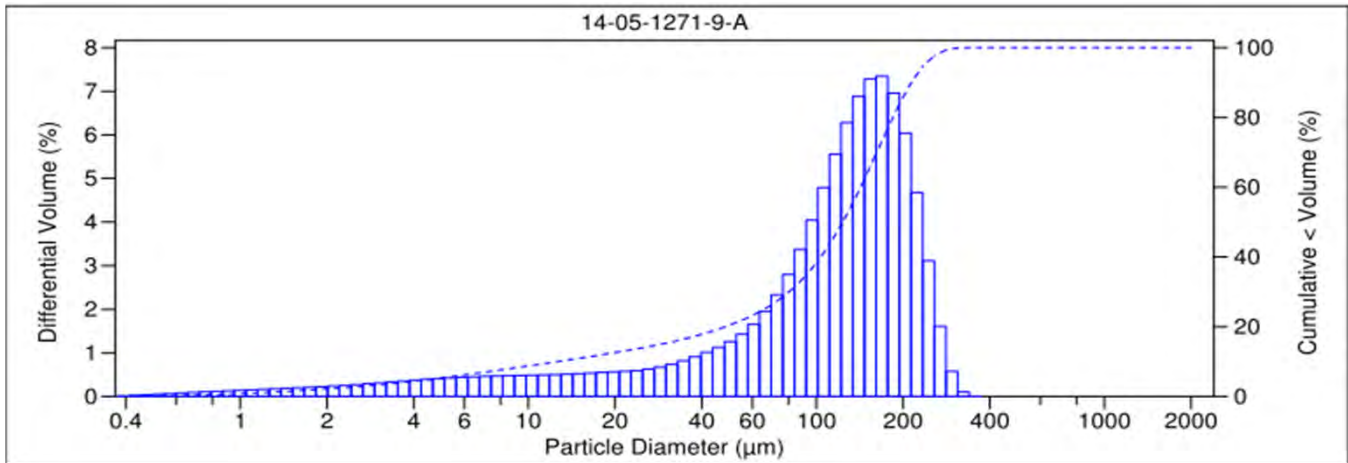
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-07 BOTTOM		Very Fine Sand	0.120

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.24	45.99	26.79	19.69	4.29	23.98



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

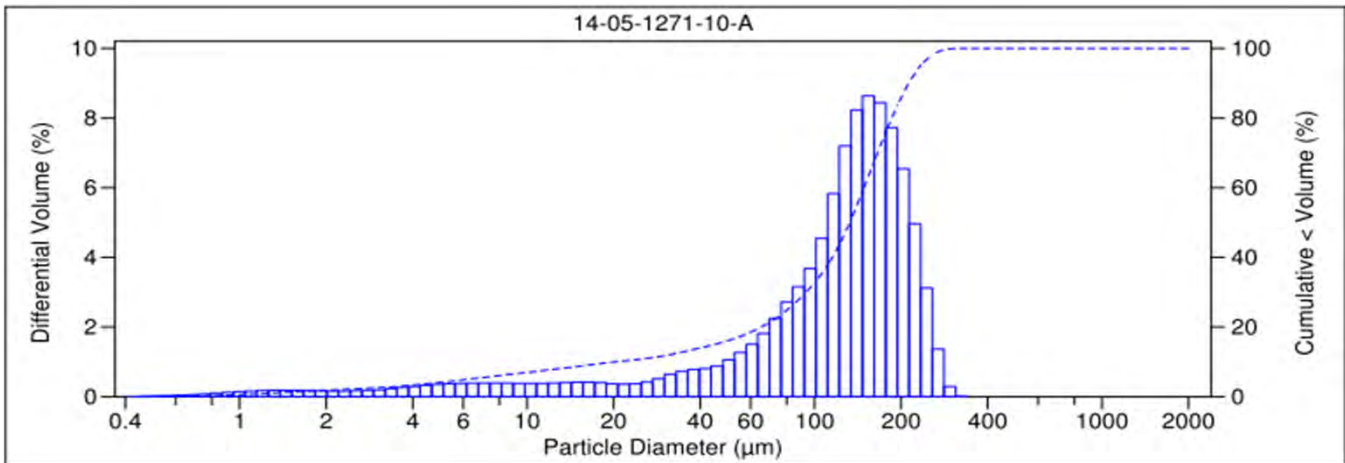
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-08 TOP		Fine Sand	0.127

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	2.63	51.94	26.17	15.98	3.28	19.26



V 3.0

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PARTICLE SIZE SUMMARY
(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

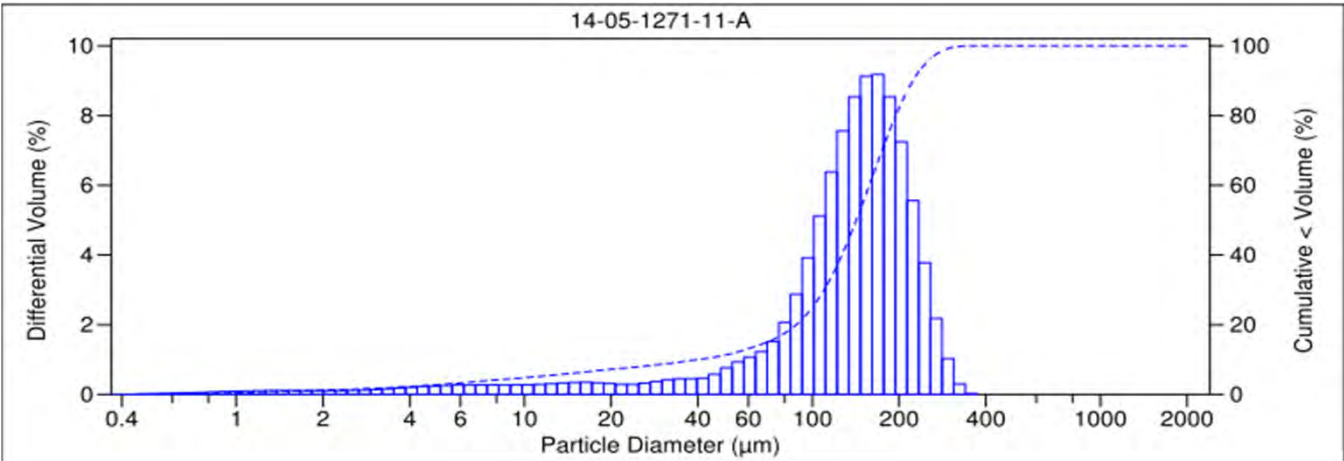
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-08 BOTTOM		Fine Sand	0.140

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	4.69	56.39	25.29	11.40	2.23	13.63



V 3.0

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PARTICLE SIZE SUMMARY
(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

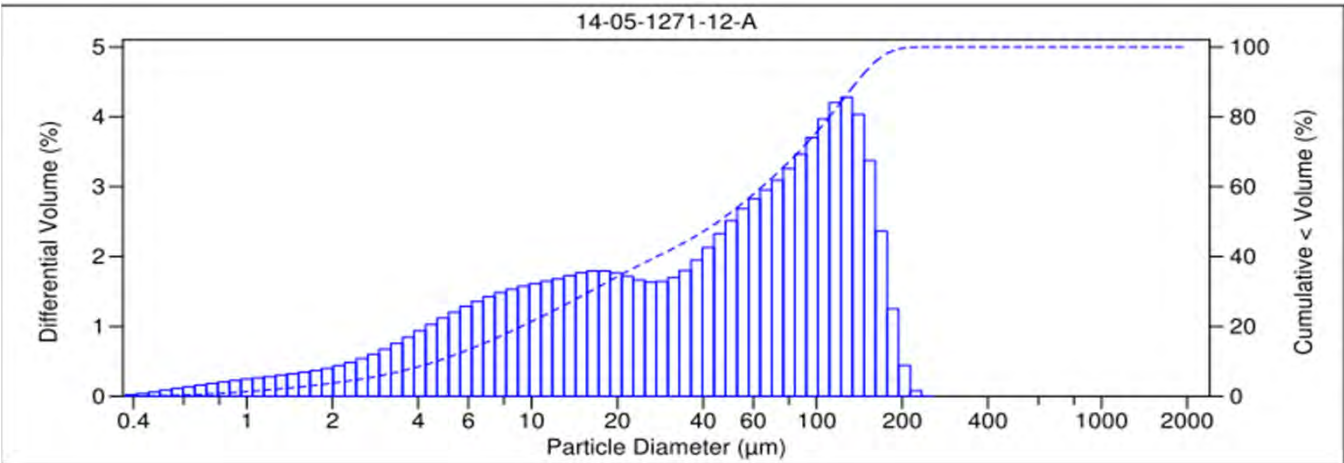
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-09 TOP		Silt	0.059

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	14.71	26.21	50.82	8.26	59.08



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

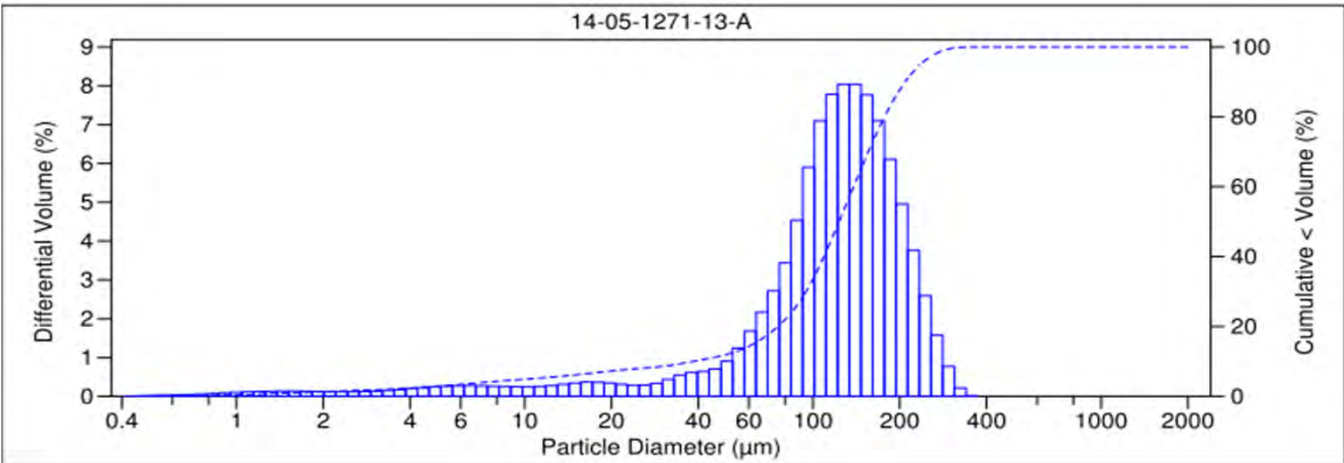
Date Sampled: 05/15/14
Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-09 BOTTOM		Silt	0.126

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.38	45.39	36.09	12.80	2.35	15.15



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

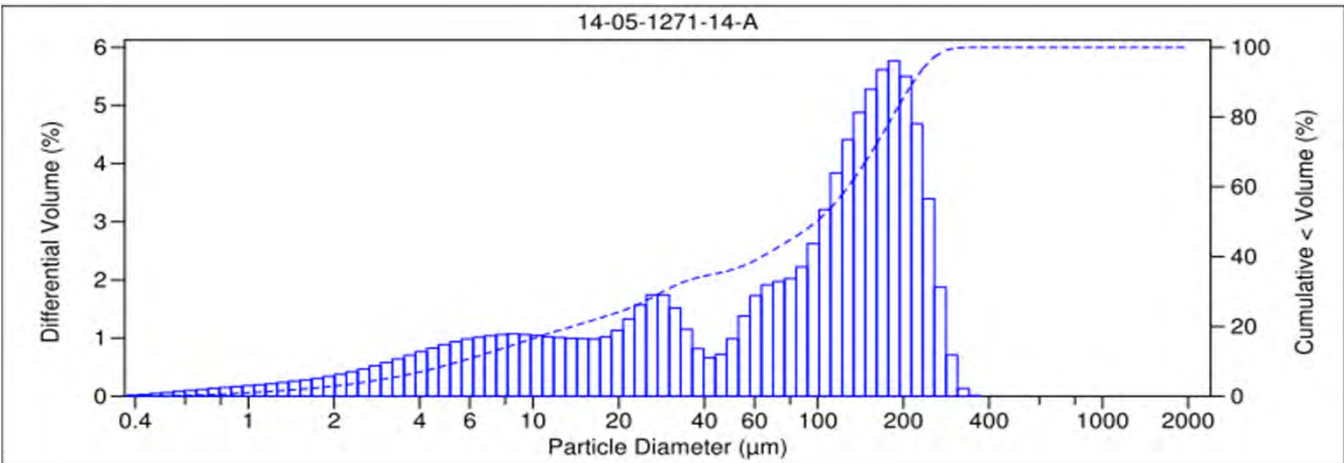
Date Sampled: 05/15/14
Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-10 TOP		Very Fine Sand	0.103

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.76	37.28	19.29	32.88	6.79	39.67



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

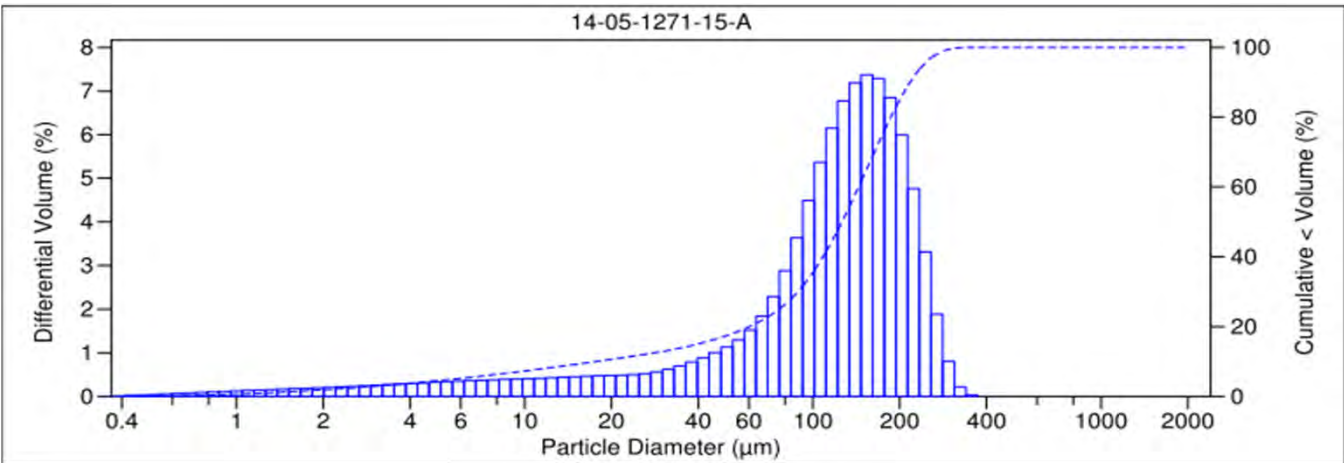
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Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-10 BOTTOM		Very Fine Sand	0.125

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	3.96	46.80	28.76	16.94	3.55	20.48



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

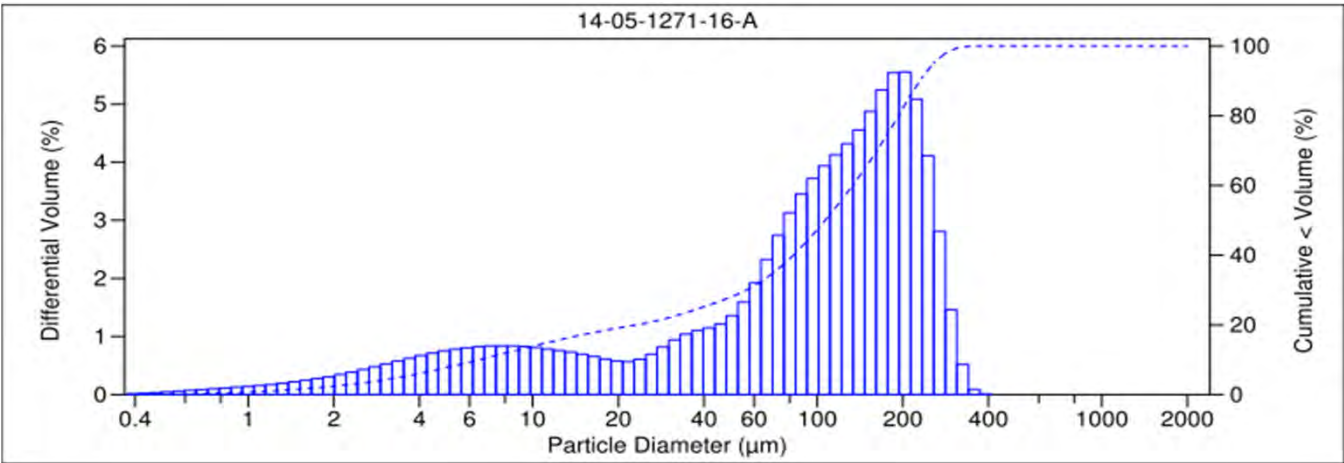
Date Sampled: 05/15/14
Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-11 TOP		Very Fine Sand	0.114

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	6.14	36.89	24.89	26.19	5.90	32.09



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

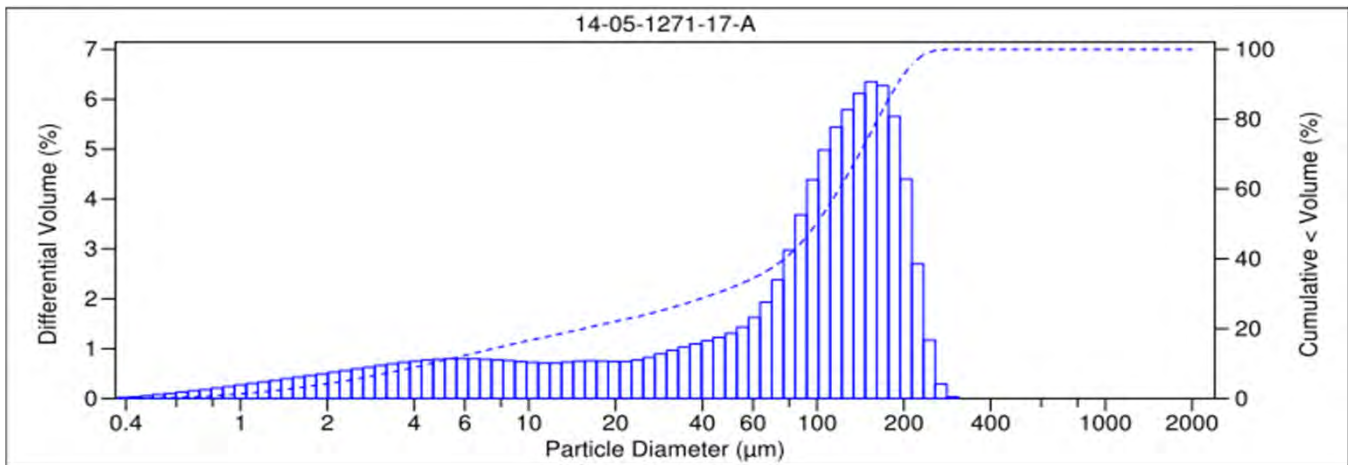
Date Sampled: 05/15/14
Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-11 BOTTOM		Very Fine Sand	0.097

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.68	36.58	27.58	26.38	8.78	35.16



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

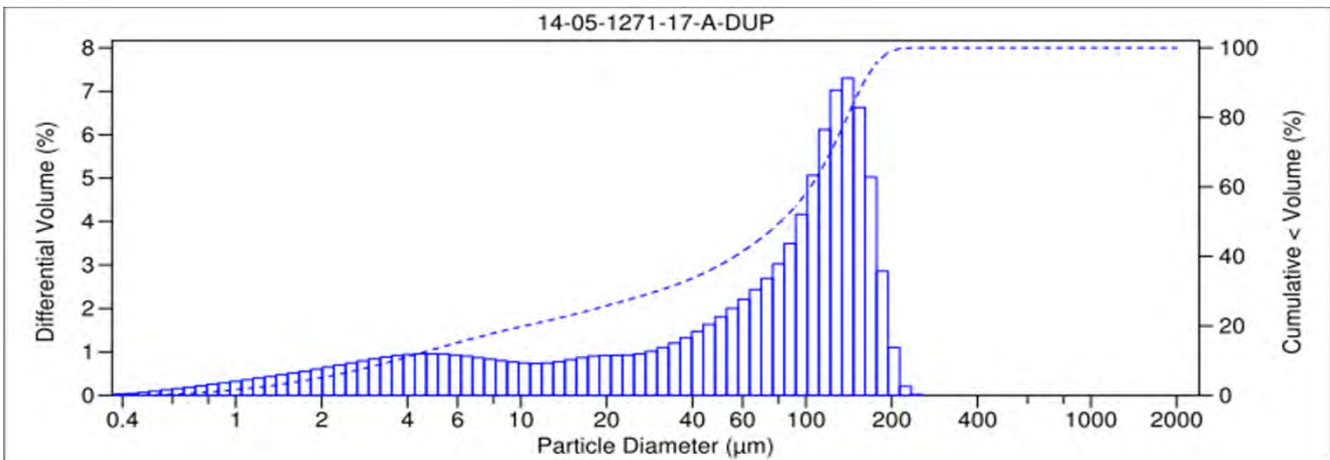
Date Sampled: 05/15/14
Date Received: 05/16/14
Work Order No: 14-05-1271
Date Analyzed: 05/20/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
JB-S-11 Bottom (Particle size dup)		Very Fine Sand	0.080

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.01	28.32	29.22	31.62	10.84	42.46



V 3.0

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Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-08 BOTTOM	Sample	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCS2
JB-S-08 BOTTOM	Matrix Spike	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCS2
JB-S-08 BOTTOM	Matrix Spike Duplicate	Sediment	TOC 4	05/22/14	05/22/14 19:08	E0522TOCS2

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.3800	3.000	3.330	98	3.120	91	75-125	7	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1270-40	Sample	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1
14-05-1270-40	Matrix Spike	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1
14-05-1270-40	Matrix Spike Duplicate	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.4800	3.000	3.300	94	3.290	94	75-125	0	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
SR-N-01 TOP	Sample	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCS1
SR-N-01 TOP	Matrix Spike	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCS1
SR-N-01 TOP	Matrix Spike Duplicate	Sediment	TOC 5	05/21/14	05/22/14 14:10	E0521TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.7500	3.000	3.380	88	3.340	86	75-125	1	0-25	



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14	06/09/14 20:20	140609S01
14-06-0596-1	Matrix Spike	Sediment	ICP/MS 03	06/09/14	06/09/14 19:54	140609S01
14-06-0596-1	Matrix Spike Duplicate	Sediment	ICP/MS 03	06/09/14	06/09/14 19:57	140609S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	5.134	25.00	30.56	102	27.37	89	80-120	11	0-20	
Cadmium	0.1976	25.00	27.86	111	24.68	98	80-120	12	0-20	
Chromium	38.20	25.00	69.05	123	63.57	101	80-120	8	0-20	3
Copper	24.21	25.00	51.51	109	47.75	94	80-120	8	0-20	
Lead	11.56	25.00	39.95	114	36.18	98	80-120	10	0-20	
Nickel	38.78	25.00	66.61	111	61.55	91	80-120	8	0-20	
Selenium	0.3452	25.00	28.65	113	25.60	101	80-120	11	0-20	
Silver	0.1535	12.50	13.87	110	12.43	98	80-120	11	0-20	
Zinc	58.83	25.00	91.48	131	81.38	90	80-120	12	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-10 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14	05/21/14 15:43	140520S04
JB-S-10 BOTTOM	Matrix Spike	Sediment	ICP/MS 04	05/20/14	05/21/14 15:29	140520S04
JB-S-10 BOTTOM	Matrix Spike Duplicate	Sediment	ICP/MS 04	05/20/14	05/21/14 15:32	140520S04

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	0.8321	25.00	26.15	101	26.48	103	80-120	1	0-20	
Cadmium	ND	25.00	27.66	111	27.72	111	80-120	0	0-20	
Chromium	5.572	25.00	31.91	105	31.89	105	80-120	0	0-20	
Copper	1.870	25.00	29.08	109	28.94	108	80-120	0	0-20	
Lead	2.386	25.00	28.45	104	28.77	106	80-120	1	0-20	
Nickel	3.022	25.00	29.23	105	29.37	105	80-120	0	0-20	
Selenium	0.1133	25.00	26.65	106	26.07	104	80-120	2	0-20	
Silver	ND	12.50	13.45	108	13.59	109	80-120	1	0-20	
Zinc	16.39	25.00	43.67	109	47.54	125	80-120	8	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-10 BOTTOM	Sample	Sediment	Mercury 05	05/21/14	05/21/14 18:43	140521S05
JB-S-10 BOTTOM	Matrix Spike	Sediment	Mercury 05	05/21/14	05/21/14 18:45	140521S05
JB-S-10 BOTTOM	Matrix Spike Duplicate	Sediment	Mercury 05	05/21/14	05/21/14 18:48	140521S05

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	ND	0.8350	0.7953	95	0.8696	104	76-136	9	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0537-4	Sample	Solid	Mercury 05	06/09/14	06/10/14 13:29	140609S08
14-06-0537-4	Matrix Spike	Solid	Mercury 05	06/09/14	06/10/14 13:32	140609S08
14-06-0537-4	Matrix Spike Duplicate	Solid	Mercury 05	06/09/14	06/10/14 13:34	140609S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.8350	0.9798	117	0.9691	116	71-137	1	0-14	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-07 BOTTOM	Sample	Sediment	GC 51	05/25/14	05/28/14 13:37	140525S01
JB-S-07 BOTTOM	Matrix Spike	Sediment	GC 51	05/25/14	05/28/14 16:43	140525S01
JB-S-07 BOTTOM	Matrix Spike Duplicate	Sediment	GC 51	05/25/14	05/28/14 16:58	140525S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	5.288	106	5.544	111	50-135	5	0-25	
Alpha-BHC	ND	5.000	6.195	124	6.265	125	50-135	1	0-25	
Beta-BHC	ND	5.000	5.901	118	6.663	133	50-135	12	0-25	
Delta-BHC	ND	5.000	7.026	141	7.519	150	50-135	7	0-25	3
Gamma-BHC	ND	5.000	6.031	121	6.197	124	50-135	3	0-25	
Dieldrin	ND	5.000	6.311	126	6.499	130	50-135	3	0-25	
4,4'-DDD	ND	5.000	5.648	113	5.842	117	50-135	3	0-25	
4,4'-DDE	ND	5.000	5.757	115	5.908	118	50-135	3	0-25	
4,4'-DDT	ND	5.000	5.952	119	6.073	121	50-135	2	0-25	
Endosulfan I	ND	5.000	5.716	114	5.830	117	50-135	2	0-25	
Endosulfan II	ND	5.000	5.892	118	6.020	120	50-135	2	0-25	
Endosulfan Sulfate	ND	5.000	7.022	140	9.457	189	50-135	30	0-25	3,4
Endrin	ND	5.000	5.318	106	6.010	120	50-135	12	0-25	
Endrin Aldehyde	ND	5.000	5.391	108	5.513	110	50-135	2	0-25	
Endrin Ketone	ND	5.000	6.466	129	6.576	132	50-135	2	0-25	
Heptachlor	ND	5.000	6.114	122	6.518	130	50-135	6	0-25	
Heptachlor Epoxide	ND	5.000	5.233	105	5.427	109	50-135	4	0-25	
Methoxychlor	ND	5.000	6.290	126	6.510	130	50-135	3	0-25	
Alpha Chlordane	ND	5.000	5.635	113	5.779	116	50-135	3	0-25	
Gamma Chlordane	ND	5.000	5.465	109	5.693	114	50-135	4	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-10 TOP LAB DUP	Sample	Sediment	GC 51	06/09/14	06/11/14 12:29	140609S10
JB-S-10 TOP LAB DUP	Matrix Spike	Sediment	GC 51	06/09/14	06/11/14 11:32	140609S10
JB-S-10 TOP LAB DUP	Matrix Spike Duplicate	Sediment	GC 51	06/09/14	06/11/14 11:46	140609S10

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	3.310	66	2.897	58	50-135	13	0-25	
Alpha-BHC	ND	5.000	4.047	81	3.724	74	50-135	8	0-25	
Beta-BHC	ND	5.000	3.892	78	3.743	75	50-135	4	0-25	
Delta-BHC	ND	5.000	3.699	74	3.601	72	50-135	3	0-25	
Gamma-BHC	ND	5.000	3.801	76	3.191	64	50-135	17	0-25	
Dieldrin	ND	5.000	3.612	72	3.181	64	50-135	13	0-25	
4,4'-DDD	ND	5.000	3.577	72	3.124	62	50-135	14	0-25	
4,4'-DDE	1.258	5.000	3.703	49	3.234	40	50-135	14	0-25	3
4,4'-DDT	ND	5.000	3.882	78	3.511	70	50-135	10	0-25	
Endosulfan I	ND	5.000	3.505	70	2.910	58	50-135	19	0-25	
Endosulfan II	ND	5.000	3.803	76	3.466	69	50-135	9	0-25	
Endosulfan Sulfate	ND	5.000	3.845	77	3.172	63	50-135	19	0-25	
Endrin	ND	5.000	3.896	78	3.365	67	50-135	15	0-25	
Endrin Aldehyde	ND	5.000	3.361	67	2.795	56	50-135	18	0-25	
Endrin Ketone	ND	5.000	3.820	76	3.281	66	50-135	15	0-25	
Heptachlor	ND	5.000	3.692	74	3.410	68	50-135	8	0-25	
Heptachlor Epoxide	ND	5.000	3.476	70	3.008	60	50-135	14	0-25	
Methoxychlor	ND	5.000	3.957	79	3.422	68	50-135	15	0-25	
Alpha Chlordane	ND	5.000	3.395	68	2.938	59	50-135	14	0-25	
Gamma Chlordane	ND	5.000	3.304	66	2.889	58	50-135	13	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-08 TOP	Sample	Sediment	GC/MS MM	05/25/14	05/29/14 07:37	140525S08
JB-S-08 TOP	Matrix Spike	Sediment	GC/MS MM	05/25/14	05/29/14 12:51	140525S08
JB-S-08 TOP	Matrix Spike Duplicate	Sediment	GC/MS MM	05/25/14	05/29/14 13:17	140525S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	695.0	70	721.0	72	40-160	4	0-20	
2,4-Dichlorophenol	ND	1000	693.0	69	689.1	69	40-160	1	0-20	
2-Methylphenol	ND	1000	653.7	65	646.6	65	40-160	1	0-20	
2-Nitrophenol	ND	1000	621.4	62	639.8	64	40-160	3	0-20	
4-Chloro-3-Methylphenol	ND	1000	700.6	70	711.5	71	40-160	2	0-20	
Acenaphthene	ND	1000	677.8	68	691.1	69	40-106	2	0-20	
Benzo (a) Pyrene	13.99	1000	654.1	64	657.6	64	17-163	1	0-20	
Chrysene	ND	1000	643.1	64	627.0	63	17-168	3	0-20	
Di-n-Butyl Phthalate	ND	1000	703.2	70	617.4	62	40-160	13	0-20	
Dimethyl Phthalate	94.94	1000	620.6	53	636.9	54	40-160	3	0-20	
Fluoranthene	ND	1000	628.5	63	621.9	62	26-137	1	0-20	
Fluorene	ND	1000	667.6	67	701.9	70	59-121	5	0-20	
Naphthalene	ND	1000	672.6	67	678.9	68	21-133	1	0-20	
Phenanthrene	ND	1000	700.7	70	696.4	70	54-120	1	0-20	
Phenol	ND	1000	683.8	68	676.9	68	40-160	1	0-20	
Pyrene	ND	1000	712.9	71	685.6	69	6-156	4	0-46	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-10 TOP LAB DUP	Sample	Sediment	GC/MS MM	06/09/14	06/10/14 17:26	140609S12
JB-S-10 TOP LAB DUP	Matrix Spike	Sediment	GC/MS MM	06/09/14	06/10/14 17:51	140609S12
JB-S-10 TOP LAB DUP	Matrix Spike Duplicate	Sediment	GC/MS MM	06/09/14	06/10/14 18:17	140609S12

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	717.2	72	711.2	71	40-160	1	0-20	
2,4-Dichlorophenol	ND	1000	730.5	73	729.3	73	40-160	0	0-20	
2-Methylphenol	ND	1000	520.4	52	532.4	53	40-160	2	0-20	
2-Nitrophenol	ND	1000	796.8	80	792.3	79	40-160	1	0-20	
4-Chloro-3-Methylphenol	ND	1000	821.7	82	828.5	83	40-160	1	0-20	
Acenaphthene	ND	1000	618.3	62	616.5	62	40-106	0	0-20	
Benzo (a) Pyrene	27.41	1000	595.9	57	595.1	57	17-163	0	0-20	
Chrysene	ND	1000	602.7	60	605.4	61	17-168	0	0-20	
Di-n-Butyl Phthalate	ND	1000	571.8	57	564.7	56	40-160	1	0-20	
Dimethyl Phthalate	252.9	1000	1014	76	1034	78	40-160	2	0-20	
Fluoranthene	ND	1000	577.3	58	579.8	58	26-137	0	0-20	
Fluorene	ND	1000	593.8	59	591.5	59	59-121	0	0-20	
Naphthalene	ND	1000	694.7	69	693.6	69	21-133	0	0-20	
Phenanthrene	ND	1000	490.6	49	465.2	47	54-120	5	0-20	3
Phenol	ND	1000	879.8	88	893.0	89	40-160	1	0-20	
Pyrene	ND	1000	602.4	60	628.2	63	6-156	4	0-46	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
JB-S-08 TOP	Sample	Sediment	GC/MS HHH	05/28/14	05/29/14 16:24	140528S08
JB-S-08 TOP	Matrix Spike	Sediment	GC/MS HHH	05/28/14	05/30/14 02:25	140528S08
JB-S-08 TOP	Matrix Spike Duplicate	Sediment	GC/MS HHH	05/28/14	05/30/14 02:52	140528S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	30.89	124	28.59	114	50-125	8	0-30	
PCB018	ND	25.00	25.91	104	23.62	94	50-125	9	0-30	
PCB028	ND	25.00	27.07	108	24.79	99	50-125	9	0-30	
PCB044	ND	25.00	24.85	99	23.40	94	50-125	6	0-30	
PCB052	ND	25.00	23.69	95	21.78	87	50-125	8	0-30	
PCB066	ND	25.00	28.82	115	26.43	106	50-125	9	0-30	
PCB077	ND	25.00	27.26	109	25.10	100	50-125	8	0-30	
PCB101	ND	25.00	24.29	97	22.48	90	50-125	8	0-30	
PCB105	ND	25.00	27.27	109	25.03	100	50-125	9	0-30	
PCB118	ND	25.00	26.99	108	25.71	103	50-125	5	0-30	
PCB126	ND	25.00	27.25	109	25.10	100	50-125	8	0-30	
PCB128	ND	25.00	22.11	88	20.59	82	50-125	7	0-30	
PCB153	ND	25.00	24.42	98	22.18	89	50-125	10	0-30	
PCB170	ND	25.00	24.57	98	23.95	96	50-125	3	0-30	
PCB180	ND	25.00	26.02	104	22.96	92	50-125	13	0-30	
PCB187	ND	25.00	25.04	100	23.09	92	50-125	8	0-30	
PCB195	ND	25.00	32.17	129	30.35	121	50-125	6	0-30	3
PCB206	ND	25.00	29.10	116	27.61	110	50-125	5	0-30	
PCB209	ND	25.00	28.82	115	28.75	115	50-125	0	0-30	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-8	Sample	Sediment	GC/MS HHH	06/09/14	06/11/14 03:24	140609S02
14-06-0596-8	Matrix Spike	Sediment	GC/MS HHH	06/09/14	06/11/14 14:51	140609S02
14-06-0596-8	Matrix Spike Duplicate	Sediment	GC/MS HHH	06/09/14	06/11/14 15:22	140609S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	19.76	79	17.40	70	50-125	13	0-30	
PCB018	ND	25.00	16.74	67	14.79	59	50-125	12	0-30	
PCB028	ND	25.00	19.08	76	16.80	67	50-125	13	0-30	
PCB044	ND	25.00	18.31	73	15.73	63	50-125	15	0-30	
PCB052	ND	25.00	16.79	67	14.76	59	50-125	13	0-30	
PCB066	ND	25.00	21.90	88	18.85	75	50-125	15	0-30	
PCB077	ND	25.00	21.71	87	18.01	72	50-125	19	0-30	
PCB101	ND	25.00	18.61	74	15.88	64	50-125	16	0-30	
PCB105	ND	25.00	21.68	87	18.02	72	50-125	18	0-30	
PCB118	ND	25.00	22.99	92	18.79	75	50-125	20	0-30	
PCB126	ND	25.00	20.55	82	17.70	71	50-125	15	0-30	
PCB128	ND	25.00	16.77	67	14.66	59	50-125	13	0-30	
PCB153	ND	25.00	19.85	79	15.91	64	50-125	22	0-30	
PCB170	ND	25.00	18.76	75	16.62	66	50-125	12	0-30	
PCB180	ND	25.00	19.86	79	17.16	69	50-125	15	0-30	
PCB187	ND	25.00	19.20	77	16.45	66	50-125	15	0-30	
PCB195	ND	25.00	23.95	96	21.42	86	50-125	11	0-30	
PCB206	ND	25.00	20.35	81	17.76	71	50-125	14	0-30	
PCB209	ND	25.00	22.26	89	19.49	78	50-125	13	0-30	

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:20	140609S01
14-06-0596-1	PDS	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:00	140609S01

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.134	25.00	28.69	94	75-125	
Cadmium	0.1976	25.00	25.10	100	75-125	
Chromium	38.20	25.00	62.56	97	75-125	
Copper	24.21	25.00	47.32	92	75-125	
Lead	11.56	25.00	36.00	98	75-125	
Nickel	38.78	25.00	61.76	92	75-125	
Selenium	0.3452	25.00	28.88	114	75-125	
Silver	0.1535	12.50	12.53	99	75-125	
Zinc	58.83	25.00	83.22	98	75-125	

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
JB-S-10 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 15:43	140520S04
JB-S-10 BOTTOM	PDS	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 15:36	140520S04

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>PDS Conc.</u>	<u>PDS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic	0.8321	25.00	27.31	106	75-125	
Cadmium	ND	25.00	27.01	108	75-125	
Chromium	5.572	25.00	30.91	101	75-125	
Copper	1.870	25.00	28.72	107	75-125	
Lead	2.386	25.00	28.35	104	75-125	
Nickel	3.022	25.00	29.07	104	75-125	
Selenium	0.1133	25.00	26.23	104	75-125	
Silver	ND	12.50	13.49	108	75-125	
Zinc	16.39	25.00	44.70	113	75-125	



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Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
SR-N-01 TOP	Sample	Sediment	N/A	05/19/14 00:00	05/20/14 13:00	E0520TSD1
SR-N-01 TOP	Sample Duplicate	Sediment	N/A	05/19/14 00:00	05/20/14 13:00	E0520TSD1
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total		47.30	47.00	1	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
JB-S-10 TOP LAB DUP	Sample	Sediment	N/A	06/06/14 00:00	06/09/14 13:00	E0609TSD2
JB-S-10 TOP LAB DUP	Sample Duplicate	Sediment	N/A	06/06/14 00:00	06/09/14 13:00	E0609TSD2

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	64.60	64.60	0	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1040	LCS	Solid	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2			
099-06-013-1040	LCSD	Solid	TOC 4	05/22/14	05/22/14 19:08	E0522TOCL2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6606	110	0.6430	107	80-120	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1055	LCS	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
099-06-013-1055	LCSD	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6070	101	0.6024	100	80-120	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1039	LCS	Solid	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1			
099-06-013-1039	LCSD	Solid	TOC 5	05/21/14	05/22/14 14:10	E0521TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.5641	94	0.5658	94	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-212	LCS	Solid	ICP/MS 03	06/09/14	06/09/14 19:48	140609L01E			
099-15-254-212	LCSD	Solid	ICP/MS 03	06/09/14	06/10/14 15:02	140609L01E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	26.37	105	24.85	99	80-120	6	0-20	
Cadmium	25.00	26.75	107	25.41	102	80-120	5	0-20	
Chromium	25.00	25.16	101	24.94	100	80-120	1	0-20	
Copper	25.00	26.54	106	26.22	105	80-120	1	0-20	
Lead	25.00	26.30	105	25.07	100	80-120	5	0-20	
Nickel	25.00	25.54	102	24.92	100	80-120	2	0-20	
Selenium	25.00	28.56	114	26.59	106	80-120	7	0-20	
Silver	12.50	11.41	91	12.80	102	80-120	12	0-20	
Zinc	25.00	28.80	115	26.11	104	80-120	10	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-254-206	LCS	Solid	ICP/MS 04	05/20/14	05/21/14 13:03	140520L04E
099-15-254-206	LCSD	Solid	ICP/MS 04	05/20/14	05/21/14 13:13	140520L04E

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.40	102	25.21	101	80-120	1	0-20	
Cadmium	25.00	24.62	98	25.12	100	80-120	2	0-20	
Chromium	25.00	24.67	99	24.56	98	80-120	0	0-20	
Copper	25.00	26.36	105	26.18	105	80-120	1	0-20	
Lead	25.00	24.53	98	24.69	99	80-120	1	0-20	
Nickel	25.00	24.75	99	24.68	99	80-120	0	0-20	
Selenium	25.00	24.82	99	24.97	100	80-120	1	0-20	
Silver	12.50	12.79	102	12.99	104	80-120	2	0-20	
Zinc	25.00	26.99	108	27.06	108	80-120	0	0-20	


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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-22	LCS	Solid	Mercury 05	05/21/14	05/21/14 18:23	140521L05E			
099-16-278-22	LCSD	Solid	Mercury 05	05/21/14	05/21/14 18:25	140521L05E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8860	106	0.8843	106	82-124	0	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-28	LCS	Solid	Mercury 05	06/09/14	06/10/14 13:27	140609L08E			
099-16-278-28	LCSD	Solid	Mercury 05	06/09/14	06/11/14 13:09	140609L08E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.9064	109	0.9079	109	82-124	0	0-16	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-283	LCS	Solid	GC 51	05/25/14	05/28/14 11:00	140525L01				
099-12-858-283	LCSD	Solid	GC 51	05/25/14	05/28/14 11:14	140525L01				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	4.967	99	5.222	104	50-135	36-149	5	0-25	
Alpha-BHC	5.000	5.335	107	5.534	111	50-135	36-149	4	0-25	
Beta-BHC	5.000	5.104	102	4.961	99	50-135	36-149	3	0-25	
Delta-BHC	5.000	4.698	94	4.923	98	50-135	36-149	5	0-25	
Gamma-BHC	5.000	5.376	108	5.542	111	50-135	36-149	3	0-25	
Dieldrin	5.000	5.040	101	5.319	106	50-135	36-149	5	0-25	
4,4'-DDD	5.000	4.798	96	5.098	102	50-135	36-149	6	0-25	
4,4'-DDE	5.000	4.745	95	5.008	100	50-135	36-149	5	0-25	
4,4'-DDT	5.000	5.039	101	5.271	105	50-135	36-149	5	0-25	
Endosulfan I	5.000	5.290	106	5.562	111	50-135	36-149	5	0-25	
Endosulfan II	5.000	5.274	105	5.509	110	50-135	36-149	4	0-25	
Endosulfan Sulfate	5.000	4.900	98	5.139	103	50-135	36-149	5	0-25	
Endrin	5.000	5.411	108	5.671	113	50-135	36-149	5	0-25	
Endrin Aldehyde	5.000	4.907	98	5.162	103	50-135	36-149	5	0-25	
Endrin Ketone	5.000	5.118	102	5.424	108	50-135	36-149	6	0-25	
Heptachlor	5.000	5.337	107	5.567	111	50-135	36-149	4	0-25	
Heptachlor Epoxide	5.000	4.656	93	4.898	98	50-135	36-149	5	0-25	
Methoxychlor	5.000	4.903	98	5.154	103	50-135	36-149	5	0-25	
Alpha Chlordane	5.000	4.888	98	5.138	103	50-135	36-149	5	0-25	
Gamma Chlordane	5.000	4.940	99	5.206	104	50-135	36-149	5	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-288	LCS	Solid	GC 51	06/09/14	06/11/14 11:03	140609L10				
099-12-858-288	LCSD	Solid	GC 51	06/09/14	06/11/14 11:17	140609L10				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	4.922	98	4.725	94	50-135	36-149	4	0-25	
Alpha-BHC	5.000	5.462	109	5.219	104	50-135	36-149	5	0-25	
Beta-BHC	5.000	4.963	99	4.750	95	50-135	36-149	4	0-25	
Delta-BHC	5.000	4.869	97	4.656	93	50-135	36-149	4	0-25	
Gamma-BHC	5.000	5.461	109	5.229	105	50-135	36-149	4	0-25	
Dieldrin	5.000	4.992	100	4.812	96	50-135	36-149	4	0-25	
4,4'-DDD	5.000	4.794	96	4.611	92	50-135	36-149	4	0-25	
4,4'-DDE	5.000	4.727	95	4.521	90	50-135	36-149	4	0-25	
4,4'-DDT	5.000	5.134	103	4.943	99	50-135	36-149	4	0-25	
Endosulfan I	5.000	5.125	102	4.975	99	50-135	36-149	3	0-25	
Endosulfan II	5.000	5.162	103	4.988	100	50-135	36-149	3	0-25	
Endosulfan Sulfate	5.000	4.845	97	4.676	94	50-135	36-149	4	0-25	
Endrin	5.000	5.144	103	4.808	96	50-135	36-149	7	0-25	
Endrin Aldehyde	5.000	5.002	100	4.956	99	50-135	36-149	1	0-25	
Endrin Ketone	5.000	5.152	103	5.015	100	50-135	36-149	3	0-25	
Heptachlor	5.000	5.428	109	5.202	104	50-135	36-149	4	0-25	
Heptachlor Epoxide	5.000	4.696	94	4.452	89	50-135	36-149	5	0-25	
Methoxychlor	5.000	4.971	99	4.820	96	50-135	36-149	3	0-25	
Alpha Chlordane	5.000	4.801	96	4.634	93	50-135	36-149	4	0-25	
Gamma Chlordane	5.000	4.814	96	4.660	93	50-135	36-149	3	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/16/14
 Work Order: 14-05-1271
 Preparation: EPA 3545
 Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-80	LCS	Solid	GC/MS MM	05/25/14	05/28/14 18:49	140525L08				
099-14-256-80	LCSD	Solid	GC/MS MM	05/25/14	05/28/14 19:15	140525L08				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	785.2	79	800.8	80	40-160	20-180	2	0-20	
2,4-Dichlorophenol	1000	794.1	79	792.9	79	40-160	20-180	0	0-20	
2-Methylphenol	1000	711.3	71	718.9	72	40-160	20-180	1	0-20	
2-Nitrophenol	1000	774.5	77	786.9	79	40-160	20-180	2	0-20	
4-Chloro-3-Methylphenol	1000	811.3	81	826.8	83	40-160	20-180	2	0-20	
Acenaphthene	1000	776.6	78	774.5	77	48-108	38-118	0	0-11	
Benzo (a) Pyrene	1000	786.0	79	763.8	76	17-163	0-187	3	0-20	
Chrysene	1000	734.1	73	710.5	71	17-168	0-193	3	0-20	
Di-n-Butyl Phthalate	1000	947.3	95	956.9	96	40-160	20-180	1	0-20	
Dimethyl Phthalate	1000	779.3	78	795.2	80	40-160	20-180	2	0-20	
Fluoranthene	1000	761.1	76	772.7	77	26-137	8-156	2	0-20	
Fluorene	1000	759.9	76	774.4	77	59-121	49-131	2	0-20	
Naphthalene	1000	790.9	79	779.8	78	21-133	2-152	1	0-20	
Phenanthrene	1000	789.1	79	787.1	79	54-120	43-131	0	0-20	
Phenol	1000	752.0	75	762.8	76	40-160	20-180	1	0-20	
Pyrene	1000	775.9	78	768.8	77	28-106	15-119	1	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-82	LCS	Solid	GC/MS MM	06/09/14	06/10/14 15:42	140609L12				
099-14-256-82	LCSD	Solid	GC/MS MM	06/09/14	06/10/14 16:08	140609L12				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	540.0	54	611.7	61	40-160	20-180	12	0-20	
2,4-Dichlorophenol	1000	654.6	65	740.6	74	40-160	20-180	12	0-20	
2-Methylphenol	1000	658.8	66	729.6	73	40-160	20-180	10	0-20	
2-Nitrophenol	1000	618.2	62	713.9	71	40-160	20-180	14	0-20	
4-Chloro-3-Methylphenol	1000	788.2	79	904.6	90	40-160	20-180	14	0-20	
Acenaphthene	1000	729.6	73	790.0	79	48-108	38-118	8	0-11	
Benzo (a) Pyrene	1000	724.2	72	798.4	80	17-163	0-187	10	0-20	
Chrysene	1000	684.8	68	751.6	75	17-168	0-193	9	0-20	
Di-n-Butyl Phthalate	1000	906.9	91	1062	106	40-160	20-180	16	0-20	
Dimethyl Phthalate	1000	890.5	89	977.2	98	40-160	20-180	9	0-20	
Fluoranthene	1000	708.3	71	776.7	78	26-137	8-156	9	0-20	
Fluorene	1000	713.3	71	765.3	77	59-121	49-131	7	0-20	
Naphthalene	1000	744.7	74	815.1	82	21-133	2-152	9	0-20	
Phenanthrene	1000	723.0	72	815.1	82	54-120	43-131	12	0-20	
Phenol	1000	718.3	72	778.6	78	40-160	20-180	8	0-20	
Pyrene	1000	743.4	74	831.1	83	28-106	15-119	11	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-182	LCS	Solid	GC/MS HHH	05/28/14	05/29/14 03:53	140528L08				
099-14-341-182	LCSD	Solid	GC/MS HHH	05/28/14	05/29/14 04:21	140528L08				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	19.75	79	19.62	78	50-125	38-138	1	0-30	
PCB018	25.00	17.16	69	16.75	67	50-125	38-138	2	0-30	
PCB028	25.00	18.92	76	18.66	75	50-125	38-138	1	0-30	
PCB044	25.00	19.11	76	19.21	77	50-125	38-138	1	0-30	
PCB052	25.00	17.25	69	17.45	70	50-125	38-138	1	0-30	
PCB066	25.00	22.75	91	22.45	90	50-125	38-138	1	0-30	
PCB077	25.00	22.91	92	22.83	91	50-125	38-138	0	0-30	
PCB101	25.00	19.84	79	20.09	80	50-125	38-138	1	0-30	
PCB105	25.00	23.24	93	23.00	92	50-125	38-138	1	0-30	
PCB118	25.00	23.70	95	23.28	93	50-125	38-138	2	0-30	
PCB126	25.00	23.20	93	23.30	93	50-125	38-138	0	0-30	
PCB128	25.00	18.73	75	18.83	75	50-125	38-138	1	0-30	
PCB153	25.00	20.66	83	20.43	82	50-125	38-138	1	0-30	
PCB170	25.00	17.54	70	17.32	69	50-125	38-138	1	0-30	
PCB180	25.00	21.62	86	21.60	86	50-125	38-138	0	0-30	
PCB187	25.00	20.84	83	20.63	83	50-125	38-138	1	0-30	
PCB195	25.00	22.03	88	22.17	89	50-125	38-138	1	0-30	
PCB206	25.00	18.95	76	19.05	76	50-125	38-138	0	0-30	
PCB209	25.00	19.46	78	19.66	79	50-125	38-138	1	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/16/14
Work Order: 14-05-1271
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-187	LCS	Solid	GC/MS HHH	06/09/14	06/10/14 22:40	140609L02				
099-14-341-187	LCSD	Solid	GC/MS HHH	06/09/14	06/10/14 23:13	140609L02				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	26.06	104	25.21	101	50-125	38-138	3	0-30	
PCB018	25.00	21.98	88	20.52	82	50-125	38-138	7	0-30	
PCB028	25.00	22.71	91	23.61	94	50-125	38-138	4	0-30	
PCB044	25.00	21.47	86	22.09	88	50-125	38-138	3	0-30	
PCB052	25.00	19.58	78	19.20	77	50-125	38-138	2	0-30	
PCB066	25.00	24.38	98	24.32	97	50-125	38-138	0	0-30	
PCB077	25.00	22.97	92	24.15	97	50-125	38-138	5	0-30	
PCB101	25.00	21.46	86	20.78	83	50-125	38-138	3	0-30	
PCB105	25.00	21.04	84	21.01	84	50-125	38-138	0	0-30	
PCB118	25.00	21.59	86	24.62	98	50-125	38-138	13	0-30	
PCB126	25.00	20.69	83	21.54	86	50-125	38-138	4	0-30	
PCB128	25.00	16.29	65	19.75	79	50-125	38-138	19	0-30	
PCB153	25.00	18.49	74	19.10	76	50-125	38-138	3	0-30	
PCB170	25.00	24.75	99	21.85	87	50-125	38-138	12	0-30	
PCB180	25.00	19.19	77	20.85	83	50-125	38-138	8	0-30	
PCB187	25.00	20.16	81	18.88	76	50-125	38-138	7	0-30	
PCB195	25.00	29.10	116	29.02	116	50-125	38-138	0	0-30	
PCB206	25.00	24.16	97	23.81	95	50-125	38-138	1	0-30	
PCB209	25.00	25.72	103	23.44	94	50-125	38-138	9	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 14-05-1271

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



5817 Dryden Place, Ste 101 • Carlsbad, CA 92008 • (760) 795-6900, FAX 931-1580
 1340 Treat Blvd, Ste 210 • Walnut Creek, CA 94597 • (925) 948-2600, FAX 948-2601

CHAIN OF CUSTODY
 36259
 DATE 5/15/14 PAGE 1 OF 2

14-05-1271

PROJECT NAME / SURVEY / PROJECT NUMBER
 ADCNR - MOBILE BAY

PROJECT MANAGER / CONTACT
 DAN MCCOY

CLIENT
 WESTON SOLUTIONS

ADDRESS
 SEE ABOVE

PHONE / FAX / EMAIL
 " "

ANALYSIS/TEST REQUESTED	TOTAL NUMBER OF CONTAINERS	CONTAINER TYPE / VOLUME	DATE	TIME	MATRIX	SAMPLE ID	FOR WESTON USE ONLY
			5/15/14	0915	SED.	SR-N-01 TOP	
				0915		SR-N-01 BOTTOM	
				0900		SR-N-02 TOP	
				0845		SR-N-02 BOTTOM	
				0815		SR-N-03 TOP	
				0830		SR-N-03 BOTTOM	
				0830		SR-N-03 BOTTOM DEP	
				1100		JB-S-07 TOP	
				1055		JB-S-07 BOTTOM	
				1045		JB-S-08 TOP	
				1030		JB-S-08 BOTTOM	
				1010		JB-S-09 TOP	
				1000		JB-S-09 BOTTOM	
				1120		JB-S-10 TOP	
				1110		JB-S-10 BOTTOM	
				1140		JB-S-11 TOP	

SAMPLED BY: PRINT
 CHRIS WARN & DAN MCCOY

SIGNATURE

COMMENTS / SPECIAL INSTRUCTIONS
 * SEE ATTACHED TABLE FOR ANALYSES

RELINQUISHED BY		RECEIVED BY	
Print Name	Signature	Print Name	Signature
1. DAN MCCOY		J. PATEL	
2. J. PATEL			
3.			
4.			
5.			
6.			



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CHAIN OF CUSTODY

36260

DATE 5/15/14 PAGE 2 OF 2

PROJECT NAME / SURVEY / PROJECT NUMBER
 PROJECT MANAGER / CONTACT
 CLIENT
 ADDRESS
 PHONE / FAX / EMAIL

SITE ID (Location)
 DATE
 TIME
 MATRIX

SAMPLE ID
 CONTAINER TYPE / VOLUME
 TOTAL NUMBER OF CONTAINERS

ANALYSIS/TEST REQUESTED
 FOR WESTON USE ONLY

PRESERVED HOW
 SAMPLE TEMP. (°C)
 WESTON LAB ID

SAMPLED BY: PRINT SIGNATURE
 COMMENTS / SPECIAL INSTRUCTIONS

RELINQUISHED BY	RECEIVED BY
Print Name	Signature
Firm	Firm
Date/Time	Date/Time
DAN MCCOY	[Signature]
WESTON SOLUTIONS	CIEL
5/15/14 1000	5/16/14 1040

2/5/16
 1270
 1271

The physical analyses listed in Table 1 will be performed at all 29 sites at both depth profiles to provide the most information possible for development of a transport model. Additionally, the role of sediment in chemical pollution is tied both to the particle size of sediment and to the amount of particulate organic carbon associated with the sediment. Collecting physical parameters at all sites will provide data for comparison with chemical results in a cost-effective manner since physical analyses are less expensive than chemical analyses. Assumptions regarding chemistry results may be able to be made at stations which have similar physical parameter analytical results. For example, finer grained sediment generally contains greater concentrations of metals. If the chemical data are plotted against grain-size information, distinct patterns may emerge. There is a strong positive correlation between increasing chemical concentration and the increasing percentage of fine-grained material (Horowitz 1985).

Table 1. Physical Parameters

Physical Analysis	Method	Depth Profile
Percent Solids	SM 2540B	Upper and Lower
Total Organic Carbon (TOC)	EPA 9060A	Upper and Lower
Laser Particle Size	ASTM D4464(M)	Upper and Lower

Top AND BOTTOM SAMPLES

Sediment from each of the 29 sample locations will also be analyzed for chemical constituents as presented in Table 2 below. The primary constituents (metals, mercury, and pesticides) will be analyzed at both depth profiles at the 29 locations. The secondary constituents (polychlorinated biphenyls [PCBs] and PAHs, phenols, and phthalates) will also be analyzed at each of the 29 locations, but only for the upper depth profile in order to provide the greatest cost/benefit. It is anticipated that the upper sediment profile will have a higher probability of contamination due to the relatively low depositional rate for sediment in the project area.

Table 2. Chemical Parameters

Chemical Analysis	Method	Depth Profile
Trace Metals	EPA 6020, ICP/MS	Upper and Lower
Mercury	EPA 7471	Upper and Lower
Organochlorine Pesticides	EPA 8081A	Upper and Lower
PCB Congeners	EPA 8270C SIM	Upper
PAHs, Phenols, Phthalates	EPA 8270C SIM	Upper

Top AND BOTTOM SAMPLES

Top SAMPLES ONLY

1.4.2 Water Quality Parameters

Crews will be equipped with a water quality meter to record general conditions at each sampling location. Parameters that will be measured include water depth, temperature, conductivity, salinity, hydrogen ion concentration (pH), dissolved oxygen (DO), and turbidity. Water quality readings and general field observations will be recorded onto field datasheets (Appendix A).

1271

FedEx 3 of 5
MPS# 0260 8677 5801 7355
Mstr# 8054 6947 2832 0200

FRI - 16 MAY 10:30A
PRIORITY OVERNIGHT

XH APVA

92841
CA-US
SNA

FedEx 2 of 5
MPS# 0260 8677 5801 7436
Mstr# 8054 6947 2832 0200

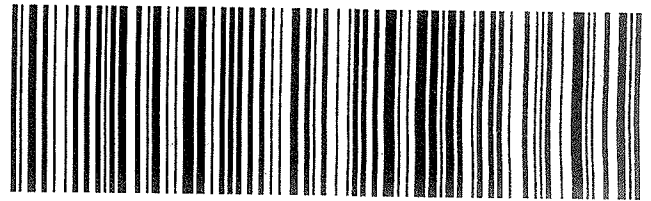
FRI - 16 MAY 10:30A
PRIORITY OVERNIGHT

XH APVA

92841
CA-US
SNA



FID 613848 15MAY14 MOBA 51AC1/62D3/65DD



FID 613848 15MAY14 MOBA 51AC1/62D3/65DD

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FedEx Express NEW Package US Airbill

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Form ID No. 0200

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1 From [Redacted] Date 5/15/14

Sender's Name DAN MCCOY Phone 760 458-4877

Company WESTON SOLUTIONS

Address 5817 DRYDEN PLACE SUITE 101

City CARLSBAD State CA ZIP 92008

4 Express Package Service *To most locations. Packages up to 150 lbs. NOTE: Service order has changed. Please select carefully. For packages over 150 lbs, use the new FedEx Express Freight US Airbill.

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2 or 3 Business Days

FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

FedEx 2Day A.M.
Second business morning.* Saturday Delivery NOT available.

FedEx 2Day
Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Express Saver
Third business day.* Saturday Delivery NOT available.

2 Your Internal Billing Reference

3 To Recipient's Name ATTN: BOB CLARK Phone 714 895-5494

Company CAL SCIENCE

Address 7740 LINCOLN WAY

Address [Redacted]

City GARDEN GROVE State CA ZIP 92841

HOLD Weekday
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HOLD Saturday
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5 Packaging *Declared value limit \$500.

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SATURDAY Delivery
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No Signature Required
Package may be left without obtaining a signature for delivery.

Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?
One box must be checked.

No Yes As per attached Shipper's Declaration Yes Shipper's Declaration not required Dry Ice Dry Ice, 9 UN 1845 x kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Sender: Recipient Third Party Credit Card Cash/Check

Total Packages Total Weight lbs. Credit Card Auth.



8054 6947 2832

644

*Our liability is limited to US\$100 unless you declare a higher value. See the current FedEx Service Guide for details.

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SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: Weston

DATE: 05/16/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2 . 1 °C - 0.3 °C (CF) = 1 . 8 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Checked by: LS

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Checked by: LS

Sample _____ No (Not Intact) Not Present Checked by: R12

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Collection date/time, matrix, and/or # of containers logged in based on sample labels.

No analysis requested. Not relinquished. No date/time relinquished.

Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------------------	-------------------------------------	--------------------------	--------------------------

Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Aqueous samples received within 15-minute holding time

<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Canister Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: R12

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: R12

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: R12



WORK ORDER #: **14-05-1271**

SAMPLE RECEIPT FORM

Cooler 2 of 2

CLIENT: Weston

DATE: 05/16/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 2.2 °C - 0.3 °C (CF) = 1.9 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Checked by: 15

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Checked by: 15

Sample _____ No (Not Intact) Not Present Checked by: 812

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOA_h VOA_{na2} 125AGB 125AGB_h 125AGB_p 1AGB 1AGB_{na2} 1AGB_s

500AGB 500AGJ 500AGJ_s 250AGB 250CGB 250CGB_s 1PB 1PB_{na} 500PB

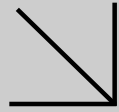
250PB 250PB_n 125PB 125PB_zna 100PJ 100PJ_{na2} _____ _____ _____

Air: Tedlar® Canister Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: 812

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: 802

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered Scanned by: 802

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WORK ORDER NUMBER: 14-05-1383

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Weston Solutions

Client Project Name: ADCNR Mobile Bay

Attention: Dan McCoy
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Approved for release on 06/17/2014 by:
Danielle Gonsman
Project Manager

ResultLink ▶

Email your PM ▶



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 Work Order Number: 14-05-1383

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CASE NARRATIVE**Calscience Work Order No.: 14-05-1383****Project ID: ADCNR – Mobile Bay**

Provided below is a narrative of our analytical effort, including any unique features or anomalies encountered as part of the analysis of the sediment samples.

Sample Condition on Receipt

One water and four sediment samples were received for this project on May 17, 2014. The samples were transferred to the laboratory in an ice-chest with wet ice, following strict chain-of-custody (COC) procedures. The temperature of the samples upon receipt at the laboratory was 2.7°C. All samples were logged into the Laboratory Information Management System (LIMS), given laboratory identification numbers and then stored in refrigeration units pending chemistry.

Tests Performed

Sediment:

Total Solids by SM 2540B
Trace Metals by EPA 6020
Mercury by EPA 7471A
Total Organic Carbon by EPA 9060A
Chlorinated Pesticides by EPA 8081A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Particle Size by ASTM D4464 (M)

Field Blank:

Trace Metals by EPA 6020
Mercury by EPA 7471A
PCB Congeners by EPA 8270C SIM
PAHs, Phenols and Phthalates by EPA 8270C SIM
Chlorinated Pesticides by EPA 8081A

Data Summary

The sediment samples were homogenized prior to analysis.

Holding times

All holding times were met with the following exceptions.

The OC Pesticide analysis for the Field Blank was extracted past holding time due to laboratory error.

The laboratory duplicate was analyzed outside the EPA Method recommended solid sample holding time for SVOCs, Pesticides, PCBs and Total Solids. However, the samples were frozen after collection (prior to holding time expiration) at -18°C. Calscience follows SWAMP criteria and the Puget Sound Protocol (USEPA/PSWQAT, 1997, Table 2) for holding times in sediment samples, which states holding times may be extended up to six months to one year (two years for metals) if stored frozen at -18°C after collection. Therefore, the sample results have not been flagged as exceeding the EPA Method recommended holding times.

Blanks

Concentrations of target analytes in the method blank were found to be below reporting limits for all analyses with the exception of the following.

A trace amount of Copper was detected in two of the method blanks. However, the copper concentrations in the samples were 10 times or more than that of the Method Blank, therefore the results are released with the appropriate qualifiers.

A trace amount (below the RL) of Bis (2-ethylhexyl) phthalate and butyl benzyl phthalate were detected in one or more of the EPA 8270C Method Blanks. If detected in the samples, the results have been flagged with a “B” qualifier.

Reporting Limits

The Method Detection Limits were met. All sample results were evaluated to the Method Detection Limits, and results detected below the RL were flagged with a J-qualifier.

Laboratory Control Samples

A Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were performed for each applicable test. All parameters were within established control limits with the exception of the RPD for Pyrene.

Matrix Spikes

Matrix spiking was performed at the required frequencies using project and non-project samples. The matrix spike parameters outside the acceptable control limits were noted below for project specific/ Work Order specific matrix spikes only.

The Zinc MSD recovery was above the established control limits matrix spike sample CB-S-09 BOTTOM. Since the LCS/LCSD recoveries were in control, the results are released with no further action.

The MS, MSD and/or RPDs for several OC Pesticide analytes were outside the control limits in matrix spike sample CB-S-10 TOP. Since the LCS/LCSDs were in control, the results are released with no further action.

Surrogates

Surrogate recoveries for all applicable tests and samples were within acceptable control limits with the following exceptions.

One of the PCB Congeners surrogates, p-Terphenyl-d14, was outside of the established control limits in one sample. The results were confirmed by re-analysis and are released with no further action since the PCBs were ND.

Laboratory Duplicate

A Lab Dup was analyzed using sample CB-S-09 TOP. The RPDs were within acceptable ranges unless otherwise noted

Acronyms

LCS - Laboratory Control Sample
PDS - Post Digestion Spike
MS/MSD- Matrix Spike/Matrix Spike Duplicate
RPD- Relative Percent Difference

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 05/17/14. They were assigned to Work Order 14-05-1383.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Sample Summary

Client: Weston Solutions	Work Order: 14-05-1383
5817 Dryden Place, Suite 101	Project Name: ADCNR Mobile Bay
Carlsbad, CA 92008-9999	PO Number:
	Date/Time Received: 05/17/14 10:30
	Number of Containers: 10

Attn: Dan McCoy

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
CB-S-10 TOP	14-05-1383-1	05/16/14 10:05	1	Sediment
CB-S-10 BOTTOM	14-05-1383-2	05/16/14 10:10	1	Sediment
CB-S-09 TOP	14-05-1383-3	05/16/14 10:45	1	Sediment
CB-S-09 BOTTOM	14-05-1383-4	05/16/14 11:00	1	Sediment
FIELD BLANK	14-05-1383-5	05/16/14 10:30	4	Aqueous
CB-S-09 TOP LAB DUP	14-05-1383-6	05/16/14 10:45	1	Sediment
CB-S-10 TOP (Particle size dup)	14-05-1383-7	05/16/14 10:05	1	Sediment

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: EPA 9060A
Units: %

Project: ADCNR Mobile Bay

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-A	05/16/14 10:05	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1

Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	1.6	0.11	0.025	1.00	

CB-S-10 BOTTOM	14-05-1383-2-A	05/16/14 10:10	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	1.0	0.082	0.020	1.00	

CB-S-09 TOP	14-05-1383-3-A	05/16/14 10:45	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.90	0.077	0.019	1.00	

CB-S-09 BOTTOM	14-05-1383-4-A	05/16/14 11:00	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.43	0.070	0.017	1.00	

CB-S-09 TOP LAB DUP	14-05-1383-6-A	05/16/14 10:45	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1
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Comment(s): - Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.99	0.076	0.019	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	EPA 9060A
	Units:	%

Project: ADCNR Mobile Bay

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-013-1047	N/A	Solid	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	ND	0.050	0.012	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-013-1055	N/A	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Carbon, Total Organic	ND	0.050	0.012	1.00	

Analytical Report

Weston Solutions	Date Received: 05/17/14
5817 Dryden Place, Suite 101	Work Order: 14-05-1383
Carlsbad, CA 92008-9999	Preparation: N/A
	Method: SM 2540 B (M)
	Units: %

Project: ADCNR Mobile Bay

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-A	05/16/14 10:05	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	47.6	0.100	0.100	1.00	

CB-S-10 BOTTOM	14-05-1383-2-A	05/16/14 10:10	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	61.2	0.100	0.100	1.00	

CB-S-09 TOP	14-05-1383-3-A	05/16/14 10:45	Sediment	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	64.6	0.100	0.100	1.00	

CB-S-09 BOTTOM	14-05-1383-4-A	05/16/14 11:00	Sediment	N/A	05/19/14	05/20/14 16:00	E0520TSB3
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	71.9	0.100	0.100	1.00	

CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	N/A	06/09/14	06/09/14 20:00	E0609TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	65.4	0.100	0.100	1.00	

Method Blank	099-05-019-2580	N/A	Solid	N/A	05/19/14	05/20/14 13:00	E0520TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total	ND	0.100	0.100	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	N/A
	Method:	SM 2540 B (M)
	Units:	%

Project: ADCNR Mobile Bay

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-05-019-2578	N/A	Solid	N/A	05/19/14	05/20/14 16:00	E0520TSB3

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Method Blank	099-05-019-2602	N/A	Solid	N/A	06/09/14	06/09/14 20:00	E0609TSB1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Solids, Total	ND	0.100	0.100	1.00	

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3020A Total
 Method: EPA 6020
 Units: mg/L

Project: ADCNR Mobile Bay

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FIELD BLANK	14-05-1383-5-D	05/16/14 10:30	Aqueous	ICP/MS 03	05/19/14	05/19/14 21:47	140519L06

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.00100	0.000386	1.00	
Cadmium	ND	0.00100	0.000128	1.00	
Chromium	ND	0.00100	0.000402	1.00	
Copper	ND	0.00100	0.000140	1.00	
Lead	ND	0.00100	0.0000898	1.00	
Nickel	ND	0.00100	0.000132	1.00	
Selenium	ND	0.00100	0.000168	1.00	
Silver	ND	0.00100	0.000111	1.00	
Zinc	0.000839	0.00500	0.000479	1.00	J

Method Blank	096-06-003-4429	N/A	Aqueous	ICP/MS 03	05/19/14	05/19/14 21:41	140519L06
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.00100	0.000386	1.00	
Cadmium	ND	0.00100	0.000128	1.00	
Chromium	ND	0.00100	0.000402	1.00	
Copper	ND	0.00100	0.000140	1.00	
Lead	ND	0.00100	0.0000898	1.00	
Nickel	ND	0.00100	0.000132	1.00	
Selenium	ND	0.00100	0.000168	1.00	
Silver	ND	0.00100	0.000111	1.00	
Zinc	ND	0.00500	0.000479	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-AA	05/16/14 10:05	Sediment	ICP/MS 04	05/20/14	05/21/14 19:38	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	4.82	0.210	0.183	1.00	
Cadmium	0.351	0.210	0.120	1.00	
Chromium	23.0	0.210	0.130	1.00	
Copper	11.1	0.210	0.0881	1.00	B
Lead	13.7	0.210	0.138	1.00	
Nickel	12.6	0.210	0.106	1.00	
Selenium	0.581	0.210	0.154	1.00	
Silver	0.0852	0.210	0.0658	1.00	J
Zinc	68.4	2.10	1.67	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 BOTTOM	14-05-1383-2-AA	05/16/14 10:10	Sediment	ICP/MS 04	05/20/14	05/21/14 19:42	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	3.60	0.163	0.143	1.00	
Cadmium	0.231	0.163	0.0935	1.00	
Chromium	21.1	0.163	0.101	1.00	
Copper	7.83	0.163	0.0685	1.00	B
Lead	9.01	0.163	0.108	1.00	
Nickel	10.5	0.163	0.0827	1.00	
Selenium	0.281	0.163	0.119	1.00	
Silver	0.0516	0.163	0.0511	1.00	J
Zinc	49.8	1.63	1.30	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3050B
 Method: EPA 6020
 Units: mg/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP	14-05-1383-3-AA	05/16/14 10:45	Sediment	ICP/MS 04	05/20/14	05/21/14 15:26	140520L04E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.73	0.155	0.135	1.00	
Cadmium	0.171	0.155	0.0886	1.00	
Chromium	9.23	0.155	0.0961	1.00	
Copper	3.82	0.155	0.0649	1.00	B
Lead	5.09	0.155	0.102	1.00	
Nickel	5.08	0.155	0.0784	1.00	
Selenium	0.197	0.155	0.113	1.00	
Silver	ND	0.155	0.0485	1.00	
Zinc	31.7	1.55	1.23	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 BOTTOM	14-05-1383-4-AA	05/16/14 11:00	Sediment	ICP/MS 04	05/20/14	05/21/14 19:35	140520L05E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	1.36	0.139	0.121	1.00	
Cadmium	0.136	0.139	0.0796	1.00	J
Chromium	6.11	0.139	0.0863	1.00	
Copper	2.36	0.139	0.0583	1.00	B
Lead	2.90	0.139	0.0917	1.00	
Nickel	3.86	0.139	0.0704	1.00	
Selenium	0.120	0.139	0.102	1.00	J
Silver	ND	0.139	0.0435	1.00	
Zinc	19.1	1.39	1.11	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	ICP/MS 03	06/09/14	06/09/14 21:37	140609L01E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	2.48	0.153	0.134	1.00	
Cadmium	0.213	0.153	0.0875	1.00	
Chromium	9.26	0.153	0.0949	1.00	
Copper	3.96	0.153	0.0641	1.00	
Lead	6.24	0.153	0.101	1.00	
Nickel	5.57	0.153	0.0774	1.00	
Selenium	ND	0.153	0.112	1.00	
Silver	ND	0.153	0.0479	1.00	
Zinc	41.9	1.53	1.22	1.00	

Method Blank	099-15-254-206	N/A	Solid	ICP/MS 04	05/20/14	05/21/14 12:53	140520L04E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	0.0580	0.100	0.0419	1.00	J
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3050B
	Method:	EPA 6020
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-254-207	N/A	Solid	ICP/MS 04	05/20/14	05/21/14 12:56	140520L05E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	0.0475	0.100	0.0419	1.00	J
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

Method Blank	099-15-254-212	N/A	Solid	ICP/MS 03	06/09/14	06/09/14 19:44	140609L01E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.100	0.0873	1.00	
Cadmium	ND	0.100	0.0572	1.00	
Chromium	ND	0.100	0.0621	1.00	
Copper	ND	0.100	0.0419	1.00	
Lead	ND	0.100	0.0659	1.00	
Nickel	ND	0.100	0.0506	1.00	
Selenium	ND	0.100	0.0731	1.00	
Silver	ND	0.100	0.0313	1.00	
Zinc	ND	1.00	0.795	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 7470A Total
	Method:	EPA 7470A
	Units:	mg/L

Project: ADCNR Mobile Bay Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FIELD BLANK	14-05-1383-5-B	05/16/14 10:30	Aqueous	Mercury 04	05/19/14	05/20/14 14:40	140519L01A

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0000500	0.0000321	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-510-479	N/A	Aqueous	Mercury 04	05/19/14	05/19/14 14:43	140519L01A

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0000500	0.0000321	1.00	

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg

Project: ADCNR Mobile Bay Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-AA	05/16/14 10:05	Sediment	Mercury 05	05/21/14	05/21/14 21:24	140521L06E

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0607	0.0400	0.0117	1.00	

CB-S-10 BOTTOM	14-05-1383-2-AA	05/16/14 10:10	Sediment	Mercury 05	05/21/14	05/21/14 21:26	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0250	0.0306	0.00899	1.00	J

CB-S-09 TOP	14-05-1383-3-AA	05/16/14 10:45	Sediment	Mercury 05	05/21/14	05/21/14 21:28	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0172	0.0290	0.00852	1.00	J

CB-S-09 BOTTOM	14-05-1383-4-AA	05/16/14 11:00	Sediment	Mercury 05	05/21/14	05/21/14 18:50	140521L06E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0278	0.00817	1.00	

CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	Mercury 05	06/09/14	06/09/14 15:16	140609L01E
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Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	0.0244	0.0287	0.00842	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 7471A Total
	Method:	EPA 7471A
	Units:	mg/kg
Project: ADCNR Mobile Bay		Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-16-278-21	N/A	Solid	Mercury 05	05/21/14	05/21/14 18:17	140521L06E

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0200	0.00587	1.00	

Method Blank	099-16-278-27	N/A	Solid	Mercury 05	06/09/14	06/09/14 14:01	140609L01E
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Mercury	ND	0.0200	0.00587	1.00	

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: ASTM D4464 (M)
Units: %

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-A	05/16/14 10:05	Sediment	LPSA 1	N/A	05/19/14 16:51	

Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	24.46	
Silt (0.00391 to 0.0625mm)	75.54	
Total Silt and Clay (0 to 0.0625mm)	100.0	
Very Fine Sand (0.0625 to 0.125mm)	ND	
Fine Sand (0.125 to 0.25mm)	ND	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-S-10 BOTTOM	14-05-1383-2-A	05/16/14 10:10	Sediment	LPSA 1	N/A	05/19/14 16:59	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	40.88	
Silt (0.00391 to 0.0625mm)	59.12	
Total Silt and Clay (0 to 0.0625mm)	100.0	
Very Fine Sand (0.0625 to 0.125mm)	ND	
Fine Sand (0.125 to 0.25mm)	ND	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

CB-S-09 TOP	14-05-1383-3-A	05/16/14 10:45	Sediment	LPSA 1	N/A	05/19/14 17:07	
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Parameter	Result	Qualifiers
Clay (less than 0.00391mm)	8.64	
Silt (0.00391 to 0.0625mm)	39.60	
Total Silt and Clay (0 to 0.0625mm)	48.25	
Very Fine Sand (0.0625 to 0.125mm)	29.80	
Fine Sand (0.125 to 0.25mm)	21.90	
Medium Sand (0.25 to 0.5mm)	0.050	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: N/A
 Method: ASTM D4464 (M)
 Units: %

Project: ADCNR Mobile Bay

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 BOTTOM	14-05-1383-4-A	05/16/14 11:00	Sediment	LPSA 1	N/A	05/19/14 17:14	

<u>Parameter</u>	<u>Result</u>	<u>Qualifiers</u>
Clay (less than 0.00391mm)	2.09	
Silt (0.00391 to 0.0625mm)	10.00	
Total Silt and Clay (0 to 0.0625mm)	12.09	
Very Fine Sand (0.0625 to 0.125mm)	28.90	
Fine Sand (0.125 to 0.25mm)	51.49	
Medium Sand (0.25 to 0.5mm)	7.49	
Coarse Sand (0.5 to 1mm)	0.030	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP (Particle size dup)	14-05-1383-7-A	05/16/14 10:05	Sediment	LPSA 1	N/A	05/19/14 18:13	

<u>Parameter</u>	<u>Result</u>	<u>Qualifiers</u>
Clay (less than 0.00391mm)	21.65	
Silt (0.00391 to 0.0625mm)	64.05	
Total Silt and Clay (0 to 0.0625mm)	85.70	
Very Fine Sand (0.0625 to 0.125mm)	12.91	
Fine Sand (0.125 to 0.25mm)	1.39	
Medium Sand (0.25 to 0.5mm)	ND	
Coarse Sand (0.5 to 1mm)	ND	
Very Coarse Sand (1 to 2mm)	ND	
Gravel (greater than 2mm)	ND	


 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-AA	05/16/14 10:05	Sediment	GC 66	05/25/14	05/28/14 15:16	140525L09

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	2.1	0.66	1.00	
Alpha-BHC	ND	2.1	0.68	1.00	
Beta-BHC	ND	2.1	0.55	1.00	
Delta-BHC	ND	2.1	0.54	1.00	
Gamma-BHC	ND	2.1	0.73	1.00	
Chlordane	ND	21	6.9	1.00	
Dieldrin	ND	2.1	0.69	1.00	
Trans-nonachlor	ND	2.1	0.60	1.00	
2,4'-DDD	ND	2.1	0.71	1.00	
2,4'-DDE	6.9	2.1	0.64	1.00	
2,4'-DDT	ND	2.1	0.63	1.00	
4,4'-DDD	1.3	2.1	0.66	1.00	J
4,4'-DDE	6.3	2.1	0.63	1.00	
4,4'-DDT	ND	2.1	0.70	1.00	
Endosulfan I	ND	2.1	0.55	1.00	
Endosulfan II	ND	2.1	0.59	1.00	
Endosulfan Sulfate	ND	2.1	0.71	1.00	
Endrin	ND	2.1	0.75	1.00	
Endrin Aldehyde	ND	2.1	0.51	1.00	
Endrin Ketone	ND	2.1	0.73	1.00	
Heptachlor	ND	2.1	0.68	1.00	
Heptachlor Epoxide	ND	2.1	0.75	1.00	
Methoxychlor	ND	2.1	0.68	1.00	
Toxaphene	ND	42	13	1.00	
Alpha Chlordane	ND	2.1	0.67	1.00	
Gamma Chlordane	ND	2.1	0.67	1.00	
Cis-nonachlor	ND	2.1	0.62	1.00	
Oxychlordane	ND	2.1	0.59	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	112	25-145			
Decachlorobiphenyl	108	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 BOTTOM	14-05-1383-2-AA	05/16/14 10:10	Sediment	GC 66	05/25/14	05/28/14 15:30	140525L09

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.6	0.51	1.00	
Alpha-BHC	ND	1.6	0.53	1.00	
Beta-BHC	ND	1.6	0.43	1.00	
Delta-BHC	ND	1.6	0.42	1.00	
Gamma-BHC	ND	1.6	0.56	1.00	
Chlordane	ND	16	5.3	1.00	
Dieldrin	ND	1.6	0.54	1.00	
Trans-nonachlor	ND	1.6	0.47	1.00	
2,4'-DDD	ND	1.6	0.55	1.00	
2,4'-DDE	ND	1.6	0.50	1.00	
2,4'-DDT	ND	1.6	0.49	1.00	
4,4'-DDD	ND	1.6	0.52	1.00	
4,4'-DDE	ND	1.6	0.49	1.00	
4,4'-DDT	ND	1.6	0.55	1.00	
Endosulfan I	ND	1.6	0.43	1.00	
Endosulfan II	ND	1.6	0.46	1.00	
Endosulfan Sulfate	ND	1.6	0.55	1.00	
Endrin	ND	1.6	0.58	1.00	
Endrin Aldehyde	ND	1.6	0.40	1.00	
Endrin Ketone	ND	1.6	0.57	1.00	
Heptachlor	ND	1.6	0.52	1.00	
Heptachlor Epoxide	ND	1.6	0.58	1.00	
Methoxychlor	ND	1.6	0.53	1.00	
Toxaphene	ND	33	10	1.00	
Alpha Chlordane	ND	1.6	0.52	1.00	
Gamma Chlordane	ND	1.6	0.52	1.00	
Cis-nonachlor	ND	1.6	0.48	1.00	
Oxychlordane	ND	1.6	0.46	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	102	25-145			
Decachlorobiphenyl	92	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP	14-05-1383-3-AA	05/16/14 10:45	Sediment	GC 66	05/25/14	05/28/14 15:44	140525L09

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.49	1.00	
Alpha-BHC	ND	1.5	0.50	1.00	
Beta-BHC	ND	1.5	0.41	1.00	
Delta-BHC	ND	1.5	0.40	1.00	
Gamma-BHC	ND	1.5	0.54	1.00	
Chlordane	ND	15	5.1	1.00	
Dieldrin	ND	1.5	0.51	1.00	
Trans-nonachlor	ND	1.5	0.45	1.00	
2,4'-DDD	ND	1.5	0.52	1.00	
2,4'-DDE	4.1	1.5	0.47	1.00	
2,4'-DDT	ND	1.5	0.47	1.00	
4,4'-DDD	0.69	1.5	0.49	1.00	J
4,4'-DDE	3.6	1.5	0.46	1.00	
4,4'-DDT	ND	1.5	0.52	1.00	
Endosulfan I	ND	1.5	0.41	1.00	
Endosulfan II	ND	1.5	0.43	1.00	
Endosulfan Sulfate	ND	1.5	0.52	1.00	
Endrin	ND	1.5	0.55	1.00	
Endrin Aldehyde	ND	1.5	0.38	1.00	
Endrin Ketone	ND	1.5	0.54	1.00	
Heptachlor	ND	1.5	0.50	1.00	
Heptachlor Epoxide	ND	1.5	0.55	1.00	
Methoxychlor	ND	1.5	0.50	1.00	
Toxaphene	ND	31	9.8	1.00	
Alpha Chlordane	ND	1.5	0.50	1.00	
Gamma Chlordane	ND	1.5	0.49	1.00	
Cis-nonachlor	ND	1.5	0.45	1.00	
Oxychlordane	ND	1.5	0.44	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	105	25-145			
Decachlorobiphenyl	99	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 BOTTOM	14-05-1383-4-AA	05/16/14 11:00	Sediment	GC 66	05/25/14	05/28/14 15:58	140525L09

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.4	0.44	1.00	
Alpha-BHC	ND	1.4	0.45	1.00	
Beta-BHC	ND	1.4	0.37	1.00	
Delta-BHC	ND	1.4	0.36	1.00	
Gamma-BHC	ND	1.4	0.48	1.00	
Chlordane	ND	14	4.5	1.00	
Dieldrin	ND	1.4	0.46	1.00	
Trans-nonachlor	ND	1.4	0.40	1.00	
2,4'-DDD	ND	1.4	0.47	1.00	
2,4'-DDE	1.6	1.4	0.42	1.00	
2,4'-DDT	ND	1.4	0.42	1.00	
4,4'-DDD	ND	1.4	0.44	1.00	
4,4'-DDE	1.0	1.4	0.42	1.00	J
4,4'-DDT	ND	1.4	0.46	1.00	
Endosulfan I	ND	1.4	0.36	1.00	
Endosulfan II	ND	1.4	0.39	1.00	
Endosulfan Sulfate	ND	1.4	0.47	1.00	
Endrin	ND	1.4	0.50	1.00	
Endrin Aldehyde	ND	1.4	0.34	1.00	
Endrin Ketone	ND	1.4	0.48	1.00	
Heptachlor	ND	1.4	0.45	1.00	
Heptachlor Epoxide	ND	1.4	0.49	1.00	
Methoxychlor	ND	1.4	0.45	1.00	
Toxaphene	ND	28	8.8	1.00	
Alpha Chlordane	ND	1.4	0.45	1.00	
Gamma Chlordane	ND	1.4	0.44	1.00	
Cis-nonachlor	ND	1.4	0.41	1.00	
Oxychlordane	ND	1.4	0.39	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	113	25-145			
Decachlorobiphenyl	104	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8081A
	Units:	ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	GC 51	06/09/14	06/11/14 12:43	140609L10

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Aldrin	ND	1.5	0.48	1.00	
Alpha-BHC	ND	1.5	0.49	1.00	
Beta-BHC	ND	1.5	0.40	1.00	
Delta-BHC	ND	1.5	0.39	1.00	
Gamma-BHC	ND	1.5	0.53	1.00	
Chlordane	ND	15	5.0	1.00	
Dieldrin	ND	1.5	0.50	1.00	
Trans-nonachlor	ND	1.5	0.44	1.00	
2,4'-DDD	ND	1.5	0.52	1.00	
2,4'-DDE	3.8	1.5	0.46	1.00	
2,4'-DDT	ND	1.5	0.46	1.00	
4,4'-DDD	1.5	1.5	0.48	1.00	J
4,4'-DDE	3.5	1.5	0.46	1.00	
4,4'-DDT	ND	1.5	0.51	1.00	
Endosulfan I	ND	1.5	0.40	1.00	
Endosulfan II	ND	1.5	0.43	1.00	
Endosulfan Sulfate	ND	1.5	0.51	1.00	
Endrin	ND	1.5	0.55	1.00	
Endrin Aldehyde	ND	1.5	0.37	1.00	
Endrin Ketone	ND	1.5	0.53	1.00	
Heptachlor	ND	1.5	0.49	1.00	
Heptachlor Epoxide	ND	1.5	0.54	1.00	
Methoxychlor	ND	1.5	0.49	1.00	
Toxaphene	ND	30	9.7	1.00	
Alpha Chlordane	ND	1.5	0.49	1.00	
Gamma Chlordane	ND	1.5	0.48	1.00	
Cis-nonachlor	ND	1.5	0.45	1.00	
Oxychlordane	ND	1.5	0.43	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
2,4,5,6-Tetrachloro-m-Xylene	107	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-284	N/A	Solid	GC 66	05/25/14	05/28/14 15:02	140525L09

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	120	25-145			
Decachlorobiphenyl	106	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-858-288	N/A	Solid	GC 51	06/09/14	06/11/14 10:49	140609L10

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Aldrin	ND	1.0	0.31	1.00	
Alpha-BHC	ND	1.0	0.32	1.00	
Beta-BHC	ND	1.0	0.26	1.00	
Delta-BHC	ND	1.0	0.26	1.00	
Gamma-BHC	ND	1.0	0.35	1.00	
Chlordane	ND	10	3.3	1.00	
Dieldrin	ND	1.0	0.33	1.00	
Trans-nonachlor	ND	1.0	0.29	1.00	
2,4'-DDD	ND	1.0	0.34	1.00	
2,4'-DDE	ND	1.0	0.31	1.00	
2,4'-DDT	ND	1.0	0.30	1.00	
4,4'-DDD	ND	1.0	0.32	1.00	
4,4'-DDE	ND	1.0	0.30	1.00	
4,4'-DDT	ND	1.0	0.33	1.00	
Endosulfan I	ND	1.0	0.26	1.00	
Endosulfan II	ND	1.0	0.28	1.00	
Endosulfan Sulfate	ND	1.0	0.34	1.00	
Endrin	ND	1.0	0.36	1.00	
Endrin Aldehyde	ND	1.0	0.24	1.00	
Endrin Ketone	ND	1.0	0.35	1.00	
Heptachlor	ND	1.0	0.32	1.00	
Heptachlor Epoxide	ND	1.0	0.36	1.00	
Methoxychlor	ND	1.0	0.32	1.00	
Toxaphene	ND	20	6.3	1.00	
Alpha Chlordane	ND	1.0	0.32	1.00	
Gamma Chlordane	ND	1.0	0.32	1.00	
Cis-nonachlor	ND	1.0	0.29	1.00	
Oxychlordane	ND	1.0	0.28	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,5,6-Tetrachloro-m-Xylene	123	25-145			
Decachlorobiphenyl	110	24-168			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3510C
Method: EPA 8081A
Units: ug/L

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FIELD BLANK	14-05-1383-5-E	05/16/14 10:30	Aqueous	GC 44	06/09/14	06/14/14 03:18	140609L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Oxychlordane	ND	0.010	0.0034	1.00	ET
Aldrin	ND	0.010	0.0021	1.00	ET
Alpha Chlordane	ND	0.010	0.0032	1.00	ET
Alpha-BHC	ND	0.010	0.0039	1.00	ET
Beta-BHC	ND	0.010	0.0035	1.00	ET
Chlordane	ND	0.025	0.021	1.00	ET
Cis-nonachlor	ND	0.010	0.0035	1.00	ET
2,4'-DDD	ND	0.010	0.0031	1.00	ET
4,4'-DDD	ND	0.010	0.0036	1.00	ET
4,4'-DDE	ND	0.010	0.0036	1.00	ET
2,4'-DDE	ND	0.010	0.0062	1.00	ET
2,4'-DDT	ND	0.010	0.0043	1.00	ET
4,4'-DDT	ND	0.010	0.0033	1.00	ET
Delta-BHC	ND	0.010	0.0033	1.00	ET
Dieldrin	ND	0.010	0.0031	1.00	ET
Endosulfan I	ND	0.010	0.0032	1.00	ET
Endosulfan II	ND	0.010	0.0035	1.00	ET
Endosulfan Sulfate	ND	0.010	0.0038	1.00	ET
Endrin	ND	0.010	0.0036	1.00	ET
Endrin Aldehyde	ND	0.010	0.0076	1.00	ET
Endrin Ketone	ND	0.010	0.0040	1.00	ET
Gamma Chlordane	ND	0.010	0.0033	1.00	ET
Gamma-BHC	ND	0.010	0.0037	1.00	ET
Heptachlor	ND	0.010	0.0036	1.00	ET
Heptachlor Epoxide	ND	0.010	0.0034	1.00	ET
Hexachlorobenzene	ND	0.010	0.0058	1.00	ET
Methoxychlor	ND	0.010	0.0043	1.00	ET
Mirex	ND	0.010	0.0045	1.00	ET
Toxaphene	ND	0.12	0.047	1.00	ET
Trans-nonachlor	ND	0.010	0.0048	1.00	ET
Surrogate	Rec. (%)	Control Limits	Qualifiers		
Decachlorobiphenyl	85	50-150			
2,4,5,6-Tetrachloro-m-Xylene	114	50-150			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3510C
	Method:	EPA 8081A
	Units:	ug/L

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-435-143	N/A	Aqueous	GC 44	06/09/14	06/14/14 01:52	140609L05

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Oxychlordane	ND	0.010	0.0034	1.00	
Aldrin	ND	0.010	0.0021	1.00	
Alpha Chlordane	ND	0.010	0.0032	1.00	
Alpha-BHC	ND	0.010	0.0039	1.00	
Beta-BHC	ND	0.010	0.0035	1.00	
Chlordane	ND	0.025	0.021	1.00	
Cis-nonachlor	ND	0.010	0.0035	1.00	
2,4'-DDD	ND	0.010	0.0031	1.00	
4,4'-DDD	ND	0.010	0.0036	1.00	
4,4'-DDE	ND	0.010	0.0036	1.00	
2,4'-DDE	ND	0.010	0.0062	1.00	
2,4'-DDT	ND	0.010	0.0043	1.00	
4,4'-DDT	ND	0.010	0.0033	1.00	
Delta-BHC	ND	0.010	0.0033	1.00	
Dieldrin	ND	0.010	0.0031	1.00	
Endosulfan I	ND	0.010	0.0032	1.00	
Endosulfan II	ND	0.010	0.0035	1.00	
Endosulfan Sulfate	ND	0.010	0.0038	1.00	
Endrin	ND	0.010	0.0036	1.00	
Endrin Aldehyde	ND	0.010	0.0076	1.00	
Endrin Ketone	ND	0.010	0.0040	1.00	
Gamma Chlordane	ND	0.010	0.0033	1.00	
Gamma-BHC	ND	0.010	0.0037	1.00	
Heptachlor	ND	0.010	0.0036	1.00	
Heptachlor Epoxide	ND	0.010	0.0034	1.00	
Hexachlorobenzene	ND	0.010	0.0058	1.00	
Methoxychlor	ND	0.010	0.0043	1.00	
Mirex	ND	0.010	0.0045	1.00	
Toxaphene	ND	0.12	0.047	1.00	
Trans-nonachlor	ND	0.010	0.0048	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
Decachlorobiphenyl	82	50-150			
2,4,5,6-Tetrachloro-m-Xylene	103	50-150			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3510C
	Method:	EPA 8270C SIM
	Units:	ug/L

Project: ADCNR Mobile Bay Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FIELD BLANK	14-05-1383-5-E	05/16/14 10:30	Aqueous	GC/MS MM	05/23/14	05/28/14 23:06	140523L07

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Isophorone	ND	1.0	0.036	1.00	
1-Methylnaphthalene	ND	0.20	0.040	1.00	
2,4,5-Trichlorophenol	ND	1.0	0.043	1.00	
2,4,6-Trichlorophenol	ND	1.0	0.034	1.00	
2,4-Dichlorophenol	ND	1.0	0.034	1.00	
2,4-Dimethylphenol	ND	1.0	0.057	1.00	
2,4-Dinitrophenol	ND	10	5.0	1.00	
2-Chlorophenol	ND	1.0	0.050	1.00	
2-Methylnaphthalene	ND	0.20	0.035	1.00	
2-Methylphenol	ND	1.0	0.053	1.00	
2-Nitrophenol	ND	1.0	0.035	1.00	
3/4-Methylphenol	ND	1.0	0.036	1.00	
4,6-Dinitro-2-Methylphenol	ND	10	4.0	1.00	
4-Chloro-3-Methylphenol	ND	1.0	0.034	1.00	
4-Nitrophenol	ND	20	3.8	1.00	
Acenaphthene	ND	0.20	0.041	1.00	
Acenaphthylene	ND	0.20	0.039	1.00	
Anthracene	ND	0.20	0.048	1.00	
Benzo (a) Anthracene	ND	0.20	0.046	1.00	
Benzo (a) Pyrene	ND	0.20	0.047	1.00	
Benzo (b) Fluoranthene	ND	0.20	0.051	1.00	
Benzo (g,h,i) Perylene	ND	0.20	0.045	1.00	
Benzo (k) Fluoranthene	ND	0.20	0.060	1.00	
Bis(2-Ethylhexyl) Phthalate	0.22	5.0	0.049	1.00	B,J
Butyl Benzyl Phthalate	0.17	5.0	0.053	1.00	B,J
Chrysene	ND	0.20	0.048	1.00	
Di-n-Butyl Phthalate	ND	5.0	0.080	1.00	
Di-n-Octyl Phthalate	ND	5.0	0.048	1.00	
Dibenz (a,h) Anthracene	ND	0.20	0.049	1.00	
Diethyl Phthalate	ND	5.0	0.053	1.00	
Dimethyl Phthalate	ND	5.0	0.046	1.00	
Fluoranthene	ND	0.20	0.047	1.00	
Fluorene	ND	0.20	0.045	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.20	0.050	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3510C
Method: EPA 8270C SIM
Units: ug/L

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
N-Nitrosodimethylamine	ND	1.0	0.049	1.00	
Naphthalene	ND	0.20	0.044	1.00	
Pentachlorophenol	ND	10	4.1	1.00	
Phenanthrene	ND	0.20	0.050	1.00	
Phenol	0.99	1.0	0.032	1.00	J
Pyrene	ND	0.20	0.051	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	78	24-152	
2-Fluorobiphenyl	55	33-144	
2-Fluorophenol	51	31-142	
Nitrobenzene-d5	65	28-139	
p-Terphenyl-d14	67	23-160	
Phenol-d6	39	30-136	

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3510C
	Method:	EPA 8270C SIM
	Units:	ug/L

Project: ADCNR Mobile Bay Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-430-213	N/A	Aqueous	GC/MS MM	05/23/14	05/29/14 12:25	140523L07

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Isophorone	ND	1.0	0.036	1.00	
1-Methylnaphthalene	ND	0.20	0.040	1.00	
2,4,5-Trichlorophenol	ND	1.0	0.043	1.00	
2,4,6-Trichlorophenol	ND	1.0	0.034	1.00	
2,4-Dichlorophenol	ND	1.0	0.034	1.00	
2,4-Dimethylphenol	ND	1.0	0.057	1.00	
2,4-Dinitrophenol	ND	10	5.0	1.00	
2-Chlorophenol	ND	1.0	0.050	1.00	
2-Methylnaphthalene	ND	0.20	0.035	1.00	
2-Methylphenol	ND	1.0	0.053	1.00	
2-Nitrophenol	ND	1.0	0.035	1.00	
3/4-Methylphenol	ND	1.0	0.036	1.00	
4,6-Dinitro-2-Methylphenol	ND	10	4.0	1.00	
4-Chloro-3-Methylphenol	ND	1.0	0.034	1.00	
4-Nitrophenol	ND	20	3.8	1.00	
Acenaphthene	ND	0.20	0.041	1.00	
Acenaphthylene	ND	0.20	0.039	1.00	
Anthracene	ND	0.20	0.048	1.00	
Benzo (a) Anthracene	ND	0.20	0.046	1.00	
Benzo (a) Pyrene	ND	0.20	0.047	1.00	
Benzo (b) Fluoranthene	ND	0.20	0.051	1.00	
Benzo (g,h,i) Perylene	ND	0.20	0.045	1.00	
Benzo (k) Fluoranthene	ND	0.20	0.060	1.00	
Bis(2-Ethylhexyl) Phthalate	0.13	5.0	0.049	1.00	J
Butyl Benzyl Phthalate	0.086	5.0	0.053	1.00	J
Chrysene	ND	0.20	0.048	1.00	
Di-n-Butyl Phthalate	ND	5.0	0.080	1.00	
Di-n-Octyl Phthalate	ND	5.0	0.048	1.00	
Dibenz (a,h) Anthracene	ND	0.20	0.049	1.00	
Diethyl Phthalate	ND	5.0	0.053	1.00	
Dimethyl Phthalate	ND	5.0	0.046	1.00	
Fluoranthene	ND	0.20	0.047	1.00	
Fluorene	ND	0.20	0.045	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.20	0.050	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3510C
 Method: EPA 8270C SIM
 Units: ug/L

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
N-Nitrosodimethylamine	ND	1.0	0.049	1.00	
Naphthalene	ND	0.20	0.044	1.00	
Pentachlorophenol	ND	10	4.1	1.00	
Phenanthrene	ND	0.20	0.050	1.00	
Phenol	ND	1.0	0.032	1.00	
Pyrene	ND	0.20	0.051	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	79	24-152	
2-Fluorobiphenyl	72	33-144	
2-Fluorophenol	48	31-142	
Nitrobenzene-d5	76	28-139	
p-Terphenyl-d14	69	23-160	
Phenol-d6	34	30-136	



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-AA	05/16/14 10:05	Sediment	GC/MS MM	05/25/14	05/29/14 13:43	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	21	7.8	1.00	
2,4,5-Trichlorophenol	ND	21	6.8	1.00	
2,4,6-Trichlorophenol	ND	21	7.5	1.00	
2,4-Dichlorophenol	ND	21	5.6	1.00	
2,4-Dimethylphenol	ND	21	6.4	1.00	
2,4-Dinitrophenol	ND	1000	110	1.00	
2-Chlorophenol	ND	21	7.0	1.00	
2-Methylnaphthalene	ND	21	7.5	1.00	
2-Methylphenol	13	21	11	1.00	J
2-Nitrophenol	ND	21	5.0	1.00	
3/4-Methylphenol	ND	21	5.3	1.00	
4,6-Dinitro-2-Methylphenol	ND	1000	140	1.00	
4-Chloro-3-Methylphenol	ND	21	7.4	1.00	
4-Nitrophenol	ND	1000	130	1.00	
Acenaphthene	ND	21	9.7	1.00	
Acenaphthylene	ND	21	9.4	1.00	
Anthracene	ND	21	11	1.00	
Benzo (a) Anthracene	14	21	9.8	1.00	J
Benzo (a) Pyrene	130	21	11	1.00	
Benzo (b) Fluoranthene	16	21	11	1.00	J
Benzo (g,h,i) Perylene	12	21	8.8	1.00	J
Benzo (k) Fluoranthene	ND	21	14	1.00	
Bis(2-Ethylhexyl) Phthalate	61	21	8.4	1.00	B
Butyl Benzyl Phthalate	51	21	9.2	1.00	
Chrysene	13	21	11	1.00	J
Di-n-Butyl Phthalate	ND	21	11	1.00	
Di-n-Octyl Phthalate	11	21	9.9	1.00	J
Dibenz (a,h) Anthracene	ND	21	7.8	1.00	
Diethyl Phthalate	ND	21	10	1.00	
Dimethyl Phthalate	170	21	11	1.00	
Fluoranthene	19	21	12	1.00	J
Fluorene	ND	21	11	1.00	
Indeno (1,2,3-c,d) Pyrene	11	21	9.5	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 2 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	8.0	21	7.9	1.00	J
Pentachlorophenol	ND	1000	2.7	1.00	
Phenanthrene	ND	21	12	1.00	
Phenol	ND	21	7.7	1.00	
Pyrene	23	21	11	1.00	
1,6,7-Trimethylnaphthalene	ND	21	6.3	1.00	
2,3,4,6-Tetrachlorophenol	ND	21	8.1	1.00	
2,6-Dichlorophenol	ND	21	12	1.00	
Benzoic Acid	310	210	26	1.00	
DCPA	ND	21	5.0	1.00	
Dibenzothiophene	ND	21	12	1.00	
Perthane	ND	21	2.7	1.00	
1-Methylphenanthrene	ND	21	7.5	1.00	
Benzo (e) Pyrene	11	21	5.0	1.00	J
Perylene	110	21	7.4	1.00	
Biphenyl	ND	21	8.4	1.00	
2,6-Dimethylnaphthalene	ND	21	7.1	1.00	
Isophorone	ND	210	26	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	72	32-143	
2-Fluorobiphenyl	55	14-146	
2-Fluorophenol	42	15-138	
Nitrobenzene-d5	37	18-162	
p-Terphenyl-d14	63	34-148	
Phenol-d6	48	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP	14-05-1383-3-AA	05/16/14 10:45	Sediment	GC/MS MM	05/25/14	05/29/14 14:08	140525L08

Comment(s): - Results are reported on a dry weight basis.

- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.7	1.00	
2,4,5-Trichlorophenol	ND	15	5.0	1.00	
2,4,6-Trichlorophenol	ND	15	5.6	1.00	
2,4-Dichlorophenol	ND	15	4.1	1.00	
2,4-Dimethylphenol	ND	15	4.7	1.00	
2,4-Dinitrophenol	ND	770	83	1.00	
2-Chlorophenol	ND	15	5.2	1.00	
2-Methylnaphthalene	ND	15	5.5	1.00	
2-Methylphenol	ND	15	8.1	1.00	
2-Nitrophenol	ND	15	3.7	1.00	
3/4-Methylphenol	ND	15	4.0	1.00	
4,6-Dinitro-2-Methylphenol	ND	770	110	1.00	
4-Chloro-3-Methylphenol	ND	15	5.5	1.00	
4-Nitrophenol	ND	770	99	1.00	
Acenaphthene	ND	15	7.2	1.00	
Acenaphthylene	ND	15	7.0	1.00	
Anthracene	ND	15	8.3	1.00	
Benzo (a) Anthracene	44	15	7.2	1.00	
Benzo (a) Pyrene	45	15	7.8	1.00	
Benzo (b) Fluoranthene	42	15	8.0	1.00	
Benzo (g,h,i) Perylene	27	15	6.5	1.00	
Benzo (k) Fluoranthene	26	15	10	1.00	
Bis(2-Ethylhexyl) Phthalate	31	15	6.3	1.00	B
Butyl Benzyl Phthalate	43	15	6.8	1.00	
Chrysene	49	15	7.8	1.00	
Di-n-Butyl Phthalate	ND	15	7.9	1.00	
Di-n-Octyl Phthalate	ND	15	7.3	1.00	
Dibenz (a,h) Anthracene	ND	15	5.8	1.00	
Diethyl Phthalate	ND	15	7.7	1.00	
Dimethyl Phthalate	120	15	8.3	1.00	
Fluoranthene	79	15	9.0	1.00	
Fluorene	ND	15	7.9	1.00	
Indeno (1,2,3-c,d) Pyrene	30	15	7.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.8	1.00	
Pentachlorophenol	ND	770	2.0	1.00	
Phenanthrene	23	15	8.9	1.00	
Phenol	ND	15	5.7	1.00	
Pyrene	74	15	8.3	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.7	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	6.0	1.00	
2,6-Dichlorophenol	ND	15	9.1	1.00	
Benzoic Acid	230	150	19	1.00	
DCPA	ND	15	3.7	1.00	
Dibenzothiophene	ND	15	8.9	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.5	1.00	
Benzo (e) Pyrene	30	15	3.7	1.00	
Perylene	92	15	5.5	1.00	
Biphenyl	ND	15	6.2	1.00	
2,6-Dimethylnaphthalene	ND	15	5.2	1.00	
Isophorone	ND	150	19	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	79	32-143	
2-Fluorobiphenyl	48	14-146	
2-Fluorophenol	35	15-138	
Nitrobenzene-d5	29	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	45	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	GC/MS MM	06/09/14	06/10/14 18:44	140609L12

Comment(s): - Results are reported on a dry weight basis.
 - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	15	5.7	1.00	
2,4,5-Trichlorophenol	ND	15	4.9	1.00	
2,4,6-Trichlorophenol	ND	15	5.5	1.00	
2,4-Dichlorophenol	ND	15	4.1	1.00	
2,4-Dimethylphenol	ND	15	4.7	1.00	
2,4-Dinitrophenol	ND	760	82	1.00	
2-Chlorophenol	ND	15	5.1	1.00	
2-Methylnaphthalene	ND	15	5.5	1.00	
2-Methylphenol	ND	15	8.0	1.00	
2-Nitrophenol	ND	15	3.6	1.00	
3/4-Methylphenol	ND	15	3.9	1.00	
4,6-Dinitro-2-Methylphenol	ND	760	110	1.00	
4-Chloro-3-Methylphenol	ND	15	5.4	1.00	
4-Nitrophenol	ND	760	97	1.00	
Acenaphthene	ND	15	7.1	1.00	
Acenaphthylene	ND	15	6.9	1.00	
Anthracene	ND	15	8.2	1.00	
Benzo (a) Anthracene	36	15	7.1	1.00	
Benzo (a) Pyrene	37	15	7.7	1.00	
Benzo (b) Fluoranthene	36	15	7.9	1.00	
Benzo (g,h,i) Perylene	21	15	6.4	1.00	
Benzo (k) Fluoranthene	13	15	10	1.00	J
Bis(2-Ethylhexyl) Phthalate	26	15	6.2	1.00	
Butyl Benzyl Phthalate	38	15	6.7	1.00	
Chrysene	37	15	7.7	1.00	
Di-n-Butyl Phthalate	ND	15	7.8	1.00	
Di-n-Octyl Phthalate	ND	15	7.2	1.00	
Dibenz (a,h) Anthracene	ND	15	5.7	1.00	
Diethyl Phthalate	ND	15	7.6	1.00	
Dimethyl Phthalate	450	15	8.2	1.00	
Fluoranthene	63	15	8.9	1.00	
Fluorene	ND	15	7.8	1.00	
Indeno (1,2,3-c,d) Pyrene	23	15	6.9	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Naphthalene	ND	15	5.8	1.00	
Pentachlorophenol	ND	760	1.9	1.00	
Phenanthrene	20	15	8.8	1.00	
Phenol	ND	15	5.6	1.00	
Pyrene	67	15	8.2	1.00	
1,6,7-Trimethylnaphthalene	ND	15	4.6	1.00	
2,3,4,6-Tetrachlorophenol	ND	15	5.9	1.00	
2,6-Dichlorophenol	ND	15	9.0	1.00	
Benzoic Acid	220	150	19	1.00	
DCPA	ND	15	3.6	1.00	
Dibenzothiophene	ND	15	8.8	1.00	
Perthane	ND	15	2.0	1.00	
1-Methylphenanthrene	ND	15	5.5	1.00	
Benzo (e) Pyrene	24	15	3.7	1.00	
Perylene	94	15	5.4	1.00	
Biphenyl	ND	15	6.2	1.00	
2,6-Dimethylnaphthalene	ND	15	5.2	1.00	
Isophorone	ND	150	19	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2,4,6-Tribromophenol	71	32-143			
2-Fluorobiphenyl	72	14-146			
2-Fluorophenol	69	15-138			
Nitrobenzene-d5	78	18-162			
p-Terphenyl-d14	67	34-148			
Phenol-d6	73	17-141			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-80	N/A	Solid	GC/MS MM	05/25/14	05/28/14 18:23	140525L08

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	6.2	10	4.1	1.00	J
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM
Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	66	32-143	
2-Fluorobiphenyl	63	14-146	
2-Fluorophenol	54	15-138	
Nitrobenzene-d5	60	18-162	
p-Terphenyl-d14	71	34-148	
Phenol-d6	55	17-141	



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-256-82	N/A	Solid	GC/MS MM	06/09/14	06/10/14 15:17	140609L12

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
1-Methylnaphthalene	ND	10	3.7	1.00	
2,4,5-Trichlorophenol	ND	10	3.3	1.00	
2,4,6-Trichlorophenol	ND	10	3.6	1.00	
2,4-Dichlorophenol	ND	10	2.7	1.00	
2,4-Dimethylphenol	ND	10	3.1	1.00	
2,4-Dinitrophenol	ND	500	54	1.00	
2-Chlorophenol	ND	10	3.4	1.00	
2-Methylnaphthalene	ND	10	3.6	1.00	
2-Methylphenol	ND	10	5.3	1.00	
2-Nitrophenol	ND	10	2.4	1.00	
3/4-Methylphenol	ND	10	2.6	1.00	
4,6-Dinitro-2-Methylphenol	ND	500	69	1.00	
4-Chloro-3-Methylphenol	ND	10	3.5	1.00	
4-Nitrophenol	ND	500	64	1.00	
Acenaphthene	ND	10	4.7	1.00	
Acenaphthylene	ND	10	4.5	1.00	
Anthracene	ND	10	5.4	1.00	
Benzo (a) Anthracene	ND	10	4.7	1.00	
Benzo (a) Pyrene	ND	10	5.1	1.00	
Benzo (b) Fluoranthene	ND	10	5.2	1.00	
Benzo (g,h,i) Perylene	ND	10	4.2	1.00	
Benzo (k) Fluoranthene	ND	10	6.6	1.00	
Bis(2-Ethylhexyl) Phthalate	ND	10	4.1	1.00	
Butyl Benzyl Phthalate	ND	10	4.4	1.00	
Chrysene	ND	10	5.1	1.00	
Di-n-Butyl Phthalate	ND	10	5.1	1.00	
Di-n-Octyl Phthalate	ND	10	4.7	1.00	
Dibenz (a,h) Anthracene	ND	10	3.7	1.00	
Diethyl Phthalate	ND	10	5.0	1.00	
Dimethyl Phthalate	ND	10	5.4	1.00	
Fluoranthene	ND	10	5.8	1.00	
Fluorene	ND	10	5.1	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	10	4.6	1.00	
Naphthalene	ND	10	3.8	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Pentachlorophenol	ND	500	1.3	1.00	
Phenanthrene	ND	10	5.8	1.00	
Phenol	ND	10	3.7	1.00	
Pyrene	ND	10	5.4	1.00	
1,6,7-Trimethylnaphthalene	ND	10	3.0	1.00	
2,3,4,6-Tetrachlorophenol	ND	10	3.9	1.00	
2,6-Dichlorophenol	ND	10	5.9	1.00	
Benzoic Acid	ND	100	12	1.00	
DCPA	ND	10	2.4	1.00	
Dibenzothiophene	ND	10	5.8	1.00	
Perthane	ND	10	1.3	1.00	
1-Methylphenanthrene	ND	10	3.6	1.00	
Benzo (e) Pyrene	ND	10	2.4	1.00	
Perylene	ND	10	3.6	1.00	
Biphenyl	ND	10	4.1	1.00	
2,6-Dimethylnaphthalene	ND	10	3.4	1.00	
Isophorone	ND	100	12	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2,4,6-Tribromophenol	85	32-143	
2-Fluorobiphenyl	77	14-146	
2-Fluorophenol	86	15-138	
Nitrobenzene-d5	83	18-162	
p-Terphenyl-d14	70	34-148	
Phenol-d6	79	17-141	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 1 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-10 TOP	14-05-1383-1-AA	05/16/14 10:05	Sediment	GC/MS HHH	05/23/14	05/31/14 05:42	140523L30

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	1.0	0.25	1.00	
PCB008	ND	1.0	0.18	1.00	
PCB018	ND	1.0	0.33	1.00	
PCB028	ND	1.0	0.21	1.00	
PCB031	ND	1.0	0.24	1.00	
PCB033	ND	1.0	0.23	1.00	
PCB037	ND	1.0	0.27	1.00	
PCB044	ND	1.0	0.27	1.00	
PCB049	ND	1.0	0.25	1.00	
PCB052	ND	1.0	0.20	1.00	
PCB056	ND	1.0	0.29	1.00	
PCB060	ND	1.0	0.22	1.00	
PCB066	ND	1.0	0.19	1.00	
PCB070	ND	1.0	0.17	1.00	
PCB074	ND	1.0	0.20	1.00	
PCB077	ND	1.0	0.20	1.00	
PCB081	ND	1.0	0.26	1.00	
PCB087	ND	1.0	0.21	1.00	
PCB095	ND	1.0	0.35	1.00	
PCB097	ND	1.0	0.29	1.00	
PCB099	ND	1.0	0.18	1.00	
PCB101	ND	1.0	0.17	1.00	
PCB105	ND	1.0	0.22	1.00	
PCB110	ND	1.0	0.22	1.00	
PCB114	ND	1.0	0.21	1.00	
PCB118	ND	1.0	0.28	1.00	
PCB119	ND	1.0	0.18	1.00	
PCB123	ND	1.0	0.18	1.00	
PCB126	ND	1.0	0.29	1.00	
PCB128	ND	1.0	0.21	1.00	
PCB132	ND	1.0	0.35	1.00	
PCB138/158	ND	2.1	0.42	1.00	
PCB141	ND	1.0	0.23	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	1.0	0.19	1.00	
PCB151	ND	1.0	0.22	1.00	
PCB153	ND	1.0	0.22	1.00	
PCB156	ND	1.0	0.20	1.00	
PCB157	ND	1.0	0.20	1.00	
PCB167	ND	1.0	0.21	1.00	
PCB168	ND	1.0	0.18	1.00	
PCB169	ND	1.0	0.17	1.00	
PCB170	ND	1.0	0.19	1.00	
PCB174	ND	1.0	0.22	1.00	
PCB177	ND	1.0	0.26	1.00	
PCB180	ND	1.0	0.13	1.00	
PCB183	ND	1.0	0.23	1.00	
PCB184	ND	1.0	0.12	1.00	
PCB187	ND	1.0	0.22	1.00	
PCB189	ND	1.0	0.18	1.00	
PCB194	ND	1.0	0.20	1.00	
PCB195	ND	1.0	0.11	1.00	
PCB200	ND	1.0	0.20	1.00	
PCB201	ND	1.0	0.12	1.00	
PCB203	ND	1.0	0.22	1.00	
PCB206	ND	1.0	0.17	1.00	
PCB209	ND	1.0	0.22	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	67	19-133	
p-Terphenyl-d14	24	33-147	1,2,6

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 3 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP	14-05-1383-3-AA	05/16/14 10:45	Sediment	GC/MS HHH	05/23/14	05/31/14 06:09	140523L30

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.77	0.18	1.00	
PCB008	ND	0.77	0.13	1.00	
PCB018	ND	0.77	0.24	1.00	
PCB028	ND	0.77	0.15	1.00	
PCB031	ND	0.77	0.18	1.00	
PCB033	ND	0.77	0.17	1.00	
PCB037	ND	0.77	0.20	1.00	
PCB044	ND	0.77	0.20	1.00	
PCB049	ND	0.77	0.18	1.00	
PCB052	ND	0.77	0.15	1.00	
PCB056	ND	0.77	0.21	1.00	
PCB060	ND	0.77	0.16	1.00	
PCB066	ND	0.77	0.14	1.00	
PCB070	ND	0.77	0.13	1.00	
PCB074	ND	0.77	0.15	1.00	
PCB077	ND	0.77	0.15	1.00	
PCB081	ND	0.77	0.19	1.00	
PCB087	ND	0.77	0.16	1.00	
PCB095	ND	0.77	0.26	1.00	
PCB097	ND	0.77	0.21	1.00	
PCB099	ND	0.77	0.13	1.00	
PCB101	ND	0.77	0.13	1.00	
PCB105	ND	0.77	0.16	1.00	
PCB110	ND	0.77	0.16	1.00	
PCB114	ND	0.77	0.15	1.00	
PCB118	ND	0.77	0.20	1.00	
PCB119	ND	0.77	0.13	1.00	
PCB123	ND	0.77	0.13	1.00	
PCB126	ND	0.77	0.21	1.00	
PCB128	ND	0.77	0.16	1.00	
PCB132	ND	0.77	0.25	1.00	
PCB138/158	ND	1.5	0.31	1.00	
PCB141	ND	0.77	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.77	0.14	1.00	
PCB151	ND	0.77	0.16	1.00	
PCB153	ND	0.77	0.16	1.00	
PCB156	ND	0.77	0.15	1.00	
PCB157	ND	0.77	0.15	1.00	
PCB167	ND	0.77	0.15	1.00	
PCB168	ND	0.77	0.13	1.00	
PCB169	ND	0.77	0.13	1.00	
PCB170	ND	0.77	0.14	1.00	
PCB174	ND	0.77	0.16	1.00	
PCB177	ND	0.77	0.19	1.00	
PCB180	ND	0.77	0.094	1.00	
PCB183	ND	0.77	0.17	1.00	
PCB184	ND	0.77	0.086	1.00	
PCB187	ND	0.77	0.16	1.00	
PCB189	ND	0.77	0.13	1.00	
PCB194	ND	0.77	0.15	1.00	
PCB195	ND	0.77	0.081	1.00	
PCB200	ND	0.77	0.14	1.00	
PCB201	ND	0.77	0.088	1.00	
PCB203	ND	0.77	0.17	1.00	
PCB206	ND	0.77	0.13	1.00	
PCB209	ND	0.77	0.16	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	56	19-133			
p-Terphenyl-d14	54	33-147			



 Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 5 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
CB-S-09 TOP LAB DUP	14-05-1383-6-AA	05/16/14 10:45	Sediment	GC/MS HHH	06/09/14	06/11/14 06:35	140609L02

Comment(s):

- Results are reported on a dry weight basis.
- Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.75	0.18	1.00	
PCB008	ND	0.75	0.13	1.00	
PCB018	ND	0.75	0.24	1.00	
PCB028	ND	0.75	0.15	1.00	
PCB031	ND	0.75	0.17	1.00	
PCB033	ND	0.75	0.16	1.00	
PCB037	ND	0.75	0.20	1.00	
PCB044	ND	0.75	0.20	1.00	
PCB049	ND	0.75	0.18	1.00	
PCB052	ND	0.75	0.15	1.00	
PCB056	ND	0.75	0.21	1.00	
PCB060	ND	0.75	0.16	1.00	
PCB066	ND	0.75	0.14	1.00	
PCB070	ND	0.75	0.12	1.00	
PCB074	ND	0.75	0.14	1.00	
PCB077	ND	0.75	0.15	1.00	
PCB081	ND	0.75	0.18	1.00	
PCB087	ND	0.75	0.15	1.00	
PCB095	ND	0.75	0.25	1.00	
PCB097	ND	0.75	0.20	1.00	
PCB099	ND	0.75	0.13	1.00	
PCB101	ND	0.75	0.12	1.00	
PCB105	ND	0.75	0.16	1.00	
PCB110	ND	0.75	0.15	1.00	
PCB114	ND	0.75	0.15	1.00	
PCB118	ND	0.75	0.20	1.00	
PCB119	ND	0.75	0.13	1.00	
PCB123	ND	0.75	0.13	1.00	
PCB126	ND	0.75	0.21	1.00	
PCB128	ND	0.75	0.15	1.00	
PCB132	ND	0.75	0.25	1.00	
PCB138/158	ND	1.5	0.30	1.00	
PCB141	ND	0.75	0.17	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg
Project: ADCNR Mobile Bay		Page 6 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB149	ND	0.75	0.13	1.00	
PCB151	ND	0.75	0.16	1.00	
PCB153	ND	0.75	0.16	1.00	
PCB156	ND	0.75	0.15	1.00	
PCB157	ND	0.75	0.14	1.00	
PCB167	ND	0.75	0.15	1.00	
PCB168	ND	0.75	0.13	1.00	
PCB169	ND	0.75	0.12	1.00	
PCB170	ND	0.75	0.14	1.00	
PCB174	ND	0.75	0.16	1.00	
PCB177	ND	0.75	0.18	1.00	
PCB180	ND	0.75	0.092	1.00	
PCB183	ND	0.75	0.17	1.00	
PCB184	ND	0.75	0.084	1.00	
PCB187	ND	0.75	0.16	1.00	
PCB189	ND	0.75	0.13	1.00	
PCB194	ND	0.75	0.14	1.00	
PCB195	ND	0.75	0.079	1.00	
PCB200	ND	0.75	0.14	1.00	
PCB201	ND	0.75	0.085	1.00	
PCB203	ND	0.75	0.16	1.00	
PCB206	ND	0.75	0.12	1.00	
PCB209	ND	0.75	0.16	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
2-Fluorobiphenyl	115	19-133	
p-Terphenyl-d14	82	33-147	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-184	N/A	Solid	GC/MS HHH	05/23/14	05/30/14 21:02	140523L30

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	54	19-133			
p-Terphenyl-d14	86	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions	Date Received:	05/17/14
5817 Dryden Place, Suite 101	Work Order:	14-05-1383
Carlsbad, CA 92008-9999	Preparation:	EPA 3545
	Method:	EPA 8270C SIM PCB Congeners
	Units:	ug/kg

Project: ADCNR Mobile Bay Page 9 of 10

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-341-187	N/A	Solid	GC/MS HHH	06/09/14	06/10/14 20:17	140609L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB003	ND	0.50	0.12	1.00	
PCB008	ND	0.50	0.085	1.00	
PCB018	ND	0.50	0.16	1.00	
PCB028	ND	0.50	0.099	1.00	
PCB031	ND	0.50	0.12	1.00	
PCB033	ND	0.50	0.11	1.00	
PCB037	ND	0.50	0.13	1.00	
PCB044	ND	0.50	0.13	1.00	
PCB049	ND	0.50	0.12	1.00	
PCB052	ND	0.50	0.097	1.00	
PCB056	ND	0.50	0.14	1.00	
PCB060	ND	0.50	0.11	1.00	
PCB066	ND	0.50	0.091	1.00	
PCB070	ND	0.50	0.082	1.00	
PCB074	ND	0.50	0.094	1.00	
PCB077	ND	0.50	0.097	1.00	
PCB081	ND	0.50	0.12	1.00	
PCB087	ND	0.50	0.10	1.00	
PCB095	ND	0.50	0.17	1.00	
PCB097	ND	0.50	0.14	1.00	
PCB099	ND	0.50	0.085	1.00	
PCB101	ND	0.50	0.081	1.00	
PCB105	ND	0.50	0.10	1.00	
PCB110	ND	0.50	0.10	1.00	
PCB114	ND	0.50	0.10	1.00	
PCB118	ND	0.50	0.13	1.00	
PCB119	ND	0.50	0.087	1.00	
PCB123	ND	0.50	0.087	1.00	
PCB126	ND	0.50	0.14	1.00	
PCB128	ND	0.50	0.10	1.00	
PCB132	ND	0.50	0.17	1.00	
PCB138/158	ND	1.0	0.20	1.00	
PCB141	ND	0.50	0.11	1.00	
PCB149	ND	0.50	0.089	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3545
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/kg

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.50	0.10	1.00	
PCB153	ND	0.50	0.10	1.00	
PCB156	ND	0.50	0.098	1.00	
PCB157	ND	0.50	0.096	1.00	
PCB167	ND	0.50	0.10	1.00	
PCB168	ND	0.50	0.086	1.00	
PCB169	ND	0.50	0.082	1.00	
PCB170	ND	0.50	0.093	1.00	
PCB174	ND	0.50	0.11	1.00	
PCB177	ND	0.50	0.12	1.00	
PCB180	ND	0.50	0.061	1.00	
PCB183	ND	0.50	0.11	1.00	
PCB184	ND	0.50	0.056	1.00	
PCB187	ND	0.50	0.10	1.00	
PCB189	ND	0.50	0.086	1.00	
PCB194	ND	0.50	0.096	1.00	
PCB195	ND	0.50	0.053	1.00	
PCB200	ND	0.50	0.093	1.00	
PCB201	ND	0.50	0.057	1.00	
PCB203	ND	0.50	0.11	1.00	
PCB206	ND	0.50	0.083	1.00	
PCB209	ND	0.50	0.11	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
2-Fluorobiphenyl	100	19-133			
p-Terphenyl-d14	102	33-147			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FIELD BLANK	14-05-1383-5-ABCDE	05/16/14 10:30	Aqueous	GC/MS HHH	05/23/14	05/27/14 18:21	140523L06A

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.020	0.0049	1.00	
PCB008	ND	0.020	0.0044	1.00	
PCB018	ND	0.020	0.0062	1.00	
PCB028	ND	0.020	0.0060	1.00	
PCB031	ND	0.020	0.0050	1.00	
PCB033	ND	0.020	0.0053	1.00	
PCB037	ND	0.020	0.0061	1.00	
PCB044	ND	0.020	0.0066	1.00	
PCB049	ND	0.020	0.0080	1.00	
PCB052	ND	0.020	0.0072	1.00	
PCB056	ND	0.020	0.0061	1.00	
PCB060	ND	0.020	0.0077	1.00	
PCB066	ND	0.020	0.0064	1.00	
PCB070	ND	0.020	0.0065	1.00	
PCB074	ND	0.020	0.0061	1.00	
PCB077	ND	0.020	0.0060	1.00	
PCB081	ND	0.020	0.0064	1.00	
PCB087	ND	0.020	0.0065	1.00	
PCB095	ND	0.020	0.0053	1.00	
PCB097	ND	0.020	0.0049	1.00	
PCB099	ND	0.020	0.0063	1.00	
PCB101	ND	0.020	0.0066	1.00	
PCB105	ND	0.020	0.0066	1.00	
PCB110	ND	0.020	0.0066	1.00	
PCB114	ND	0.020	0.0060	1.00	
PCB118	ND	0.020	0.0065	1.00	
PCB119	ND	0.020	0.0067	1.00	
PCB123	ND	0.020	0.0065	1.00	
PCB126	ND	0.020	0.0067	1.00	
PCB128	ND	0.020	0.0068	1.00	
PCB132	ND	0.020	0.0072	1.00	
PCB138/158	ND	0.040	0.013	1.00	
PCB141	ND	0.020	0.0059	1.00	
PCB149	ND	0.020	0.0070	1.00	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.020	0.0061	1.00	
PCB153	ND	0.020	0.0067	1.00	
PCB156	ND	0.020	0.0069	1.00	
PCB157	ND	0.020	0.0064	1.00	
PCB167	ND	0.020	0.0069	1.00	
PCB168	ND	0.020	0.0065	1.00	
PCB169	ND	0.020	0.0064	1.00	
PCB170	ND	0.020	0.0068	1.00	
PCB174	ND	0.020	0.0047	1.00	
PCB177	ND	0.020	0.0063	1.00	
PCB180	ND	0.020	0.0068	1.00	
PCB183	ND	0.020	0.0064	1.00	
PCB184	ND	0.020	0.0049	1.00	
PCB187	ND	0.020	0.0062	1.00	
PCB189	ND	0.020	0.0057	1.00	
PCB194	ND	0.020	0.0068	1.00	
PCB195	ND	0.020	0.0075	1.00	
PCB200	ND	0.020	0.0070	1.00	
PCB201	ND	0.020	0.0059	1.00	
PCB203	ND	0.020	0.0052	1.00	
PCB206	ND	0.020	0.0060	1.00	
PCB209	ND	0.020	0.0074	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
p-Terphenyl-d14	87	50-150			
2-Fluorobiphenyl	77	50-150			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: ADCNR Mobile Bay

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-433-80	N/A	Aqueous	GC/MS HHH	05/23/14	05/27/14 17:53	140523L06A

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
PCB003	ND	0.020	0.0049	1.00	
PCB008	ND	0.020	0.0044	1.00	
PCB018	ND	0.020	0.0062	1.00	
PCB028	ND	0.020	0.0060	1.00	
PCB031	ND	0.020	0.0050	1.00	
PCB033	ND	0.020	0.0053	1.00	
PCB037	ND	0.020	0.0061	1.00	
PCB044	ND	0.020	0.0066	1.00	
PCB049	ND	0.020	0.0080	1.00	
PCB052	ND	0.020	0.0072	1.00	
PCB056	ND	0.020	0.0061	1.00	
PCB060	ND	0.020	0.0077	1.00	
PCB066	ND	0.020	0.0064	1.00	
PCB070	ND	0.020	0.0065	1.00	
PCB074	ND	0.020	0.0061	1.00	
PCB077	ND	0.020	0.0060	1.00	
PCB081	ND	0.020	0.0064	1.00	
PCB087	ND	0.020	0.0065	1.00	
PCB095	ND	0.020	0.0053	1.00	
PCB097	ND	0.020	0.0049	1.00	
PCB099	ND	0.020	0.0063	1.00	
PCB101	ND	0.020	0.0066	1.00	
PCB105	ND	0.020	0.0066	1.00	
PCB110	ND	0.020	0.0066	1.00	
PCB114	ND	0.020	0.0060	1.00	
PCB118	ND	0.020	0.0065	1.00	
PCB119	ND	0.020	0.0067	1.00	
PCB123	ND	0.020	0.0065	1.00	
PCB126	ND	0.020	0.0067	1.00	
PCB128	ND	0.020	0.0068	1.00	
PCB132	ND	0.020	0.0072	1.00	
PCB138/158	ND	0.040	0.013	1.00	
PCB141	ND	0.020	0.0059	1.00	
PCB149	ND	0.020	0.0070	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3510C
 Method: EPA 8270C SIM PCB Congeners
 Units: ug/L

Project: ADCNR Mobile Bay

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
PCB151	ND	0.020	0.0061	1.00	
PCB153	ND	0.020	0.0067	1.00	
PCB156	ND	0.020	0.0069	1.00	
PCB157	ND	0.020	0.0064	1.00	
PCB167	ND	0.020	0.0069	1.00	
PCB168	ND	0.020	0.0065	1.00	
PCB169	ND	0.020	0.0064	1.00	
PCB170	ND	0.020	0.0068	1.00	
PCB174	ND	0.020	0.0047	1.00	
PCB177	ND	0.020	0.0063	1.00	
PCB180	ND	0.020	0.0068	1.00	
PCB183	ND	0.020	0.0064	1.00	
PCB184	ND	0.020	0.0049	1.00	
PCB187	ND	0.020	0.0062	1.00	
PCB189	ND	0.020	0.0057	1.00	
PCB194	ND	0.020	0.0068	1.00	
PCB195	ND	0.020	0.0075	1.00	
PCB200	ND	0.020	0.0070	1.00	
PCB201	ND	0.020	0.0059	1.00	
PCB203	ND	0.020	0.0052	1.00	
PCB206	ND	0.020	0.0060	1.00	
PCB209	ND	0.020	0.0074	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>		
p-Terphenyl-d14	96	50-150			
2-Fluorobiphenyl	94	50-150			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

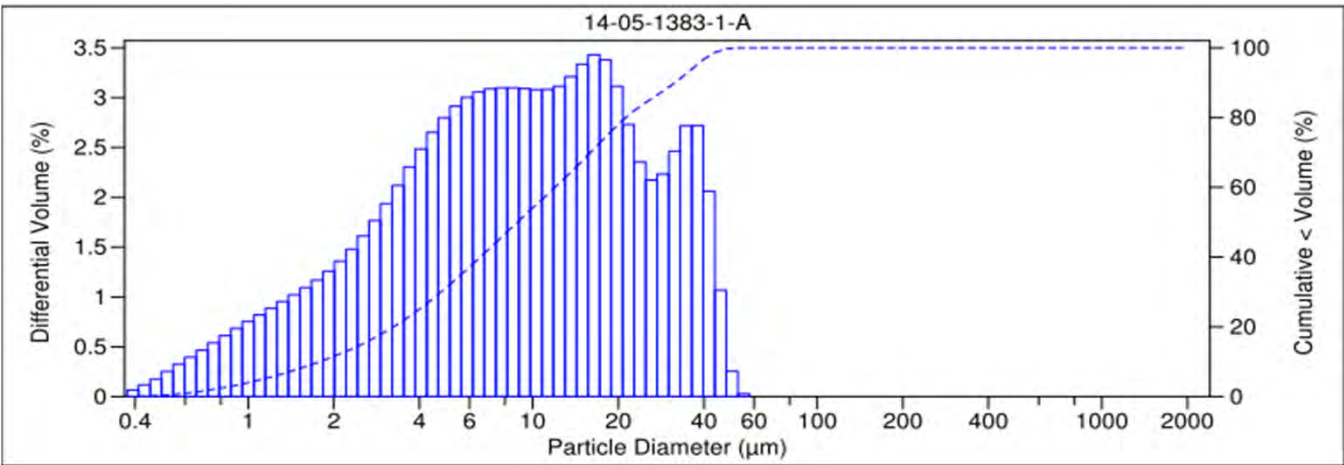
Date Sampled: 05/16/14
Date Received: 05/17/14
Work Order No: 14-05-1383
Date Analyzed: 05/19/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

Page 1 of 4

Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-10 TOP		Silt	0.013

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.00	0.00	75.54	24.46	100.00



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
 2433 Impala Drive
 Carlsbad, CA 92008-7227

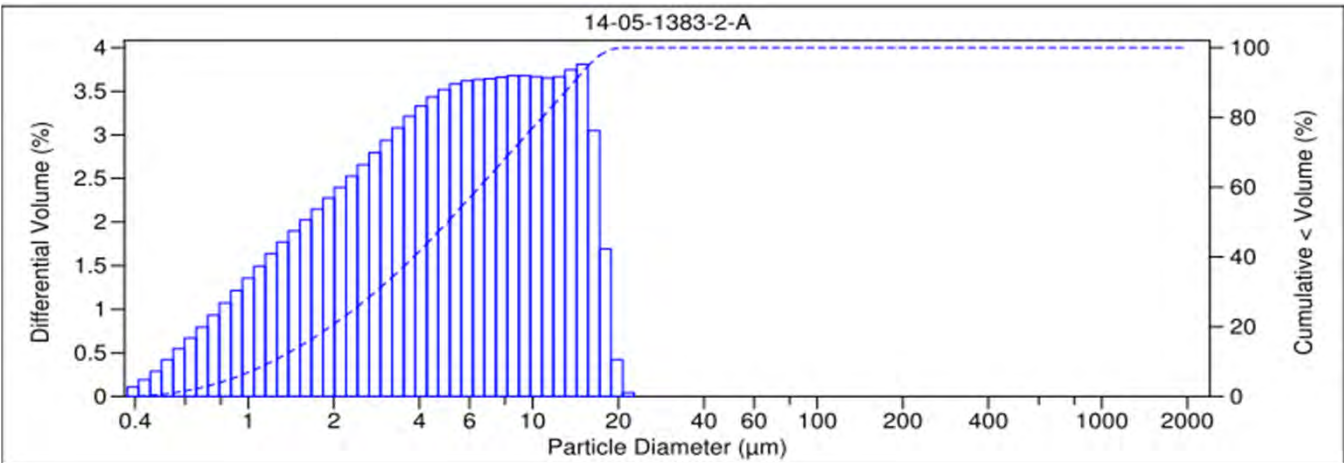
Date Sampled: 05/16/14
 Date Received: 05/17/14
 Work Order No: 14-05-1383
 Date Analyzed: 05/19/14
 Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-10 BOTTOM		Silt	0.006

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	0.00	0.00	59.12	40.88	100.00



V 3.0

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PARTICLE SIZE SUMMARY

(ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

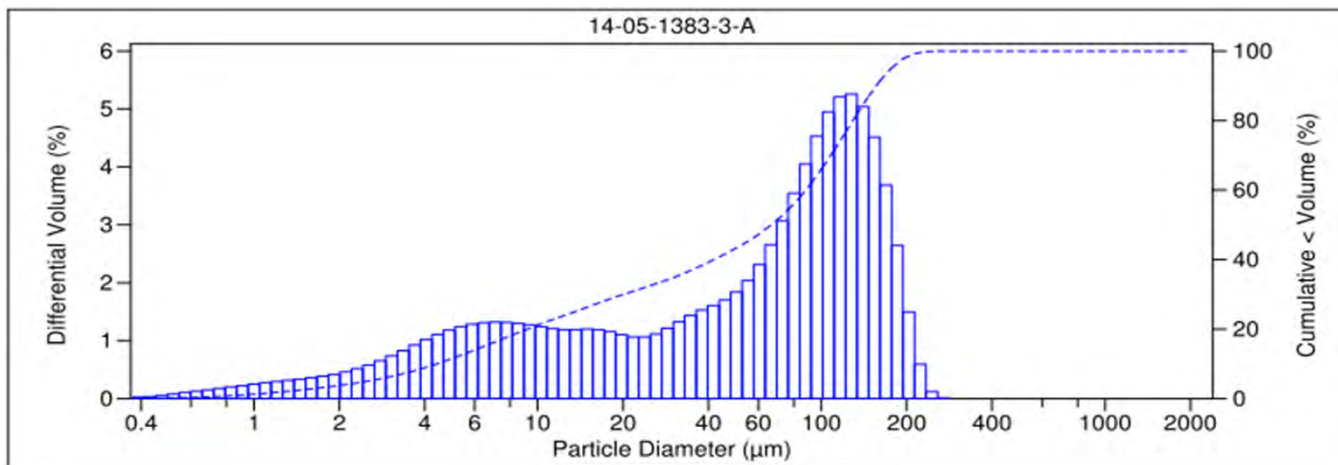
Date Sampled: 05/16/14
Date Received: 05/17/14
Work Order No: 14-05-1383
Date Analyzed: 05/19/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-09 TOP		Very Fine Sand	0.073

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.05	21.90	29.80	39.60	8.64	48.25



V 3.0

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PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

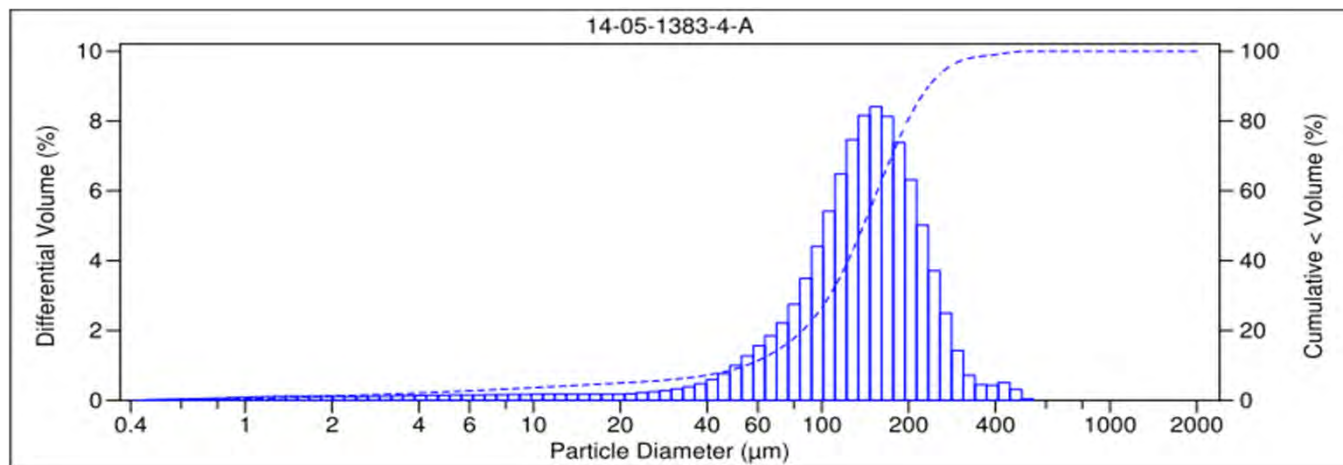
Date Sampled: 05/16/14
Date Received: 05/17/14
Work Order No: 14-05-1383
Date Analyzed: 05/19/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-09 BOTTOM		Fine Sand	0.144

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.03	7.49	51.49	28.90	10.00	2.09	12.09



V 3.0

Return to Contents

PARTICLE SIZE SUMMARY (ASTM D422 / D4464M)

Weston Solutions
2433 Impala Drive
Carlsbad, CA 92008-7227

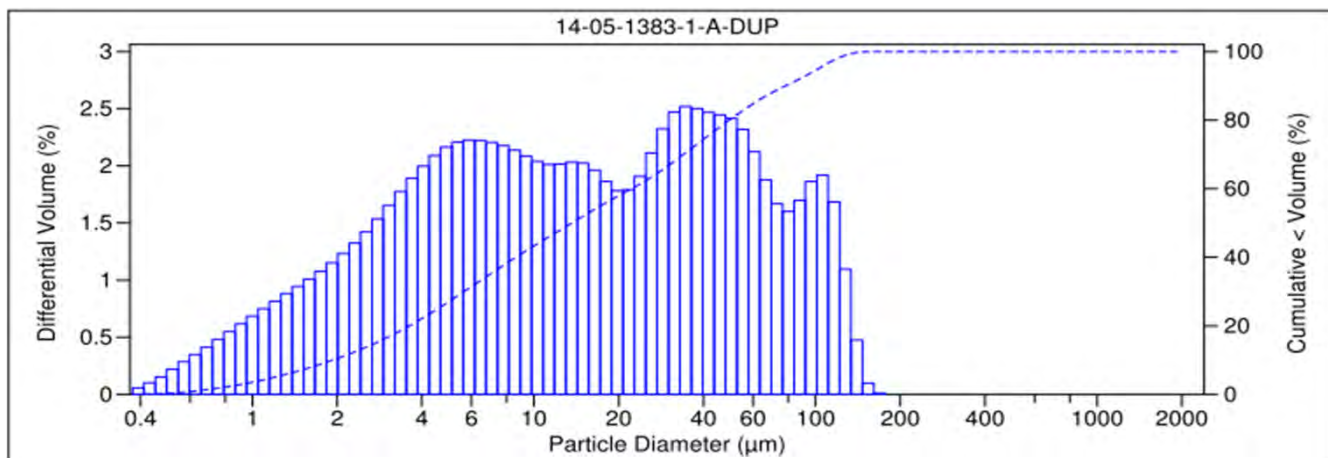
Date Sampled: 05/16/14
Date Received: 05/17/14
Work Order No: 14-05-1383
Date Analyzed: 05/19/14
Method: ASTM D4464M

Project: ADCNR Mobile Bay

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Sample ID	Depth ft	Description	Mean Grain Size mm
CB-S-10 TOP (Particle size dup)		Silt	0.028

Particle Size Distribution, wt by percent								Total Silt & Clay
Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Silt	Clay	
0.00	0.00	0.00	0.00	1.39	12.91	64.05	21.65	85.70



V 3.0

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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-S-10 TOP	Sample	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCS1
CB-S-10 TOP	Matrix Spike	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCS1
CB-S-10 TOP	Matrix Spike Duplicate	Sediment	TOC 4	05/27/14	05/27/14 14:37	E0527TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.7500	3.000	3.630	96	3.470	91	75-125	5	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1270-40	Sample	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1
14-05-1270-40	Matrix Spike	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1
14-05-1270-40	Matrix Spike Duplicate	Sediment	TOC 4	06/09/14	06/09/14 18:16	E0609TOCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.4800	3.000	3.300	94	3.290	94	75-125	0	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3005A Filtr.
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1386-1	Sample	Aqueous	ICP/MS 03	05/19/14	05/19/14 20:59	140519S06
14-05-1386-1	Matrix Spike	Aqueous	ICP/MS 03	05/19/14	05/19/14 20:50	140519S06
14-05-1386-1	Matrix Spike Duplicate	Aqueous	ICP/MS 03	05/19/14	05/19/14 20:52	140519S06

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.05000	0.04658	93	0.04597	92	73-127	1	0-11	
Cadmium	ND	0.05000	0.04884	98	0.05023	100	84-114	3	0-8	
Chromium	ND	0.05000	0.05493	110	0.05637	113	73-133	3	0-11	
Copper	ND	0.05000	0.05146	103	0.05113	102	72-108	1	0-10	
Lead	ND	0.05000	0.05407	108	0.05506	110	79-121	2	0-10	
Nickel	ND	0.05000	0.05183	104	0.05117	102	68-122	1	0-10	
Selenium	ND	0.05000	0.04436	89	0.04523	90	59-125	2	0-12	
Silver	ND	0.02500	0.02871	115	0.02753	110	68-128	4	0-14	
Zinc	0.01309	0.05000	0.05860	91	0.06485	104	43-145	10	0-39	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14	06/09/14 20:20	140609S01
14-06-0596-1	Matrix Spike	Sediment	ICP/MS 03	06/09/14	06/09/14 19:54	140609S01
14-06-0596-1	Matrix Spike Duplicate	Sediment	ICP/MS 03	06/09/14	06/09/14 19:57	140609S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	5.134	25.00	30.56	102	27.37	89	80-120	11	0-20	
Cadmium	0.1976	25.00	27.86	111	24.68	98	80-120	12	0-20	
Chromium	38.20	25.00	69.05	123	63.57	101	80-120	8	0-20	3
Copper	24.21	25.00	51.51	109	47.75	94	80-120	8	0-20	
Lead	11.56	25.00	39.95	114	36.18	98	80-120	10	0-20	
Nickel	38.78	25.00	66.61	111	61.55	91	80-120	8	0-20	
Selenium	0.3452	25.00	28.65	113	25.60	101	80-120	11	0-20	
Silver	0.1535	12.50	13.87	110	12.43	98	80-120	11	0-20	
Zinc	58.83	25.00	91.48	131	81.38	90	80-120	12	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-15	Sample	Sediment	ICP/MS 04	05/20/14	05/21/14 15:43	140520S04
14-05-1271-15	Matrix Spike	Sediment	ICP/MS 04	05/20/14	05/21/14 15:29	140520S04
14-05-1271-15	Matrix Spike Duplicate	Sediment	ICP/MS 04	05/20/14	05/21/14 15:32	140520S04

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.8321	25.00	26.15	101	26.48	103	80-120	1	0-20	
Cadmium	ND	25.00	27.66	111	27.72	111	80-120	0	0-20	
Chromium	5.572	25.00	31.91	105	31.89	105	80-120	0	0-20	
Copper	1.870	25.00	29.08	109	28.94	108	80-120	0	0-20	
Lead	2.386	25.00	28.45	104	28.77	106	80-120	1	0-20	
Nickel	3.022	25.00	29.23	105	29.37	105	80-120	0	0-20	
Selenium	0.1133	25.00	26.65	106	26.07	104	80-120	2	0-20	
Silver	ND	12.50	13.45	108	13.59	109	80-120	1	0-20	
Zinc	16.39	25.00	43.67	109	47.54	125	80-120	8	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-S-09 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14	05/21/14 19:35	140520S05
CB-S-09 BOTTOM	Matrix Spike	Sediment	ICP/MS 04	05/20/14	05/21/14 14:51	140520S05
CB-S-09 BOTTOM	Matrix Spike Duplicate	Sediment	ICP/MS 04	05/20/14	05/21/14 14:55	140520S05

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Arsenic	0.9767	25.00	26.77	103	27.60	106	80-120	3	0-20	
Cadmium	ND	25.00	27.70	111	27.66	111	80-120	0	0-20	
Chromium	4.393	25.00	32.07	111	31.44	108	80-120	2	0-20	
Copper	1.693	25.00	28.82	109	28.84	109	80-120	0	0-20	
Lead	2.085	25.00	28.14	104	28.32	105	80-120	1	0-20	
Nickel	2.773	25.00	29.45	107	29.12	105	80-120	1	0-20	
Selenium	ND	25.00	27.13	109	27.26	109	80-120	0	0-20	
Silver	ND	12.50	13.45	108	13.69	110	80-120	2	0-20	
Zinc	13.77	25.00	43.68	120	49.22	142	80-120	12	0-20	3

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 7470A Filt.
Method: EPA 7470A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1326-5	Sample	Aqueous	Mercury 04	05/19/14	05/19/14 14:47	140519S01
14-05-1326-5	Matrix Spike	Aqueous	Mercury 04	05/19/14	05/19/14 14:49	140519S01
14-05-1326-5	Matrix Spike Duplicate	Aqueous	Mercury 04	05/19/14	05/19/14 14:52	140519S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.008285	83	0.008254	83	57-141	0	0-10	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
CB-S-09 BOTTOM	Sample	Sediment	Mercury 05	05/21/14	05/21/14 18:50	140521S06
CB-S-09 BOTTOM	Matrix Spike	Sediment	Mercury 05	05/21/14	05/21/14 18:52	140521S06
CB-S-09 BOTTOM	Matrix Spike Duplicate	Sediment	Mercury 05	05/21/14	05/21/14 18:54	140521S06

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Mercury	ND	0.8350	0.8083	97	0.8773	105	76-136	8	0-16	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0199-13	Sample	Solid	Mercury 05	06/09/14	06/09/14 14:05	140609S01
14-06-0199-13	Matrix Spike	Solid	Mercury 05	06/09/14	06/09/14 14:07	140609S01
14-06-0199-13	Matrix Spike Duplicate	Solid	Mercury 05	06/09/14	06/09/14 14:10	140609S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.2777	0.8350	0.9775	84	0.9260	78	71-137	5	0-14	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-18	Sample	Sediment	GC 51	06/09/14	06/11/14 12:29	140609S10
14-05-1271-18	Matrix Spike	Sediment	GC 51	06/09/14	06/11/14 11:32	140609S10
14-05-1271-18	Matrix Spike Duplicate	Sediment	GC 51	06/09/14	06/11/14 11:46	140609S10

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	3.310	66	2.897	58	50-135	13	0-25	
Alpha-BHC	ND	5.000	4.047	81	3.724	74	50-135	8	0-25	
Beta-BHC	ND	5.000	3.892	78	3.743	75	50-135	4	0-25	
Delta-BHC	ND	5.000	3.699	74	3.601	72	50-135	3	0-25	
Gamma-BHC	ND	5.000	3.801	76	3.191	64	50-135	17	0-25	
Dieldrin	ND	5.000	3.612	72	3.181	64	50-135	13	0-25	
4,4'-DDD	ND	5.000	3.577	72	3.124	62	50-135	14	0-25	
4,4'-DDE	1.258	5.000	3.703	49	3.234	40	50-135	14	0-25	3
4,4'-DDT	ND	5.000	3.882	78	3.511	70	50-135	10	0-25	
Endosulfan I	ND	5.000	3.505	70	2.910	58	50-135	19	0-25	
Endosulfan II	ND	5.000	3.803	76	3.466	69	50-135	9	0-25	
Endosulfan Sulfate	ND	5.000	3.845	77	3.172	63	50-135	19	0-25	
Endrin	ND	5.000	3.896	78	3.365	67	50-135	15	0-25	
Endrin Aldehyde	ND	5.000	3.361	67	2.795	56	50-135	18	0-25	
Endrin Ketone	ND	5.000	3.820	76	3.281	66	50-135	15	0-25	
Heptachlor	ND	5.000	3.692	74	3.410	68	50-135	8	0-25	
Heptachlor Epoxide	ND	5.000	3.476	70	3.008	60	50-135	14	0-25	
Methoxychlor	ND	5.000	3.957	79	3.422	68	50-135	15	0-25	
Alpha Chlordane	ND	5.000	3.395	68	2.938	59	50-135	14	0-25	
Gamma Chlordane	ND	5.000	3.304	66	2.889	58	50-135	13	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
CB-S-10 TOP	Sample	Sediment	GC 66	05/25/14	05/28/14 15:16	140525S09				
CB-S-10 TOP	Matrix Spike	Sediment	GC 66	05/25/14	05/28/14 16:12	140525S09				
CB-S-10 TOP	Matrix Spike Duplicate	Sediment	GC 66	05/25/14	05/28/14 16:26	140525S09				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aldrin	ND	5.000	4.123	82	4.670	93	50-135	12	0-25	
Alpha-BHC	ND	5.000	4.584	92	5.212	104	50-135	13	0-25	
Beta-BHC	ND	5.000	5.031	101	6.238	125	50-135	21	0-25	
Delta-BHC	ND	5.000	4.754	95	6.433	129	50-135	30	0-25	4
Gamma-BHC	ND	5.000	4.171	83	4.960	99	50-135	17	0-25	
Dieldrin	ND	5.000	4.740	95	5.467	109	50-135	14	0-25	
4,4'-DDD	ND	5.000	5.802	116	6.050	121	50-135	4	0-25	
4,4'-DDE	2.997	5.000	4.755	35	5.709	54	50-135	18	0-25	3
4,4'-DDT	ND	5.000	2.002	40	3.178	64	50-135	45	0-25	3,4
Endosulfan I	ND	5.000	4.046	81	4.807	96	50-135	17	0-25	
Endosulfan II	ND	5.000	4.566	91	5.540	111	50-135	19	0-25	
Endosulfan Sulfate	ND	5.000	4.711	94	5.258	105	50-135	11	0-25	
Endrin	ND	5.000	4.022	80	4.475	89	50-135	11	0-25	
Endrin Aldehyde	ND	5.000	1.327	27	2.953	59	50-135	76	0-25	3,4
Endrin Ketone	ND	5.000	3.514	70	4.363	87	50-135	22	0-25	
Heptachlor	ND	5.000	3.099	62	4.096	82	50-135	28	0-25	4
Heptachlor Epoxide	ND	5.000	4.481	90	5.163	103	50-135	14	0-25	
Methoxychlor	ND	5.000	1.989	40	3.156	63	50-135	45	0-25	3,4
Alpha Chlordane	ND	5.000	3.896	78	4.623	92	50-135	17	0-25	
Gamma Chlordane	ND	5.000	3.959	79	4.574	91	50-135	14	0-25	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1271-10	Sample	Sediment	GC/MS MM	05/25/14	05/29/14 07:37	140525S08
14-05-1271-10	Matrix Spike	Sediment	GC/MS MM	05/25/14	05/29/14 12:51	140525S08
14-05-1271-10	Matrix Spike Duplicate	Sediment	GC/MS MM	05/25/14	05/29/14 13:17	140525S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	695.0	70	721.0	72	40-160	4	0-20	
2,4-Dichlorophenol	ND	1000	693.0	69	689.1	69	40-160	1	0-20	
2-Methylphenol	ND	1000	653.7	65	646.6	65	40-160	1	0-20	
2-Nitrophenol	ND	1000	621.4	62	639.8	64	40-160	3	0-20	
4-Chloro-3-Methylphenol	ND	1000	700.6	70	711.5	71	40-160	2	0-20	
Acenaphthene	ND	1000	677.8	68	691.1	69	40-106	2	0-20	
Benzo (a) Pyrene	13.99	1000	654.1	64	657.6	64	17-163	1	0-20	
Chrysene	ND	1000	643.1	64	627.0	63	17-168	3	0-20	
Di-n-Butyl Phthalate	ND	1000	703.2	70	617.4	62	40-160	13	0-20	
Dimethyl Phthalate	94.94	1000	620.6	53	636.9	54	40-160	3	0-20	
Fluoranthene	ND	1000	628.5	63	621.9	62	26-137	1	0-20	
Fluorene	ND	1000	667.6	67	701.9	70	59-121	5	0-20	
Naphthalene	ND	1000	672.6	67	678.9	68	21-133	1	0-20	
Phenanthrene	ND	1000	700.7	70	696.4	70	54-120	1	0-20	
Phenol	ND	1000	683.8	68	676.9	68	40-160	1	0-20	
Pyrene	ND	1000	712.9	71	685.6	69	6-156	4	0-46	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
14-05-1271-18	Sample	Sediment	GC/MS MM	06/09/14	06/10/14 17:26	140609S12				
14-05-1271-18	Matrix Spike	Sediment	GC/MS MM	06/09/14	06/10/14 17:51	140609S12				
14-05-1271-18	Matrix Spike Duplicate	Sediment	GC/MS MM	06/09/14	06/10/14 18:17	140609S12				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	ND	1000	717.2	72	711.2	71	40-160	1	0-20	
2,4-Dichlorophenol	ND	1000	730.5	73	729.3	73	40-160	0	0-20	
2-Methylphenol	ND	1000	520.4	52	532.4	53	40-160	2	0-20	
2-Nitrophenol	ND	1000	796.8	80	792.3	79	40-160	1	0-20	
4-Chloro-3-Methylphenol	ND	1000	821.7	82	828.5	83	40-160	1	0-20	
Acenaphthene	ND	1000	618.3	62	616.5	62	40-106	0	0-20	
Benzo (a) Pyrene	27.41	1000	595.9	57	595.1	57	17-163	0	0-20	
Chrysene	ND	1000	602.7	60	605.4	61	17-168	0	0-20	
Di-n-Butyl Phthalate	ND	1000	571.8	57	564.7	56	40-160	1	0-20	
Dimethyl Phthalate	252.9	1000	1014	76	1034	78	40-160	2	0-20	
Fluoranthene	ND	1000	577.3	58	579.8	58	26-137	0	0-20	
Fluorene	ND	1000	593.8	59	591.5	59	59-121	0	0-20	
Naphthalene	ND	1000	694.7	69	693.6	69	21-133	0	0-20	
Phenanthrene	ND	1000	490.6	49	465.2	47	54-120	5	0-20	3
Phenol	ND	1000	879.8	88	893.0	89	40-160	1	0-20	
Pyrene	ND	1000	602.4	60	628.2	63	6-156	4	0-46	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1270-38	Sample	Sediment	GC/MS HHH	05/23/14	05/30/14 19:39	140523S30
14-05-1270-38	Matrix Spike	Sediment	GC/MS HHH	05/23/14	05/31/14 04:48	140523S30
14-05-1270-38	Matrix Spike Duplicate	Sediment	GC/MS HHH	05/23/14	05/31/14 05:15	140523S30

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	18.06	72	29.83	119	50-125	49	0-30	4
PCB018	ND	25.00	13.80	55	22.54	90	50-125	48	0-30	4
PCB028	ND	25.00	14.66	59	24.08	96	50-125	49	0-30	4
PCB044	ND	25.00	13.59	54	21.32	85	50-125	44	0-30	4
PCB052	ND	25.00	12.39	50	20.15	81	50-125	48	0-30	4
PCB066	ND	25.00	15.78	63	24.62	98	50-125	44	0-30	4
PCB077	ND	25.00	16.53	66	25.87	103	50-125	44	0-30	4
PCB101	ND	25.00	12.73	51	19.43	78	50-125	42	0-30	4
PCB105	ND	25.00	14.97	60	23.16	93	50-125	43	0-30	4
PCB118	ND	25.00	14.87	59	23.26	93	50-125	44	0-30	4
PCB126	ND	25.00	15.79	63	24.01	96	50-125	41	0-30	4
PCB128	ND	25.00	11.78	47	17.78	71	50-125	41	0-30	3,4
PCB153	ND	25.00	12.28	49	18.41	74	50-125	40	0-30	3,4
PCB170	ND	25.00	12.22	49	18.30	73	50-125	40	0-30	3,4
PCB180	ND	25.00	13.42	54	19.52	78	50-125	37	0-30	4
PCB187	ND	25.00	12.56	50	18.77	75	50-125	40	0-30	4
PCB195	ND	25.00	16.00	64	22.80	91	50-125	35	0-30	4
PCB206	ND	25.00	13.95	56	18.73	75	50-125	29	0-30	4
PCB209	ND	25.00	13.62	54	17.51	70	50-125	25	0-30	4

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-06-0596-8	Sample	Sediment	GC/MS HHH	06/09/14	06/11/14 03:24	140609S02
14-06-0596-8	Matrix Spike	Sediment	GC/MS HHH	06/09/14	06/11/14 14:51	140609S02
14-06-0596-8	Matrix Spike Duplicate	Sediment	GC/MS HHH	06/09/14	06/11/14 15:22	140609S02

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
PCB008	ND	25.00	19.76	79	17.40	70	50-125	13	0-30	
PCB018	ND	25.00	16.74	67	14.79	59	50-125	12	0-30	
PCB028	ND	25.00	19.08	76	16.80	67	50-125	13	0-30	
PCB044	ND	25.00	18.31	73	15.73	63	50-125	15	0-30	
PCB052	ND	25.00	16.79	67	14.76	59	50-125	13	0-30	
PCB066	ND	25.00	21.90	88	18.85	75	50-125	15	0-30	
PCB077	ND	25.00	21.71	87	18.01	72	50-125	19	0-30	
PCB101	ND	25.00	18.61	74	15.88	64	50-125	16	0-30	
PCB105	ND	25.00	21.68	87	18.02	72	50-125	18	0-30	
PCB118	ND	25.00	22.99	92	18.79	75	50-125	20	0-30	
PCB126	ND	25.00	20.55	82	17.70	71	50-125	15	0-30	
PCB128	ND	25.00	16.77	67	14.66	59	50-125	13	0-30	
PCB153	ND	25.00	19.85	79	15.91	64	50-125	22	0-30	
PCB170	ND	25.00	18.76	75	16.62	66	50-125	12	0-30	
PCB180	ND	25.00	19.86	79	17.16	69	50-125	15	0-30	
PCB187	ND	25.00	19.20	77	16.45	66	50-125	15	0-30	
PCB195	ND	25.00	23.95	96	21.42	86	50-125	11	0-30	
PCB206	ND	25.00	20.35	81	17.76	71	50-125	14	0-30	
PCB209	ND	25.00	22.26	89	19.49	78	50-125	13	0-30	

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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - PDS

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 3005A Filt.
 Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDS Batch Number
14-05-1386-1	Sample	Aqueous	ICP/MS 03	05/19/14 00:00	05/19/14 20:59	140519S06
14-05-1386-1	PDS	Aqueous	ICP/MS 03	05/19/14 00:00	05/19/14 20:54	140519S06

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	ND	0.1000	0.09102	91	75-125	
Cadmium	ND	0.1000	0.09461	95	75-125	
Chromium	ND	0.1000	0.1097	110	75-125	
Copper	ND	0.1000	0.09956	100	75-125	
Lead	ND	0.1000	0.1052	105	75-125	
Nickel	ND	0.1000	0.09692	97	75-125	
Selenium	ND	0.1000	0.08864	89	75-125	
Silver	ND	0.05000	0.05307	106	75-125	
Zinc	0.01309	0.1000	0.1030	90	75-125	

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-06-0596-1	Sample	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:20	140609S01
14-06-0596-1	PDS	Sediment	ICP/MS 03	06/09/14 00:00	06/09/14 20:00	140609S01

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	5.134	25.00	28.69	94	75-125	
Cadmium	0.1976	25.00	25.10	100	75-125	
Chromium	38.20	25.00	62.56	97	75-125	
Copper	24.21	25.00	47.32	92	75-125	
Lead	11.56	25.00	36.00	98	75-125	
Nickel	38.78	25.00	61.76	92	75-125	
Selenium	0.3452	25.00	28.88	114	75-125	
Silver	0.1535	12.50	12.53	99	75-125	
Zinc	58.83	25.00	83.22	98	75-125	

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
14-05-1271-15	Sample	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 15:43	140520S04
14-05-1271-15	PDS	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 15:36	140520S04

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	%Rec. CL	Qualifiers
Arsenic	0.8321	25.00	27.31	106	75-125	
Cadmium	ND	25.00	27.01	108	75-125	
Chromium	5.572	25.00	30.91	101	75-125	
Copper	1.870	25.00	28.72	107	75-125	
Lead	2.386	25.00	28.35	104	75-125	
Nickel	3.022	25.00	29.07	104	75-125	
Selenium	0.1133	25.00	26.23	104	75-125	
Silver	ND	12.50	13.49	108	75-125	
Zinc	16.39	25.00	44.70	113	75-125	



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RPD: Relative Percent Difference. CL: Control Limits

Quality Control - PDS

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
CB-S-09 BOTTOM	Sample	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 19:35	140520S05
CB-S-09 BOTTOM	PDS	Sediment	ICP/MS 04	05/20/14 00:00	05/21/14 14:58	140520S05

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>PDS Conc.</u>	<u>PDS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Arsenic	0.9767	25.00	28.12	109	75-125	
Cadmium	ND	25.00	26.95	108	75-125	
Chromium	4.393	25.00	30.20	103	75-125	
Copper	1.693	25.00	28.98	109	75-125	
Lead	2.085	25.00	27.99	104	75-125	
Nickel	2.773	25.00	28.60	103	75-125	
Selenium	ND	25.00	28.90	116	75-125	
Silver	ND	12.50	13.37	107	75-125	
Zinc	13.77	25.00	43.84	120	75-125	



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Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-05-1271-1	Sample	Sediment	N/A	05/19/14 00:00	05/20/14 13:00	E0520TSD1
14-05-1271-1	Sample Duplicate	Sediment	N/A	05/19/14 00:00	05/20/14 13:00	E0520TSD1

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	47.30	47.00	1	0-10	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-05-1270-21	Sample	Sediment	N/A	05/19/14 00:00	05/20/14 16:00	E0520TSD3
14-05-1270-21	Sample Duplicate	Sediment	N/A	05/19/14 00:00	05/20/14 16:00	E0520TSD3

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	48.10	49.20	2	0-10	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Sample Duplicate

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: SM 2540 B (M)

Project: ADCNR Mobile Bay

Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
14-06-0596-1	Sample	Sediment	N/A	06/09/14 00:00	06/09/14 20:00	E0609TSD1
14-06-0596-1	Sample Duplicate	Sediment	N/A	06/09/14 00:00	06/09/14 20:00	E0609TSD1

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Solids, Total	48.10	48.10	0	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1047	LCS	Solid	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1			
099-06-013-1047	LCSD	Solid	TOC 4	05/27/14	05/27/14 14:37	E0527TOCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Carbon, Total Organic	0.6000	0.6148	102	0.6148	102	80-120	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: N/A
Method: EPA 9060A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-06-013-1055	LCS	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
099-06-013-1055	LCSD	Solid	TOC 4	06/09/14	06/09/14 18:16	E0609TOCL1			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon, Total Organic	0.6000	0.6070	101	0.6024	100	80-120	1	0-20	



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3020A Total
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-4429	LCS	Aqueous	ICP/MS 03	05/19/14	05/19/14 21:51	140519L06
096-06-003-4429	LCSD	Aqueous	ICP/MS 03	05/19/14	05/20/14 16:31	140519L06

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	0.1000	0.1028	103	0.09601	96	80-120	7	0-20	
Cadmium	0.1000	0.1005	100	0.09889	99	80-120	2	0-20	
Chromium	0.1000	0.1027	103	0.09711	97	80-120	6	0-20	
Copper	0.1000	0.1026	103	0.09945	99	80-120	3	0-20	
Lead	0.1000	0.1001	100	0.09727	97	80-120	3	0-20	
Nickel	0.1000	0.09882	99	0.09578	96	80-120	3	0-20	
Selenium	0.1000	0.1070	107	0.1028	103	80-120	4	0-20	
Silver	0.05000	0.04554	91	0.04982	100	80-120	9	0-20	
Zinc	0.1000	0.1038	104	0.09941	99	80-120	4	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-212	LCS	Solid	ICP/MS 03	06/09/14	06/09/14 19:48	140609L01E			
099-15-254-212	LCSD	Solid	ICP/MS 03	06/09/14	06/10/14 15:02	140609L01E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	26.37	105	24.85	99	80-120	6	0-20	
Cadmium	25.00	26.75	107	25.41	102	80-120	5	0-20	
Chromium	25.00	25.16	101	24.94	100	80-120	1	0-20	
Copper	25.00	26.54	106	26.22	105	80-120	1	0-20	
Lead	25.00	26.30	105	25.07	100	80-120	5	0-20	
Nickel	25.00	25.54	102	24.92	100	80-120	2	0-20	
Selenium	25.00	28.56	114	26.59	106	80-120	7	0-20	
Silver	12.50	11.41	91	12.80	102	80-120	12	0-20	
Zinc	25.00	28.80	115	26.11	104	80-120	10	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-206	LCS	Solid	ICP/MS 04	05/20/14	05/21/14 13:03	140520L04E			
099-15-254-206	LCSD	Solid	ICP/MS 04	05/20/14	05/21/14 13:13	140520L04E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.40	102	25.21	101	80-120	1	0-20	
Cadmium	25.00	24.62	98	25.12	100	80-120	2	0-20	
Chromium	25.00	24.67	99	24.56	98	80-120	0	0-20	
Copper	25.00	26.36	105	26.18	105	80-120	1	0-20	
Lead	25.00	24.53	98	24.69	99	80-120	1	0-20	
Nickel	25.00	24.75	99	24.68	99	80-120	0	0-20	
Selenium	25.00	24.82	99	24.97	100	80-120	1	0-20	
Silver	12.50	12.79	102	12.99	104	80-120	2	0-20	
Zinc	25.00	26.99	108	27.06	108	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3050B
Method: EPA 6020

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-254-207	LCS	Solid	ICP/MS 04	05/20/14	05/21/14 13:06	140520L05E			
099-15-254-207	LCSD	Solid	ICP/MS 04	05/20/14	05/21/14 14:45	140520L05E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	25.00	25.71	103	26.95	108	80-120	5	0-20	
Cadmium	25.00	25.32	101	26.31	105	80-120	4	0-20	
Chromium	25.00	24.59	98	25.80	103	80-120	5	0-20	
Copper	25.00	27.22	109	27.49	110	80-120	1	0-20	
Lead	25.00	25.24	101	25.77	103	80-120	2	0-20	
Nickel	25.00	25.49	102	25.89	104	80-120	2	0-20	
Selenium	25.00	24.92	100	25.55	102	80-120	3	0-20	
Silver	12.50	13.27	106	13.51	108	80-120	2	0-20	
Zinc	25.00	27.68	111	28.63	115	80-120	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

Weston Solutions
 5817 Dryden Place, Suite 101
 Carlsbad, CA 92008-9999

Date Received: 05/17/14
 Work Order: 14-05-1383
 Preparation: EPA 7470A Total
 Method: EPA 7470A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-510-479	LCS	Aqueous	Mercury 04	05/19/14	05/19/14 14:45	140519L01A

<u>Parameter</u>	<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury	0.01000	0.01002	100	85-121	

Return to Contents 

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-21	LCS	Solid	Mercury 05	05/21/14	05/21/14 18:28	140521L06E			
099-16-278-21	LCSD	Solid	Mercury 05	05/21/14	05/21/14 18:30	140521L06E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.8868	106	0.8591	103	82-124	3	0-16	



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 7471A Total
Method: EPA 7471A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-16-278-27	LCS	Solid	Mercury 05	06/09/14	06/09/14 14:03	140609L01E			
099-16-278-27	LCSD	Solid	Mercury 05	06/09/14	06/11/14 13:07	140609L01E			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	0.8350	0.9054	108	0.9088	109	82-124	0	0-16	


 Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-288	LCS	Solid	GC 51	06/09/14	06/11/14 11:03	140609L10				
099-12-858-288	LCSD	Solid	GC 51	06/09/14	06/11/14 11:17	140609L10				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	4.922	98	4.725	94	50-135	36-149	4	0-25	
Alpha-BHC	5.000	5.462	109	5.219	104	50-135	36-149	5	0-25	
Beta-BHC	5.000	4.963	99	4.750	95	50-135	36-149	4	0-25	
Delta-BHC	5.000	4.869	97	4.656	93	50-135	36-149	4	0-25	
Gamma-BHC	5.000	5.461	109	5.229	105	50-135	36-149	4	0-25	
Dieldrin	5.000	4.992	100	4.812	96	50-135	36-149	4	0-25	
4,4'-DDD	5.000	4.794	96	4.611	92	50-135	36-149	4	0-25	
4,4'-DDE	5.000	4.727	95	4.521	90	50-135	36-149	4	0-25	
4,4'-DDT	5.000	5.134	103	4.943	99	50-135	36-149	4	0-25	
Endosulfan I	5.000	5.125	102	4.975	99	50-135	36-149	3	0-25	
Endosulfan II	5.000	5.162	103	4.988	100	50-135	36-149	3	0-25	
Endosulfan Sulfate	5.000	4.845	97	4.676	94	50-135	36-149	4	0-25	
Endrin	5.000	5.144	103	4.808	96	50-135	36-149	7	0-25	
Endrin Aldehyde	5.000	5.002	100	4.956	99	50-135	36-149	1	0-25	
Endrin Ketone	5.000	5.152	103	5.015	100	50-135	36-149	3	0-25	
Heptachlor	5.000	5.428	109	5.202	104	50-135	36-149	4	0-25	
Heptachlor Epoxide	5.000	4.696	94	4.452	89	50-135	36-149	5	0-25	
Methoxychlor	5.000	4.971	99	4.820	96	50-135	36-149	3	0-25	
Alpha Chlordane	5.000	4.801	96	4.634	93	50-135	36-149	4	0-25	
Gamma Chlordane	5.000	4.814	96	4.660	93	50-135	36-149	3	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-858-284	LCS	Solid	GC 66	05/25/14	05/28/14 17:38	140525L09				
099-12-858-284	LCSD	Solid	GC 66	05/25/14	05/28/14 17:52	140525L09				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	5.000	5.478	110	5.777	116	50-135	36-149	5	0-25	
Alpha-BHC	5.000	4.901	98	5.209	104	50-135	36-149	6	0-25	
Beta-BHC	5.000	5.659	113	6.176	124	50-135	36-149	9	0-25	
Delta-BHC	5.000	4.658	93	5.005	100	50-135	36-149	7	0-25	
Gamma-BHC	5.000	4.690	94	5.160	103	50-135	36-149	10	0-25	
Dieldrin	5.000	5.419	108	5.715	114	50-135	36-149	5	0-25	
4,4'-DDD	5.000	5.999	120	6.107	122	50-135	36-149	2	0-25	
4,4'-DDE	5.000	5.571	111	5.699	114	50-135	36-149	2	0-25	
4,4'-DDT	5.000	4.653	93	4.810	96	50-135	36-149	3	0-25	
Endosulfan I	5.000	5.742	115	5.736	115	50-135	36-149	0	0-25	
Endosulfan II	5.000	5.832	117	5.966	119	50-135	36-149	2	0-25	
Endosulfan Sulfate	5.000	4.705	94	5.016	100	50-135	36-149	6	0-25	
Endrin	5.000	5.193	104	5.544	111	50-135	36-149	7	0-25	
Endrin Aldehyde	5.000	5.008	100	5.575	112	50-135	36-149	11	0-25	
Endrin Ketone	5.000	5.193	104	5.536	111	50-135	36-149	6	0-25	
Heptachlor	5.000	5.206	104	5.570	111	50-135	36-149	7	0-25	
Heptachlor Epoxide	5.000	5.347	107	5.368	107	50-135	36-149	0	0-25	
Methoxychlor	5.000	4.435	89	4.746	95	50-135	36-149	7	0-25	
Alpha Chlordane	5.000	5.220	104	5.542	111	50-135	36-149	6	0-25	
Gamma Chlordane	5.000	5.141	103	5.406	108	50-135	36-149	5	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3510C
Method: EPA 8081A

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-435-143	LCS	Aqueous	GC 44	06/09/14	06/14/14 01:23	140609L05				
099-14-435-143	LCSD	Aqueous	GC 44	06/09/14	06/14/14 01:37	140609L05				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Aldrin	0.2500	0.2505	100	0.2482	99	50-150	33-167	1	0-25	
Alpha Chlordane	0.2500	0.2523	101	0.2514	101	50-150	33-167	0	0-25	
Alpha-BHC	0.2500	0.2771	111	0.2750	110	50-150	33-167	1	0-25	
Beta-BHC	0.2500	0.2574	103	0.2534	101	50-150	33-167	2	0-25	
4,4'-DDD	0.2500	0.2657	106	0.2647	106	50-150	33-167	0	0-25	
4,4'-DDE	0.2500	0.2624	105	0.2611	104	50-150	33-167	1	0-25	
4,4'-DDT	0.2500	0.2564	103	0.2548	102	50-150	33-167	1	0-25	
Delta-BHC	0.2500	0.2520	101	0.2502	100	50-150	33-167	1	0-25	
Dieldrin	0.2500	0.2627	105	0.2622	105	50-150	33-167	0	0-25	
Endosulfan I	0.2500	0.2611	104	0.2606	104	50-150	33-167	0	0-25	
Endosulfan II	0.2500	0.2729	109	0.2733	109	50-150	33-167	0	0-25	
Endosulfan Sulfate	0.2500	0.2465	99	0.2461	98	50-150	33-167	0	0-25	
Endrin	0.2500	0.2633	105	0.2623	105	50-150	33-167	0	0-25	
Endrin Aldehyde	0.2500	0.2273	91	0.2272	91	50-150	33-167	0	0-25	
Endrin Ketone	0.2500	0.2709	108	0.2707	108	50-150	33-167	0	0-25	
Gamma Chlordane	0.2500	0.2520	101	0.2487	99	50-150	33-167	1	0-25	
Gamma-BHC	0.2500	0.2706	108	0.2690	108	50-150	33-167	1	0-25	
Heptachlor	0.2500	0.2679	107	0.2669	107	50-150	33-167	0	0-25	
Heptachlor Epoxide	0.2500	0.2547	102	0.2544	102	50-150	33-167	0	0-25	
Methoxychlor	0.2500	0.2494	100	0.2494	100	50-150	33-167	0	0-25	

Total number of LCS compounds: 20

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3510C
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-430-213	LCS	Aqueous	GC/MS MM	05/23/14	05/28/14 19:41	140523L07				
099-12-430-213	LCSD	Aqueous	GC/MS MM	05/23/14	05/28/14 20:06	140523L07				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	20.00	19.00	95	16.97	85	80-120	73-127	11	0-20	
2,4-Dichlorophenol	20.00	18.42	92	17.02	85	40-160	20-180	8	0-20	
2-Methylphenol	20.00	12.74	64	12.99	65	40-160	20-180	2	0-20	
2-Nitrophenol	20.00	18.53	93	16.87	84	40-160	20-180	9	0-20	
4-Chloro-3-Methylphenol	20.00	17.83	89	16.53	83	40-160	20-180	8	0-20	
Acenaphthene	20.00	17.67	88	15.45	77	55-121	44-132	13	0-15	
Benzo (a) Pyrene	20.00	18.11	91	15.32	77	17-163	0-187	17	0-20	
Chrysene	20.00	16.86	84	14.04	70	17-168	0-193	18	0-20	
Di-n-Butyl Phthalate	20.00	21.33	107	17.78	89	40-160	20-180	18	0-20	
Dimethyl Phthalate	20.00	17.71	89	15.80	79	40-160	20-180	11	0-20	
Fluoranthene	20.00	17.55	88	14.92	75	26-137	8-156	16	0-20	
Fluorene	20.00	17.30	87	15.37	77	59-121	49-131	12	0-20	
Naphthalene	20.00	17.80	89	16.73	84	21-133	2-152	6	0-20	
Phenanthrene	20.00	18.01	90	14.83	74	54-120	43-131	19	0-20	
Phenol	20.00	8.218	41	8.269	41	40-160	20-180	1	0-20	
Pyrene	20.00	17.73	89	15.10	76	45-129	31-143	16	0-15	X

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-80	LCS	Solid	GC/MS MM	05/25/14	05/28/14 18:49	140525L08				
099-14-256-80	LCSD	Solid	GC/MS MM	05/25/14	05/28/14 19:15	140525L08				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	785.2	79	800.8	80	40-160	20-180	2	0-20	
2,4-Dichlorophenol	1000	794.1	79	792.9	79	40-160	20-180	0	0-20	
2-Methylphenol	1000	711.3	71	718.9	72	40-160	20-180	1	0-20	
2-Nitrophenol	1000	774.5	77	786.9	79	40-160	20-180	2	0-20	
4-Chloro-3-Methylphenol	1000	811.3	81	826.8	83	40-160	20-180	2	0-20	
Acenaphthene	1000	776.6	78	774.5	77	48-108	38-118	0	0-11	
Benzo (a) Pyrene	1000	786.0	79	763.8	76	17-163	0-187	3	0-20	
Chrysene	1000	734.1	73	710.5	71	17-168	0-193	3	0-20	
Di-n-Butyl Phthalate	1000	947.3	95	956.9	96	40-160	20-180	1	0-20	
Dimethyl Phthalate	1000	779.3	78	795.2	80	40-160	20-180	2	0-20	
Fluoranthene	1000	761.1	76	772.7	77	26-137	8-156	2	0-20	
Fluorene	1000	759.9	76	774.4	77	59-121	49-131	2	0-20	
Naphthalene	1000	790.9	79	779.8	78	21-133	2-152	1	0-20	
Phenanthrene	1000	789.1	79	787.1	79	54-120	43-131	0	0-20	
Phenol	1000	752.0	75	762.8	76	40-160	20-180	1	0-20	
Pyrene	1000	775.9	78	768.8	77	28-106	15-119	1	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-256-82	LCS	Solid	GC/MS MM	06/09/14	06/10/14 15:42	140609L12				
099-14-256-82	LCSD	Solid	GC/MS MM	06/09/14	06/10/14 16:08	140609L12				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
2,4,6-Trichlorophenol	1000	540.0	54	611.7	61	40-160	20-180	12	0-20	
2,4-Dichlorophenol	1000	654.6	65	740.6	74	40-160	20-180	12	0-20	
2-Methylphenol	1000	658.8	66	729.6	73	40-160	20-180	10	0-20	
2-Nitrophenol	1000	618.2	62	713.9	71	40-160	20-180	14	0-20	
4-Chloro-3-Methylphenol	1000	788.2	79	904.6	90	40-160	20-180	14	0-20	
Acenaphthene	1000	729.6	73	790.0	79	48-108	38-118	8	0-11	
Benzo (a) Pyrene	1000	724.2	72	798.4	80	17-163	0-187	10	0-20	
Chrysene	1000	684.8	68	751.6	75	17-168	0-193	9	0-20	
Di-n-Butyl Phthalate	1000	906.9	91	1062	106	40-160	20-180	16	0-20	
Dimethyl Phthalate	1000	890.5	89	977.2	98	40-160	20-180	9	0-20	
Fluoranthene	1000	708.3	71	776.7	78	26-137	8-156	9	0-20	
Fluorene	1000	713.3	71	765.3	77	59-121	49-131	7	0-20	
Naphthalene	1000	744.7	74	815.1	82	21-133	2-152	9	0-20	
Phenanthrene	1000	723.0	72	815.1	82	54-120	43-131	12	0-20	
Phenol	1000	718.3	72	778.6	78	40-160	20-180	8	0-20	
Pyrene	1000	743.4	74	831.1	83	28-106	15-119	11	0-16	

Total number of LCS compounds: 16

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-184	LCS	Solid	GC/MS HHH	05/23/14	05/31/14 11:46	140523L30				
099-14-341-184	LCSD	Solid	GC/MS HHH	05/23/14	05/30/14 21:57	140523L30				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	30.08	120	27.39	110	50-125	38-138	9	0-30	
PCB018	25.00	23.77	95	22.91	92	50-125	38-138	4	0-30	
PCB028	25.00	25.62	102	25.04	100	50-125	38-138	2	0-30	
PCB044	25.00	22.70	91	24.02	96	50-125	38-138	6	0-30	
PCB052	25.00	20.89	84	21.92	88	50-125	38-138	5	0-30	
PCB066	25.00	26.11	104	27.52	110	50-125	38-138	5	0-30	
PCB077	25.00	25.01	100	26.05	104	50-125	38-138	4	0-30	
PCB101	25.00	22.52	90	23.64	95	50-125	38-138	5	0-30	
PCB105	25.00	24.48	98	25.12	100	50-125	38-138	3	0-30	
PCB118	25.00	25.17	101	26.34	105	50-125	38-138	5	0-30	
PCB126	25.00	24.21	97	24.21	97	50-125	38-138	0	0-30	
PCB128	25.00	19.89	80	18.93	76	50-125	38-138	5	0-30	
PCB153	25.00	21.98	88	22.64	91	50-125	38-138	3	0-30	
PCB170	25.00	21.34	85	22.52	90	50-125	38-138	5	0-30	
PCB180	25.00	22.70	91	21.92	88	50-125	38-138	4	0-30	
PCB187	25.00	22.12	88	22.84	91	50-125	38-138	3	0-30	
PCB195	25.00	27.12	108	28.30	113	50-125	38-138	4	0-30	
PCB206	25.00	27.54	110	24.91	100	50-125	38-138	10	0-30	
PCB209	25.00	26.37	105	25.25	101	50-125	38-138	4	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3545
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

Page 17 of 18

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-341-187	LCS	Solid	GC/MS HHH	06/09/14	06/10/14 22:40	140609L02				
099-14-341-187	LCSD	Solid	GC/MS HHH	06/09/14	06/10/14 23:13	140609L02				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	25.00	26.06	104	25.21	101	50-125	38-138	3	0-30	
PCB018	25.00	21.98	88	20.52	82	50-125	38-138	7	0-30	
PCB028	25.00	22.71	91	23.61	94	50-125	38-138	4	0-30	
PCB044	25.00	21.47	86	22.09	88	50-125	38-138	3	0-30	
PCB052	25.00	19.58	78	19.20	77	50-125	38-138	2	0-30	
PCB066	25.00	24.38	98	24.32	97	50-125	38-138	0	0-30	
PCB077	25.00	22.97	92	24.15	97	50-125	38-138	5	0-30	
PCB101	25.00	21.46	86	20.78	83	50-125	38-138	3	0-30	
PCB105	25.00	21.04	84	21.01	84	50-125	38-138	0	0-30	
PCB118	25.00	21.59	86	24.62	98	50-125	38-138	13	0-30	
PCB126	25.00	20.69	83	21.54	86	50-125	38-138	4	0-30	
PCB128	25.00	16.29	65	19.75	79	50-125	38-138	19	0-30	
PCB153	25.00	18.49	74	19.10	76	50-125	38-138	3	0-30	
PCB170	25.00	24.75	99	21.85	87	50-125	38-138	12	0-30	
PCB180	25.00	19.19	77	20.85	83	50-125	38-138	8	0-30	
PCB187	25.00	20.16	81	18.88	76	50-125	38-138	7	0-30	
PCB195	25.00	29.10	116	29.02	116	50-125	38-138	0	0-30	
PCB206	25.00	24.16	97	23.81	95	50-125	38-138	1	0-30	
PCB209	25.00	25.72	103	23.44	94	50-125	38-138	9	0-30	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Weston Solutions
5817 Dryden Place, Suite 101
Carlsbad, CA 92008-9999

Date Received: 05/17/14
Work Order: 14-05-1383
Preparation: EPA 3510C
Method: EPA 8270C SIM PCB Congeners

Project: ADCNR Mobile Bay

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-14-433-80	LCS	Aqueous	GC/MS HHH	05/23/14	05/27/14 16:56	140523L06A				
099-14-433-80	LCSD	Aqueous	GC/MS HHH	05/23/14	05/27/14 17:25	140523L06A				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
PCB008	1.000	0.9751	98	1.002	100	50-150	33-167	3	0-25	
PCB018	1.000	0.8120	81	0.8263	83	50-150	33-167	2	0-25	
PCB028	1.000	0.8499	85	0.8589	86	50-150	33-167	1	0-25	
PCB044	1.000	0.8197	82	0.8214	82	50-150	33-167	0	0-25	
PCB052	1.000	0.7530	75	0.7626	76	50-150	33-167	1	0-25	
PCB066	1.000	0.9153	92	0.9272	93	50-150	33-167	1	0-25	
PCB077	1.000	0.8852	89	0.8888	89	50-150	33-167	0	0-25	
PCB101	1.000	0.7862	79	0.7960	80	50-150	33-167	1	0-25	
PCB105	1.000	0.8618	86	0.8621	86	50-150	33-167	0	0-25	
PCB118	1.000	0.8830	88	0.8914	89	50-150	33-167	1	0-25	
PCB126	1.000	0.8484	85	0.8515	85	50-150	33-167	0	0-25	
PCB128	1.000	0.6890	69	0.7027	70	50-150	33-167	2	0-25	
PCB153	1.000	0.7550	75	0.7691	77	50-150	33-167	2	0-25	
PCB170	1.000	0.7243	72	0.7180	72	50-150	33-167	1	0-25	
PCB180	1.000	0.7657	77	0.7625	76	50-150	33-167	0	0-25	
PCB187	1.000	0.7502	75	0.7568	76	50-150	33-167	1	0-25	
PCB195	1.000	0.8919	89	0.8839	88	50-150	33-167	1	0-25	
PCB206	1.000	0.7286	73	0.7346	73	50-150	33-167	1	0-25	
PCB209	1.000	0.7272	73	0.7239	72	50-150	33-167	0	0-25	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 14-05-1383

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



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 1340 Treat Blvd, Ste 210 • Walnut Creek, CA 94597 • (925) 948-2600, FAX 948-2601

CHAIN OF CUSTODY

36259

DATE 5/16/14 PAGE 1 OF 1

PROJECT NAME / SURVEY / PROJECT NUMBER		CONTAINER TYPE / VOLUME		TOTAL NUMBER OF CONTAINERS		ANALYSIS/TEST REQUESTED		FOR WESTON USE ONLY		
SITE ID (Location)	SAMPLE ID	DATE	TIME	MATRIX				PRESERVED HOW	SAMPLE TEMP. (°C) UPON RECEIPT	WESTON LAB ID
1 CB-S-10 Top	CB-S-10 Top	5/16/14	1005	SED	1-16oz JAR	*		ICE		14-05-1383
2 CB-S-10 Bottom	CB-S-10 Bottom		1010							
3 CB-S-09 Top	CB-S-09 Top		1045							
4 CB-S-09 Bottom	CB-S-09 Bottom		1100							
5 FIELD BLANK	FIELD BLANK		1030		4-16oz JARS					

SAMPLED BY: DAN McCoy & CHARIS WARM
 SIGNATURE: [Signature]
 PRINT: [Signature]

COMMENTS / SPECIAL INSTRUCTIONS
 * SEE ATTACHED TABLE FOR ANALYSES

RELINQUISHED BY: [Signature]
 Firm: WESTON
 Date/Time: 5/16/14 1345

RECEIVED BY: [Signature]
 Firm: CCB
 Date/Time: 5/17/14 1030



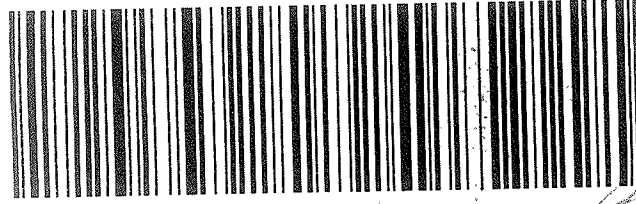
1383

FedEx
TRK#
0200 8054 6947 2730

SATURDAY 12:00P
PRIORITY OVERNIGHT

X0 APVA

92841
CA-US
SNA



FID 475766 16MAY14 MOBA 51AC1/62D3/65DD

1383

The physical analyses listed in Table 1 will be performed at all 29 sites at both depth profiles to provide the most information possible for development of a transport model. Additionally, the role of sediment in chemical pollution is tied both to the particle size of sediment and to the amount of particulate organic carbon associated with the sediment. Collecting physical parameters at all sites will provide data for comparison with chemical results in a cost-effective manner since physical analyses are less expensive than chemical analyses. Assumptions regarding chemistry results may be able to be made at stations which have similar physical parameter analytical results. For example, finer grained sediment generally contains greater concentrations of metals. If the chemical data are plotted against grain-size information, distinct patterns may emerge. There is a strong positive correlation between increasing chemical concentration and the increasing percentage of fine-grained material (Horowitz 1985).

Table 1. Physical Parameters

Physical Analysis	Method	Depth Profile
Percent Solids	SM 2540B	Upper and Lower
Total Organic Carbon (TOC)	EPA 9060A	Upper and Lower
Laser Particle Size	ASTM D4464(M)	Upper and Lower

TOP & BOTTOM SAMPLES

Sediment from each of the 29 sample locations will also be analyzed for chemical constituents as presented in Table 2 below. The primary constituents (metals, mercury, and pesticides) will be analyzed at both depth profiles at the 29 locations. The secondary constituents (polychlorinated biphenyls [PCBs] and PAHs, phenols, and phthalates) will also be analyzed at each of the 29 locations, but only for the upper depth profile in order to provide the greatest cost/benefit. It is anticipated that the upper sediment profile will have a higher probability of contamination due to the relatively low depositional rate for sediment in the project area.

Table 2. Chemical Parameters

Chemical Analysis	Method	Depth Profile
Trace Metals	EPA 6020, ICP/MS	Upper and Lower
Mercury	EPA 7471	Upper and Lower
Organochlorine Pesticides	EPA 8081A	Upper and Lower
PCB Congeners	EPA 8270C SIM	Upper
PAHs, Phenols, Phthalates	EPA 8270C SIM	Upper

TOP AND BOTTOM SAMPLES

TOP ONLY SAMPLES

1.4.2 Water Quality Parameters

Crews will be equipped with a water quality meter to record general conditions at each sampling location. Parameters that will be measured include water depth, temperature, conductivity, salinity, hydrogen ion concentration (pH), dissolved oxygen (DO), and turbidity. Water quality readings and general field observations will be recorded onto field datasheets (Appendix A).

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Weston

DATE: 05/17/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3.6 °C - 0.3 °C (CF) = 2.7 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Checked by: 802

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Checked by: 802

Sample _____ No (Not Intact) Not Present Checked by: 802

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Aqueous: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 1PBna 500PB

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ 16ozCGJ _____ _____

Air: Tedlar® Canister **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** 802

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 778

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure z_{na}: ZnAc₂+NaOH f: Filtered **Scanned by:** 778

