

Hit Summary Sheet
SW-846

SDG No.: Q2032 **Order ID:** Q2032
Client: CDM Smith **Project ID:** South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID : TP-11								
Q2032-01	TP-11	SOIL	Aluminum	3420		0.99	5.88	mg/Kg
Q2032-01	TP-11	SOIL	Arsenic	7.54		0.22	1.18	mg/Kg
Q2032-01	TP-11	SOIL	Barium	10.3		0.86	5.88	mg/Kg
Q2032-01	TP-11	SOIL	Beryllium	0.40		0.029	0.35	mg/Kg
Q2032-01	TP-11	SOIL	Cadmium	0.33	J	0.028	0.35	mg/Kg
Q2032-01	TP-11	SOIL	Calcium	278		13.0	118	mg/Kg
Q2032-01	TP-11	SOIL	Chromium	12.7		0.055	0.59	mg/Kg
Q2032-01	TP-11	SOIL	Cobalt	1.49	J	0.12	1.76	mg/Kg
Q2032-01	TP-11	SOIL	Copper	9.16		0.26	1.18	mg/Kg
Q2032-01	TP-11	SOIL	Iron	17000		4.69	5.88	mg/Kg
Q2032-01	TP-11	SOIL	Lead	10.3		0.15	0.71	mg/Kg
Q2032-01	TP-11	SOIL	Magnesium	285		14.1	118	mg/Kg
Q2032-01	TP-11	SOIL	Manganese	31.5		0.17	1.18	mg/Kg
Q2032-01	TP-11	SOIL	Mercury	0.033		0.010	0.017	mg/Kg
Q2032-01	TP-11	SOIL	Nickel	1.98	J	0.15	2.35	mg/Kg
Q2032-01	TP-11	SOIL	Potassium	322		32.6	118	mg/Kg
Q2032-01	TP-11	SOIL	Sodium	211		20.9	118	mg/Kg
Q2032-01	TP-11	SOIL	Thallium	1.41	J	0.27	2.35	mg/Kg
Q2032-01	TP-11	SOIL	Vanadium	17.8		0.29	2.35	mg/Kg
Q2032-01	TP-11	SOIL	Zinc	10.7		0.27	2.35	mg/Kg
Client ID : TP-29								
Q2032-02	TP-29	SOIL	Aluminum	8350		0.91	5.40	mg/Kg
Q2032-02	TP-29	SOIL	Arsenic	4.45		0.21	1.08	mg/Kg
Q2032-02	TP-29	SOIL	Barium	40.7		0.79	5.40	mg/Kg
Q2032-02	TP-29	SOIL	Beryllium	0.51		0.027	0.32	mg/Kg
Q2032-02	TP-29	SOIL	Calcium	642		12.0	108	mg/Kg
Q2032-02	TP-29	SOIL	Chromium	13.8		0.051	0.54	mg/Kg
Q2032-02	TP-29	SOIL	Cobalt	2.10		0.11	1.62	mg/Kg
Q2032-02	TP-29	SOIL	Copper	4.85		0.24	1.08	mg/Kg
Q2032-02	TP-29	SOIL	Iron	19400		4.31	5.40	mg/Kg
Q2032-02	TP-29	SOIL	Lead	7.58		0.14	0.65	mg/Kg
Q2032-02	TP-29	SOIL	Magnesium	383		13.0	108	mg/Kg
Q2032-02	TP-29	SOIL	Manganese	36.1		0.15	1.08	mg/Kg
Q2032-02	TP-29	SOIL	Mercury	0.020		0.0090	0.016	mg/Kg
Q2032-02	TP-29	SOIL	Nickel	5.81		0.14	2.16	mg/Kg
Q2032-02	TP-29	SOIL	Potassium	256		29.9	108	mg/Kg
Q2032-02	TP-29	SOIL	Silver	0.22	J	0.13	0.54	mg/Kg

Hit Summary Sheet
SW-846

SDG No.:	Q2032	Order ID:	Q2032
Client:	CDM Smith	Project ID:	South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2032-02	TP-29	SOIL	Sodium	278		19.2	108	mg/Kg
Q2032-02	TP-29	SOIL	Thallium	1.30	J	0.25	2.16	mg/Kg
Q2032-02	TP-29	SOIL	Vanadium	24.8		0.27	2.16	mg/Kg
Q2032-02	TP-29	SOIL	Zinc	14.0		0.25	2.16	mg/Kg
Client ID : TP-29-99								
Q2032-03	TP-29-99	SOIL	Aluminum	4670		0.91	5.41	mg/Kg
Q2032-03	TP-29-99	SOIL	Arsenic	3.71		0.21	1.08	mg/Kg
Q2032-03	TP-29-99	SOIL	Barium	27.3		0.79	5.41	mg/Kg
Q2032-03	TP-29-99	SOIL	Beryllium	0.41		0.027	0.33	mg/Kg
Q2032-03	TP-29-99	SOIL	Calcium	641		12.0	108	mg/Kg
Q2032-03	TP-29-99	SOIL	Chromium	10.3		0.051	0.54	mg/Kg
Q2032-03	TP-29-99	SOIL	Cobalt	1.82		0.11	1.62	mg/Kg
Q2032-03	TP-29-99	SOIL	Copper	5.19		0.24	1.08	mg/Kg
Q2032-03	TP-29-99	SOIL	Iron	16400		4.32	5.41	mg/Kg
Q2032-03	TP-29-99	SOIL	Lead	14.3		0.14	0.65	mg/Kg
Q2032-03	TP-29-99	SOIL	Magnesium	308		13.0	108	mg/Kg
Q2032-03	TP-29-99	SOIL	Manganese	49.9		0.15	1.08	mg/Kg
Q2032-03	TP-29-99	SOIL	Mercury	0.14		0.0090	0.016	mg/Kg
Q2032-03	TP-29-99	SOIL	Nickel	3.76		0.14	2.16	mg/Kg
Q2032-03	TP-29-99	SOIL	Potassium	192		30.0	108	mg/Kg
Q2032-03	TP-29-99	SOIL	Sodium	198		19.3	108	mg/Kg
Q2032-03	TP-29-99	SOIL	Thallium	0.99	J	0.25	2.16	mg/Kg
Q2032-03	TP-29-99	SOIL	Vanadium	19.1		0.27	2.16	mg/Kg
Q2032-03	TP-29-99	SOIL	Zinc	12.8		0.25	2.16	mg/Kg
Client ID : TP-24								
Q2032-04	TP-24	SOIL	Aluminum	4380		0.93	5.55	mg/Kg
Q2032-04	TP-24	SOIL	Arsenic	3.54		0.21	1.11	mg/Kg
Q2032-04	TP-24	SOIL	Barium	18.5		0.81	5.55	mg/Kg
Q2032-04	TP-24	SOIL	Beryllium	0.38		0.028	0.33	mg/Kg
Q2032-04	TP-24	SOIL	Cadmium	0.27	J	0.027	0.33	mg/Kg
Q2032-04	TP-24	SOIL	Calcium	351		12.3	111	mg/Kg
Q2032-04	TP-24	SOIL	Chromium	16.8		0.052	0.56	mg/Kg
Q2032-04	TP-24	SOIL	Cobalt	1.63	J	0.11	1.66	mg/Kg
Q2032-04	TP-24	SOIL	Copper	13.5		0.24	1.11	mg/Kg
Q2032-04	TP-24	SOIL	Iron	24300		4.43	5.55	mg/Kg
Q2032-04	TP-24	SOIL	Lead	11.7		0.14	0.67	mg/Kg
Q2032-04	TP-24	SOIL	Magnesium	287		13.3	111	mg/Kg
Q2032-04	TP-24	SOIL	Manganese	16.5		0.16	1.11	mg/Kg
Q2032-04	TP-24	SOIL	Mercury	0.030		0.0090	0.016	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2032
Client: CDM Smith

Order ID: Q2032
Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2032-04	TP-24	SOIL	Nickel	2.56		0.14	2.22	mg/Kg
Q2032-04	TP-24	SOIL	Potassium	427		30.7	111	mg/Kg
Q2032-04	TP-24	SOIL	Sodium	388		19.7	111	mg/Kg
Q2032-04	TP-24	SOIL	Thallium	1.91	J	0.26	2.22	mg/Kg
Q2032-04	TP-24	SOIL	Vanadium	26.4		0.28	2.22	mg/Kg
Q2032-04	TP-24	SOIL	Zinc	15.3		0.26	2.22	mg/Kg
Client ID : TP-37								
Q2032-07	TP-37	SOIL	Aluminum	3890		0.95	5.66	mg/Kg
Q2032-07	TP-37	SOIL	Arsenic	5.80		0.22	1.13	mg/Kg
Q2032-07	TP-37	SOIL	Barium	36.0		0.83	5.66	mg/Kg
Q2032-07	TP-37	SOIL	Beryllium	0.39		0.028	0.34	mg/Kg
Q2032-07	TP-37	SOIL	Cadmium	0.049	J	0.027	0.34	mg/Kg
Q2032-07	TP-37	SOIL	Calcium	763		12.6	113	mg/Kg
Q2032-07	TP-37	SOIL	Chromium	16.7		0.053	0.57	mg/Kg
Q2032-07	TP-37	SOIL	Cobalt	1.68	J	0.11	1.70	mg/Kg
Q2032-07	TP-37	SOIL	Copper	6.43		0.25	1.13	mg/Kg
Q2032-07	TP-37	SOIL	Iron	11700		4.52	5.66	mg/Kg
Q2032-07	TP-37	SOIL	Lead	7.40		0.15	0.68	mg/Kg
Q2032-07	TP-37	SOIL	Magnesium	182		13.6	113	mg/Kg
Q2032-07	TP-37	SOIL	Manganese	18.1		0.16	1.13	mg/Kg
Q2032-07	TP-37	SOIL	Mercury	0.021		0.0090	0.017	mg/Kg
Q2032-07	TP-37	SOIL	Nickel	4.26		0.15	2.27	mg/Kg
Q2032-07	TP-37	SOIL	Potassium	127		31.4	113	mg/Kg
Q2032-07	TP-37	SOIL	Sodium	150		20.2	113	mg/Kg
Q2032-07	TP-37	SOIL	Thallium	0.80	J	0.26	2.27	mg/Kg
Q2032-07	TP-37	SOIL	Vanadium	23.6		0.28	2.27	mg/Kg
Q2032-07	TP-37	SOIL	Zinc	20.7		0.26	2.27	mg/Kg
Client ID : TP-32								
Q2032-08	TP-32	SOIL	Aluminum	4640		0.81	4.84	mg/Kg
Q2032-08	TP-32	SOIL	Arsenic	2.14		0.18	0.97	mg/Kg
Q2032-08	TP-32	SOIL	Barium	20.9		0.71	4.84	mg/Kg
Q2032-08	TP-32	SOIL	Beryllium	0.39		0.024	0.29	mg/Kg
Q2032-08	TP-32	SOIL	Cadmium	0.14	J	0.023	0.29	mg/Kg
Q2032-08	TP-32	SOIL	Calcium	147		10.8	96.8	mg/Kg
Q2032-08	TP-32	SOIL	Chromium	5.85		0.046	0.48	mg/Kg
Q2032-08	TP-32	SOIL	Cobalt	2.63		0.097	1.45	mg/Kg
Q2032-08	TP-32	SOIL	Copper	4.25		0.21	0.97	mg/Kg
Q2032-08	TP-32	SOIL	Iron	10600		3.86	4.84	mg/Kg
Q2032-08	TP-32	SOIL	Lead	22.1		0.13	0.58	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2032

Order ID: Q2032

Client: CDM Smith

Project ID: South River WM Replacement

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q2032-08	TP-32	SOIL	Magnesium	242		11.6	96.8	mg/Kg
Q2032-08	TP-32	SOIL	Manganese	49.6		0.14	0.97	mg/Kg
Q2032-08	TP-32	SOIL	Mercury	0.069		0.0090	0.016	mg/Kg
Q2032-08	TP-32	SOIL	Nickel	3.02		0.13	1.94	mg/Kg
Q2032-08	TP-32	SOIL	Potassium	93.4	J	26.8	96.8	mg/Kg
Q2032-08	TP-32	SOIL	Sodium	66.9	J	17.2	96.8	mg/Kg
Q2032-08	TP-32	SOIL	Thallium	0.61	J	0.22	1.94	mg/Kg
Q2032-08	TP-32	SOIL	Vanadium	13.9		0.24	1.94	mg/Kg
Q2032-08	TP-32	SOIL	Zinc	9.33		0.22	1.94	mg/Kg
Client ID : FB-05132025								
Q2032-11	FB-05132025	Water	Manganese	3.50	J	2.97	10.0	ug/L
Q2032-11	FB-05132025	Water	Zinc	16.0	J	8.33	20.0	ug/L



SAMPLE DATA

A

B

C

D

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-11	SDG No.:	Q2032
Lab Sample ID:	Q2032-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	76.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	3420	*	1	0.99	5.88	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-36-0	Antimony	0.26	UN	1	0.26	2.94	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-38-2	Arsenic	7.54		1	0.22	1.18	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-39-3	Barium	10.3	N	1	0.86	5.88	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-41-7	Beryllium	0.40		1	0.029	0.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-43-9	Cadmium	0.33	J	1	0.028	0.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-70-2	Calcium	278	*	1	13.0	118	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-47-3	Chromium	12.7		1	0.055	0.59	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-48-4	Cobalt	1.49	J	1	0.12	1.76	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-50-8	Copper	9.16		1	0.26	1.18	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7439-89-6	Iron	17000	*	1	4.69	5.88	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7439-92-1	Lead	10.3	*	1	0.15	0.71	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7439-95-4	Magnesium	285	N*	1	14.1	118	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7439-96-5	Manganese	31.5	N*	1	0.17	1.18	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7439-97-6	Mercury	0.033		1	0.010	0.017	mg/Kg	05/15/25 08:55	05/15/25 14:01	7471B	
7440-02-0	Nickel	1.98	J	1	0.15	2.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-09-7	Potassium	322	N	1	32.6	118	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7782-49-2	Selenium	0.31	UN	1	0.31	1.18	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-22-4	Silver	0.14	UN	1	0.14	0.59	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-23-5	Sodium	211	N*	1	20.9	118	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-28-0	Thallium	1.41	J	1	0.27	2.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-62-2	Vanadium	17.8	N*	1	0.29	2.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050
7440-66-6	Zinc	10.7	N	1	0.27	2.35	mg/Kg	05/15/25 10:05	05/20/25 14:37	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29	SDG No.:	Q2032
Lab Sample ID:	Q2032-02	Matrix:	SOIL
Level (low/med):	low	% Solid:	86.1

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	8350	*	1	0.91	5.40	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-36-0	Antimony	0.24	UN	1	0.24	2.70	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-38-2	Arsenic	4.45		1	0.21	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-39-3	Barium	40.7	N	1	0.79	5.40	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-41-7	Beryllium	0.51		1	0.027	0.32	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-43-9	Cadmium	0.026	U	1	0.026	0.32	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-70-2	Calcium	642	*	1	12.0	108	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-47-3	Chromium	13.8		1	0.051	0.54	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-48-4	Cobalt	2.10		1	0.11	1.62	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-50-8	Copper	4.85		1	0.24	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7439-89-6	Iron	19400	*	1	4.31	5.40	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7439-92-1	Lead	7.58	*	1	0.14	0.65	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7439-95-4	Magnesium	383	N*	1	13.0	108	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7439-96-5	Manganese	36.1	N*	1	0.15	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7439-97-6	Mercury	0.020		1	0.0090	0.016	mg/Kg	05/15/25 08:55	05/15/25 14:03	7471B	
7440-02-0	Nickel	5.81		1	0.14	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-09-7	Potassium	256	N	1	29.9	108	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7782-49-2	Selenium	0.28	UN	1	0.28	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-22-4	Silver	0.22	JN	1	0.13	0.54	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-23-5	Sodium	278	N*	1	19.2	108	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-28-0	Thallium	1.30	J	1	0.25	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-62-2	Vanadium	24.8	N*	1	0.27	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050
7440-66-6	Zinc	14.0	N	1	0.25	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:41	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-29-99	SDG No.:	Q2032
Lab Sample ID:	Q2032-03	Matrix:	SOIL
Level (low/med):	low	% Solid:	86.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4670	*	1	0.91	5.41	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-36-0	Antimony	0.24	UN	1	0.24	2.70	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-38-2	Arsenic	3.71		1	0.21	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-39-3	Barium	27.3	N	1	0.79	5.41	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-41-7	Beryllium	0.41		1	0.027	0.33	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-43-9	Cadmium	0.026	U	1	0.026	0.33	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-70-2	Calcium	641	*	1	12.0	108	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-47-3	Chromium	10.3		1	0.051	0.54	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-48-4	Cobalt	1.82		1	0.11	1.62	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-50-8	Copper	5.19		1	0.24	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7439-89-6	Iron	16400	*	1	4.32	5.41	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7439-92-1	Lead	14.3	*	1	0.14	0.65	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7439-95-4	Magnesium	308	N*	1	13.0	108	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7439-96-5	Manganese	49.9	N*	1	0.15	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7439-97-6	Mercury	0.14		1	0.0090	0.016	mg/Kg	05/15/25 08:55	05/15/25 14:06	7471B	
7440-02-0	Nickel	3.76		1	0.14	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-09-7	Potassium	192	N	1	30.0	108	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7782-49-2	Selenium	0.28	UN	1	0.28	1.08	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-22-4	Silver	0.13	UN	1	0.13	0.54	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-23-5	Sodium	198	N*	1	19.3	108	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-28-0	Thallium	0.99	J	1	0.25	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-62-2	Vanadium	19.1	N*	1	0.27	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050
7440-66-6	Zinc	12.8	N	1	0.25	2.16	mg/Kg	05/15/25 10:05	05/20/25 14:54	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-24	SDG No.:	Q2032
Lab Sample ID:	Q2032-04	Matrix:	SOIL
Level (low/med):	low	% Solid:	74.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4380	*	1	0.93	5.55	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-36-0	Antimony	0.24	UN	1	0.24	2.77	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-38-2	Arsenic	3.54		1	0.21	1.11	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-39-3	Barium	18.5	N	1	0.81	5.55	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-41-7	Beryllium	0.38		1	0.028	0.33	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-43-9	Cadmium	0.27	J	1	0.027	0.33	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-70-2	Calcium	351	*	1	12.3	111	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-47-3	Chromium	16.8		1	0.052	0.56	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-48-4	Cobalt	1.63	J	1	0.11	1.66	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-50-8	Copper	13.5		1	0.24	1.11	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7439-89-6	Iron	24300	*	1	4.43	5.55	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7439-92-1	Lead	11.7	*	1	0.14	0.67	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7439-95-4	Magnesium	287	N*	1	13.3	111	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7439-96-5	Manganese	16.5	N*	1	0.16	1.11	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7439-97-6	Mercury	0.030		1	0.0090	0.016	mg/Kg	05/15/25 08:55	05/15/25 14:08	7471B	
7440-02-0	Nickel	2.56		1	0.14	2.22	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-09-7	Potassium	427	N	1	30.7	111	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7782-49-2	Selenium	0.29	UN	1	0.29	1.11	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-22-4	Silver	0.13	UN	1	0.13	0.56	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-23-5	Sodium	388	N*	1	19.7	111	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-28-0	Thallium	1.91	J	1	0.26	2.22	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-62-2	Vanadium	26.4	N*	1	0.28	2.22	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050
7440-66-6	Zinc	15.3	N	1	0.26	2.22	mg/Kg	05/15/25 10:05	05/20/25 14:58	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-37	SDG No.:	Q2032
Lab Sample ID:	Q2032-07	Matrix:	SOIL
Level (low/med):	low	% Solid:	82.5

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	3890	*	1	0.95	5.66	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-36-0	Antimony	0.25	UN	1	0.25	2.83	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-38-2	Arsenic	5.80		1	0.22	1.13	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-39-3	Barium	36.0	N	1	0.83	5.66	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-41-7	Beryllium	0.39		1	0.028	0.34	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-43-9	Cadmium	0.049	J	1	0.027	0.34	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-70-2	Calcium	763	*	1	12.6	113	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-47-3	Chromium	16.7		1	0.053	0.57	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-48-4	Cobalt	1.68	J	1	0.11	1.70	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-50-8	Copper	6.43		1	0.25	1.13	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7439-89-6	Iron	11700	*	1	4.52	5.66	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7439-92-1	Lead	7.40	*	1	0.15	0.68	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7439-95-4	Magnesium	182	N*	1	13.6	113	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7439-96-5	Manganese	18.1	N*	1	0.16	1.13	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7439-97-6	Mercury	0.021		1	0.0090	0.017	mg/Kg	05/15/25 08:55	05/15/25 14:20	7471B	
7440-02-0	Nickel	4.26		1	0.15	2.27	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-09-7	Potassium	127	N	1	31.4	113	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7782-49-2	Selenium	0.30	UN	1	0.30	1.13	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-22-4	Silver	0.14	UN	1	0.14	0.57	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-23-5	Sodium	150	N*	1	20.2	113	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-28-0	Thallium	0.80	J	1	0.26	2.27	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-62-2	Vanadium	23.6	N*	1	0.28	2.27	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050
7440-66-6	Zinc	20.7	N	1	0.26	2.27	mg/Kg	05/15/25 10:05	05/20/25 15:23	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	TP-32	SDG No.:	Q2032
Lab Sample ID:	Q2032-08	Matrix:	SOIL
Level (low/med):	low	% Solid:	86.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	4640	*	1	0.81	4.84	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-36-0	Antimony	0.21	UN	1	0.21	2.42	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-38-2	Arsenic	2.14		1	0.18	0.97	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-39-3	Barium	20.9	N	1	0.71	4.84	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-41-7	Beryllium	0.39		1	0.024	0.29	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-43-9	Cadmium	0.14	J	1	0.023	0.29	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-70-2	Calcium	147	*	1	10.8	96.8	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-47-3	Chromium	5.85		1	0.046	0.48	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-48-4	Cobalt	2.63		1	0.097	1.45	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-50-8	Copper	4.25		1	0.21	0.97	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7439-89-6	Iron	10600	*	1	3.86	4.84	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7439-92-1	Lead	22.1	*	1	0.13	0.58	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7439-95-4	Magnesium	242	N*	1	11.6	96.8	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7439-96-5	Manganese	49.6	N*	1	0.14	0.97	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7439-97-6	Mercury	0.069		1	0.0090	0.016	mg/Kg	05/15/25 08:55	05/15/25 14:30	7471B	
7440-02-0	Nickel	3.02		1	0.13	1.94	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-09-7	Potassium	93.4	JN	1	26.8	96.8	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7782-49-2	Selenium	0.25	UN	1	0.25	0.97	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-22-4	Silver	0.12	UN	1	0.12	0.48	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-23-5	Sodium	66.9	JN*	1	17.2	96.8	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-28-0	Thallium	0.61	J	1	0.22	1.94	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-62-2	Vanadium	13.9	N*	1	0.24	1.94	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050
7440-66-6	Zinc	9.33	N	1	0.22	1.94	mg/Kg	05/15/25 10:05	05/20/25 15:27	6010D	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	CDM Smith	Date Collected:	05/13/25
Project:	South River WM Replacement	Date Received:	05/13/25
Client Sample ID:	FB-05132025	SDG No.:	Q2032
Lab Sample ID:	Q2032-11	Matrix:	Water
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.	Prep Met.
7429-90-5	Aluminum	5.67	U	1	5.67	50.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-36-0	Antimony	3.38	U	1	3.38	25.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-38-2	Arsenic	2.56	U	1	2.56	10.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-39-3	Barium	7.28	U	1	7.28	50.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-41-7	Beryllium	0.28	U	1	0.28	3.00	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-43-9	Cadmium	0.25	U	1	0.25	3.00	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-70-2	Calcium	117	U	1	117	1000	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-47-3	Chromium	1.06	U	1	1.06	5.00	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-48-4	Cobalt	1.13	U	1	1.13	15.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-50-8	Copper	2.30	U	1	2.30	10.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7439-89-6	Iron	11.7	UN	1	11.7	50.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7439-92-1	Lead	1.15	U	1	1.15	6.00	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7439-95-4	Magnesium	122	U	1	122	1000	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7439-96-5	Manganese	3.50	J	1	2.97	10.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7439-97-6	Mercury	0.076	UN*1		0.076	0.20	ug/L	05/16/25 09:13	05/19/25 11:49	7470A	
7440-02-0	Nickel	1.53	U	1	1.53	20.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-09-7	Potassium	459	U	1	459	1000	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7782-49-2	Selenium	4.82	U	1	4.82	10.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-22-4	Silver	0.81	UN	1	0.81	5.00	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-23-5	Sodium	434	U	1	434	1000	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-28-0	Thallium	2.19	U	1	2.19	20.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-62-2	Vanadium	3.13	U	1	3.13	20.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010
7440-66-6	Zinc	16.0	J	1	8.33	20.0	ug/L	05/16/25 10:30	05/19/25 18:12	6010D	SW3010

Color Before:	Colorless	Clarity Before:	Clear	Texture:
Color After:	Colorless	Clarity After:	Clear	Artifacts:
Comments:	METALS-TAL			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N = Spiked sample recovery not within control limits

LAB CHRONICLE

OrderID:	Q2032	OrderDate:	5/13/2025 4:01:00 PM
Client:	CDM Smith	Project:	South River WM Replacement
Contact:	Marcie Ann Encinas	Location:	L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2032-01	TP-11	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-02	TP-29	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-03	TP-29-99	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-04	TP-24	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-07	TP-37	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-08	TP-32	SOIL			05/13/25			05/13/25
			Mercury	7471B		05/15/25	05/15/25	
			Metals ICP-TAL	6010D		05/15/25	05/20/25	
Q2032-09	COMP-1	TCLP			05/13/25			05/13/25
			TCLP ICP Metals	6010D		05/15/25	05/19/25	
			TCLP Mercury	7470A		05/16/25	05/19/25	
Q2032-11	FB-05132025	Water			05/13/25			05/13/25
			Mercury	7470A		05/16/25	05/19/25	
			Metals ICP-TAL	6010D		05/16/25	05/19/25	