

ANALYTICAL RESULTS SUMMARY

METALS
GC SEMI-VOLATILES
SEMI-VOLATILE ORGANICS
VOLATILE ORGANICS

PROJECT NAME : SOUTH RIVER WM REPLACEMENT

CDM SMITH

110 Fieldcrest Ave

Raritan Center

Edison, NJ - 08837

Phone No: 732-225-7000

ORDER ID : Q2010

ATTENTION : Marcie Ann Encinas



Laboratory Certification ID # 20012



Hit Summary Sheet
SW-846

SDG No.: Q2010
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q2010-03	TP-14 TP-14	SOIL	Acetone	10.8	J	4.10	21.6	ug/Kg
			Total Voc :	10.8				
			Total Concentration:	10.8				
Client ID: Q2010-04	TP-17 TP-17	SOIL	Acetone	21.2		3.90	20.6	ug/Kg
Q2010-04	TP-17	SOIL	Methylcyclohexane	0.83	J	0.75	4.10	ug/Kg
Q2010-04	TP-17	SOIL	Benzene	6.90		0.65	4.10	ug/Kg
			Total Voc :	28.9				
			Total Concentration:	28.9				

Hit Summary Sheet SW-846

SDG No.: Q2010
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-10								
Q2010-01	TP-10	SOIL	Phenanthrene	150.000	J	22.4	180	ug/Kg
Q2010-01	TP-10	SOIL	Fluoranthene	510.000		32.1	180	ug/Kg
Q2010-01	TP-10	SOIL	Pyrene	380.000		38.5	180	ug/Kg
Q2010-01	TP-10	SOIL	Benzo(a)anthracene	220.000		24.6	180	ug/Kg
Q2010-01	TP-10	SOIL	Chrysene	280.000		21.3	180	ug/Kg
Q2010-01	TP-10	SOIL	Bis(2-ethylhexyl)phthalate	180.000		63.3	180	ug/Kg
Q2010-01	TP-10	SOIL	Benzo(b)fluoranthene	370.000		20.3	180	ug/Kg
Q2010-01	TP-10	SOIL	Benzo(k)fluoranthene	140.000	J	24	180	ug/Kg
Q2010-01	TP-10	SOIL	Benzo(a)pyrene	250.000		31.6	180	ug/Kg
Q2010-01	TP-10	SOIL	Indeno(1,2,3-cd)pyrene	130.000	J	31.1	180	ug/Kg
Q2010-01	TP-10	SOIL	Benzo(g,h,i)perylene	150.000	J	27.5	180	ug/Kg
Total Svoc :				2,760.00				
Q2010-01	TP-10	SOIL	n-Hexadecanoic acid	*	220.000	J	0	ug/Kg
Q2010-01	TP-10	SOIL	11H-Benzo[a]fluoren-11-one	*	84.500	J	0	ug/Kg
Q2010-01	TP-10	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	200.000	AB	0	ug/Kg
Q2010-01	TP-10	SOIL	Benzo[e]pyrene	*	180.000	J	0	ug/Kg
Q2010-01	TP-10	SOIL	Benzophenone	*	120.000	J	0	ug/Kg
Total Tics :				804.50				
Total Concentration:				3,564.50				
Client ID : TP-13								
Q2010-02	TP-13	SOIL	(E)-4-(3-Hydroxyprop-1-en-1-yl)-	*	180.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	280.000	AB	0	ug/Kg
Q2010-02	TP-13	SOIL	3,5-Dimethoxy-4-hydroxycinnam:	*	410.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Benzophenone	*	350.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	cis-13-Octadecenoic acid	*	190.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Dichloroacetic acid, heptadecyl es	*	110.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Docosane, 7-hexyl-	*	120.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Eicosane, 9-octyl-	*	83.700	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Heptacosane	*	110.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	n-Hexadecanoic acid	*	2,100.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Nonadecane	*	120.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Octadecanoic acid	*	100.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Octadecanoic acid, 2-(2-hydroxye	*	900.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Pentadecanoic acid	*	220.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Tetradecanoic acid	*	390.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	trans-Sinapyl alcohol	*	550.000	J	0	ug/Kg
Q2010-02	TP-13	SOIL	Tridecanoic acid	*	2,400.000	J	0	ug/Kg

Hit Summary Sheet SW-846

SDG No.: Q2010
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2010-02	TP-13	SOIL	unknown13.634	*	180.000	J 0	0	ug/Kg
Total Tics :					8,793.70			
Total Concentration:					8,793.70			
Client ID : TP-14								
Q2010-03	TP-14	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	290.000	AB	0	0	ug/Kg
Q2010-03	TP-14	SOIL	Benzophenone *	210.000	J	0	0	ug/Kg
Q2010-03	TP-14	SOIL	n-Hexadecanoic acid *	180.000	J	0	0	ug/Kg
Q2010-03	TP-14	SOIL	Pentafluoropropionic acid, pentad *	130.000	J	0	0	ug/Kg
Total Tics :					810.00			
Total Concentration:					810.00			
Client ID : TP-17								
Q2010-04	TP-17	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	330.000	AB	0	0	ug/Kg
Q2010-04	TP-17	SOIL	Benzophenone *	190.000	J	0	0	ug/Kg
Q2010-04	TP-17	SOIL	Heptadecyl trifluoroacetate *	150.000	J	0	0	ug/Kg
Q2010-04	TP-17	SOIL	n-Hexadecanoic acid *	150.000	J	0	0	ug/Kg
Q2010-04	TP-17	SOIL	unknown17.756 *	100.000	J	0	0	ug/Kg
Total Tics :					920.00			
Total Concentration:					920.00			

Hit Summary Sheet
SW-846

SDG No.: Q2010

Order ID: Q2010

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-10								
Q2010-01	TP-10	SOIL	alpha-Chlordane	0.52	JP	0.13	1.80	ug/kg
Q2010-01	TP-10	SOIL	gamma-Chlordane	0.26	J	0.16	1.80	ug/kg
Total Concentration:				0.780				



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q2010

Order ID: Q2010

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
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Client ID :

Total Concentration: 0.000



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q2010

Order ID: Q2010

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
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Client ID :

Total Concentration: 0.000

Hit Summary Sheet
SW-846

SDG No.: Q2010

Order ID: Q2010

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-10								
Q2010-01	TP-10	SOIL	Aluminum	5560		0.85	5.03	mg/Kg
Q2010-01	TP-10	SOIL	Arsenic	6.09		0.19	1.01	mg/Kg
Q2010-01	TP-10	SOIL	Barium	23.1		0.74	5.03	mg/Kg
Q2010-01	TP-10	SOIL	Beryllium	0.71		0.025	0.30	mg/Kg
Q2010-01	TP-10	SOIL	Calcium	5780		11.2	101	mg/Kg
Q2010-01	TP-10	SOIL	Chromium	18.7		0.047	0.50	mg/Kg
Q2010-01	TP-10	SOIL	Cobalt	3.32		0.10	1.51	mg/Kg
Q2010-01	TP-10	SOIL	Copper	13.1		0.22	1.01	mg/Kg
Q2010-01	TP-10	SOIL	Iron	20600		4.02	5.03	mg/Kg
Q2010-01	TP-10	SOIL	Lead	18.3		0.13	0.60	mg/Kg
Q2010-01	TP-10	SOIL	Magnesium	1500		12.1	101	mg/Kg
Q2010-01	TP-10	SOIL	Manganese	66.3		0.14	1.01	mg/Kg
Q2010-01	TP-10	SOIL	Mercury	0.027		0.0080	0.014	mg/Kg
Q2010-01	TP-10	SOIL	Nickel	5.39		0.13	2.01	mg/Kg
Q2010-01	TP-10	SOIL	Potassium	354		27.9	101	mg/Kg
Q2010-01	TP-10	SOIL	Selenium	1.71		0.26	1.01	mg/Kg
Q2010-01	TP-10	SOIL	Sodium	141		17.9	101	mg/Kg
Q2010-01	TP-10	SOIL	Thallium	1.19	J	0.23	2.01	mg/Kg
Q2010-01	TP-10	SOIL	Vanadium	22.0		0.25	2.01	mg/Kg
Q2010-01	TP-10	SOIL	Zinc	24.3		0.23	2.01	mg/Kg
Client ID : TP-13								
Q2010-02	TP-13	SOIL	Aluminum	1420		0.95	5.67	mg/Kg
Q2010-02	TP-13	SOIL	Arsenic	2.01		0.22	1.13	mg/Kg
Q2010-02	TP-13	SOIL	Barium	88.5		0.83	5.67	mg/Kg
Q2010-02	TP-13	SOIL	Beryllium	0.66		0.028	0.34	mg/Kg
Q2010-02	TP-13	SOIL	Calcium	736		12.6	113	mg/Kg
Q2010-02	TP-13	SOIL	Chromium	3.18		0.053	0.57	mg/Kg
Q2010-02	TP-13	SOIL	Cobalt	11.6		0.11	1.70	mg/Kg
Q2010-02	TP-13	SOIL	Copper	8.79		0.25	1.13	mg/Kg
Q2010-02	TP-13	SOIL	Iron	52100		4.52	5.67	mg/Kg
Q2010-02	TP-13	SOIL	Lead	3.70		0.15	0.68	mg/Kg
Q2010-02	TP-13	SOIL	Magnesium	36.5	J	13.6	113	mg/Kg
Q2010-02	TP-13	SOIL	Manganese	1880		0.16	1.13	mg/Kg
Q2010-02	TP-13	SOIL	Mercury	0.029		0.0080	0.015	mg/Kg
Q2010-02	TP-13	SOIL	Nickel	4.50		0.15	2.27	mg/Kg
Q2010-02	TP-13	SOIL	Potassium	86.9	J	31.4	113	mg/Kg
Q2010-02	TP-13	SOIL	Selenium	4.21		0.30	1.13	mg/Kg

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Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2010-02	TP-13	SOIL	Sodium	180		20.2	113	mg/Kg
Q2010-02	TP-13	SOIL	Thallium	4.13		0.26	2.27	mg/Kg
Q2010-02	TP-13	SOIL	Vanadium	4.94		0.28	2.27	mg/Kg
Q2010-02	TP-13	SOIL	Zinc	5.63		0.26	2.27	mg/Kg
Client ID : TP-14								
Q2010-03	TP-14	SOIL	Aluminum	3690		0.98	5.85	mg/Kg
Q2010-03	TP-14	SOIL	Arsenic	4.94		0.22	1.17	mg/Kg
Q2010-03	TP-14	SOIL	Barium	13.7		0.85	5.85	mg/Kg
Q2010-03	TP-14	SOIL	Beryllium	0.64		0.029	0.35	mg/Kg
Q2010-03	TP-14	SOIL	Calcium	468		13.0	117	mg/Kg
Q2010-03	TP-14	SOIL	Chromium	19.5		0.055	0.59	mg/Kg
Q2010-03	TP-14	SOIL	Cobalt	1.73	J	0.12	1.75	mg/Kg
Q2010-03	TP-14	SOIL	Copper	19.8		0.26	1.17	mg/Kg
Q2010-03	TP-14	SOIL	Iron	24600		4.66	5.85	mg/Kg
Q2010-03	TP-14	SOIL	Lead	10.7		0.15	0.70	mg/Kg
Q2010-03	TP-14	SOIL	Magnesium	308		14.0	117	mg/Kg
Q2010-03	TP-14	SOIL	Manganese	45.0		0.16	1.17	mg/Kg
Q2010-03	TP-14	SOIL	Mercury	0.021		0.0090	0.016	mg/Kg
Q2010-03	TP-14	SOIL	Nickel	2.19	J	0.15	2.34	mg/Kg
Q2010-03	TP-14	SOIL	Potassium	385		32.4	117	mg/Kg
Q2010-03	TP-14	SOIL	Selenium	1.90		0.30	1.17	mg/Kg
Q2010-03	TP-14	SOIL	Sodium	134		20.8	117	mg/Kg
Q2010-03	TP-14	SOIL	Thallium	1.95	J	0.27	2.34	mg/Kg
Q2010-03	TP-14	SOIL	Vanadium	22.7		0.29	2.34	mg/Kg
Q2010-03	TP-14	SOIL	Zinc	18.0		0.27	2.34	mg/Kg
Client ID : TP-17								
Q2010-04	TP-17	SOIL	Aluminum	1840		0.92	5.45	mg/Kg
Q2010-04	TP-17	SOIL	Arsenic	2.77		0.21	1.09	mg/Kg
Q2010-04	TP-17	SOIL	Barium	61.7		0.80	5.45	mg/Kg
Q2010-04	TP-17	SOIL	Beryllium	0.45		0.027	0.33	mg/Kg
Q2010-04	TP-17	SOIL	Calcium	989		12.1	109	mg/Kg
Q2010-04	TP-17	SOIL	Chromium	14.4		0.051	0.55	mg/Kg
Q2010-04	TP-17	SOIL	Cobalt	1.63	J	0.11	1.64	mg/Kg
Q2010-04	TP-17	SOIL	Copper	18.6		0.24	1.09	mg/Kg
Q2010-04	TP-17	SOIL	Iron	21000		4.35	5.45	mg/Kg
Q2010-04	TP-17	SOIL	Lead	7.32		0.14	0.65	mg/Kg
Q2010-04	TP-17	SOIL	Magnesium	141		13.1	109	mg/Kg
Q2010-04	TP-17	SOIL	Manganese	136		0.15	1.09	mg/Kg
Q2010-04	TP-17	SOIL	Mercury	0.014	J	0.0090	0.017	mg/Kg

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Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2010-04	TP-17	SOIL	Nickel	1.09	J	0.14	2.18	mg/Kg
Q2010-04	TP-17	SOIL	Potassium	369		30.2	109	mg/Kg
Q2010-04	TP-17	SOIL	Selenium	1.59		0.28	1.09	mg/Kg
Q2010-04	TP-17	SOIL	Sodium	122		19.4	109	mg/Kg
Q2010-04	TP-17	SOIL	Thallium	0.65	J	0.25	2.18	mg/Kg
Q2010-04	TP-17	SOIL	Vanadium	114		0.27	2.18	mg/Kg
Q2010-04	TP-17	SOIL	Zinc	2.73		0.25	2.18	mg/Kg