

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 : Q2150

ATTENTION : Marcie Ann Encinas



Laboratory Certification ID # 20012



Hit Summary Sheet
SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID:	TP-44							
Q2150-01	TP-44	SOIL	Acetone	16.9	J	4.10	21.6	ug/Kg
			Total Voc :	16.9				
Q2150-01	TP-44	SOIL	11H-Dibenzo[b,e][1,4]diazepin *	6.70	J	0	0	ug/Kg
			Total Tics :	6.70				
			Total Concentration:	23.6				
Client ID:	TP-42							
Q2150-02	TP-42	SOIL	Acetone	20.9	J	4.20	22.2	ug/Kg
			Total Voc :	20.9				
Q2150-02	TP-42	SOIL	Tert butyl alcohol *	18.4	J	12.2	22.2	ug/Kg
			Total Tics :	18.4				
			Total Concentration:	39.3				
Client ID:	TP-39							
Q2150-03	TP-39	SOIL	Acetone	14.1	J	3.90	20.6	ug/Kg
Q2150-03	TP-39	SOIL	Benzene	7.20		0.65	4.10	ug/Kg
			Total Voc :	21.3				
			Total Concentration:	21.3				
Client ID:	TP-48							
Q2150-04	TP-48	SOIL	Acetone	13.1	J	4.50	23.8	ug/Kg
			Total Voc :	13.1				
			Total Concentration:	13.1				
Client ID:	TP-47							
Q2150-05	TP-47	SOIL	1-Methyldecylamine *	28.7	J	0	0	ug/Kg
			Total Tics :	28.7				
			Total Concentration:	28.7				
Client ID:	TP-51							
Q2150-07	TP-51	SOIL	Acetone	48.0		3.80	19.8	ug/Kg
Q2150-07	TP-51	SOIL	Methylene Chloride	3.10	J	2.80	7.90	ug/Kg
Q2150-07	TP-51	SOIL	2-Butanone	9.10	J	5.20	19.8	ug/Kg
Q2150-07	TP-51	SOIL	Benzene	2.80	J	0.63	4.00	ug/Kg
Q2150-07	TP-51	SOIL	m/p-Xylenes	1.20	J	0.98	7.90	ug/Kg
Q2150-07	TP-51	SOIL	Isopropylbenzene	2.90	J	0.62	4.00	ug/Kg
			Total Voc :	67.1				
Q2150-07	TP-51	SOIL	Benzene, 1-ethyl-2-methyl- *	4.50	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	Bi-2-cyclohexen-1-yl *	5.30	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	Salicylic acid, 2TMS derivative *	7.00	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	Pentacyclo[6.3.1.0(2,7).0(3,5).0(4,8)]octa-2,4,6-triene *	5.00	J	0	0	ug/Kg
Q2150-07	TP-51	SOIL	11H-Dibenzo[b,e][1,4]diazepin *	7.00	J	0	0	ug/Kg
			Total Tics :	28.8				

Hit Summary Sheet
SW-846

SDG No.: Q2150

Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Total Concentration:				95.9				
Client ID: Q2150-09	TP-54 TP-54	SOIL	Acetone	21.8		3.60	19.0	ug/Kg
Total Voc :				21.8				
Q2150-09	TP-54	SOIL	11H-Dibenzo[b,e][1,4]diazepin *	6.00	J	0	0	ug/Kg
Total Tics :				6.00				
Total Concentration:				27.8				
Client ID: Q2150-10	TP-53 TP-53	SOIL	Methylene Chloride	2.80	J	2.70	7.50	ug/Kg
Total Voc :				2.80				
Total Concentration:				2.80				

Hit Summary Sheet SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-44								
Q2150-01	TP-44	SOIL	Acenaphthylene	350.000		36.6	220	ug/Kg
Q2150-01	TP-44	SOIL	Acenaphthene	260.000		27	220	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzofuran	210.000	J	28.7	220	ug/Kg
Q2150-01	TP-44	SOIL	Fluorene	450.000		32	220	ug/Kg
Q2150-01	TP-44	SOIL	Phenanthrene	2,200.000		26.4	220	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene	1,100.000		42.1	220	ug/Kg
Q2150-01	TP-44	SOIL	Carbazole	170.000	J	39.5	220	ug/Kg
Q2150-01	TP-44	SOIL	Fluoranthene	5,200.000	E	38	220	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene	2,700.000		45.6	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(a)anthracene	2,700.000		29.1	220	ug/Kg
Q2150-01	TP-44	SOIL	Chrysene	2,200.000		25.2	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(b)fluoranthene	3,400.000	E	24	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(k)fluoranthene	1,500.000		28.3	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(a)pyrene	2,500.000		37.3	220	ug/Kg
Q2150-01	TP-44	SOIL	Indeno(1,2,3-cd)pyrene	1,000.000		36.8	220	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzo(a,h)anthracene	320.000		34.7	220	ug/Kg
Q2150-01	TP-44	SOIL	Benzo(g,h,i)perylene	1,200.000		32.5	220	ug/Kg
Total Svoc :				27,460.00				
Q2150-01	TP-44	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	250.000	AB	0	0	ug/Kg
Q2150-01	TP-44	SOIL	4H-Cyclopenta[def]phenanthrene *	1,100.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	9,10-Dimethylanthracene *	470.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	9-Cyanophenanthrene *	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene, 1-methyl- *	250.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Anthracene, 2-methyl- *	700.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzene, 1,1-(1,3-butadiene-1,4-d *	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzo[e]pyrene *	600.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Benzophenone *	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Cyclopenta(def)phenanthrenone *	290.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Dibenzothiophene *	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Fluoranthene, 2-methyl- *	230.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 1-methyl- *	150.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 4,5,9,10-tetrahydro- *	390.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Pyrene, 4-methyl- *	130.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	unknown10.851 *	130.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	unknown9.645 *	140.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Naphthalene, 2-phenyl- *	260.000	J	0	0	ug/Kg
Q2150-01	TP-44	SOIL	Perylene *	1,800.000	J	0	0	ug/Kg

Hit Summary Sheet SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-01	TP-44	SOIL	Phenanthrene, 2-methyl-	*	280.000	J 0	0	ug/Kg
Total Tics :					7,930.00			
Total Concentration:					35,390.00			
Client ID : TP-44DL								
Q2150-01DL	TP-44DL	SOIL	Fluorene		480.000	JD 160	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Phenanthrene		2,500.000	D 130	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Anthracene		1,100.000	D 210	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Fluoranthene		4,800.000	D 190	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Pyrene		3,100.000	D 230	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(a)anthracene		2,700.000	D 150	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Chrysene		2,600.000	D 130	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(b)fluoranthene		3,900.000	D 120	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(k)fluoranthene		1,200.000	D 140	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(a)pyrene		2,800.000	D 190	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Indeno(1,2,3-cd)pyrene		1,100.000	D 180	1100	ug/Kg
Q2150-01DL	TP-44DL	SOIL	Benzo(g,h,i)perylene		1,100.000	D 160	1100	ug/Kg
Total Svoc :					27,380.00			
Total Concentration:					27,380.00			
Client ID : TP-42								
Q2150-02	TP-42	SOIL	Fluoranthene		130.000	J 34.7	200	ug/Kg
Q2150-02	TP-42	SOIL	Pyrene		100.000	J 41.7	200	ug/Kg
Q2150-02	TP-42	SOIL	Benzo(b)fluoranthene		77.900	J 22	200	ug/Kg
Total Svoc :					307.90			
Q2150-02	TP-42	SOIL	Benzophenone	*	150.000	J 0	0	ug/Kg
Q2150-02	TP-42	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB 0	0	ug/Kg
Q2150-02	TP-42	SOIL	Heptadecyl trifluoroacetate	*	110.000	J 0	0	ug/Kg
Q2150-02	TP-42	SOIL	n-Hexadecanoic acid	*	190.000	J 0	0	ug/Kg
Total Tics :					700.00			
Total Concentration:					1,007.90			
Client ID : TP-39								
Q2150-03	TP-39	SOIL	Phenanthrene		96.600	J 24.9	200	ug/Kg
Q2150-03	TP-39	SOIL	Fluoranthene		130.000	J 35.7	200	ug/Kg
Q2150-03	TP-39	SOIL	Pyrene		95.600	J 42.9	200	ug/Kg
Q2150-03	TP-39	SOIL	Bis(2-ethylhexyl)phthalate		370.000	70.5	200	ug/Kg
Q2150-03	TP-39	SOIL	Benzo(b)fluoranthene		83.100	J 22.6	200	ug/Kg
Total Svoc :					775.30			
Q2150-03	TP-39	SOIL	n-Hexadecanoic acid	*	340.000	J 0	0	ug/Kg
Q2150-03	TP-39	SOIL	1,3-Dioxolane, 2,2-dimethyl-	*	160.000	J 0	0	ug/Kg
Q2150-03	TP-39	SOIL	1-Heneicosanol	*	140.000	J 0	0	ug/Kg

Hit Summary Sheet SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-03	TP-39	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	430.000	AB	0	ug/Kg
Q2150-03	TP-39	SOIL	Benzophenone	*	260.000	J	0	ug/Kg
Total Tics :					1,330.00			
Total Concentration:					2,105.30			
Client ID : TP-48								
Q2150-04	TP-48	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	460.000	AB	0	ug/Kg
Q2150-04	TP-48	SOIL	Benzophenone	*	280.000	J	0	ug/Kg
Q2150-04	TP-48	SOIL	Heptadecyl heptafluorobutyrate	*	180.000	J	0	ug/Kg
Q2150-04	TP-48	SOIL	n-Hexadecanoic acid	*	430.000	J	0	ug/Kg
Total Tics :					1,350.00			
Total Concentration:					1,350.00			
Client ID : TP-47								
Q2150-05	TP-47	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	290.000	AB	0	ug/Kg
Q2150-05	TP-47	SOIL	Benzophenone	*	180.000	J	0	ug/Kg
Q2150-05	TP-47	SOIL	n-Hexadecanoic acid	*	410.000	J	0	ug/Kg
Q2150-05	TP-47	SOIL	Octadecanoic acid	*	150.000	J	0	ug/Kg
Q2150-05	TP-47	SOIL	Trifluoroacetoxy hexadecane	*	200.000	J	0	ug/Kg
Total Tics :					1,230.00			
Total Concentration:					1,230.00			
Client ID : TP-50								
Q2150-06	TP-50	SOIL	Phenanthrene		280.000		24.3	ug/Kg
Q2150-06	TP-50	SOIL	Anthracene		86.900	J	38.7	ug/Kg
Q2150-06	TP-50	SOIL	Fluoranthene		670.000		34.9	ug/Kg
Q2150-06	TP-50	SOIL	Pyrene		350.000		41.8	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(a)anthracene		340.000		26.7	ug/Kg
Q2150-06	TP-50	SOIL	Chrysene		290.000		23.1	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(b)fluoranthene		440.000		22.1	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(k)fluoranthene		150.000	J	26	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(a)pyrene		320.000		34.3	ug/Kg
Q2150-06	TP-50	SOIL	Indeno(1,2,3-cd)pyrene		110.000	J	33.8	ug/Kg
Q2150-06	TP-50	SOIL	Benzo(g,h,i)perylene		130.000	J	29.9	ug/Kg
Total Svoc :					3,166.90			
Q2150-06	TP-50	SOIL	11H-Benzo[a]fluoren-11-one	*	110.000	J	0	ug/Kg
Q2150-06	TP-50	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	250.000	AB	0	ug/Kg
Q2150-06	TP-50	SOIL	4H-Cyclopenta[def]phenanthrene	*	90.200	J	0	ug/Kg
Q2150-06	TP-50	SOIL	Benzo[e]pyrene	*	210.000	J	0	ug/Kg
Q2150-06	TP-50	SOIL	Benzophenone	*	130.000	J	0	ug/Kg
Q2150-06	TP-50	SOIL	n-Hexadecanoic acid	*	240.000	J	0	ug/Kg
Total Tics :					1,030.20			

Hit Summary Sheet SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Total Concentration:				4,197.10				
Client ID : TP-51								
Q2150-07	TP-51	SOIL	1-Tetracosene	*	430.000	J 0	0	ug/Kg
Q2150-07	TP-51	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	410.000	AB 0	0	ug/Kg
Q2150-07	TP-51	SOIL	Benzophenone	*	200.000	J 0	0	ug/Kg
Q2150-07	TP-51	SOIL	n-Hexadecanoic acid	*	330.000	J 0	0	ug/Kg
Q2150-07	TP-51	SOIL	Pentadecafluorooctanoic acid, oct:	*	110.000	J 0	0	ug/Kg
Q2150-07	TP-51	SOIL	unknown10.345	*	130.000	J 0	0	ug/Kg
Total Tics :				1,610.00				
Total Concentration:				1,610.00				
Client ID : TP-52								
Q2150-08	TP-52	SOIL	Acenaphthylene		92.600	J 33.7	200	ug/Kg
Q2150-08	TP-52	SOIL	Phenanthrene		270.000	24.3	200	ug/Kg
Q2150-08	TP-52	SOIL	Anthracene		140.000	J 38.8	200	ug/Kg
Q2150-08	TP-52	SOIL	Fluoranthene		1,300.000	34.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Pyrene		770.000	41.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(a)anthracene		750.000	26.8	200	ug/Kg
Q2150-08	TP-52	SOIL	Chrysene		780.000	23.2	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(b)fluoranthene		1,100.000	22.1	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(k)fluoranthene		360.000	26.1	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(a)pyrene		830.000	34.4	200	ug/Kg
Q2150-08	TP-52	SOIL	Indeno(1,2,3-cd)pyrene		300.000	33.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Dibenzo(a,h)anthracene		93.900	J 31.9	200	ug/Kg
Q2150-08	TP-52	SOIL	Benzo(g,h,i)perylene		350.000	29.9	200	ug/Kg
Total Svoc :				7,136.50				
Q2150-08	TP-52	SOIL	11H-Benzo[a]fluorene	*	130.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	2-Pentanone, 4-hydroxy-4-methyl	*	290.000	AB 0	0	ug/Kg
Q2150-08	TP-52	SOIL	4H-Cyclopenta[def]phenanthrene	*	220.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Ethanol, 2-butoxy-	*	79.600	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Benzo[e]pyrene	*	190.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Benzophenone	*	170.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Pyrene, 4,5,9,10-tetrahydro-	*	83.100	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	n-Hexadecanoic acid	*	460.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Pentadecafluorooctanoic acid, oct:	*	94.400	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Perylene	*	630.000	J 0	0	ug/Kg
Q2150-08	TP-52	SOIL	Phenanthrene, 2,5-dimethyl-	*	100.000	J 0	0	ug/Kg
Total Tics :				2,447.10				
Total Concentration:				9,583.60				

Client ID : TP-54

Hit Summary Sheet
SW-846

SDG No.: Q2150
Client: CDM Smith

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-09	TP-54	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	360.000	AB	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Benzophenone *	250.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	n-Hexadecanoic acid *	550.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Octadecanoic acid *	110.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Octadecyl trifluoroacetate *	360.000	J	0	0	ug/Kg
Q2150-09	TP-54	SOIL	Supraene *	110.000	J	0	0	ug/Kg
Total Tics :				1,740.00				
Total Concentration:				1,740.00				
Client ID : TP-53								
Q2150-10	TP-53	SOIL	2-Pentanone, 4-hydroxy-4-methyl *	270.000	AB	0	0	ug/Kg
Q2150-10	TP-53	SOIL	Benzophenone *	130.000	J	0	0	ug/Kg
Q2150-10	TP-53	SOIL	n-Hexadecanoic acid *	150.000	J	0	0	ug/Kg
Q2150-10	TP-53	SOIL	Trichloroacetic acid, hexadecyl es *	160.000	J	0	0	ug/Kg
Total Tics :				710.00				
Total Concentration:				710.00				

Hit Summary Sheet
SW-846

SDG No.: Q2150

Order ID: Q2150

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-44								
Q2150-01	TP-44	SOIL	alpha-Chlordane	0.76	J	0.15	2.20	ug/kg
Q2150-01	TP-44	SOIL	gamma-Chlordane	0.30	J	0.19	2.20	ug/kg
Total Concentration:				1.060				
Client ID : TP-50								
Q2150-06	TP-50	SOIL	alpha-Chlordane	1.40	JP	0.14	2.00	ug/kg
Q2150-06	TP-50	SOIL	gamma-Chlordane	0.80	JP	0.17	2.00	ug/kg
Total Concentration:				2.200				



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

Hit Summary Sheet
SW-846

SDG No.: Q2150

Order ID: Q2150

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.: Q2150

Order ID: Q2150

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.: Q2150

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Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-44								
Q2150-01	TP-44	SOIL	Aluminum	4350		1.01	6.04	mg/Kg
Q2150-01	TP-44	SOIL	Arsenic	4.63		0.23	1.21	mg/Kg
Q2150-01	TP-44	SOIL	Barium	32.2		0.88	6.04	mg/Kg
Q2150-01	TP-44	SOIL	Beryllium	0.53		0.030	0.36	mg/Kg
Q2150-01	TP-44	SOIL	Calcium	1480		13.4	121	mg/Kg
Q2150-01	TP-44	SOIL	Chromium	11.2		0.057	0.60	mg/Kg
Q2150-01	TP-44	SOIL	Cobalt	3.58		0.12	1.81	mg/Kg
Q2150-01	TP-44	SOIL	Copper	24.8		0.27	1.21	mg/Kg
Q2150-01	TP-44	SOIL	Iron	28600		4.82	6.04	mg/Kg
Q2150-01	TP-44	SOIL	Lead	32.0		0.16	0.72	mg/Kg
Q2150-01	TP-44	SOIL	Magnesium	648		14.5	121	mg/Kg
Q2150-01	TP-44	SOIL	Manganese	126		0.17	1.21	mg/Kg
Q2150-01	TP-44	SOIL	Mercury	0.030		0.0090	0.015	mg/Kg
Q2150-01	TP-44	SOIL	Nickel	5.14		0.16	2.41	mg/Kg
Q2150-01	TP-44	SOIL	Potassium	348		33.4	121	mg/Kg
Q2150-01	TP-44	SOIL	Silver	0.31	J	0.14	0.60	mg/Kg
Q2150-01	TP-44	SOIL	Sodium	194		21.5	121	mg/Kg
Q2150-01	TP-44	SOIL	Vanadium	21.8		0.30	2.41	mg/Kg
Q2150-01	TP-44	SOIL	Zinc	30.6		0.28	2.41	mg/Kg
Client ID : TP-42								
Q2150-02	TP-42	SOIL	Aluminum	2540		0.89	5.32	mg/Kg
Q2150-02	TP-42	SOIL	Arsenic	5.25		0.20	1.06	mg/Kg
Q2150-02	TP-42	SOIL	Barium	21.4		0.78	5.32	mg/Kg
Q2150-02	TP-42	SOIL	Beryllium	0.43		0.027	0.32	mg/Kg
Q2150-02	TP-42	SOIL	Calcium	814		11.8	106	mg/Kg
Q2150-02	TP-42	SOIL	Chromium	9.31		0.050	0.53	mg/Kg
Q2150-02	TP-42	SOIL	Cobalt	1.61		0.11	1.60	mg/Kg
Q2150-02	TP-42	SOIL	Copper	28.9		0.23	1.06	mg/Kg
Q2150-02	TP-42	SOIL	Iron	18400		4.25	5.32	mg/Kg
Q2150-02	TP-42	SOIL	Lead	69.1		0.14	0.64	mg/Kg
Q2150-02	TP-42	SOIL	Magnesium	334		12.8	106	mg/Kg
Q2150-02	TP-42	SOIL	Manganese	90.0		0.15	1.06	mg/Kg
Q2150-02	TP-42	SOIL	Mercury	0.014		0.0080	0.014	mg/Kg
Q2150-02	TP-42	SOIL	Nickel	3.17		0.14	2.13	mg/Kg
Q2150-02	TP-42	SOIL	Potassium	302		29.5	106	mg/Kg
Q2150-02	TP-42	SOIL	Silver	0.31	J	0.13	0.53	mg/Kg
Q2150-02	TP-42	SOIL	Sodium	151		18.9	106	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2150

Order ID: Q2150

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-02	TP-42	SOIL	Vanadium	17.9		0.27	2.13	mg/Kg
Q2150-02	TP-42	SOIL	Zinc	77.9		0.25	2.13	mg/Kg
Client ID : TP-39								
Q2150-03	TP-39	SOIL	Aluminum	3890		0.96	5.69	mg/Kg
Q2150-03	TP-39	SOIL	Arsenic	4.24		0.22	1.14	mg/Kg
Q2150-03	TP-39	SOIL	Barium	46.0		0.83	5.69	mg/Kg
Q2150-03	TP-39	SOIL	Beryllium	0.38		0.028	0.34	mg/Kg
Q2150-03	TP-39	SOIL	Calcium	1190		12.6	114	mg/Kg
Q2150-03	TP-39	SOIL	Chromium	8.62		0.053	0.57	mg/Kg
Q2150-03	TP-39	SOIL	Cobalt	1.97		0.11	1.71	mg/Kg
Q2150-03	TP-39	SOIL	Copper	9.95		0.25	1.14	mg/Kg
Q2150-03	TP-39	SOIL	Iron	13700		4.54	5.69	mg/Kg
Q2150-03	TP-39	SOIL	Lead	114		0.15	0.68	mg/Kg
Q2150-03	TP-39	SOIL	Magnesium	275		13.7	114	mg/Kg
Q2150-03	TP-39	SOIL	Manganese	83.1		0.16	1.14	mg/Kg
Q2150-03	TP-39	SOIL	Mercury	0.046		0.0080	0.015	mg/Kg
Q2150-03	TP-39	SOIL	Nickel	3.62		0.15	2.28	mg/Kg
Q2150-03	TP-39	SOIL	Potassium	568		31.5	114	mg/Kg
Q2150-03	TP-39	SOIL	Silver	0.26	J	0.14	0.57	mg/Kg
Q2150-03	TP-39	SOIL	Sodium	391		20.3	114	mg/Kg
Q2150-03	TP-39	SOIL	Vanadium	17.1		0.28	2.28	mg/Kg
Q2150-03	TP-39	SOIL	Zinc	19.0		0.26	2.28	mg/Kg
Client ID : TP-48								
Q2150-04	TP-48	SOIL	Aluminum	1500		0.99	5.87	mg/Kg
Q2150-04	TP-48	SOIL	Arsenic	1.97		0.22	1.17	mg/Kg
Q2150-04	TP-48	SOIL	Barium	6.76		0.86	5.87	mg/Kg
Q2150-04	TP-48	SOIL	Beryllium	0.31	J	0.029	0.35	mg/Kg
Q2150-04	TP-48	SOIL	Calcium	331		13.0	117	mg/Kg
Q2150-04	TP-48	SOIL	Chromium	10.5		0.055	0.59	mg/Kg
Q2150-04	TP-48	SOIL	Cobalt	1.70	J	0.12	1.76	mg/Kg
Q2150-04	TP-48	SOIL	Copper	13.0		0.26	1.17	mg/Kg
Q2150-04	TP-48	SOIL	Iron	16500		4.69	5.87	mg/Kg
Q2150-04	TP-48	SOIL	Lead	5.52		0.15	0.71	mg/Kg
Q2150-04	TP-48	SOIL	Magnesium	159		14.1	117	mg/Kg
Q2150-04	TP-48	SOIL	Manganese	20.2		0.16	1.17	mg/Kg
Q2150-04	TP-48	SOIL	Nickel	1.67	J	0.15	2.35	mg/Kg
Q2150-04	TP-48	SOIL	Potassium	220		32.5	117	mg/Kg
Q2150-04	TP-48	SOIL	Sodium	236		20.9	117	mg/Kg
Q2150-04	TP-48	SOIL	Vanadium	11.4		0.29	2.35	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2150

Order ID: Q2150

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-04	TP-48	SOIL	Zinc	8.09		0.27	2.35	mg/Kg
Client ID : TP-47								
Q2150-05	TP-47	SOIL	Aluminum	2460		0.95	5.66	mg/Kg
Q2150-05	TP-47	SOIL	Arsenic	7.01		0.22	1.13	mg/Kg
Q2150-05	TP-47	SOIL	Barium	8.49		0.83	5.66	mg/Kg
Q2150-05	TP-47	SOIL	Beryllium	0.64		0.028	0.34	mg/Kg
Q2150-05	TP-47	SOIL	Cadmium	0.22	J	0.027	0.34	mg/Kg
Q2150-05	TP-47	SOIL	Calcium	930		12.6	113	mg/Kg
Q2150-05	TP-47	SOIL	Chromium	14.4		0.053	0.57	mg/Kg
Q2150-05	TP-47	SOIL	Cobalt	2.59		0.11	1.70	mg/Kg
Q2150-05	TP-47	SOIL	Copper	12.3		0.25	1.13	mg/Kg
Q2150-05	TP-47	SOIL	Iron	33000		4.52	5.66	mg/Kg
Q2150-05	TP-47	SOIL	Lead	11.6		0.15	0.68	mg/Kg
Q2150-05	TP-47	SOIL	Magnesium	415		13.6	113	mg/Kg
Q2150-05	TP-47	SOIL	Manganese	69.1		0.16	1.13	mg/Kg
Q2150-05	TP-47	SOIL	Nickel	2.80		0.15	2.27	mg/Kg
Q2150-05	TP-47	SOIL	Potassium	247		31.4	113	mg/Kg
Q2150-05	TP-47	SOIL	Sodium	121		20.2	113	mg/Kg
Q2150-05	TP-47	SOIL	Vanadium	25.0		0.28	2.27	mg/Kg
Q2150-05	TP-47	SOIL	Zinc	23.7		0.26	2.27	mg/Kg
Client ID : TP-50								
Q2150-06	TP-50	SOIL	Aluminum	6500		0.80	4.77	mg/Kg
Q2150-06	TP-50	SOIL	Arsenic	4.62		0.18	0.95	mg/Kg
Q2150-06	TP-50	SOIL	Barium	38.3		0.70	4.77	mg/Kg
Q2150-06	TP-50	SOIL	Beryllium	0.41		0.024	0.29	mg/Kg
Q2150-06	TP-50	SOIL	Cadmium	0.52		0.023	0.29	mg/Kg
Q2150-06	TP-50	SOIL	Calcium	21100		10.6	95.3	mg/Kg
Q2150-06	TP-50	SOIL	Chromium	17.6		0.045	0.48	mg/Kg
Q2150-06	TP-50	SOIL	Cobalt	7.76		0.095	1.43	mg/Kg
Q2150-06	TP-50	SOIL	Copper	38.8		0.21	0.95	mg/Kg
Q2150-06	TP-50	SOIL	Iron	15200		3.80	4.77	mg/Kg
Q2150-06	TP-50	SOIL	Lead	54.8		0.12	0.57	mg/Kg
Q2150-06	TP-50	SOIL	Magnesium	4510		11.4	95.3	mg/Kg
Q2150-06	TP-50	SOIL	Manganese	209		0.13	0.95	mg/Kg
Q2150-06	TP-50	SOIL	Mercury	0.045		0.0080	0.015	mg/Kg
Q2150-06	TP-50	SOIL	Nickel	18.5		0.12	1.91	mg/Kg
Q2150-06	TP-50	SOIL	Potassium	696		26.4	95.3	mg/Kg
Q2150-06	TP-50	SOIL	Silver	0.54		0.11	0.48	mg/Kg
Q2150-06	TP-50	SOIL	Sodium	887		17.0	95.3	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2150

Order ID: Q2150

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-06	TP-50	SOIL	Vanadium	33.8		0.24	1.91	mg/Kg
Q2150-06	TP-50	SOIL	Zinc	62.3		0.22	1.91	mg/Kg
Client ID : TP-51								
Q2150-07	TP-51	SOIL	Aluminum	3580		0.92	5.46	mg/Kg
Q2150-07	TP-51	SOIL	Arsenic	3.77		0.21	1.09	mg/Kg
Q2150-07	TP-51	SOIL	Barium	18.7		0.80	5.46	mg/Kg
Q2150-07	TP-51	SOIL	Beryllium	0.54		0.027	0.33	mg/Kg
Q2150-07	TP-51	SOIL	Cadmium	0.096	J	0.026	0.33	mg/Kg
Q2150-07	TP-51	SOIL	Calcium	648		12.1	109	mg/Kg
Q2150-07	TP-51	SOIL	Chromium	10.1		0.051	0.55	mg/Kg
Q2150-07	TP-51	SOIL	Cobalt	2.23		0.11	1.64	mg/Kg
Q2150-07	TP-51	SOIL	Copper	7.28		0.24	1.09	mg/Kg
Q2150-07	TP-51	SOIL	Iron	15200		4.35	5.46	mg/Kg
Q2150-07	TP-51	SOIL	Lead	15.3		0.14	0.66	mg/Kg
Q2150-07	TP-51	SOIL	Magnesium	151		13.1	109	mg/Kg
Q2150-07	TP-51	SOIL	Manganese	30.1		0.15	1.09	mg/Kg
Q2150-07	TP-51	SOIL	Mercury	0.031		0.0090	0.017	mg/Kg
Q2150-07	TP-51	SOIL	Nickel	3.05		0.14	2.18	mg/Kg
Q2150-07	TP-51	SOIL	Potassium	314		30.2	109	mg/Kg
Q2150-07	TP-51	SOIL	Sodium	328		19.4	109	mg/Kg
Q2150-07	TP-51	SOIL	Vanadium	22.4		0.27	2.18	mg/Kg
Q2150-07	TP-51	SOIL	Zinc	10.1		0.25	2.18	mg/Kg
Client ID : TP-52								
Q2150-08	TP-52	SOIL	Aluminum	4650		0.87	5.19	mg/Kg
Q2150-08	TP-52	SOIL	Arsenic	4.63		0.20	1.04	mg/Kg
Q2150-08	TP-52	SOIL	Barium	36.7		0.76	5.19	mg/Kg
Q2150-08	TP-52	SOIL	Beryllium	0.55		0.026	0.31	mg/Kg
Q2150-08	TP-52	SOIL	Cadmium	0.22	J	0.025	0.31	mg/Kg
Q2150-08	TP-52	SOIL	Calcium	1150		11.5	104	mg/Kg
Q2150-08	TP-52	SOIL	Chromium	8.57		0.049	0.52	mg/Kg
Q2150-08	TP-52	SOIL	Cobalt	4.55		0.10	1.56	mg/Kg
Q2150-08	TP-52	SOIL	Copper	18.6		0.23	1.04	mg/Kg
Q2150-08	TP-52	SOIL	Iron	19100		4.14	5.19	mg/Kg
Q2150-08	TP-52	SOIL	Lead	29.9		0.14	0.62	mg/Kg
Q2150-08	TP-52	SOIL	Magnesium	598		12.4	104	mg/Kg
Q2150-08	TP-52	SOIL	Manganese	80.2		0.14	1.04	mg/Kg
Q2150-08	TP-52	SOIL	Mercury	0.044		0.0080	0.014	mg/Kg
Q2150-08	TP-52	SOIL	Nickel	7.26		0.14	2.07	mg/Kg
Q2150-08	TP-52	SOIL	Potassium	334		28.7	104	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2150 **Order ID:** Q2150
Client: CDM Smith **Project ID:** South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-08	TP-52	SOIL	Sodium	179		18.5	104	mg/Kg
Q2150-08	TP-52	SOIL	Vanadium	22.7		0.26	2.07	mg/Kg
Q2150-08	TP-52	SOIL	Zinc	23.6		0.24	2.07	mg/Kg
Client ID : TP-54								
Q2150-09	TP-54	SOIL	Aluminum	4450		0.97	5.75	mg/Kg
Q2150-09	TP-54	SOIL	Arsenic	0.86	J	0.22	1.15	mg/Kg
Q2150-09	TP-54	SOIL	Barium	20.1		0.84	5.75	mg/Kg
Q2150-09	TP-54	SOIL	Beryllium	0.21	J	0.029	0.35	mg/Kg
Q2150-09	TP-54	SOIL	Calcium	558		12.8	115	mg/Kg
Q2150-09	TP-54	SOIL	Chromium	10.1		0.054	0.57	mg/Kg
Q2150-09	TP-54	SOIL	Cobalt	0.76	J	0.12	1.73	mg/Kg
Q2150-09	TP-54	SOIL	Copper	5.25		0.25	1.15	mg/Kg
Q2150-09	TP-54	SOIL	Iron	3090		4.59	5.75	mg/Kg
Q2150-09	TP-54	SOIL	Lead	5.07		0.15	0.69	mg/Kg
Q2150-09	TP-54	SOIL	Magnesium	574		13.8	115	mg/Kg
Q2150-09	TP-54	SOIL	Manganese	13.5		0.16	1.15	mg/Kg
Q2150-09	TP-54	SOIL	Nickel	2.40		0.15	2.30	mg/Kg
Q2150-09	TP-54	SOIL	Potassium	489		31.9	115	mg/Kg
Q2150-09	TP-54	SOIL	Sodium	285		20.5	115	mg/Kg
Q2150-09	TP-54	SOIL	Vanadium	13.5		0.29	2.30	mg/Kg
Q2150-09	TP-54	SOIL	Zinc	5.42		0.27	2.30	mg/Kg
Client ID : TP-53								
Q2150-10	TP-53	SOIL	Aluminum	3290		0.93	5.53	mg/Kg
Q2150-10	TP-53	SOIL	Arsenic	3.50		0.21	1.11	mg/Kg
Q2150-10	TP-53	SOIL	Barium	9.87		0.81	5.53	mg/Kg
Q2150-10	TP-53	SOIL	Beryllium	0.38		0.028	0.33	mg/Kg
Q2150-10	TP-53	SOIL	Calcium	481		12.3	111	mg/Kg
Q2150-10	TP-53	SOIL	Chromium	7.74		0.052	0.55	mg/Kg
Q2150-10	TP-53	SOIL	Cobalt	1.09	J	0.11	1.66	mg/Kg
Q2150-10	TP-53	SOIL	Copper	3.46		0.24	1.11	mg/Kg
Q2150-10	TP-53	SOIL	Iron	15000		4.41	5.53	mg/Kg
Q2150-10	TP-53	SOIL	Lead	6.90		0.14	0.66	mg/Kg
Q2150-10	TP-53	SOIL	Magnesium	206		13.3	111	mg/Kg
Q2150-10	TP-53	SOIL	Manganese	22.9		0.16	1.11	mg/Kg
Q2150-10	TP-53	SOIL	Mercury	0.016		0.0090	0.016	mg/Kg
Q2150-10	TP-53	SOIL	Nickel	1.96	J	0.14	2.21	mg/Kg
Q2150-10	TP-53	SOIL	Potassium	186		30.6	111	mg/Kg
Q2150-10	TP-53	SOIL	Sodium	239		19.7	111	mg/Kg
Q2150-10	TP-53	SOIL	Vanadium	19.8		0.28	2.21	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2150
Client: CDM Smith

Order ID: Q2150
Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2150-10	TP-53	SOIL	Zinc	5.58		0.25	2.21	mg/Kg