

ANALYTICAL RESULTS SUMMARY

GENERAL CHEMISTRY
METALS

PROJECT NAME : USACE NAB SEDIMENT PROJECT 25

US ARMY CORP OF ENGINEERS

2 Hopkins Plaza

Baltimore, MD - 21201

Phone No: 1-800-434-0988

ORDER ID : Q2085

ATTENTION : Kendall Rosenberg



Laboratory Certification ID # 20012



Hit Summary Sheet
SW-846

SDG No.: Q2085 **Order ID:** Q2085
Client: US Army Corp of Engineers **Project ID:** USACE NAB Sediment Project 25

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : SC-4-SED-051525									
Q2085-01	SC-4-SED-051525	SOIL	Aluminum	2200		0.37	1.04	2.08	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Arsenic	3.41		0.012	0.026	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Barium	4.16		0.034	0.13	1.04	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Beryllium	0.28		0.033	0.078	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Cadmium	0.052	J	0.019	0.078	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Calcium	281		4.98	19.8	52.0	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Chromium	5.17		0.027	0.052	0.21	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Cobalt	1.35		0.0090	0.026	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Copper	2.71		0.068	0.10	0.21	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Iron	6160		0.96	1.30	5.20	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Lead	3.40		0.033	0.078	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Magnesium	790		2.01	19.8	52.0	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Manganese	32.7		0.035	0.052	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Nickel	3.00		0.045	0.078	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Potassium	383		3.99	19.8	52.0	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Sodium	2000		7.30	26.0	52.0	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Thallium	0.034	J	0.015	0.052	0.10	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Vanadium	9.05		0.011	0.026	0.52	mg/Kg
Q2085-01	SC-4-SED-051525	SOIL	Zinc	11.5		0.094	0.16	0.52	mg/Kg
Client ID : SC-3-SED-051525									
Q2085-02	SC-3-SED-051525	SOIL	Aluminum	6540		0.42	1.18	2.36	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Arsenic	5.41		0.014	0.029	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Barium	27.4		0.039	0.15	1.18	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Beryllium	0.25		0.038	0.088	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Cadmium	0.078	J	0.021	0.088	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Calcium	268		5.64	22.4	58.9	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Chromium	13.6		0.031	0.059	0.24	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Cobalt	2.29		0.011	0.029	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Copper	8.56		0.077	0.12	0.24	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Iron	10100		1.08	1.47	5.89	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Lead	6.12		0.038	0.088	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Magnesium	1660		2.27	22.4	58.9	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Manganese	52.8		0.040	0.059	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Nickel	6.71		0.051	0.088	0.12	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Potassium	899		4.52	22.4	58.9	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Sodium	1860		8.27	29.5	58.9	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Thallium	0.058	J	0.016	0.059	0.12	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2085

Order ID: Q2085

Client: US Army Corp of Engineers

Project ID: USACE NAB Sediment Project 25

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q2085-02	SC-3-SED-051525	SOIL	Vanadium	19.3		0.013	0.029	0.59	mg/Kg
Q2085-02	SC-3-SED-051525	SOIL	Zinc	24.3		0.11	0.18	0.59	mg/Kg
Client ID : SC-2-SED-051525									
Q2085-03	SC-2-SED-051525	SOIL	Aluminum	608		0.36	0.99	1.99	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Arsenic	0.70		0.012	0.025	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Barium	7.12		0.033	0.12	0.99	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Beryllium	0.050	J	0.032	0.074	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Calcium	160		4.76	18.9	49.6	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Chromium	1.88		0.026	0.050	0.20	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Cobalt	0.51		0.0090	0.025	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Copper	1.19		0.065	0.099	0.20	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Iron	987		0.91	1.24	4.96	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Lead	1.95		0.032	0.074	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Magnesium	306		1.92	18.9	49.6	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Manganese	11.7		0.034	0.050	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Nickel	0.98		0.043	0.074	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Potassium	168		3.81	18.9	49.6	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Sodium	1520		6.97	24.8	49.6	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Thallium	0.017	J	0.014	0.050	0.099	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Vanadium	1.64		0.011	0.025	0.50	mg/Kg
Q2085-03	SC-2-SED-051525	SOIL	Zinc	6.76		0.089	0.15	0.50	mg/Kg
Client ID : SC-1-SED-051625									
Q2085-04	SC-1-SED-051625	SOIL	Aluminum	3290		0.37	1.01	2.03	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Antimony	2.12		0.046	0.076	0.20	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Arsenic	2.49		0.012	0.025	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Barium	7.23		0.033	0.13	1.01	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Beryllium	0.24		0.032	0.076	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Cadmium	0.097	J	0.018	0.076	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Calcium	430		4.85	19.3	50.7	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Chromium	5.35		0.026	0.051	0.20	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Cobalt	1.94		0.0090	0.025	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Copper	3.71		0.066	0.10	0.20	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Iron	6010		0.93	1.27	5.07	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Lead	4.25		0.032	0.076	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Magnesium	1020		1.96	19.3	50.7	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Manganese	50.7		0.034	0.051	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Nickel	4.38		0.044	0.076	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Potassium	620		3.89	19.3	50.7	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Sodium	2270		7.11	25.3	50.7	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2085

Order ID: Q2085

Client: US Army Corp of Engineers

Project ID: USACE NAB Sediment Project 25

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q2085-04	SC-1-SED-051625	SOIL	Thallium	0.062	J	0.014	0.051	0.10	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Vanadium	7.42		0.011	0.025	0.51	mg/Kg
Q2085-04	SC-1-SED-051625	SOIL	Zinc	27.3		0.091	0.15	0.51	mg/Kg
Client ID : SC-COMP-SED-051625									
Q2085-07	SC-COMP-SED-051625	SOIL	Aluminum	3100		0.37	1.04	2.08	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Arsenic	3.24		0.012	0.026	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Barium	7.49		0.034	0.13	1.04	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Beryllium	0.23		0.033	0.078	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Cadmium	0.083	J	0.019	0.078	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Calcium	326		4.97	19.7	51.9	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Chromium	6.49		0.027	0.052	0.21	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Cobalt	1.78		0.0090	0.026	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Copper	4.06		0.068	0.10	0.21	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Iron	6670		0.96	1.30	5.19	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Lead	3.57		0.033	0.078	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Magnesium	1020		2.00	19.7	51.9	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Manganese	47.1		0.035	0.052	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Nickel	4.03		0.045	0.078	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Potassium	546		3.99	19.7	51.9	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Sodium	2280		7.29	26.0	51.9	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Thallium	0.071	J	0.015	0.052	0.10	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Vanadium	9.66		0.011	0.026	0.52	mg/Kg
Q2085-07	SC-COMP-SED-051625	SOIL	Zinc	16.3		0.093	0.16	0.52	mg/Kg
Client ID : DUPE-1-SC									
Q2085-08	DUPE-1-SC	SOIL	Aluminum	2170		0.34	0.93	1.86	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Arsenic	1.74		0.011	0.023	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Barium	8.35		0.031	0.12	0.93	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Beryllium	0.15		0.030	0.070	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Cadmium	0.046	J	0.017	0.070	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Calcium	246		4.46	17.7	46.5	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Chromium	4.20		0.024	0.047	0.19	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Cobalt	1.78		0.0080	0.023	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Copper	2.73		0.060	0.093	0.19	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Iron	4240		0.86	1.16	4.65	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Lead	2.85		0.030	0.070	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Magnesium	838		1.80	17.7	46.5	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Manganese	35.8		0.032	0.047	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Nickel	3.54		0.040	0.070	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Potassium	375		3.57	17.7	46.5	mg/Kg

Hit Summary Sheet
SW-846

SDG No.: Q2085

Order ID: Q2085

Client: US Army Corp of Engineers

Project ID: USACE NAB Sediment Project 25

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Q2085-08	DUPE-1-SC	SOIL	Sodium	2230		6.53	23.3	46.5	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Thallium	0.039	J	0.013	0.047	0.093	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Vanadium	4.78		0.010	0.023	0.47	mg/Kg
Q2085-08	DUPE-1-SC	SOIL	Zinc	14.4		0.084	0.14	0.47	mg/Kg