

This review was performed with guidance from the National Functional Guidelines for Organic Superfund Methods Data Review (US EPA, 2020, US EPA) and/or the National Functional Guidelines for Inorganic Superfund Methods Data Review (US EPA, 2020, US EPA). These validation guidance documents specifically address analyses performed in accordance with the CLP analytical methods and are not completely applicable to the type of analyses and analytical protocols performed for the Standard Method (SM), SW-846, and/or US EPA methods utilized by the laboratory for these samples. Environmental Standards, Inc. (Environmental Standards) used professional judgment to determine the quality of the analytical results and compliance relative to the Standard Method (SM), SW-846, and/or US EPA utilized by the laboratory. This QA review was performed on the data associated with Sample Delivery Group (SDG):

L1861755

The findings offered in this report are based on a review of the Chain-of-Custody Record and Case Narrative, sample preservation and condition upon laboratory receipt, holding times, surrogate recovery, field and laboratory blank results, laboratory and field duplicate precision, laboratory control sample / laboratory control sample duplicate recoveries and precision, matrix spike / matrix spike duplicate recoveries and precision, total and dissolved results comparisons, and/or percent solids (as applicable). All review items may not have been included in this SDG; therefore, only those items included in this SDG were addressed in the QA review.

A summary of the results of the data review process is provided below:

Sample	Sample Type	Method	Analyte	T/D	Result	Qual	Reason Code(s)	MDL	QL	Unit	Detect?
GACO0521T045-1CRS006PACE	N	SW6020	Lead	T	31.9	J	MS,MSP	11.7	11.7	mg/Kg	Y
GACO0521T045-1CRS006PACE	N	SW6020	Zinc	T	79.8	J	MS,MSP	58.3	58.3	mg/Kg	Y
GACO0521T045-1CRS006PACE	N	SW8270-SIM	Benzo(a)anthracene	N	0.0117	J	MS,MSP	0.00700	0.00700	mg/Kg	Y

Data Qualifiers

U	The analyte was analyzed for, but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate, or was observed in a blank at a similar level.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Reason Codes and Explanations

BF	Contamination present in a field blank (e.g ., Field Blank, Equipment Blank, etc .); evaluation criteria exceeded
BL	Contamination present in a laboratory blank (e.g ., Method Blank, Instrument Blank, etc .); evaluation criteria exceeded
BT	Contamination present in the Trip Blank; evaluation criteria exceeded
CC	Possible contamination due to carryover from a previous sample
CR	Calculated result in which one or more of the components has been qualified
CRQ	Calculated result flagged due to reporting protocol
CT	Cooler temperature criteria not met
CY	Chemical Yield recovery criteria not met
EC	Result exceeds the calibration range; potential bias indeterminate
FD	Field duplicate imprecision; potential bias indeterminate
GH	Headspace present in the gamma spectrometer sample analysis vessel; potential bias indeterminate
GS	Low sample density in the gamma spectrometer sample analysis vessel; potential bias indeterminate
HT	Holding time exceeded
HV	Headspace present in volatile vials
IN	Interference (e.g ., laboratory, chemical, chromatographic/instrumental, and/or matrix) present in the analysis
LC	Laboratory control sample/laboratory control sample duplicate recovery criteria not met

LCP	Laboratory control sample/laboratory control sample duplicate precision criteria not met; potential bias indeterminate
LD	Laboratory duplicate precision criteria not met; potential bias indeterminate
MDP	Laboratory deviated from the method for a method-defined parameter, based on regulatory requirements
MS	Matrix spike/matrix spike duplicate recovery criteria not met
MSP	Matrix spike/matrix spike duplicate precision criteria not met; potential bias indeterminate
PD	Post-digestion spike recovery criteria not met
OT	Other deficiencies, see report for additional details
PS	Low percent solids; potential bias indeterminate
RA	Replicate/multiple analyses criteria not met; potential bias indeterminate
RL	The analysis meets all qualitative identification criteria, but the measured concentration is between the method detection limit and the quantitation or reporting limit; potential bias indeterminate
RS	Reporting limit standard(s) outside of acceptance limits
SC	Relative percent difference between two columns exceeds criteria; potential bias indeterminate
SP	Sample preservation criteria not met
SR	Surrogate recovery criteria not met
ST	Sample container type incorrect
SU	Sample result is less than the two-sigma uncertainty
SUN	Absolute value of the negative sample result is greater than the two-sigma uncertainty
SW	Sample switch suspected
TD	Result for dissolved constituent significantly exceeded result for total constituent; potential bias indeterminate
TIC	Tentatively identified compound, quantified using an assumed calibration factor; potential bias indeterminate

Lab Sample ID	L1861755-01
Sys Sample Code	GACO0521T045-1CRS006PACE
Sample Name	GACO0521T045-1CRS006PACE
Sample Date	5/21/2025 3:50:00 PM
Sample Type	N
Matrix	SO
Parent Sample	
% Moisture	14.20

Analytic Method	Chemical Name	CAS Rn	Fraction	Test Type	Result Unit	Final Result	Final Qual	Reason code	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
CALC	Sodium Adsorption Ratio	SAR	N	INITIAL		2.18						Y	Y	1	DRY
SM2540G	Total Solids	10-31-1	N	INITIAL	%	85.8						Y	Y	1	NA
SW6020	Arsenic	7440-38-2	T	INITIAL	mg/Kg	6.25			0.117	0.117	0.117	Y	Y	5	DRY
	Barium	7440-39-3	T	INITIAL	mg/Kg	74.8			11.7	11.7	11.7	Y	Y	5	DRY
	Cadmium	7440-43-9	T	INITIAL	mg/Kg	0.268			0.117	0.117	0.117	Y	Y	5	DRY
	Copper	7440-50-8	T	INITIAL	mg/Kg	12.6			11.7	11.7	11.7	Y	Y	5	DRY
	Lead	7439-92-1	T	INITIAL	mg/Kg	31.9	J	MS,MSP	11.7	11.7	11.7	Y	Y	5	DRY
	Nickel	7440-02-0	T	INITIAL	mg/Kg		U		11.7	11.7	11.7	N	Y	5	DRY
	Selenium	7782-49-2	T	INITIAL	mg/Kg	0.438			0.117	0.117	0.117	Y	Y	5	DRY
	Silver	7440-22-4	T	INITIAL	mg/Kg		U		0.583	0.583	0.583	N	Y	5	DRY
	Zinc	7440-66-6	T	INITIAL	mg/Kg	79.8	J	MS,MSP	58.3	58.3	58.3	Y	Y	5	DRY
SW7199	Hexavalent Chromium	18540-29-9	N	INITIAL	mg/Kg		U		0.233	0.233	0.233	N	Y	1	DRY
SW8015	TPH (GC/FID) Low Fraction	8006-61-9	N	INITIAL	mg/Kg		U		0.0933	0.117	0.117	N	Y	1	DRY
SW8015M	C10-C28 Diesel Range	DROC10C28	N	INITIAL	mg/Kg	16.6			1.88	4.66	4.66	Y	Y	1	DRY
	C28-C36 Motor Oil Range	MORC28C36	N	INITIAL	mg/Kg	44.4			0.320	4.66	4.66	Y	Y	1	DRY
SW8260	1,2,4-Trimethylbenzene	95-63-6	N	INITIAL	mg/Kg		U		0.00666	0.00666	0.00666	N	Y	1	DRY
	1,3,5-Trimethylbenzene	108-67-8	N	INITIAL	mg/Kg		U		0.00666	0.00666	0.00666	N	Y	1	DRY
	Benzene	71-43-2	N	INITIAL	mg/Kg		U		0.00133	0.00133	0.00133	N	Y	1	DRY
	Ethylbenzene	100-41-4	N	INITIAL	mg/Kg		U		0.0133	0.0133	0.0133	N	Y	1	DRY
	Toluene	108-88-3	N	INITIAL	mg/Kg		U		0.0133	0.0133	0.0133	N	Y	1	DRY
	Xylenes, Total	1330-20-7	N	INITIAL	mg/Kg		U		0.133	0.133	0.133	N	Y	1	DRY
SW8270-SIM	1-Methylnaphthalene	90-12-0	N	INITIAL	mg/Kg		U		0.00350	0.00350	0.00350	N	Y	1	DRY
	2-Methylnaphthalene	91-57-6	N	INITIAL	mg/Kg		U		0.0140	0.0140	0.0140	N	Y	1	DRY
	Acenaphthene	83-32-9	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Acenaphthylene	208-96-8	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Anthracene	120-12-7	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Benzo(a)anthracene	56-55-3	N	INITIAL	mg/Kg	0.0117	J	MS,MSP	0.00700	0.00700	0.00700	Y	Y	1	DRY
	Benzo(a)pyrene	50-32-8	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Benzo(b)fluoranthene	205-99-2	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Benzo(g,h,i)perylene	191-24-2	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Benzo(k)fluoranthene	207-08-9	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Chrysene	218-01-9	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Dibenz(a,h)anthracene	53-70-3	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY

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Sample Name	GACO0521T045-1CRS006PACE
Sample Date	5/21/2025 3:50:00 PM
Sample Type	N
Matrix	SO
Parent Sample	
% Moisture	14.20

Analytic Method	Chemical Name	CAS Rn	Fraction	Test Type	Result Unit	Final Result	Final Qual	Reason code	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW8270-SIM	Fluoranthene	206-44-0	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Fluorene	86-73-7	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Indeno(1,2,3-cd)pyrene	193-39-5	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Naphthalene	91-20-3	N	INITIAL	mg/Kg		U		0.00350	0.00350	0.00350	N	Y	1	DRY
	Phenanthrene	85-01-8	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
	Pyrene	129-00-0	N	INITIAL	mg/Kg		U		0.0385	0.0385	0.0385	N	Y	1	DRY
SW846 6010B	Hot Water Sol. Boron	HotH2OSolBo ron	T	INITIAL	mg/L	2.23			0.0167	0.200	0.200	Y	Y	1	NA
SW9045	pH	10-29-7	N	INITIAL	SU	7.82						Y	Y	1	NA
SW9050	Specific Conductance	10-34-4	N	INITIAL	umhos/cm	1610			10.0	10.0	10.0	Y	Y	1	NA

Lab Sample ID	L1861755-02
Sys Sample Code	GACO0521T045-1CRT007
Sample Name	GACO0521T045-1CRT007
Sample Date	5/21/2025 7:00:00 AM
Sample Type	TB
Matrix	WQ
Parent Sample	
% Moisture	

Analytic Method	Chemical Name	CAS Rn	Fraction	Test Type	Result Unit	Final Result	Final Qual	Reason code	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW8260	1,1,1,2-Tetrachloroethane	630-20-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1,1-Trichloroethane	71-55-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1,2,2-Tetrachloroethane	79-34-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1,2-Trichloroethane	79-00-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1,2-Trichlorotrifluoroethane	76-13-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1-Dichloroethane	75-34-3	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1-Dichloroethene	75-35-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,1-Dichloropropene	563-58-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2,3-Trichlorobenzene	87-61-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2,3-Trichloropropane	96-18-4	N	INITIAL	mg/L		U		0.00250	0.00250	0.00250	N	Y	1	NA
	1,2,3-Trimethylbenzene	526-73-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2,4-Trichlorobenzene	120-82-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2,4-Trimethylbenzene	95-63-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2-Dibromo-3-Chloropropane	96-12-8	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	1,2-Dibromoethane	106-93-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2-Dichlorobenzene	95-50-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2-Dichloroethane	107-06-2	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,2-Dichloropropane	78-87-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,3,5-Trimethylbenzene	108-67-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,3-Dichlorobenzene	541-73-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,3-Dichloropropane	142-28-9	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	1,4-Dichlorobenzene	106-46-7	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	2,2-Dichloropropane	594-20-7	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	2-Butanone (MEK)	78-93-3	N	INITIAL	mg/L		U		0.0100	0.0100	0.0100	N	Y	1	NA
	2-Chlorotoluene	95-49-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	4-Chlorotoluene	106-43-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	4-Methyl-2-pentanone (MIBK)	108-10-1	N	INITIAL	mg/L		U		0.0100	0.0100	0.0100	N	Y	1	NA
	Acetone	67-64-1	N	INITIAL	mg/L		U		0.0500	0.0500	0.0500	N	Y	1	NA
	Acrolein	107-02-8	N	INITIAL	mg/L		U		0.0500	0.0500	0.0500	N	Y	1	NA
	Acrylonitrile	107-13-1	N	INITIAL	mg/L		U		0.0100	0.0100	0.0100	N	Y	1	NA
	Benzene	71-43-2	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Bromobenzene	108-86-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Bromodichloromethane	75-27-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA

Lab Sample ID	L1861755-02
Sys Sample Code	GACO0521T045-1CRT007
Sample Name	GACO0521T045-1CRT007
Sample Date	5/21/2025 7:00:00 AM
Sample Type	TB
Matrix	WQ
Parent Sample	
% Moisture	

Analytic Method	Chemical Name	CAS Rn	Fraction	Test Type	Result Unit	Final Result	Final Qual	Reason code	Final MDL	Final RL	Final QL	Final Detect	Final Report	DF	Basis
SW8260	Bromoform	75-25-2	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Bromomethane	74-83-9	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Carbon tetrachloride	56-23-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Chlorobenzene	108-90-7	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Chlorodibromomethane	124-48-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Chloroethane	75-00-3	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Chloroform	67-66-3	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Chloromethane	74-87-3	N	INITIAL	mg/L		U		0.00250	0.00250	0.00250	N	Y	1	NA
	cis-1,2-Dichloroethene	156-59-2	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	cis-1,3-Dichloropropene	10061-01-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Dibromomethane	74-95-3	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Dichlorodifluoromethane	75-71-8	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Di-isopropyl ether	108-20-3	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Ethylbenzene	100-41-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Hexachloro-1,3-butadiene	87-68-3	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Isopropylbenzene	98-82-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Methyl tert-butyl ether	1634-04-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Methylene Chloride	75-09-2	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Naphthalene	91-20-3	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	n-Butylbenzene	104-51-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	n-Propylbenzene	103-65-1	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	p-Isopropyltoluene	99-87-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	sec-Butylbenzene	135-98-8	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Styrene	100-42-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	tert-Butylbenzene	98-06-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Tetrachloroethene	127-18-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Toluene	108-88-3	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	trans-1,2-Dichloroethene	156-60-5	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	trans-1,3-Dichloropropene	10061-02-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Trichloroethene	79-01-6	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Trichlorofluoromethane	75-69-4	N	INITIAL	mg/L		U		0.00500	0.00500	0.00500	N	Y	1	NA
	Vinyl chloride	75-01-4	N	INITIAL	mg/L		U		0.00100	0.00100	0.00100	N	Y	1	NA
	Xylenes, Total	1330-20-7	N	INITIAL	mg/L		U		0.00300	0.00300	0.00300	N	Y	1	NA