

Specialty Analytical

9011 SE Jannsen Rd
Clackamas, OR 97015
TEL: (503) 607-1331

Website: www.specialtyanalytical.com

August 27, 2024

Carter Marr
Weyerhaeuser
3401 Industrial Way
Longview, WA 98632
TEL: (541) 409-7770
FAX:

RE: Priority Pollutants/ Outfall 002B

Order No.: 2407228

Dear Carter Marr:

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications, except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty French", written in a cursive style.

Marty French
Lab Director

Specialty Analytical

WO#: 2407228

Date Reported: 8/27/2024

CLIENT: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

Lab ID: 2407228-001

Matrix: WASTE WATER

Client Sample ID Outfall 002B

Collection Date: 7/25/2024 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
HEXAVALENT CHROMIUM				218.6		Analyst: MB
Chromium, Hexavalent	2.96	0.500		µg/L	1	8/2/2024 3:24:39 PM
PP13 METALS BY 200.8				E200.8	E200.8	Analyst: AC
ICP/MS METALS- TOTAL RECOVERABLE						
Antimony	ND	0.500		µg/L	1	8/2/2024 12:29:54 PM
Arsenic	2.51	0.100		µg/L	1	8/2/2024 12:29:54 PM
Beryllium	ND	0.100		µg/L	1	8/2/2024 12:29:54 PM
Cadmium	ND	0.100		µg/L	1	8/2/2024 12:29:54 PM
Chromium	1.68	0.100		µg/L	1	8/2/2024 12:29:54 PM
Copper	6.79	0.500		µg/L	1	8/2/2024 12:29:54 PM
Lead	0.467	0.100		µg/L	1	8/2/2024 12:29:54 PM
Nickel	4.17	0.500		µg/L	1	8/5/2024 1:18:13 PM
Selenium	ND	1.00		µg/L	1	8/2/2024 12:29:54 PM
Silver	ND	0.100		µg/L	1	8/2/2024 12:29:54 PM
Thallium	ND	0.500		µg/L	1	8/2/2024 12:29:54 PM
Zinc	42.8	2.00		µg/L	1	8/2/2024 12:29:54 PM
PURGEABLE ORGANIC COMPOUNDS				E624.1	SW 5030B	Analyst: LB
1,1,1-Trichloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,1,2,2-Tetrachloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,1,2-Trichloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,1-Dichloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,1-Dichloroethene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,2-Dichlorobenzene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,2-Dichloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,2-Dichloropropane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,3-Dichlorobenzene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
1,4-Dichlorobenzene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
2-Chloroethyl vinyl ether	ND	100		µg/L	10	7/26/2024 4:38:00 PM
Acrolein	ND	100		µg/L	10	7/26/2024 4:38:00 PM
Acrylonitrile	ND	20.0		µg/L	10	7/26/2024 4:38:00 PM
Benzene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Bromodichloromethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Bromoform	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Bromomethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Carbon tetrachloride	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Chlorobenzene	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM
Chloroethane	ND	5.00		µg/L	10	7/26/2024 4:38:00 PM

Specialty Analytical

WO#: 2407228

Date Reported: 8/27/2024

CLIENT: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

PURGEABLE ORGANIC COMPOUNDS

E624.1

SW 5030B

Analyst: LB

Chloroform	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Chloromethane	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
cis-1,3-Dichloropropene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Dibromochloromethane	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Ethylbenzene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Methylene chloride	ND	200	µg/L	10	7/26/2024 4:38:00 PM
Tetrachloroethene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Toluene	397	5.00	µg/L	10	7/26/2024 4:38:00 PM
trans-1,2-Dichloroethene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
trans-1,3-Dichloropropene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Trichloroethene	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Vinyl chloride	ND	5.00	µg/L	10	7/26/2024 4:38:00 PM
Surr: 1,2-Dichloroethane-d4	88.7	83.4 - 126	%Rec	10	7/26/2024 4:38:00 PM
Surr: 4-Bromofluorobenzene	94.9	80.9 - 127	%Rec	10	7/26/2024 4:38:00 PM
Surr: Dibromofluoromethane	96.6	81.1 - 122	%Rec	10	7/26/2024 4:38:00 PM
Surr: Toluene-d8	96.7	80 - 120	%Rec	10	7/26/2024 4:38:00 PM

CYANIDE, AVAILABLE

OIA-1677

OIA-1677

Analyst: NK

Cyanide, Available	ND	0.00500	mg/L	1	7/30/2024 10:20:05 AM
--------------------	----	---------	------	---	-----------------------

CYANIDE, TOTAL

D7284

D7284

Analyst: NK

Cyanide	ND	0.00500	mg/L	1	7/30/2024 11:50:38 AM
---------	----	---------	------	---	-----------------------

CYANIDE, WEAK ACID DISSOCIABLE

D2036

D2036

Analyst: NK

Cyanide, WAD	ND	0.005	mg/L	1	7/30/2024 12:11:48 PM
--------------	----	-------	------	---	-----------------------

PHENOLICS

E420.1

Analyst: NK

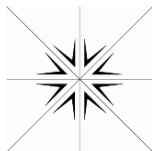
Phenolics, Total Recoverable	1.99	0.300	mg/L	6	8/2/2024 2:39:58 PM
------------------------------	------	-------	------	---	---------------------

FIELD PARAMETERS

FLD

Analyst: Clien

pH, SM4500H+ B	6.26		S.U.		7/25/2024 8:30:00 AM
Temperature, SM 2550B	17.8		deg C		7/25/2024 8:30:00 AM



Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Accreditation Program Analytes Report

WO#: 2407228

27-Aug-24

Client: Weyerhaeuser

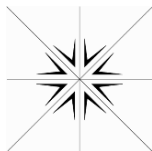
Project: Priority Pollutants/ Outfall 002B

Program Name	Sample ID	ClientSampleID	Matrix	Test Name	Analyte	Status
ORELAP	2407228-001A	Outfall 002B	Groundwater	CYANIDE, AVAILABLE	Cyanide, Available	A
			Waste Water	CYANIDE, TOTAL	Cyanide	A
	2407228-001C		Aqueous	PURGEABLE ORGANIC COMPOUNDS	Tetrachloroethene	A
					Chlorobenzene	A
					Chloroform	A
					Chloromethane	A
					cis-1,3-Dichloropropene	A
					Bromoform	A
					Methylene chloride	A
					Bromodichloromethane	A
					Toluene	A
					trans-1,2-Dichloroethene	A
					trans-1,3-Dichloropropene	A
					Trichloroethene	A
					Vinyl chloride	A
					Ethylbenzene	A
					1,2-Dichloropropane	A
					1,1,1-Trichloroethane	A
					1,1,2,2-Tetrachloroethane	A
					1,1,2-Trichloroethane	A
					1,1-Dichloroethane	A
					1,1-Dichloroethene	A
					Bromomethane	
					1,2-Dichloroethane	A
					Chloroethane	A
					1,3-Dichlorobenzene	A
					1,4-Dichlorobenzene	A
					2-Chloroethyl vinyl ether	A
					Acrolein	A
					Acrylonitrile	A
					Benzene	A

ORELAP A Accredited A

WADOE A Accredited A

ACCRED



Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Accreditation Program Analytes Report

WO#: 2407228

27-Aug-24

Client: Weyerhaeuser

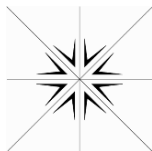
Project: Priority Pollutants/ Outfall 002B

Program Name	Sample ID	ClientSampleID	Matrix	Test Name	Analyte	Status
ORELAP	2407228-001C	Outfall 002B	Aqueous	PURGEABLE ORGANIC COMPOUNDS	1,2-Dichlorobenzene	A
					Carbon tetrachloride	A
	2407228-001D		Waste Water	ICP/MS METALS- TOTAL RECOVERABLE	Silver	A
			Aqueous		Nickel	A
			Waste Water		Nickel	A
			Wastewater		Nickel	A
			Water		Nickel	A
			Aqueous		Selenium	A
			Waste Water		Selenium	A
			Aqueous		Antimony	A
			Wastewater		Selenium	A
					Lead	A
			Aqueous		Silver	A
			Waste Water		Lead	A
			Wastewater		Silver	A
			Water		Silver	A
			Aqueous		Thallium	A
			Waste Water		Thallium	A
			Wastewater		Thallium	A
			Water		Thallium	A
			Aqueous		Zinc	A
			Waste Water		Zinc	A
			Wastewater		Zinc	A
			Water		Zinc	A
					Selenium	A
					Cadmium	A
			Waste Water		Antimony	A
			Wastewater		Antimony	A
			Water		Antimony	A
			Aqueous		Arsenic	A
			Waste Water		Arsenic	A

ORELAP A Accredited A

WADOE A Accredited A

ACCRED



Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Accreditation Program Analytes Report

WO#: 2407228

27-Aug-24

Client: Weyerhaeuser

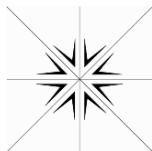
Project: Priority Pollutants/ Outfall 002B

Program Name	Sample ID	ClientSampleID	Matrix	Test Name	Analyte	Status
ORELAP	2407228-001D	Outfall 002B	Wastewater	ICP/MS METALS- TOTAL RECOVERABLE	Arsenic	A
			Water		Arsenic	A
			Wastewater		Beryllium	A
			Aqueous		Cadmium	A
			Water		Lead	A
			Wastewater		Cadmium	A
			Aqueous		Chromium	A
			Waste Water		Chromium	A
			Wastewater		Chromium	A
			Water		Chromium	A
			Aqueous		Copper	A
			Waste Water		Copper	A
			Wastewater		Copper	A
			Water		Copper	A
			Aqueous		Lead	A
			Waste Water		Cadmium	A
	2407228-001E		Aqueous	HEXAVALENT CHROMIUM	Chromium, Hexavalent	A
Washington Departmen	2407228-001A		Groundwater	CYANIDE, AVAILABLE	Cyanide, Available	A
			Waste Water	CYANIDE, TOTAL	Cyanide	A
	2407228-001B		Aqueous	PHENOLICS	Phenolics, Total Recoverable	A
	2407228-001C			PURGEABLE ORGANIC COMPOUNDS	1,2-Dichloropropane	A
					Carbon tetrachloride	A
					Bromomethane	A
					Bromoform	A
					Bromodichloromethane	A
					Acrylonitrile	A
					1,3-Dichlorobenzene	A
					Benzene	A
					1,2-Dichloroethane-d4	A
					1,2-Dichloroethane	A

ORELAP A Accredited A

WADOE A Accredited A

ACCRED



Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Accreditation Program Analytes Report

WO#: 2407228

27-Aug-24

Client: Weyerhaeuser

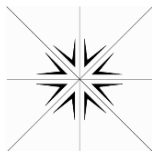
Project: Priority Pollutants/ Outfall 002B

Program Name	Sample ID	ClientSampleID	Matrix	Test Name	Analyte	Status
Washington Department of Ecology	2407228-001C	Outfall 002B	Aqueous	PURGEABLE ORGANIC COMPOUNDS	1,2-Dichlorobenzene	A
					1,1-Dichloroethene	A
					1,1,1-Trichloroethane	A
					1,1,2,2-Tetrachloroethane	A
					1,1,2-Trichloroethane	A
					Vinyl chloride	A
					Toluene	A
					Trichloroethene	A
					1,4-Dichlorobenzene	A
					1,1-Dichloroethane	A
					Chlorobenzene	A
					trans-1,3-Dichloropropene	A
					Toluene-d8	A
					Tetrachloroethene	A
					Methylene chloride	A
					Ethylbenzene	A
					Dibromochloromethane	A
					cis-1,3-Dichloropropene	A
					Chloromethane	A
					Chloroform	A
					Chloroethane	A
					trans-1,2-Dichloroethene	A
	2407228-001D			ICP/MS METALS- TOTAL RECOVERABLE	Antimony	A
					Selenium	A
					Zinc	A
					Thallium	A
					Silver	A
					Nickel	A
					Lead	A
					Copper	A
					Chromium	A

ORELAP A Accredited A

WADOE A Accredited A

ACCRED



Specialty Analytical
9011 SE Jannsen Rd
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Accreditation Program Analytes Report

WO#: 2407228

27-Aug-24

Client: Weyerhaeuser

Project: Priority Pollutants/ Outfall 002B

Program Name	Sample ID	ClientSampleID	Matrix	Test Name	Analyte	Status
Washington Departmen	2407228-001D	Outfall 002B	Aqueous	ICP/MS METALS- TOTAL RECOVERABLE	Cadmium	A
					Arsenic	A
					Beryllium	A
	2407228-001E			HEXAVALENT CHROMIUM	Chromium, Hexavalent	A

ORELAP A Accredited A

WADOE A Accredited A

ACCRED

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: ICV	SampType: ICV	TestCode: 200.8		Units: µg/L	Prep Date:			RunNo: 55036			
Client ID: ICV	Batch ID: 24134	TestNo: E200.8		E200.8	Analysis Date: 8/2/2024			SeqNo: 713348			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	50.7	0.500	50.00	0	101	90	110				
Arsenic	48.3	0.100	50.00	0	96.6	90	110				
Beryllium	50.4	0.100	50.00	0	101	90	110				
Cadmium	50.6	0.100	50.00	0	101	90	110				
Chromium	50.0	0.100	50.00	0	99.9	90	110				
Copper	51.5	0.500	50.00	0	103	90	110				
Lead	51.1	0.100	50.00	0	102	90	110				
Nickel	52.0	0.500	50.00	0	104	90	110				
Selenium	50.3	0.500	50.00	0	101	90	110				
Silver	51.5	0.100	50.00	0	103	90	110				
Thallium	50.6	0.100	50.00	0	101	90	110				
Zinc	53.0	2.00	50.00	0	106	90	110				

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713353						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.500									
Arsenic	ND	0.100									
Beryllium	ND	0.100									
Cadmium	ND	0.100									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713353						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.284	0.100									
Copper	ND	0.500									
Lead	ND	0.100									
Nickel	ND	0.500									
Selenium	ND	0.500									
Silver	ND	0.100									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713354						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.500									
Arsenic	ND	0.100									
Beryllium	ND	0.100									
Cadmium	ND	0.100									
Chromium	ND	0.100									
Copper	ND	0.500									
Lead	ND	0.100									
Nickel	ND	0.500									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713354						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.500									
Silver	ND	0.100									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:				RunNo: 55036			
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024				SeqNo: 713358			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.7	0.500	50.00	0	97.4	90	110				
Arsenic	48.0	0.100	50.00	0	96.0	90	110				
Beryllium	49.6	0.100	50.00	0	99.3	90	110				
Cadmium	49.5	0.100	50.00	0	99.1	90	110				
Chromium	49.5	0.100	50.00	0	99.1	90	110				
Copper	49.2	0.500	50.00	0	98.5	90	110				
Lead	47.4	0.100	50.00	0	94.9	90	110				
Nickel	48.8	0.500	50.00	0	97.7	90	110				
Selenium	49.7	0.500	50.00	0	99.5	90	110				
Silver	49.3	0.100	50.00	0	98.7	90	110				
Thallium	47.4	0.100	50.00	0	94.8	90	110				
Zinc	50.3	2.00	50.00	0	101	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713358						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713359						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	0.500
Arsenic	ND	0.100
Beryllium	ND	0.100
Cadmium	ND	0.100
Chromium	ND	0.100
Copper	ND	0.500
Lead	ND	0.100
Nickel	ND	0.500
Selenium	ND	0.500
Silver	ND	0.100
Thallium	ND	0.100
Zinc	ND	2.00

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713361						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	48.0	0.500	50.00	0	96.1	90	110				
Arsenic	48.2	0.100	50.00	0	96.4	90	110				
Beryllium	48.6	0.100	50.00	0	97.3	90	110				
Cadmium	49.8	0.100	50.00	0	99.5	90	110				
Chromium	49.5	0.100	50.00	0	99.1	90	110				
Copper	49.2	0.500	50.00	0	98.5	90	110				
Lead	47.7	0.100	50.00	0	95.4	90	110				
Nickel	49.5	0.500	50.00	0	99.0	90	110				
Selenium	50.0	0.500	50.00	0	100	90	110				
Silver	49.0	0.100	50.00	0	98.1	90	110				
Thallium	47.4	0.100	50.00	0	94.8	90	110				
Zinc	49.8	2.00	50.00	0	99.6	90	110				

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713362						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.500									
Arsenic	ND	0.100									
Beryllium	ND	0.100									
Cadmium	ND	0.100									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713362						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.100									
Copper	ND	0.500									
Lead	ND	0.100									
Nickel	ND	0.500									
Selenium	ND	0.500									
Silver	ND	0.100									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: MB-24134		SampType: MBLK		TestCode: 200.8		Units: µg/L		Prep Date: 8/1/2024			RunNo: 55036	
Client ID: PBW		Batch ID: 24134		TestNo: E200.8		E200.8		Analysis Date: 8/2/2024			SeqNo: 713363	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		ND	0.500									
Arsenic		ND	0.100									
Beryllium		ND	0.100									
Cadmium		ND	0.100									
Chromium		ND	0.100									
Copper		ND	0.500									
Lead		ND	0.100									
Nickel		ND	0.500									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: MB-24134	SampType: MBLK	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: PBW	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713363						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ND	0.500									
Silver	ND	0.100									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: LCS-24134	SampType: LCS	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: LCSW	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713364						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	47.2	0.500	50.00	0	94.4	85	115				
Arsenic	43.6	0.100	50.00	0	87.2	85	115				
Beryllium	45.8	0.100	50.00	0	91.5	85	115				
Cadmium	48.2	0.100	50.00	0	96.4	85	115				
Chromium	44.3	0.100	50.00	0	88.5	85	115				
Copper	50.2	0.500	50.00	0	100	85	115				
Lead	51.0	0.100	50.00	0	102	85	115				
Nickel	49.7	0.500	50.00	0	99.4	85	115				
Selenium	46.4	0.500	50.00	0	92.8	85	115				
Silver	45.0	0.100	50.00	0	90.0	85	115				
Thallium	50.0	0.100	50.00	0	100	85	115				
Zinc	51.1	2.00	50.00	0	102	85	115				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: LCS-24134	SampType: LCS	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: LCSW	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713364						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407226-004ADUP	SampType: DUP	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: BatchQC	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713366						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	0.500						0	0	20	RRF
Arsenic	0.478	0.100						0.5151	7.41	20	
Beryllium	0.555	0.100						0	200	20	RRF
Cadmium	ND	0.100						0	0	20	
Chromium	ND	0.100						0.1260	200	20	RRF
Copper	0.638	0.500						0.6274	1.73	20	
Lead	ND	0.100						0	0	20	
Nickel	ND	0.500						0	0	20	RRF
Selenium	ND	0.500						0	0	20	
Silver	ND	0.100						0	0	20	RRF
Thallium	ND	0.100						0	0	20	RRF
Zinc	ND	2.00						0	0	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: 2407226-004AMS	SampType: MS	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: BatchQC	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713367						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.3	0.500	50.00	0.08831	90.5	70	130				
Arsenic	48.2	0.100	50.00	0.5151	95.4	70	130				
Beryllium	44.3	0.100	50.00	0	88.6	70	130				
Cadmium	47.5	0.100	50.00	0	95.1	70	130				
Chromium	47.2	0.100	50.00	0.1260	94.1	70	130				
Copper	46.8	0.500	50.00	0.6274	92.3	70	130				
Lead	47.8	0.100	50.00	0.06755	95.6	70	130				
Nickel	46.6	0.500	50.00	0.2151	92.8	70	130				
Selenium	48.1	0.500	50.00	0	96.3	70	130				
Silver	42.8	0.100	50.00	0.008047	85.6	70	130				
Thallium	48.0	0.100	50.00	0.03518	95.9	70	130				
Zinc	48.2	2.00	50.00	0.7526	94.9	70	130				

Sample ID: 2407226-004AMSD		SampType: MSD		TestCode: 200.8		Units: µg/L		Prep Date: 8/1/2024		RunNo: 55036	
Client ID: BatchQC		Batch ID: 24134		TestNo: E200.8		E200.8		Analysis Date: 8/2/2024		SeqNo: 713368	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	45.0	0.500	50.00	0.08831	89.8	70	130	45.34	0.820	20	
Arsenic	47.6	0.100	50.00	0.5151	94.1	70	130	48.24	1.38	20	
Beryllium	43.7	0.100	50.00	0	87.5	70	130	44.31	1.32	20	
Cadmium	47.7	0.100	50.00	0	95.3	70	130	47.54	0.250	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: 2407226-004AMSD	SampType: MSD	TestCode: 200.8	Units: µg/L	Prep Date: 8/1/2024	RunNo: 55036						
Client ID: BatchQC	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/2/2024	SeqNo: 713368						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	45.7	0.100	50.00	0.1260	91.2	70	130	47.19	3.20	20	
Copper	46.3	0.500	50.00	0.6274	91.4	70	130	46.80	1.04	20	
Lead	47.8	0.100	50.00	0.06755	95.4	70	130	47.85	0.138	20	
Nickel	46.3	0.500	50.00	0.2151	92.1	70	130	46.63	0.764	20	
Selenium	48.1	0.500	50.00	0	96.1	70	130	48.14	0.176	20	
Silver	45.4	0.100	50.00	0.008047	90.7	70	130	42.80	5.81	20	
Thallium	47.5	0.100	50.00	0.03518	95.0	70	130	47.99	0.987	20	
Zinc	47.4	2.00	50.00	0.7526	93.4	70	130	48.21	1.62	20	

Sample ID: ICV	SampType: ICV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: ICV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713900						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	49.1	0.500	50.00	0	98.2	90	110				
Lead	48.9	0.100	50.00	0	97.7	90	110				
Nickel	49.3	0.500	50.00	0	98.5	90	110				
Selenium	48.3	0.500	50.00	0	96.7	90	110				
Thallium	47.7	0.100	50.00	0	95.4	90	110				
Zinc	49.7	2.00	50.00	0	99.4	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB		SampType: CCB		TestCode: 200.8		Units: µg/L		Prep Date:			RunNo: 55036	
Client ID: CCB		Batch ID: 24134		TestNo: E200.8		E200.8		Analysis Date: 8/5/2024			SeqNo: 713903	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		ND	0.500									
Lead		ND	0.100									
Nickel		ND	0.500									
Selenium		ND	0.500									
Thallium		ND	0.100									
Zinc		ND	2.00									

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713907						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	46.8	0.500	50.00	0	93.6	90	110				
Lead	45.8	0.100	50.00	0	91.6	90	110				
Nickel	47.3	0.500	50.00	0	94.7	90	110				
Selenium	48.0	0.500	50.00	0	96.1	90	110				
Thallium	45.1	0.100	50.00	0	90.2	90	110				
Zinc	47.9	2.00	50.00	0	95.8	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713908						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.500									
Lead	ND	0.100									
Nickel	ND	0.500									
Selenium	ND	0.500									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713916						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	46.5	0.500	50.00	0	93.0	90	110				
Nickel	46.8	0.500	50.00	0	93.5	90	110				
Selenium	48.0	0.500	50.00	0	96.0	90	110				
Zinc	47.4	2.00	50.00	0	94.8	90	110				

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713917						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/5/2024	SeqNo: 713917						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.500									
Lead	ND	0.100									
Nickel	ND	0.500									
Selenium	ND	0.500									
Thallium	ND	0.100									
Zinc	ND	2.00									

Sample ID: ICV	SampType: ICV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: ICV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715787						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	52.7	0.100	50.00	0	105	90	110				
Thallium	52.0	0.100	50.00	0	104	90	110				

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715790						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.100									
Thallium	ND	0.100									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715790						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: CCV		SampType: CCV		TestCode: 200.8		Units: µg/L		Prep Date:			RunNo: 55036		
Client ID: CCV		Batch ID: 24134		TestNo: E200.8		E200.8		Analysis Date: 8/12/2024			SeqNo: 715794		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Lead		53.9	0.100	50.00	0	108	90	110					
Thallium		53.4	0.100	50.00	0	107	90	110					

Sample ID: CCB	SampType: CCB	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCB	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715795						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	0.100									
Thallium	ND	0.100									

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715797						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 200.8

Sample ID: CCV	SampType: CCV	TestCode: 200.8	Units: µg/L	Prep Date:	RunNo: 55036						
Client ID: CCV	Batch ID: 24134	TestNo: E200.8	E200.8	Analysis Date: 8/12/2024	SeqNo: 715797						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	53.6	0.100	50.00	0	107	90	110				
Thallium	53.2	0.100	50.00	0	106	90	110				

Sample ID: CCB		SampType: CCB		TestCode: 200.8		Units: µg/L		Prep Date:			RunNo: 55036		
Client ID: CCB		Batch ID: 24134		TestNo: E200.8		E200.8		Analysis Date: 8/12/2024			SeqNo: 715798		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		ND		0.100									
Thallium		ND		0.100									

Qualifiers: E Value above quantitation range
S Spike Recovery outside accepted recovery limits
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: LCS	SampType: LCS	TestCode: 624_W		Units: µg/L	Prep Date:			RunNo: 54965			
Client ID: LCSW	Batch ID: 24100	TestNo: E624.1		SW 5030B	Analysis Date: 7/26/2024			SeqNo: 712371			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	41.4	0.500	40.00	0	103	52	162				
1,1,2,2-Tetrachloroethane	36.9	0.500	40.00	0	92.2	46	157				
1,1,2-Trichloroethane	42.5	0.500	40.00	0	106	52	150				
1,1-Dichloroethane	39.5	0.500	40.00	0	98.7	59	155				
1,1-Dichloroethene	38.8	0.500	40.00	0	96.9	0.01	234				
1,2-Dichlorobenzene	39.2	0.500	40.00	0	98.1	18	190				
1,2-Dichloroethane	38.0	0.500	40.00	0	95.1	49	155				
1,2-Dichloropropane	41.6	0.500	40.00	0	104	0.01	210				
1,3-Dichlorobenzene	39.6	0.500	40.00	0	99.1	59	156				
1,4-Dichlorobenzene	38.1	0.500	40.00	0	95.3	18	190				
2-Chloroethyl vinyl ether	71.1	10.0	40.00	0	178	0.01	305				
Acrylonitrile	45.9	2.00	40.00	0	115	30	150				
Benzene	39.1	0.500	40.00	0	97.8	37	151				
Bromodichloromethane	39.0	0.500	40.00	0	97.5	35	155				
Bromoform	40.0	0.500	40.00	0	100	45	169				
Bromomethane	39.9	0.500	40.00	0	99.7	0.01	242				
Carbon tetrachloride	36.6	0.500	40.00	0	91.6	70	140				
Chlorobenzene	40.8	0.500	40.00	0	102	37	160				
Chloroethane	39.0	0.500	40.00	0	97.5	14	230				
Chloroform	40.6	0.500	40.00	0	102	51	138				
Chloromethane	45.1	0.500	40.00	0	113	0.01	273				
cis-1,3-Dichloropropene	39.3	0.500	40.00	0	98.4	0.01	227				
Dibromochloromethane	36.7	0.500	40.00	0	91.9	53	149				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: LCS	SampType: LCS	TestCode: 624_W		Units: µg/L	Prep Date:			RunNo: 54965			
Client ID: LCSW	Batch ID: 24100	TestNo: E624.1		SW 5030B	Analysis Date: 7/26/2024			SeqNo: 712371			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	38.4	0.500	40.00	0	95.9	37	162				
Methylene chloride	39.1	20.0	40.00	0	97.8	0.01	221				
Tetrachloroethene	33.9	0.500	40.00	0	84.8	64	148				
Toluene	39.9	0.500	40.00	0	99.7	47	150				
trans-1,2-Dichloroethene	39.1	0.500	40.00	0	97.8	54	156				
trans-1,3-Dichloropropene	37.9	0.500	40.00	0	94.8	17	183				
Trichloroethene	41.4	0.500	40.00	0	104	71	157				
Vinyl chloride	35.3	0.500	40.00	0	88.3	0.01	251				

Sample ID: CCV	SampType: CCV	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: CCV	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712372						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	41.4	0.500	40.00	0	103	75	125				
1,1,2,2-Tetrachloroethane	36.9	0.500	40.00	0	92.2	60.5	139.5				
1,1,2-Trichloroethane	42.5	0.500	40.00	0	106	71	129				
1,1-Dichloroethane	39.5	0.500	40.00	0	98.7	72.5	127.5				
1,1-Dichloroethene	38.8	0.500	40.00	0	96.9	50.5	149.5				
1,2-Dichlorobenzene	39.2	0.500	40.00	0	98.1	63	137				
1,2-Dichloroethane	38.0	0.500	40.00	0	95.1	68	132				
1,2-Dichloropropane	41.6	0.500	40.00	0	104	34	166				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: CCV	SampType: CCV	TestCode: 624_W		Units: µg/L	Prep Date:			RunNo: 54965			
Client ID: CCV	Batch ID: 24100	TestNo: E624.1		SW 5030B	Analysis Date: 7/26/2024			SeqNo: 712372			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	39.6	0.500	40.00	0	99.1	73	127				
1,4-Dichlorobenzene	38.1	0.500	40.00	0	95.3	63	137				
2-Chloroethyl vinyl ether	71.1	10.0	40.00	0	178	0.01	224				
Acrylonitrile	45.9	2.00	40.00	0	115	50	150				
Benzene	39.1	0.500	40.00	0	97.8	64	136				
Bromodichloromethane	39.0	0.500	40.00	0	97.5	65.5	134.5				
Bromoform	40.0	0.500	40.00	0	100	71	129				
Bromomethane	39.9	0.500	40.00	0	99.7	14	186				
Carbon tetrachloride	36.6	0.500	40.00	0	91.6	73	127				
Chlorobenzene	40.8	0.500	40.00	0	102	66	134				
Chloroethane	39.0	0.500	40.00	0	97.5	38	162				
Chloroform	40.6	0.500	40.00	0	102	67.5	132.5				
Chloromethane	45.1	0.500	40.00	0	113	0.01	204				
cis-1,3-Dichloropropene	39.3	0.500	40.00	0	98.4	24	176				
Dibromochloromethane	36.7	0.500	40.00	0	91.9	67.5	132.5				
Ethylbenzene	38.4	0.500	40.00	0	95.9	59	141				
Methylene chloride	39.1	20.0	40.00	0	97.8	60.5	139.5				
Tetrachloroethene	33.9	0.500	40.00	0	84.8	73.5	126.5				
Toluene	39.9	0.500	40.00	0	99.7	74.5	125.5				
trans-1,2-Dichloroethene	39.1	0.500	40.00	0	97.8	69.5	130.5				
trans-1,3-Dichloropropene	37.9	0.500	40.00	0	94.8	50	150				
Trichloroethene	41.4	0.500	40.00	0	104	66.5	133.5				
Vinyl chloride	35.3	0.500	40.00	0	88.3	4	196				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: CCV	SampType: CCV	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: CCV	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712372						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: MBLK	SampType: MBLK	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: PBW	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712373						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1-Trichloroethane	ND	0.500
1,1,2,2-Tetrachloroethane	ND	0.500
1,1,2-Trichloroethane	ND	0.500
1,1-Dichloroethane	ND	0.500
1,1-Dichloroethene	ND	0.500
1,2-Dichlorobenzene	ND	0.500
1,2-Dichloroethane	ND	0.500
1,2-Dichloropropane	ND	0.500
1,3-Dichlorobenzene	ND	0.500
1,4-Dichlorobenzene	ND	0.500
2-Chloroethyl vinyl ether	ND	10.0
Acrylonitrile	ND	2.00
Benzene	ND	0.500
Bromodichloromethane	ND	0.500
Bromoform	ND	0.500
Bromomethane	ND	0.500

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: MBLK	SampType: MBLK	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: PBW	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712373						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	ND	0.500									
Chlorobenzene	ND	0.500									
Chloroethane	ND	0.500									
Chloroform	ND	0.500									
Chloromethane	ND	0.500									
cis-1,3-Dichloropropene	ND	0.500									
Dibromochloromethane	ND	0.500									
Ethylbenzene	ND	0.500									
Methylene chloride	ND	20.0									
Tetrachloroethene	ND	0.500									
Toluene	ND	0.500									
trans-1,2-Dichloroethene	ND	0.500									
trans-1,3-Dichloropropene	ND	0.500									
Trichloroethene	ND	0.500									
Vinyl chloride	ND	0.500									
Surr: 1,2-Dichloroethane-d4	99.2		100.0		99.2	83.4	126				
Surr: 4-Bromofluorobenzene	96.5		100.0		96.5	80.9	127				
Surr: Dibromofluoromethane	101		100.0		101	81.1	122				
Surr: Toluene-d8	98.2		100.0		98.2	80	120				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407166-001BMS		SampType: MS		TestCode: 624_W		Units: µg/L		Prep Date:		RunNo: 54965		
Client ID: BatchQC		Batch ID: 24100		TestNo: E624.1		SW 5030B		Analysis Date: 7/26/2024		SeqNo: 712383		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
1,1,1-Trichloroethane	24200	250	20000	0	121	52	162					
1,1,2,2-Tetrachloroethane	14700	250	20000	0	73.6	46	157					
1,1,2-Trichloroethane	20300	250	20000	0	102	52	150					
1,1-Dichloroethane	22800	250	20000	0	114	59	155					
1,1-Dichloroethene	22200	250	20000	0	111	47.8	165					
1,2-Dichlorobenzene	21000	250	20000	0	105	18	190					
1,2-Dichloroethane	19100	250	20000	0	95.6	49	155					
1,2-Dichloropropane	21800	250	20000	0	109	0.01	210					
1,3-Dichlorobenzene	21200	250	20000	0	106	59	156					
1,4-Dichlorobenzene	20500	250	20000	0	102	18	190					
2-Chloroethyl vinyl ether	ND	5000	20000	0	0	0.01	305				SMI	
Acrylonitrile	15100	1000	20000	0	75.3	20	150					
Benzene	21600	250	20000	0	108	37	151					
Bromodichloromethane	20300	250	20000	0	101	35	155					
Bromoform	18100	250	20000	0	90.4	45	169					
Bromomethane	19500	250	20000	0	97.4	0.01	242					
Carbon tetrachloride	21100	250	20000	0	106	70	140					
Chlorobenzene	22200	250	20000	0	111	37	160					
Chloroethane	21300	250	20000	0	106	14	230					
Chloroform	22300	250	20000	0	112	51	138					
Chloromethane	22500	250	20000	0	113	0.01	273					
cis-1,3-Dichloropropene	20300	250	20000	0	101	0.01	227					
Dibromochloromethane	18700	250	20000	0	93.7	53	149					

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407166-001BMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712383						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	21700	250	20000	0	109	37	162				
Methylene chloride	22000	10000	20000	0	110	0.01	221				
Tetrachloroethene	19400	250	20000	0	96.8	64	148				
Toluene	22500	250	20000	0	112	47	150				
trans-1,2-Dichloroethene	22500	250	20000	0	112	54	156				
trans-1,3-Dichloropropene	19800	250	20000	0	99.2	17	183				
Trichloroethene	23000	250	20000	0	115	71	157				
Vinyl chloride	18100	250	20000	0	90.5	0.01	251				

Sample ID: 2407227-002DMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	44.7	0.500	40.00	0	112	52	162				
1,1,2,2-Tetrachloroethane	34.8	0.500	40.00	0	87.1	46	157				
1,1,2-Trichloroethane	40.8	0.500	40.00	0	102	52	150				
1,1-Dichloroethane	41.6	0.500	40.00	0	104	59	155				
1,1-Dichloroethene	41.6	0.500	40.00	0	104	47.8	165				
1,2-Dichlorobenzene	40.2	0.500	40.00	0	101	18	190				
1,2-Dichloroethane	37.1	0.500	40.00	0	92.7	49	155				
1,2-Dichloropropane	40.8	0.500	40.00	0	102	0.01	210				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407227-002DMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3-Dichlorobenzene	40.6	0.500	40.00	0	102	59	156				
1,4-Dichlorobenzene	38.8	0.500	40.00	0	96.9	18	190				
2-Chloroethyl vinyl ether	ND	10.0	40.00	0	0	0.01	305				SMI
Acrylonitrile	43.1	2.00	40.00	0	108	20	150				
Benzene	40.2	0.500	40.00	0	101	37	151				
Bromodichloromethane	38.2	0.500	40.00	0	95.6	35	155				
Bromoform	38.9	0.500	40.00	0	97.2	45	169				
Bromomethane	37.8	0.500	40.00	0	94.4	0.01	242				
Carbon tetrachloride	39.4	0.500	40.00	0	98.6	70	140				
Chlorobenzene	42.1	0.500	40.00	0	105	37	160				
Chloroethane	38.0	0.500	40.00	0	94.9	14	230				
Chloroform	41.8	0.500	40.00	0	104	51	138				
Chloromethane	42.8	0.500	40.00	0	107	0.01	273				
cis-1,3-Dichloropropene	38.1	0.500	40.00	0	95.2	0.01	227				
Dibromochloromethane	36.7	0.500	40.00	0	91.7	53	149				
Ethylbenzene	40.5	0.500	40.00	0	101	37	162				
Methylene chloride	38.4	20.0	40.00	0	95.9	0.01	221				
Tetrachloroethene	34.6	0.500	40.00	0	86.5	64	148				
Toluene	42.1	0.500	40.00	0	105	47	150				
trans-1,2-Dichloroethene	41.7	0.500	40.00	0	104	54	156				
trans-1,3-Dichloropropene	38.4	0.500	40.00	0	96.0	17	183				
Trichloroethene	43.1	0.500	40.00	0	108	71	157				
Vinyl chloride	36.4	0.500	40.00	0	91.0	0.01	251				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407227-002DMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712384						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407228-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: Outfall 002B	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	472	5.00	400.0	0	118	52	162				
1,1,2,2-Tetrachloroethane	358	5.00	400.0	0	89.6	46	157				
1,1,2-Trichloroethane	425	5.00	400.0	0	106	52	150				
1,1-Dichloroethane	438	5.00	400.0	0	110	59	155				
1,1-Dichloroethene	448	5.00	400.0	0	112	47.8	165				
1,2-Dichlorobenzene	456	5.00	400.0	0	114	18	190				
1,2-Dichloroethane	387	5.00	400.0	0	96.8	49	155				
1,2-Dichloropropane	430	5.00	400.0	0	107	0.01	210				
1,3-Dichlorobenzene	416	5.00	400.0	0	104	59	156				
1,4-Dichlorobenzene	402	5.00	400.0	0	101	18	190				
2-Chloroethyl vinyl ether	683	100	400.0	0	171	0.01	305				
Acrylonitrile	458	20.0	400.0	0	115	20	150				
Benzene	416	5.00	400.0	0	104	37	151				
Bromodichloromethane	405	5.00	400.0	0	101	35	155				
Bromoform	394	5.00	400.0	0	98.6	45	169				
Bromomethane	342	5.00	400.0	0	85.5	0.01	242				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407228-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: Outfall 002B	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712385						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon tetrachloride	412	5.00	400.0	0	103	70	140				
Chlorobenzene	430	5.00	400.0	0	108	37	160				
Chloroethane	423	5.00	400.0	0	106	14	230				
Chloroform	433	5.00	400.0	0	108	51	138				
Chloromethane	479	5.00	400.0	0	120	0.01	273				
cis-1,3-Dichloropropene	399	5.00	400.0	0	99.8	0.01	227				
Dibromochloromethane	373	5.00	400.0	0	93.4	53	149				
Ethylbenzene	413	5.00	400.0	0	103	37	162				
Methylene chloride	420	200	400.0	0	105	0.01	221				
Tetrachloroethene	349	5.00	400.0	0	87.2	64	148				
Toluene	825	5.00	400.0	397.2	107	47	150				
trans-1,2-Dichloroethene	440	5.00	400.0	0	110	54	156				
trans-1,3-Dichloropropene	396	5.00	400.0	0	99.1	17	183				
Trichloroethene	446	5.00	400.0	0	111	71	157				
Vinyl chloride	434	5.00	400.0	0	108	0.01	251				

Sample ID: 2407229-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	112	1.00	80.00	0	140	52	162				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407229-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	81.6	1.00	80.00	0	102	46	157				
1,1,2-Trichloroethane	96.4	1.00	80.00	0	120	52	150				
1,1-Dichloroethane	105	1.00	80.00	0	131	59	155				
1,1-Dichloroethene	107	1.00	80.00	0	134	47.8	165				
1,2-Dichlorobenzene	90.0	1.00	80.00	0	113	18	190				
1,2-Dichloroethane	91.8	1.00	80.00	0	115	49	155				
1,2-Dichloropropane	103	1.00	80.00	0	128	0.01	210				
1,3-Dichlorobenzene	92.0	1.00	80.00	0	115	59	156				
1,4-Dichlorobenzene	88.9	1.00	80.00	0	111	18	190				
2-Chloroethyl vinyl ether	ND	20.0	80.00	0	0	0.01	305				SMI
Acrylonitrile	82.4	4.00	80.00	0	103	20	150				
Benzene	100	1.00	80.00	0	126	37	151				
Bromodichloromethane	98.1	1.00	80.00	0	123	35	155				
Bromoform	86.3	1.00	80.00	0	108	45	169				
Bromomethane	92.1	1.00	80.00	0	115	0.01	242				
Carbon tetrachloride	99.6	1.00	80.00	0	125	70	140				
Chlorobenzene	102	1.00	80.00	0	127	37	160				
Chloroethane	103	1.00	80.00	0	129	14	230				
Chloroform	106	1.00	80.00	0	132	51	138				
Chloromethane	116	1.00	80.00	0	145	0.01	273				
cis-1,3-Dichloropropene	94.9	1.00	80.00	0	119	0.01	227				
Dibromochloromethane	87.0	1.00	80.00	0	109	53	149				
Ethylbenzene	97.4	1.00	80.00	0	122	37	162				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407229-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712386						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	97.4	40.0	80.00	0	122	0.01	221				
Tetrachloroethene	69.8	1.00	80.00	0	87.2	64	148				
Toluene	425	1.00	80.00	303.8	152	47	150				ESMI
trans-1,2-Dichloroethene	103	1.00	80.00	0	129	54	156				
trans-1,3-Dichloropropene	90.7	1.00	80.00	0	113	17	183				
Trichloroethene	102	1.00	80.00	0	127	71	157				
Vinyl chloride	106	1.00	80.00	0	133	0.01	251				

Sample ID: 2407230-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712387						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	138	1.00	80.00	0	172	52	162				SMI
1,1,2,2-Tetrachloroethane	106	1.00	80.00	0	132	46	157				
1,1,2-Trichloroethane	122	1.00	80.00	0	152	52	150				
1,1-Dichloroethane	127	1.00	80.00	0	159	59	155				SMI
1,1-Dichloroethene	127	1.00	80.00	0	159	47.8	165				
1,2-Dichlorobenzene	118	1.00	80.00	0	148	18	190				
1,2-Dichloroethane	116	1.00	80.00	0	145	49	155				
1,2-Dichloropropane	129	1.00	80.00	0	161	0.01	210				
1,3-Dichlorobenzene	120	1.00	80.00	0	150	59	156				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407230-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712387						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	115	1.00	80.00	0	143	18	190				
2-Chloroethyl vinyl ether	185	20.0	80.00	0	231	0.01	305				
Acrylonitrile	110	4.00	80.00	0	138	20	150				
Benzene	123	1.00	80.00	0	154	37	151				SMI
Bromodichloromethane	122	1.00	80.00	0	152	35	155				
Bromoform	110	1.00	80.00	0	137	45	169				
Bromomethane	136	1.00	80.00	0	170	0.01	242				
Carbon tetrachloride	122	1.00	80.00	0	152	70	140				SMI
Chlorobenzene	126	1.00	80.00	0	157	37	160				
Chloroethane	128	1.00	80.00	0	160	14	230				
Chloroform	129	1.00	80.00	0	161	51	138				SMI
Chloromethane	144	1.00	80.00	0	181	0.01	273				
cis-1,3-Dichloropropene	119	1.00	80.00	0	148	0.01	227				
Dibromochloromethane	111	1.00	80.00	0	139	53	149				
Ethylbenzene	124	1.00	80.00	0	155	37	162				
Methylene chloride	121	40.0	80.00	0	151	0.01	221				
Tetrachloroethene	96.2	1.00	80.00	0	120	64	148				
Toluene	129	1.00	80.00	0	161	47	150				SMI
trans-1,2-Dichloroethene	126	1.00	80.00	0	157	54	156				SMI
trans-1,3-Dichloropropene	115	1.00	80.00	0	144	17	183				
Trichloroethene	127	1.00	80.00	0	158	71	157				SMI
Vinyl chloride	136	1.00	80.00	0	170	0.01	251				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407234-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712388						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	465	5.00	400.0	0	116	52	162				
1,1,2,2-Tetrachloroethane	346	5.00	400.0	0	86.4	46	157				
1,1,2-Trichloroethane	412	5.00	400.0	0	103	52	150				
1,1-Dichloroethane	430	5.00	400.0	0	108	59	155				
1,1-Dichloroethene	433	5.00	400.0	0	108	47.8	165				
1,2-Dichlorobenzene	450	5.00	400.0	0	113	18	190				
1,2-Dichloroethane	397	5.00	400.0	0	99.2	49	155				
1,2-Dichloropropane	431	5.00	400.0	0	108	0.01	210				
1,3-Dichlorobenzene	418	5.00	400.0	0	105	59	156				
1,4-Dichlorobenzene	401	5.00	400.0	0	100	18	190				
2-Chloroethyl vinyl ether	724	100	400.0	0	181	0.01	305				
Acrylonitrile	440	20.0	400.0	0	110	20	150				
Benzene	422	5.00	400.0	0	105	37	151				
Bromodichloromethane	412	5.00	400.0	0	103	35	155				
Bromoform	411	5.00	400.0	0	103	45	169				
Bromomethane	390	5.00	400.0	0	97.6	0.01	242				
Carbon tetrachloride	417	5.00	400.0	0	104	70	140				
Chlorobenzene	425	5.00	400.0	0	106	37	160				
Chloroethane	429	5.00	400.0	0	107	14	230				
Chloroform	433	5.00	400.0	0	108	51	138				
Chloromethane	480	5.00	400.0	0	120	0.01	273				
cis-1,3-Dichloropropene	402	5.00	400.0	0	100	0.01	227				
Dibromochloromethane	378	5.00	400.0	0	94.4	53	149				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: 624_W

Sample ID: 2407234-001CMS	SampType: MS	TestCode: 624_W	Units: µg/L	Prep Date:	RunNo: 54965						
Client ID: BatchQC	Batch ID: 24100	TestNo: E624.1	SW 5030B	Analysis Date: 7/26/2024	SeqNo: 712388						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ethylbenzene	411	5.00	400.0	0	103	37	162				
Methylene chloride	407	200	400.0	0	102	0.01	221				
Tetrachloroethene	470	5.00	400.0	0	117	64	148				
Toluene	430	5.00	400.0	0	107	47	150				
trans-1,2-Dichloroethene	423	5.00	400.0	0	106	54	156				
trans-1,3-Dichloropropene	394	5.00	400.0	0	98.4	17	183				
Trichloroethene	449	5.00	400.0	0	112	71	157				
Vinyl chloride	441	5.00	400.0	0	110	0.01	251				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_AVAILSP

Sample ID: ICV-R54976		SampType: ICV		TestCode: CN_AVAILSP		Units: mg/L		Prep Date:		RunNo: 54976		
Client ID: ICV		Batch ID: 24104		TestNo: OIA-1677		OIA-1677		Analysis Date: 7/30/2024		SeqNo: 712560		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available		0.0514	0.00500	0.05000	0	103	90	110				

Sample ID: ICB-R54976		SampType: ICB		TestCode: CN_AVAILSP		Units: mg/L		Prep Date:		RunNo: 54976				
Client ID: ICB		Batch ID: 24104		TestNo: OIA-1677		OIA-1677		Analysis Date: 7/30/2024		SeqNo: 712561				
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available		ND		0.00500										

Sample ID: MB-R54976		SampType: MBLK		TestCode: CN_AVAILSP		Units: mg/L		Prep Date:		RunNo: 54976			
Client ID: PBW		Batch ID: 24104		TestNo: OIA-1677		OIA-1677		Analysis Date: 7/30/2024		SeqNo: 712563			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available		ND		0.00500									

Sample ID: LCS-R54976	SampType: LCS	TestCode: CN_AVAILSP	Units: mg/L	Prep Date:	RunNo: 54976						
Client ID: LCSW	Batch ID: 24104	TestNo: OIA-1677	OIA-1677	Analysis Date: 7/30/2024	SeqNo: 712564						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available	0.0977	0.00500	0.1000	0	97.7	80	120				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_AVAILSP

Sample ID: LCS-R54976	SampType: LCS	TestCode: CN_AVAILSP	Units: mg/L	Prep Date:	RunNo: 54976						
Client ID: LCSW	Batch ID: 24104	TestNo: OIA-1677	OIA-1677	Analysis Date: 7/30/2024	SeqNo: 712564						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407230-001AMS		SampType: MS		TestCode: CN_AVAILSP		Units: mg/L		Prep Date: 7/30/2024			RunNo: 54976	
Client ID: BatchQC		Batch ID: 24104		TestNo: OIA-1677		OIA-1677		Analysis Date: 7/30/2024			SeqNo: 712569	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available		0.0530	0.00500	0.05000	0	106	67.9	120				

Sample ID: 2407230-001AMSD	SampType: MSD	TestCode: CN_AVAILSP	Units: mg/L	Prep Date: 7/30/2024	RunNo: 54976						
Client ID: BatchQC	Batch ID: 24104	TestNo: OIA-1677	OIA-1677	Analysis Date: 7/30/2024	SeqNo: 712570						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available	0.0545	0.00500	0.05000	0	109	67.9	120	0.05299	2.77	20	

Sample ID: CCV-R54976	SampType: CCV	TestCode: CN_AVAILSP	Units: mg/L	Prep Date:	RunNo: 54976						
Client ID: CCV	Batch ID: 24104	TestNo: OIA-1677	OIA-1677	Analysis Date: 7/30/2024	SeqNo: 712571						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available	0.104	0.00500	0.1000	0	104	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_AVAILSP

Sample ID: CCB-R54976		SampType: CCB		TestCode: CN_AVAILSP		Units: mg/L		Prep Date:			RunNo: 54976			
Client ID: CCB		Batch ID: 24104		TestNo: OIA-1677		OIA-1677		Analysis Date: 7/30/2024			SeqNo: 712572			
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, Available		ND		0.00500										

Qualifiers: E Value above quantitation range
S Spike Recovery outside accepted recovery limits
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_W

Sample ID: ICV-R54977	SampType: ICV	TestCode: CN_W	Units: mg/L	Prep Date:	RunNo: 54977						
Client ID: ICV	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712580						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.0495	0.00500	0.05000	0	99.1	90	110				

Sample ID: ICB-R54977	SampType: ICB	TestCode: CN_W	Units: mg/L	Prep Date:	RunNo: 54977						
Client ID: ICB	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712581						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	ND	0.00500									

Sample ID: MB-R54977		SampType: MBLK		TestCode: CN_W		Units: mg/L		Prep Date:		RunNo: 54977	
Client ID: PBW		Batch ID: 24105		TestNo: D7284		D7284		Analysis Date: 7/30/2024		SeqNo: 712583	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	ND	0.00500									

Sample ID: LCS-R54977		SampType: LCS		TestCode: CN_W		Units: mg/L		Prep Date:		RunNo: 54977		
Client ID: LCSW		Batch ID: 24105		TestNo: D7284		D7284		Analysis Date: 7/30/2024		SeqNo: 712584		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide		0.0842	0.00500	0.1000	0	84.2	80	120				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_W

Sample ID: LCS-R54977	SampType: LCS	TestCode: CN_W	Units: mg/L	Prep Date:	RunNo: 54977						
Client ID: LCSW	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712584						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407227-002BMS		SampType: MS		TestCode: CN_W		Units: mg/L		Prep Date: 7/30/2024		RunNo: 54977		
Client ID: BatchQC		Batch ID: 24105		TestNo: D7284		D7284		Analysis Date: 7/30/2024		SeqNo: 712587		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide		0.0418	0.00500	0.05000	0	83.6	67.9	120				

Sample ID: 2407227-002BMSD	SampType: MSD	TestCode: CN_W	Units: mg/L	Prep Date: 7/30/2024	RunNo: 54977						
Client ID: BatchQC	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712588						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.0465	0.00500	0.05000	0	93.0	67.9	120	0.04178	10.7	20	

Sample ID: CCV3-R54977	SampType: CCV	TestCode: CN_W	Units: mg/L	Prep Date:	RunNo: 54977						
Client ID: CCV	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712597						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	0.0973	0.00500	0.1000	0	97.3	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_W

Sample ID: CCB3-R54977	SampType: CCB	TestCode: CN_W	Units: mg/L	Prep Date:	RunNo: 54977						
Client ID: CCB	Batch ID: 24105	TestNo: D7284	D7284	Analysis Date: 7/30/2024	SeqNo: 712598						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide	ND	0.00500									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_WAD

Sample ID: CCV1-R54978	SampType: CCV	TestCode: CN_WAD	Units: mg/L	Prep Date:	RunNo: 54978						
Client ID: CCV	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712599						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.097	0.005	0.100	0	97.3	90	110				

Sample ID: CCB1-R54978	SampType: CCB	TestCode: CN_WAD	Units: mg/L	Prep Date:	RunNo: 54978						
Client ID: CCB	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712600						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	ND	0.005									

Sample ID: MB-R54978		SampType: MBLK		TestCode: CN_WAD		Units: mg/L		Prep Date:		RunNo: 54978	
Client ID: PBW		Batch ID: 24106		TestNo: D2036		D2036		Analysis Date: 7/30/2024		SeqNo: 712601	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	ND	0.005									

Sample ID: LCS-R54978		SampType: LCS		TestCode: CN_WAD		Units: mg/L		Prep Date:		RunNo: 54978			
Client ID: LCSW		Batch ID: 24106		TestNo: D2036		D2036		Analysis Date: 7/30/2024		SeqNo: 712602			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD		0.082		0.005	0.100	0	82.2	70	130				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CN_WAD

Sample ID: LCS-R54978	SampType: LCS	TestCode: CN_WAD	Units: mg/L	Prep Date:	RunNo: 54978						
Client ID: LCSW	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712602						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407228-001AMS		SampType: MS	TestCode: CN_WAD		Units: mg/L	Prep Date: 7/30/2024			RunNo: 54978		
Client ID: Outfall 002B		Batch ID: 24106	TestNo: D2036		D2036	Analysis Date: 7/30/2024			SeqNo: 712604		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.047	0.005	0.050	0.004	85.0	67.9	119				

Sample ID: 2407228-001AMSD	SampType: MSD	TestCode: CN_WAD	Units: mg/L	Prep Date: 7/30/2024	RunNo: 54978						
Client ID: Outfall 002B	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712605						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.047	0.005	0.050	0.004	85.8	67.9	119	0.047	0.863	20	

Sample ID: CCV2-R54978	SampType: CCV	TestCode: CN_WAD	Units: mg/L	Prep Date:	RunNo: 54978						
Client ID: CCV	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712608						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.097	0.005	0.100	0	96.9	90	110				

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B
TestCode: CN_WAD

Sample ID: CCB2-R54978	SampType: CCB	TestCode: CN_WAD	Units: mg/L	Prep Date:	RunNo: 54978						
Client ID: CCB	Batch ID: 24106	TestNo: D2036	D2036	Analysis Date: 7/30/2024	SeqNo: 712609						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	ND	0.005									

Qualifiers: E Value above quantitation range
S Spike Recovery outside accepted recovery limits
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CR6_IC

Sample ID: CCV-1	SampType: CCV	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: CCV	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713678						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	19.2	0.500	20.00	0	96.2	90	110				

Sample ID: MB-1	SampType: MBLK	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: PBW	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									

Sample ID: LCS-R55057	SampType: LCS	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: LCSW	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713680						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.54	0.500	10.00	0	95.4	90	110				

Sample ID: LCSD-R55057	SampType: LCSD	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: LCSS02	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	9.56	0.500	10.00	0	95.6	90	110	9.540	0.209	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CR6_IC

Sample ID: LCSD-R55057	SampType: LCSD	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: LCSS02	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2407236-001ADUP		SampType: DUP		TestCode: CR6_IC		Units: µg/L		Prep Date:		RunNo: 55057			
Client ID: BatchQC		Batch ID: R55057		TestNo: 218.6				Analysis Date: 8/2/2024		SeqNo: 713685			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		0.770		0.500						0.8200	6.29	20	

Sample ID: 2407236-001AMS	SampType: MS	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: BatchQC	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713686						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	10.1	0.500	10.00	0.8200	92.6	75	125				

Sample ID: 2407236-001AMSD		SampType: MSD		TestCode: CR6_IC		Units: µg/L		Prep Date:		RunNo: 55057			
Client ID: BatchQC		Batch ID: R55057		TestNo: 218.6				Analysis Date: 8/2/2024		SeqNo: 713687			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent		10.1		0.500	10.00	0.8200	92.4	75	125	10.08	0.199	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: CR6_IC

Sample ID: CCV-2	SampType: CCV	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: CCV	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713693						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	19.4	0.500	20.00	0	97.0	90	110				

Sample ID: MB-2	SampType: MBLK	TestCode: CR6_IC	Units: µg/L	Prep Date:	RunNo: 55057						
Client ID: PBW	Batch ID: R55057	TestNo: 218.6		Analysis Date: 8/2/2024	SeqNo: 713694						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.500									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: PHENOLICS_W

Sample ID: MB-R55042		SampType: MBLK	TestCode: PHENOLICS_ Units: mg/L			Prep Date:			RunNo: 55042		
Client ID: PBW		Batch ID: R55042	TestNo: E420.1			Analysis Date: 8/2/2024			SeqNo: 713456		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable		ND	0.0500								

Sample ID: LCS-R55042	SampType: LCS	TestCode: PHENOLICS_ Units: mg/L				Prep Date:			RunNo: 55042		
Client ID: LCSW	Batch ID: R55042	TestNo: E420.1				Analysis Date: 8/2/2024			SeqNo: 713457		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	0.934	0.0500	1.000	0	93.4	90	110				

Sample ID: 2408010-001AMS	SampType: MS	TestCode: PHENOLICS_ Units: mg/L				Prep Date:			RunNo: 55042		
Client ID: BatchQC	Batch ID: R55042	TestNo: E420.1				Analysis Date: 8/2/2024			SeqNo: 713461		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	0.306	0.0500	0.2500	0.07639	91.7	75	125				

Sample ID: 2408010-001AMSD		SampType: MSD		TestCode: PHENOLICS_ Units: mg/L			Prep Date:			RunNo: 55042			
Client ID: BatchQC		Batch ID: R55042		TestNo: E420.1			Analysis Date: 8/2/2024			SeqNo: 713462			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable		0.297		0.0500	0.2500	0.07639	88.3	75	125	0.3056	2.82	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Specialty Analytical

WO#: 2407228
8/27/2024

Client: Weyerhaeuser
Project: Priority Pollutants/ Outfall 002B

TestCode: PHENOLICS_W

Sample ID: 2408010-001AMSD	SampType: MSD	TestCode: PHENOLICS_	Units: mg/L	Prep Date:	RunNo: 55042						
Client ID: BatchQC	Batch ID: R55042	TestNo: E420.1	Analysis Date: 8/2/2024	SeqNo: 713462							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: CCV-R55042		SampType: CCV		TestCode: PHENOLICS_ Units: mg/L			Prep Date:			RunNo: 55042		
Client ID: CCV		Batch ID: R55042		TestNo: E420.1			Analysis Date: 8/2/2024			SeqNo: 713466		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable		0.900	0.0500	1.000	0	90.0	90	110				

Sample ID: CCB-R55042	SampType: CCB	TestCode: PHENOLICS_	Units: mg/L	Prep Date:	RunNo: 55042						
Client ID: CCB	Batch ID: R55042	TestNo: E420.1	Analysis Date: 8/2/2024	SeqNo: 713467							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenolics, Total Recoverable	ND	0.0500									

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits



Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Name: WEYERHAEUSER

Work Order Number 2407228

RcptNo: 1

Date and Time Received 7/25/2024 3:45:00 PM

Received by: Mandy Wehe

Completed by

Reviewed by:

Completed Date: 7/25/2024

Reviewed Date: 7/26/2024 8:50:45 AM

Carrier name: SA

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present	<input type="checkbox"/>
Are matrices correctly identified on Chain of custody?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Is it clear what analyses were requested?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present	<input checked="" type="checkbox"/>
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Were correct preservatives used and noted?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA	<input type="checkbox"/>
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Were container labels complete (ID, Pres, Date)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Was an attempt made to cool the samples?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA	<input type="checkbox"/>
All samples received at a temp. of > 0° C to 6.0° C?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA	<input type="checkbox"/>
Response when temperature is outside of range:				
Preservative added to bottles:				
Sample Temp. taken and recorded upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	To 1.9°C	
Water - Were bubbles absent in VOC vials?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No Vials	<input type="checkbox"/>
Water - Was there Chlorine Present?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA	<input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA	<input type="checkbox"/>
Are Samples considered acceptable?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Custody Seals present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Traffic Report or Packing Lists present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Airbill or Sticker?	Air Bill <input type="checkbox"/>	Sticker <input type="checkbox"/>	Not Present	<input checked="" type="checkbox"/>
Airbill No:				
Sample Tags Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Sample Tags Listed on COC?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Tag Numbers:				
Sample Condition?	Intact <input checked="" type="checkbox"/>	Broken <input type="checkbox"/>	Leaking	<input type="checkbox"/>

Case Number:

SDG:

SAS:

Adjusted? _____ Checked by

Any No and/or NA (not applicable) response must be detailed in the comments section be



Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Sample Receipt Checklist

Client Contacted? ☐ Yes ☒ No ☐ NA Person Contacted: _____ Comments: _____
Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person: _____
Client Instructions: _____
Date Contacted: _____ Contacted By: _____
Regarding: _____
CorrectiveAction: _____



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

August 09, 2024

Analytical Report for Service Request No: K2407702

Julie Clay
Specialty Analytical
9011 SE Jannsen Road
Clackamas, OR 97015

RE: 2407228

Dear Julie,

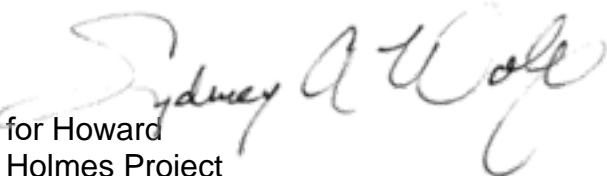
Enclosed are the results of the sample(s) submitted to our laboratory July 25, 2024
For your reference, these analyses have been assigned our service request number **K2407702**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental



for Howard
Holmes Project
Manager



ALS Environmental
ALS Group USA, Corp
1317 South 13th Avenue
Kelso, WA 98626
T : +1 360 577 7222
F : +1 360 636 1068
www.alsglobal.com

Table of Contents

Acronyms

Qualifiers

State Certifications, Accreditations, And Licenses

Case Narrative

Chain of Custody

Metals

Organochlorine Pesticides and Polychlorinated Biphenyls

Semivolatile Organic Compounds by GCMS

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjllabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdwlabservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
North Carolina DEQ	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.



Case Narrative

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Received: 07/25/2024

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

One water sample was received for analysis at ALS Environmental on 07/25/2024. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Semivolatiles by GC/MS:

Method 625.1, 07/30/2024: The analysis of the following analytes by EPA 625.1 in sample Outfall 002B was performed on 07/30/24: Benzo(b)fluoranthene and Indeno(1,2,3-cd)pyrene. As a result of a recent external audit, ALS Kelso did not have accreditation for the analytes in question at time of analysis. Efforts are being made to restore accreditation for the analytes in question as soon as possible. The results were flagged with "X" to indicate the issue and were reported in accordance with client instruction.

Method 625.1, 07/30/2024: The upper control criterion was exceeded for 4,6-Dinitro-2-methylphenol in Continuing Calibration Verification (CCV) KQ2411821-02. The field sample analyzed in this sequence did not contain the analyte in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

Method 625.1, 07/30/2024: The lower control criterion was exceeded for several analytes in the replicate Laboratory Control Samples (LCS/DLCS) KQ2411522-02/-03. The problem indicated a potential low bias to the affected analytes in the associated field sample. The data was flagged to indicate the issue. No further corrective action was taken.

Method 625.1, 07/30/2024: The following analytes were searched for and quantitated as Tentatively Identified Compounds (TICs): Dibenz(a,h)acridine, Dibenz(a,j)acridine, Dibenzo(a,e)pyrene, Dibenzo(a,h)pyrene, Dibenzo(a,i)pyrene, 3-Methylcholanthrene, and Perylene. No quantitative standards were analyzed for these analytes.

Method 625.1, 07/30/2024: The Relative Percent Difference (RPD) for Benzidine in the replicate Laboratory Control Samples (LCS/DLCS) KQ2411522-02/-03 was outside control criteria. All spike recoveries for the analyte in question were in control in the LCS/DLCS, indicating the analytical batch was in control. No further corrective action was appropriate.

Method 625.1, 07/30/2024: The detection limit was elevated for all analytes in sample Outfall 002B. The sample extract was diluted prior to instrumental analysis due to relatively high levels of non-target background components. The extract was highly colored and exhibited a strong odor, which indicated the need to perform a dilution prior to injection into the instrument. The reporting limits were elevated to reflect the dilution.

Method 625.1, 07/30/2024: Sample Outfall 002B required dilution due to the presence of elevated levels of Phenol. The reporting limits are adjusted to reflect the dilution.

Semivolatile GC:

Method 608.3, 08/07/2024: The upper control criterion was exceeded for Aroclor 1260 and 4,4'-DDT in Continuing Calibration Verification (CCV) KQ2412292-03. The field samples analyzed in this sequence did not contain the analytes in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

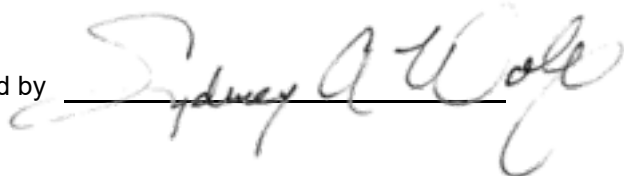
Method 608.3, 08/08/2024: The analysis of Organochlorine Pesticides and Polychlorinated Biphenyls by EPA 608.3 requires the use of dual column confirmation. When the Continuing Calibration Verification (CCV) criterion is met for both columns, the lower of the two sample results is generally reported. The primary evaluation criteria were not met on the confirmation column for Aroclor 1016, Toxaphene, 4,4'-DDD, Endosulfan Sulfate, Endrin Aldehyde, and Decachlorobiphenyl. The results were reported from the column with an acceptable CCV. The data quality was not affected. No further corrective action was necessary.

Method 608.3, 08/07/2024: The internal standard added to the samples analyzed in this sequence had expired on Aug. 1, 2024. Internal standard recovery met control criteria. No further corrective action was appropriate.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

08/09/2024

Approved by Date 08/09/2024



Chain of Custody

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

V2407702

Specialty Analytical 9011 SE Jannsen Rd Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1336		Chain of Custody Record													
		Date: 7/25/24				Page: 1 of 1				Laboratory Project No (internal):					
Project Name: 2407228				Temperature on Receipt: °C				Cooling:				Shipped Via: SA			
Client: Specialty Analytical				Project No:				PO No:				Custody Seal: Y / <u>N</u> Intact / Broken Cooler / Bottle			
Address: 9011 SE Jannsen Rd				Collected by: Client				MDL <input type="checkbox"/>				TIER IV <input type="checkbox"/> EDD <input type="checkbox"/>			
City, State, Zip: Clackamas, OR, 97015				State Collected: OR <input type="checkbox"/> WA <input checked="" type="checkbox"/> OTHER				Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by lab (after 60 days)							
Telephone: 503-607-1331				Report To (PM): PM / Mandy Wehe											
AP Email: mandy@specialtyanalytical.com				PM Email: PM@specialtyanalytical.com / mandy@specialtyanalytical.com											

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Requested Tests			Comments
					1631 LL Hg	625	608 Pest/PCB	
1 Outfall 002B	7-25-24	0830	WW	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	See attached 625/608 lists
2								2- 1L ambers
3								1- 1631 bottle kit
4								
5								
6								
7								
8								
9								
10								

*Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Sewer Water, WW=Waste Water, M=Miscellaneous

Turn-around Time:		Standard (5-7 Business): <input checked="" type="checkbox"/>		3 Day: <input type="checkbox"/>		2 Day: <input type="checkbox"/>		Next Day: <input type="checkbox"/>		Same Day: <input type="checkbox"/>	
Expedited turn-around requests should be coordinated in advance											

Relinquished	Date/Time	Received	Date/Time
x	7-25-24 1316	x	7/25/24 1316
Relinquished	Date/Time	Received	Date/Time
x		x	

Relinquished	Date/Time	Received	Date/Time
x			

PM HH

Cooler Receipt and Preservation Form

Client Specialty Analytical Service Request K24 07702
Received: 7/25/24 Opened: 7/25/24 By: VM Unloaded: 7/25/24 By: VM

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? _____
4. If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp Indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
<u>7.2</u>	<u>9.1</u>	<u>IR02</u>					
<u>6.0</u>							
<u>11.3</u>	<u>10.4</u>	<u>IR02</u>					
	<u>5.6</u>						

5. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column above:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":

6. Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # above and notify the PM. NA Y N

7. If applicable, tissue samples were received: Frozen Partially Thawed Thawed

8. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves

9. Were custody papers properly filled out (ink, signed, etc.)? NA Y N

10. Were samples received in good condition (unbroken) NA Y N

11. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N

12. Did all sample labels and tags agree with custody papers? NA Y N

13. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N

14. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N

15. Were VOA vials received without headspace? Indicate in the table below NA Y N

16. Was C12/Res negative? NA Y N

17. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N

18. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:
		SHORT HOLD

Sample ID	Bottle Count Bottle Type	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Metals

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental
Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: 07/25/24
Date Received: 07/25/24

Mercury, Total

Prep Method: METHOD
Analysis Method: 1631E
Test Notes:

Units: ng/L
Basis: NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Outfall 002B	K2407702-001	0.5	1	07/30/24	07/31/24	3.0	
Method Blank 1	K2407702-MB1	0.5	1	07/30/24	07/31/24	ND	
Method Blank 2	K2407702-MB2	0.5	1	07/30/24	07/31/24	ND	
Method Blank 3	K2407702-MB3	0.5	1	07/30/24	07/31/24	ND	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client: Specialty Analytical
Project: 2407228
LCS Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 07/31/24

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial) Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	ALS	Result Notes
						Percent Recovery Acceptance Limits	
Mercury	METHOD	1631E	5.00	5.02	100	77-123	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client: Specialty Analytical
Project: 2407228
LCS Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 07/31/24

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final) Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	ALS	Result Notes
						Percent Recovery Acceptance Limits	
Mercury	METHOD	1631E	5.00	4.92	98	77-123	

ALS Group USA, Corp.
dba ALS Environmental
QA/QC Report

Client: Specialty Analytical
Project: 2407228
LCS Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA
Date Extracted: 7/30/2024
Date Analyzed: 07/31/24

Quality Control Sample (QCS) Summary
Total Metals

Sample Name: Quality Control Sample
Units: ng/L
Basis: NA
Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	ALS	Result Notes
						Percent Recovery Acceptance Limits	
Mercury	METHOD	1631E	5.00	4.90	98	77-123	



Organochlorine Pesticides and Polychlorinated Biphenyls

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: 07/25/24 08:30
Date Received: 07/25/24 13:16

Sample Name: Outfall 002B
Lab Code: K2407702-001

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analysis Method: 608.3
Prep Method: EPA 3520C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aldrin	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Aroclor 1016	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1221	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1232	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1242	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1248	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1254	ND U	0.10	1	08/08/24 04:35	7/29/24	
Aroclor 1260	ND U	0.10	1	08/08/24 04:35	7/29/24	*
alpha-BHC	ND U	0.0094	1	08/08/24 04:35	7/29/24	
beta-BHC	ND U	0.042	1	08/08/24 04:35	7/29/24	
delta-BHC	ND U	0.0094	1	08/08/24 04:35	7/29/24	
gamma-BHC (Lindane)	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Chlordane	ND U	0.19	1	08/08/24 04:35	7/29/24	
cis-Chlordane	ND U	0.0094	1	08/08/24 04:35	7/29/24	
trans-Chlordane	ND U	0.0094	1	08/08/24 04:35	7/29/24	
4,4'-DDD	ND U	0.0094	1	08/08/24 04:35	7/29/24	
4,4'-DDE	ND U	0.0094	1	08/08/24 04:35	7/29/24	
4,4'-DDT	ND U	0.0094	1	08/08/24 04:35	7/29/24	*
Dieldrin	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Endosulfan I	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Endosulfan II	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Endosulfan Sulfate	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Endrin	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Endrin Aldehyde	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Heptachlor	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Heptachlor Epoxide	ND U	0.0094	1	08/08/24 04:35	7/29/24	
Toxaphene	ND U	0.47	1	08/08/24 04:35	7/29/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	19	10 - 134	08/08/24 04:35	
Tetrachloro-m-xylene	20	10 - 134	08/08/24 04:35	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2411609-01

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analysis Method: 608.3
Prep Method: EPA 3520C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Aldrin	ND U	0.010	1	08/07/24 21:34	7/29/24	
Aroclor 1016	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1221	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1232	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1242	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1248	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1254	ND U	0.10	1	08/07/24 21:34	7/29/24	
Aroclor 1260	ND U	0.10	1	08/07/24 21:34	7/29/24	
alpha-BHC	ND U	0.010	1	08/07/24 21:34	7/29/24	
beta-BHC	ND U	0.042	1	08/07/24 21:34	7/29/24	
delta-BHC	ND U	0.010	1	08/07/24 21:34	7/29/24	
gamma-BHC (Lindane)	ND U	0.010	1	08/07/24 21:34	7/29/24	
Chlordane	ND U	0.20	1	08/07/24 21:34	7/29/24	
cis-Chlordane	ND U	0.010	1	08/07/24 21:34	7/29/24	
trans-Chlordane	ND U	0.010	1	08/07/24 21:34	7/29/24	
4,4'-DDD	ND U	0.010	1	08/07/24 21:34	7/29/24	
4,4'-DDE	ND U	0.010	1	08/07/24 21:34	7/29/24	
4,4'-DDT	ND U	0.010	1	08/07/24 21:34	7/29/24	
Dieldrin	ND U	0.010	1	08/07/24 21:34	7/29/24	
Endosulfan I	ND U	0.010	1	08/07/24 21:34	7/29/24	
Endosulfan II	ND U	0.010	1	08/07/24 21:34	7/29/24	
Endosulfan Sulfate	ND U	0.010	1	08/07/24 21:34	7/29/24	
Endrin	ND U	0.010	1	08/07/24 21:34	7/29/24	
Endrin Aldehyde	ND U	0.010	1	08/07/24 21:34	7/29/24	
Heptachlor	ND U	0.010	1	08/07/24 21:34	7/29/24	
Heptachlor Epoxide	ND U	0.010	1	08/07/24 21:34	7/29/24	
Toxaphene	ND U	0.50	1	08/07/24 21:34	7/29/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
Decachlorobiphenyl	91	10 - 134	08/07/24 21:34	
Tetrachloro-m-xylene	67	10 - 134	08/07/24 21:34	

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: Specialty Analytical
Project: 2407228
Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received:

Sample Name: Lab Control Sample
Lab Code: KQ2411609-02

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analytical Method: 608.3
Prep Method: EPA 3520C

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDD	0.010	0.0602	0.0664	10		1	08/07/24 22:07
4,4'-DDE	0.010	0.0548	0.0628	14		1	08/07/24 22:07
4,4'-DDT	0.010	0.0668	0.0698	4		1	08/07/24 22:07
Aldrin	0.010	0.0486	0.0505	4		1	08/07/24 22:07
Dieldrin	0.010	0.0567	0.0621	9		1	08/07/24 22:07
Endosulfan I	0.010	0.0539	0.0562	4		1	08/07/24 22:07
Endosulfan II	0.010	0.0575	0.0595	3		1	08/07/24 22:07
Endosulfan Sulfate	0.010	0.0602	0.0627	4		1	08/07/24 22:07
Endrin	0.010	0.0625	0.0669	7		1	08/07/24 22:07
Endrin Aldehyde	0.010	0.0628	0.0746	17		1	08/07/24 22:07
Heptachlor	0.010	0.0500	0.0515	3		1	08/07/24 22:07
Heptachlor Epoxide	0.010	0.0575	0.0612	6		1	08/07/24 22:07
alpha-BHC	0.010	0.0521	0.0548	5		1	08/07/24 22:07
beta-BHC	0.042	0.0494	0.0627	24		1	08/07/24 22:07
delta-BHC	0.010	0.0548	0.0618	12		1	08/07/24 22:07
gamma-BHC (Lindane)	0.010	0.0551	0.0557	1		1	08/07/24 22:07

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: Specialty Analytical
Project: 2407228
Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: KQ2411609-03

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analytical Method: 608.3
Prep Method: EPA 3520C

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
4,4'-DDD	0.010	0.0568	0.0625	10		1	08/07/24 22:39
4,4'-DDE	0.010	0.0593	0.0604	2		1	08/07/24 22:39
4,4'-DDT	0.010	0.0640	0.0661	3		1	08/07/24 22:39
Aldrin	0.010	0.0445	0.0459	3		1	08/07/24 22:39
Dieldrin	0.010	0.0537	0.0605	12		1	08/07/24 22:39
Endosulfan I	0.010	0.0519	0.0551	6		1	08/07/24 22:39
Endosulfan II	0.010	0.0557	0.0578	4		1	08/07/24 22:39
Endosulfan Sulfate	0.010	0.0570	0.0592	4		1	08/07/24 22:39
Endrin	0.010	0.0658	0.0664	<1		1	08/07/24 22:39
Endrin Aldehyde	0.010	0.0596	0.0769	25		1	08/07/24 22:39
Heptachlor	0.010	0.0461	0.0468	2		1	08/07/24 22:39
Heptachlor Epoxide	0.010	0.0541	0.0579	7		1	08/07/24 22:39
alpha-BHC	0.010	0.0494	0.0517	5		1	08/07/24 22:39
beta-BHC	0.042	0.0451	0.0598	28		1	08/07/24 22:39
delta-BHC	0.010	0.0527	0.0576	9		1	08/07/24 22:39
gamma-BHC (Lindane)	0.010	0.0519	0.0526	1		1	08/07/24 22:39

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: Specialty Analytical
Project: 2407228
Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received:

Sample Name: Lab Control Sample
Lab Code: KQ2411609-04

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analytical Method: 608.3
Prep Method: EPA 3520C

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	0.10	0.551	0.673	20		1	08/07/24 23:11
Aroclor 1260	0.10	0.660	0.752	13		1	08/07/24 23:11

ALS Group USA, Corp.
dba ALS Environmental

Confirmation Results

Client: Specialty Analytical
Project: 2407228
Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received:

Sample Name: Duplicate Lab Control Sample
Lab Code: KQ2411609-05

Units: ug/L
Basis: NA

Organochlorine Pesticides and Polychlorinated Biphenyls

Analytical Method: 608.3
Prep Method: EPA 3520C

Analyte Name	MRL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Aroclor 1016	0.10	0.552	0.685	22		1	08/07/24 23:44
Aroclor 1260	0.10	0.652	0.696	7		1	08/07/24 23:44

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702

SURROGATE RECOVERY SUMMARY
Organochlorine Pesticides and Polychlorinated Biphenyls

Analysis Method: 608.3
Extraction Method: EPA 3520C

Sample Name	Lab Code	Decachlorobiphenyl	Tetrachloro-m-xylene
		10 - 134	10 - 134
Outfall 002B	K2407702-001	19	20
Method Blank	KQ2411609-01	91	67
Lab Control Sample	KQ2411609-02	86	59
Duplicate Lab Control Sample	KQ2411609-03	87	60
Lab Control Sample	KQ2411609-04	88	63
Duplicate Lab Control Sample	KQ2411609-05	95	66

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: 08/07/24
Date Extracted: 07/29/24

Duplicate Lab Control Sample Summary
Organochlorine Pesticides and Polychlorinated Biphenyls

Analysis Method: 608.3
Prep Method: EPA 3520C

Units: ug/L
Basis: NA
Analysis Lot: 850018

Lab Control Sample
KQ2411609-02

Duplicate Lab Control Sample
KQ2411609-03

Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
4,4'-DDD	0.0602	0.100	60	0.0568	0.100	57	31-141	6	39
4,4'-DDE	0.0548	0.100	55	0.0593	0.100	59	30-145	8	35
4,4'-DDT	0.0668	0.100	67	0.0640	0.100	64	25-160	4	42
Aldrin	0.0486	0.100	49	0.0445	0.100	44	42-140	9	35
alpha-BHC	0.0521	0.100	52	0.0494	0.100	49	37-140	5	36
beta-BHC	0.0494	0.100	49	0.0451	0.100	45	17-147	9	44
delta-BHC	0.0548	0.100	55	0.0527	0.100	53	19-140	4	52
Dieldrin	0.0567	0.100	57	0.0537	0.100	54	36-146	6	49
Endosulfan I	0.0539	0.100	54	0.0519	0.100	52	45-153	4	28
Endosulfan II	0.0575	0.100	57	0.0557	0.100	56	10-202	3	53
Endosulfan Sulfate	0.0602	0.100	60	0.0570	0.100	57	26-144	5	38
Endrin	0.0625	0.100	62	0.0658	0.100	66	30-147	5	48
Endrin Aldehyde	0.0628	0.100	63	0.0596	0.100	60	43-125	5	30
gamma-BHC (Lindane)	0.0551	0.100	55	0.0519	0.100	52	32-140	6	39
Heptachlor	0.0500	0.100	50	0.0461	0.100	46	34-140	8	43
Heptachlor Epoxide	0.0575	0.100	58	0.0541	0.100	54	37-142	6	26

Client:

Project:

Sample Matrix:

Specialty Analytical
2407228
Water

Service Request:

Date Analyzed:

Date Extracted:

K2407702
08/07/24
07/29/24

Duplicate Lab Control Sample Summary
Organochlorine Pesticides and Polychlorinated Biphenyls

Analysis Method:

Prep Method:

608.3
EPA 3520C

Units:

Basis:

Analysis Lot:

ug/L
NA
850018

Lab Control Sample				Duplicate Lab Control Sample					
KQ2411609-04				KQ2411609-05					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Aroclor 1016	0.551	0.500	110	0.552	0.500	110	50-140	<1	36
Aroclor 1260	0.660	0.500	132	0.652	0.500	130	8-140	1	38

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: NA
Date Extracted:

Lab Control Sample Summary
Organochlorine Pesticides and Polychlorinated Biphenyls

Sample Name:
Lab Code:
Analysis Method: 608.3
Prep Method: None

Instrument ID:
File ID:
Analysis Lot:850018

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Performance Evaluation	KQ2412292-01	J:\GC33\DATA\080724\0807F003.D\	08/07/24 12:53
Performance Evaluation	KQ2412292-04	J:\GC33\DATA\080724\0807F024.D\	08/08/24 00:16

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: 08/07/24 23:11
Date Extracted: 07/29/24

Lab Control Sample Summary
Organochlorine Pesticides and Polychlorinated Biphenyls

Sample Name:	Lab Control Sample	Instrument ID:	K-GC-33
Lab Code:	KQ2411609-04	File ID:	J:\GC33\DATA\080724\0807F022.D\
Analysis Method:	608.3	Analysis Lot:	850018
Prep Method:	EPA 3520C	Extraction Lot:	442297

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2411609-01	J:\GC33\DATA\080724\0807F019.D\	08/07/24 21:34
Duplicate Lab Control Sample	KQ2411609-03	J:\GC33\DATA\080724\0807F021.D\	08/07/24 22:39
Duplicate Lab Control Sample	KQ2411609-05	J:\GC33\DATA\080724\0807F023.D\	08/07/24 23:44
Outfall 002B	K2407702-001	J:\GC33\DATA\080724\0807F032.D\	08/08/24 04:35



Semi-Volatile Organic Compounds by GC/MS

ALS Environmental—Kelso Laboratory
1317 South 13th Avenue, Kelso, WA 98626
Phone (360)577-7222 Fax (360)636-1068
www.alsglobal.com

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: 07/25/24 08:30
Date Received: 07/25/24 13:16

Sample Name: Outfall 002B
Lab Code: K2407702-001

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Acenaphthylene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Anthracene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Benz(a)anthracene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Benzidine	ND U	10	5	07/30/24 17:42	7/26/24	
Benzo(b)fluoranthene	ND UX	4.0	5	07/30/24 17:42	7/26/24	
Benzo(k)fluoranthene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Benzo(g,h,i)perylene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Benzo(a)pyrene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Bis(2-chloroethyl) Ether	ND U	4.0	5	07/30/24 17:42	7/26/24	
Bis(2-ethylhexyl) Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
Bis(2-chloroethoxy)methane	ND U	4.0	5	07/30/24 17:42	7/26/24	
4-Bromophenyl Phenyl Ether	ND U	4.0	5	07/30/24 17:42	7/26/24	*
Butyl Benzyl Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
4-Chloro-3-methylphenol	ND U	4.0	5	07/30/24 17:42	7/26/24	
2-Chloronaphthalene	ND U	4.0	5	07/30/24 17:42	7/26/24	*
2-Chlorophenol	ND U	4.0	5	07/30/24 17:42	7/26/24	
4-Chlorophenyl Phenyl Ether	ND U	4.0	5	07/30/24 17:42	7/26/24	
Chrysene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Di-n-butyl Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
Di-n-octyl Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
Dibenz(a,h)acridine	ND U	10	5	07/30/24 17:42	7/26/24	
Dibenz(a,j)acridine	ND U	10	5	07/30/24 17:42	7/26/24	
Dibenz(a,h)anthracene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Dibenzo(a,e)pyrene	ND U	10	5	07/30/24 17:42	7/26/24	
Dibenzo(a,h)pyrene	ND U	10	5	07/30/24 17:42	7/26/24	
Dibenzo(a,i)pyrene	ND U	10	5	07/30/24 17:42	7/26/24	
3,3'-Dichlorobenzidine	ND U	4.0	5	07/30/24 17:42	7/26/24	
2,4-Dichlorophenol	ND U	4.0	5	07/30/24 17:42	7/26/24	
Diethyl Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
Dimethyl Phthalate	ND U	4.0	5	07/30/24 17:42	7/26/24	
2,4-Dimethylphenol	ND U	4.0	5	07/30/24 17:42	7/26/24	
4,6-Dinitro-2-methylphenol	ND U	10	5	07/30/24 17:42	7/26/24	*
2,4-Dinitrophenol	ND U	20	5	07/30/24 17:42	7/26/24	
2,4-Dinitrotoluene	ND U	4.0	5	07/30/24 17:42	7/26/24	
2,6-Dinitrotoluene	ND U	4.0	5	07/30/24 17:42	7/26/24	
1,2-Diphenylhydrazine	ND U	4.0	5	07/30/24 17:42	7/26/24	
Fluoranthene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Fluorene	ND U	4.0	5	07/30/24 17:42	7/26/24	*
Hexachlorobenzene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Hexachlorobutadiene	ND U	4.0	5	07/30/24 17:42	7/26/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: 07/25/24 08:30
Date Received: 07/25/24 13:16

Sample Name: Outfall 002B
Lab Code: K2407702-001

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Hexachlorocyclopentadiene	ND U	20	5	07/30/24 17:42	7/26/24	
Hexachloroethane	ND U	4.0	5	07/30/24 17:42	7/26/24	
Indeno(1,2,3-cd)pyrene	ND UX	4.0	5	07/30/24 17:42	7/26/24	
Isophorone	ND U	4.0	5	07/30/24 17:42	7/26/24	
3-Methylcholanthrene	ND U	10	5	07/30/24 17:42	7/26/24	
Naphthalene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Nitrobenzene	ND U	4.0	5	07/30/24 17:42	7/26/24	
2-Nitrophenol	ND U	4.0	5	07/30/24 17:42	7/26/24	
4-Nitrophenol	ND U	10	5	07/30/24 17:42	7/26/24	
N-Nitrosodi-n-propylamine	ND U	4.0	5	07/30/24 17:42	7/26/24	
N-Nitrosodimethylamine	ND U	4.0	5	07/30/24 17:42	7/26/24	
N-Nitrosodiphenylamine	ND U	4.0	5	07/30/24 17:42	7/26/24	
2,2'-Oxybis(1-chloropropane)	ND U	4.0	5	07/30/24 17:42	7/26/24	*
Pentachlorophenol (PCP)	ND U	10	5	07/30/24 17:42	7/26/24	
Perylene	ND U	4.0	5	07/30/24 17:42	7/26/24	
Phenanthrene	ND U	4.0	5	07/30/24 17:42	7/26/24	*
Phenol	620	20	25	07/31/24 13:03	7/26/24	
Pyrene	ND U	4.0	5	07/30/24 17:42	7/26/24	*
1,2,4-Trichlorobenzene	ND U	4.0	5	07/30/24 17:42	7/26/24	
2,4,6-Trichlorophenol	ND U	4.0	5	07/30/24 17:42	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	59	38 - 105	07/30/24 17:42	
2-Fluorophenol	51	17 - 101	07/30/24 17:42	
Nitrobenzene-d5	66	15 - 314	07/30/24 17:42	
Phenol-d6	48	8 - 424	07/30/24 17:42	
p-Terphenyl-d14	39	35 - 133	07/30/24 17:42	
2,4,6-Tribromophenol	98	12 - 129	07/30/24 17:42	

Analyte Comments:

Benzo(b)fluoranthene This analyte cannot be separated from Benzo(j)fluoranthene.

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2411522-01

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Acenaphthene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Acenaphthylene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Anthracene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Benz(a)anthracene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Benzidine	ND U	2.0	1	07/30/24 16:06	7/26/24	
Benzo(b)fluoranthene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Benzo(k)fluoranthene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Benzo(g,h,i)perylene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Benzo(a)pyrene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Bis(2-chloroethyl) Ether	ND U	0.80	1	07/30/24 16:06	7/26/24	
Bis(2-ethylhexyl) Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
Bis(2-chloroethoxy)methane	ND U	0.80	1	07/30/24 16:06	7/26/24	
4-Bromophenyl Phenyl Ether	ND U	0.80	1	07/30/24 16:06	7/26/24	
Butyl Benzyl Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
4-Chloro-3-methylphenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
2-Chloronaphthalene	ND U	0.80	1	07/30/24 16:06	7/26/24	
2-Chlorophenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
4-Chlorophenyl Phenyl Ether	ND U	0.80	1	07/30/24 16:06	7/26/24	
Chrysene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Di-n-butyl Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
Di-n-octyl Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
Dibenz(a,h)acridine	ND U	2.0	1	07/30/24 16:06	7/26/24	
Dibenz(a,j)acridine	ND U	2.0	1	07/30/24 16:06	7/26/24	
Dibenz(a,h)anthracene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Dibenzo(a,e)pyrene	ND U	2.0	1	07/30/24 16:06	7/26/24	
Dibenzo(a,h)pyrene	ND U	2.0	1	07/30/24 16:06	7/26/24	
Dibenzo(a,i)pyrene	ND U	2.0	1	07/30/24 16:06	7/26/24	
3,3'-Dichlorobenzidine	ND U	0.80	1	07/30/24 16:06	7/26/24	
2,4-Dichlorophenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
Diethyl Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
Dimethyl Phthalate	ND U	0.80	1	07/30/24 16:06	7/26/24	
2,4-Dimethylphenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
4,6-Dinitro-2-methylphenol	ND U	2.0	1	07/30/24 16:06	7/26/24	
2,4-Dinitrophenol	ND U	4.0	1	07/30/24 16:06	7/26/24	
2,4-Dinitrotoluene	ND U	0.80	1	07/30/24 16:06	7/26/24	
2,6-Dinitrotoluene	ND U	0.80	1	07/30/24 16:06	7/26/24	
1,2-Diphenylhydrazine	ND U	0.80	1	07/30/24 16:06	7/26/24	
Fluoranthene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Fluorene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Hexachlorobenzene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Hexachlorobutadiene	ND U	0.80	1	07/30/24 16:06	7/26/24	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Collected: NA
Date Received: NA

Sample Name: Method Blank
Lab Code: KQ2411522-01

Units: ug/L
Basis: NA

Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Analyte Name	Result	MRL	Dil.	Date Analyzed	Date Extracted	Q
Hexachlorocyclopentadiene	ND U	4.0	1	07/30/24 16:06	7/26/24	
Hexachloroethane	ND U	0.80	1	07/30/24 16:06	7/26/24	
Indeno(1,2,3-cd)pyrene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Isophorone	ND U	0.80	1	07/30/24 16:06	7/26/24	
3-Methylcholanthrene	ND U	2.0	1	07/30/24 16:06	7/26/24	
Naphthalene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Nitrobenzene	ND U	0.80	1	07/30/24 16:06	7/26/24	
2-Nitrophenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
4-Nitrophenol	ND U	2.0	1	07/30/24 16:06	7/26/24	
N-Nitrosodi-n-propylamine	ND U	0.80	1	07/30/24 16:06	7/26/24	
N-Nitrosodimethylamine	ND U	0.80	1	07/30/24 16:06	7/26/24	
N-Nitrosodiphenylamine	ND U	0.80	1	07/30/24 16:06	7/26/24	
2,2'-Oxybis(1-chloropropane)	ND U	0.80	1	07/30/24 16:06	7/26/24	
Pentachlorophenol (PCP)	ND U	2.0	1	07/30/24 16:06	7/26/24	
Perylene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Phenanthrene	ND U	0.80	1	07/30/24 16:06	7/26/24	
Phenol	ND U	0.80	1	07/30/24 16:06	7/26/24	
Pyrene	ND U	0.80	1	07/30/24 16:06	7/26/24	
1,2,4-Trichlorobenzene	ND U	0.80	1	07/30/24 16:06	7/26/24	
2,4,6-Trichlorophenol	ND U	0.80	1	07/30/24 16:06	7/26/24	

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
2-Fluorobiphenyl	56	38 - 105	07/30/24 16:06	
2-Fluorophenol	48	17 - 101	07/30/24 16:06	
Nitrobenzene-d5	59	15 - 314	07/30/24 16:06	
Phenol-d6	35	8 - 424	07/30/24 16:06	
p-Terphenyl-d14	68	35 - 133	07/30/24 16:06	
2,4,6-Tribromophenol	67	12 - 129	07/30/24 16:06	

Analyte Comments:

Benzo(b)fluoranthene This analyte cannot be separated from Benzo(j)fluoranthene.

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Extraction Method: EPA 3510C

Sample Name	Lab Code	2,4,6-Tribromophenol	2-Fluorobiphenyl	2-Fluorophenol
		12 - 129	38 - 105	17 - 101
Outfall 002B	K2407702-001	98	59	51
Method Blank	KQ2411522-01	67	56	48
Lab Control Sample	KQ2411522-02	78	61	58
Duplicate Lab Control Sample	KQ2411522-03	80	61	56

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702

SURROGATE RECOVERY SUMMARY
Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Extraction Method: EPA 3510C

Sample Name	Lab Code	Nitrobenzene-d5	Phenol-d6	p-Terphenyl-d14
		15 - 314	8 - 424	35 - 133
Outfall 002B	K2407702-001	66	48	39
Method Blank	KQ2411522-01	59	35	68
Lab Control Sample	KQ2411522-02	70	45	69
Duplicate Lab Control Sample	KQ2411522-03	69	44	67

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: 07/30/24
Date Extracted: 07/26/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Units: ug/L
Basis: NA
Analysis Lot: 849225

Lab Control Sample KQ2411522-02				Duplicate Lab Control Sample KQ2411522-03					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene	11.8	20.0	59	12.3	20.0	62	57-130	5	30
1,2-Diphenylhydrazine	11.8	20.0	59	12.5	20.0	62	32-134	6	30
2,2'-Oxybis(1-chloropropane)	10.8	20.0	54 *	11.2	20.0	56 *	63-139	4	30
2,4,6-Trichlorophenol	12.2	20.0	61	13.4	20.0	67	52-129	9	30
2,4-Dichlorophenol	14.1	20.0	70	15.0	20.0	75	53-122	6	30
2,4-Dimethylphenol	12.5	20.0	62	13.0	20.0	65	42-120	4	30
2,4-Dinitrophenol	11.9	20.0	59	14.8	20.0	74	0.1-173	22	30
2,4-Dinitrotoluene	16.0	20.0	80	17.1	20.0	85	48-127	7	30
2,6-Dinitrotoluene	15.1	20.0	75	16.1	20.0	80	68-137	7	30
2-Chloronaphthalene	12.0	20.0	60 *	12.5	20.0	63 *	65-120	5	30
2-Chlorophenol	13.2	20.0	66	13.9	20.0	70	36-120	6	30
2-Nitrophenol	16.1	20.0	80	17.5	20.0	87	45-167	8	30
3,3'-Dichlorobenzidine	20.6	20.0	103	22.1	20.0	111	8-213	7	30
4,6-Dinitro-2-methylphenol	19.3	20.0	97	21.6	20.0	108	53-130	11	30
4-Bromophenyl Phenyl Ether	12.6	20.0	63 *	13.9	20.0	70	65-120	10	30
4-Chloro-3-methylphenol	13.7	20.0	68	14.4	20.0	72	41-128	5	30
4-Chlorophenyl Phenyl Ether	12.7	20.0	64	13.4	20.0	67	38-145	5	30
4-Nitrophenol	5.23	20.0	26	5.86	20.0	29	13-129	11	30
Acenaphthene	12.1	20.0	61	12.9	20.0	65	60-132	6	30
Acenaphthylene	12.8	20.0	64	13.7	20.0	69	54-126	7	30
Anthracene	13.0	20.0	65	14.3	20.0	72	43-120	10	30
Benz(a)anthracene	13.3	20.0	67	14.0	20.0	70	42-133	5	30
Benzo(a)pyrene	13.3	20.0	67	14.3	20.0	71	32-148	7	30
Benzo(b)fluoranthene	13.9	20.0	70	15.1	20.0	76	42-140	8	30
Benzo(g,h,i)perylene	16.2	20.0	81	17.0	20.0	85	0.1-195	5	30
Benzo(k)fluoranthene	13.4	20.0	67	14.2	20.0	71	25-146	6	30
Bis(2-chloroethoxy)methane	12.2	20.0	61	13.1	20.0	66	49-165	7	30
Bis(2-chloroethyl) Ether	12.3	20.0	62	12.8	20.0	64	43-126	4	30
Bis(2-ethylhexyl) Phthalate	14.1	20.0	70	13.3	20.0	67	29-137	6	30
Butyl Benzyl Phthalate	15.4	20.0	77	15.2	20.0	76	0.1-140	1	30
Chrysene	13.3	20.0	66	14.0	20.0	70	44-140	5	30
Dibenz(a,h)anthracene	13.3	20.0	66	14.2	20.0	71	0.1-200	7	30
Diethyl Phthalate	13.8	20.0	69	14.5	20.0	72	0.1-120	5	30
Dimethyl Phthalate	12.9	20.0	65	13.6	20.0	68	0.1-120	5	30
Di-n-butyl Phthalate	12.1	20.0	60	13.0	20.0	65	8-120	7	30
Di-n-octyl Phthalate	14.3	20.0	71	14.7	20.0	73	19-132	3	30
Fluoranthene	12.4	20.0	62	13.2	20.0	66	43-121	6	30
Fluorene	12.6	20.0	63 *	13.3	20.0	66 *	70-120	5	30
Hexachlorobenzene	12.5	20.0	62	13.6	20.0	68	8-142	9	30
Hexachlorobutadiene	11.7	20.0	59	12.1	20.0	61	38-120	3	30
Hexachlorocyclopentadiene	5.84	20.0	29	6.56	20.0	33	3-80	12	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: 07/30/24
Date Extracted: 07/26/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method: 625.1
Prep Method: EPA 3510C

Units: ug/L
Basis: NA
Analysis Lot: 849225

Lab Control Sample KQ2411522-02				Duplicate Lab Control Sample KQ2411522-03					
Analyte Name	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Hexachloroethane	11.0	20.0	55	11.3	20.0	57	55-120	3	30
Indeno(1,2,3-cd)pyrene	13.5	20.0	68	15.5	20.0	78	0.1-151	14	30
Isophorone	11.4	20.0	57	12.3	20.0	61	47-180	8	30
Naphthalene	12.2	20.0	61	12.9	20.0	65	36-120	6	30
Nitrobenzene	12.9	20.0	64	13.6	20.0	68	54-158	5	30
N-Nitrosodimethylamine	9.93	20.0	50	11.1	20.0	56	0.1-223	11	30
N-Nitrosodi-n-propylamine	11.9	20.0	60	12.4	20.0	62	14-198	4	30
N-Nitrosodiphenylamine	13.8	20.0	69	14.7	20.0	73	37-98	6	30
Pentachlorophenol (PCP)	9.34	20.0	47	11.0	20.0	55	38-152	16	30
Phenanthrene	12.8	20.0	64 *	13.9	20.0	70	65-120	9	30
Phenol	8.56	20.0	43	8.98	20.0	45	17-120	5	30
Pyrene	11.2	20.0	56 *	11.6	20.0	58 *	70-120	4	30

Client:
Project:
Sample Matrix:

Specialty Analytical
2407228
Water

Service Request:
Date Analyzed:
Date Extracted:

K2407702
07/30/24
07/26/24

Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Analysis Method:
Prep Method:

625.1
EPA 3510C

Units:
Basis:
Analysis Lot:

ug/L
NA
849273

Analyte Name	Lab Control Sample			Duplicate Lab Control Sample			% Rec Limits	RPD	RPD Limit
	Result	Spike Amount	% Rec	Result	Spike Amount	% Rec			
Benzidine	8.17	40.0	20	5.12	40.0	13	0.1-140	46 *	30

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: Specialty Analytical
Project: 2407228
Sample Matrix: Water

Service Request: K2407702
Date Analyzed: 07/30/24 16:32
Date Extracted: 07/26/24

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS

Sample Name: Lab Control Sample
Lab Code: KQ2411522-02
Analysis Method: 625.1
Prep Method: EPA 3510C

Instrument ID: K-MS-48
File ID: J:\MS48\DATA\073024\0730F007.D\
Analysis Lot: 849225,849273,849276
Extraction Lot: 442229

This Lab Control Sample applies to the following analyses.

Sample Name	Lab Code	File ID	Date Analyzed
Method Blank	KQ2411522-01	J:\MS48\DATA\073024\0730F006.D\	07/30/24 16:06
Method Blank	KQ2411522-01	J:\MS48\DATA\073024_BENZIDINE\0730F006.D\	07/30/24 16:06
Duplicate Lab Control Sample	KQ2411522-03	J:\MS48\DATA\073024\0730F008.D\	07/30/24 16:54
Duplicate Lab Control Sample	KQ2411522-03	J:\MS48\DATA\073024_BENZIDINE\0730F008.D\	07/30/24 16:54
Outfall 002B	K2407702-001	J:\MS48\DATA\073024\0730F010.D\	07/30/24 17:42
Outfall 002B	K2407702-001	J:\MS48\DATA\073024_BENZIDINE\0730F010.D\	07/30/24 17:42
Outfall 002B	K2407702-001	J:\MS48\DATA\073124\0731F004.D\	07/31/24 13:03



August 27, 2024

Enthalpy Analytical - El Dorado Hills
Work Order No. 2408027

Ms. Mandy Wehe
Specialty Analytical
11711 SE Capps Rd, Ste B
Clackamas, OR 97015

Dear Ms. Wehe,

Enclosed are the results for the sample set received at Enthalpy Analytical - EDH on August 02, 2024 under your Project Name '2407228'.

Enthalpy Analytical - EDH is committed to serving you effectively. If you require additional information, please contact me at 916-673-1520 or by email at kathy.zipp@enthalpy.com.

Thank you for choosing Enthalpy Analytical - EDH as part of your analytical support team.

Sincerely,

Kathy Zipp
Project Manager

Enthalpy Analytical - EDH certifies that the report herein meets all the requirements set forth by NELAP for those applicable test methods. Results relate only to the samples as received by the laboratory. This report should not be reproduced except in full without the written approval of Enthalpy Analytical - EDH.

Enthalpy Analytical - EDH Order No. 2408027

Case Narrative

Sample Condition on Receipt:

One wastewater sample was received and stored securely in accordance with Enthalpy Analytical - EDH standard operating procedures and EPA methodology. The sample was received in good condition and within the method temperature requirements.

Analytical Notes:

EPA Method 1613B

This sample was extracted and analyzed for 2,3,7,8-TCDD by EPA Method 1613B using a ZB-DIOXIN GC column.

Holding Times

The sample was extracted and analyzed within the method hold times.

Quality Control

The Initial Calibration and Continuing Calibration Verifications met the method acceptance criteria.

A Method Blank and Ongoing Precision and Recovery (OPR) sample were extracted and analyzed with the preparation batch. The analyte was not detected in the Method Blank. The OPR recoveries were within the method acceptance criteria.

Labeled standard recoveries for all QC and field samples were within method acceptance criteria.

TABLE OF CONTENTS

Case Narrative.....	1
Table of Contents.....	3
Sample Inventory.....	4
Analytical Results.....	5
Qualifiers.....	9
Certifications.....	10
Sample Receipt.....	11

Sample Inventory Report

Sample ID	Client Sample ID	Sampled	Received	Components/Containers
2408027-01	Outfall 002B	25-Jul-24 08:30	02-Aug-24 11:29	Amber Glass NM Bottle, 1L

ANALYTICAL RESULTS

Sample ID: Method Blank
EPA Method 1613B
Client Data

Name: Specialty Analytical
 Project: 2407228
 Matrix: Aqueous

Laboratory Data

Lab Sample: B24H166-BLK1
 QC Batch: B24H166
 Sample Size: 1.00 L

Date Extracted: 17-Aug-24
 Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	0.477	3.92			23-Aug-24 20:27	1
Labeled Standards	Type	% Recovery		Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	93.5		31 - 137		23-Aug-24 20:27	1
37Cl-2,3,7,8-TCDD	CRS	98.5		42 - 164		23-Aug-24 20:27	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

Sample ID: OPR				EPA Method 1613B			
Client Data Name: Specialty Analytical Project: 2407228 Matrix: Aqueous			Laboratory Data Lab Sample: B24H166-BS1 QC Batch: B24H166 Date Extracted: 17-Aug-24 20:22 Sample Size: 1.00 L Column: ZB-DIOXIN				
Analyte	Amt Found (pg/L)	Spike Amt	% Recovery	Limits	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	186	200	93.2	73 - 146		23-Aug-24 18:07	1
Labeled Standards	Type		% Recovery	Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS		104	25 - 141		23-Aug-24 18:07	1
37Cl-2,3,7,8-TCDD	CRS		110	37 - 158		23-Aug-24 18:07	1

Sample ID: Outfall 002B
EPA Method 1613B
Client Data

Name: Specialty Analytical
 Project: 2407228
 Matrix: Wastewater
 Date Collected: 25-Jul-24 08:30

Laboratory Data

Lab Sample: 2408027-01 Date Received: 02-Aug-24 11:29
 QC Batch: B24H166 Date Extracted: 17-Aug-24
 Sample Size: 1.04 L Column: ZB-DIOXIN

Analyte	Conc. (pg/L)	EDL	MDL	EMPC	Qualifiers	Analyzed	Dilution
2,3,7,8-TCDD	ND	1.74	3.77			24-Aug-24 17:25	1
Labeled Standards	Type	% Recovery		Limits	Qualifiers	Analyzed	Dilution
13C-2,3,7,8-TCDD	IS	46.0		31 - 137		24-Aug-24 17:25	1
37Cl-2,3,7,8-TCDD	CRS	98.9		42 - 164		24-Aug-24 17:25	1

EDL - Sample specific estimated detection limit

EMPC - Estimated maximum possible concentration

MDL - Method Detection Limit

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank
Conc.	Concentration
CRS	Cleanup Recovery Standard
D	Dilution
DL	Detection Limit
E	The associated compound concentration exceeded the calibration range of the instrument
H	Recovery and/or RPD was outside laboratory acceptance limits
I	Chemical Interference
IS	Internal Standard
J	The amount detected is below the Reporting Limit/LOQ
LOD	Limit of Detection
LOQ	Limit of Quantitation
M	Estimated Maximum Possible Concentration (CA Region 2 projects only)
MDL	Method Detection Limit
NA	Not applicable
ND	Not Detected
OPR	Ongoing Precision and Recovery sample
P	The reported concentration may include contribution from chlorinated diphenyl ether(s).
Q	The ion transition ratio is outside of the acceptance criteria.
RL	Reporting Limit
RL	For 537.1, the reported RLs are the MRLs.
TEQ	Toxic Equivalency, sum of the toxic equivalency factors (TEF) multiplied by the sample concentrations.
TEQMax	TEQ calculation that uses the detection limit as the concentration for non-detects
TEQMin	TEQ calculation that uses zero as the concentration for non-detects
TEQRisk	TEQ calculation that uses ½ the detection limit as the concentration for non-detects
U	Not Detected (specific projects only)
*	See Cover Letter

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

Enthalpy Analytical - EDH Certifications

Accrediting Authority	Certificate Number
Alaska Department of Environmental Conservation	17-013
Arkansas Department of Environmental Quality	21-023-0
California Department of Health – ELAP	2892
DoD ELAP - A2LA Accredited - ISO/IEC 17025	3091.01
Florida Department of Health	E87777
Hawaii Department of Health	N/A
Louisiana Department of Environmental Quality	01977
Maine Department of Health	2020018
Michigan Department of Environmental Quality	9932
Minnesota Department of Health	2211390
Nevada Division of Environmental Protection	CA00413
New Hampshire Environmental Accreditation Program	207721
New Jersey Department of Environmental Protection	CA003
New York Department of Health	11411
Ohio Environmental Protection Agency	87778
Oregon Laboratory Accreditation Program	4042-021
Texas Commission on Environmental Quality	T104704189-22-13
Vermont Department of Health	VT-4042
Virginia Department of General Services	11276
Washington Department of Ecology	C584
Wisconsin Department of Natural Resources	998036160

Current certificates and lists of licensed parameters can be found at Enthalpy.com/Resources/Accreditations.

<div style="display: inline-block; vertical-align: middle;"> Specialty Analytical 9011 SE Jannsen Rd Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1336 </div>		Chain of Custody Record											
		Date: 7/30/24				Page: 1 of 1				Laboratory Project No (internal):			
Client: Specialty Analytical		Project No:				PO No:				Temperature on Receipt: °C			
Address: 9011 SE Jannsen Rd		Collected by: Client				Cooling:				Shipped Via:			
City, State, Zip: Clackamas, OR, 97015		State Collected: OR <input type="checkbox"/> WA <input checked="" type="checkbox"/> OTHER				Custody Seal: Y / N Intact / Broken Cooler / Bottle				MDL <input type="checkbox"/> TIER IV <input type="checkbox"/> EDD <input type="checkbox"/>			
Telephone: 503-607-1331		Report To (PM): PM / Mandy Wehe				Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by lab (after 60 days)							
AP Email: mandy@specialtyanalytical.com		PM Email: PM@specialtyanalytical.com / mandy@specialtyanalytical.com											

Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Dioxin Furans*	Requested Tests												Comments
1 Outfall 002B	07/25/24	0830	WW	1	✓													*2,3,7,8 TCDD only
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

* Matrix: A = Air, AQ = Aqueous, L = Liquid, O = Oil, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water, M = Miscellaneous

Turn-around Time:	Standard (5-7 Business): <input checked="" type="checkbox"/>	3 Day: <input type="checkbox"/>	2 Day: <input type="checkbox"/>	Next Day: <input type="checkbox"/>	Same Day: <input type="checkbox"/>
-------------------	--	---------------------------------	---------------------------------	------------------------------------	------------------------------------

Expedited turn-around requests should be coordinated in advance

Relinquished x	Date/ Time 7-31-24 1600	Received x Jennifer Torres	Date/ Time 08/02/24 1129
Relinquished x	Date/ Time	Received x	Date/ Time
Relinquished x	Date/ Time	Received x	Date/ Time

CoC/Label Reconciliation Report WO# 2408027

LabNumber	CoC Sample ID	SampleAlias	Sample Date/Time	Container	BaseMatrix	Sample Comments
2408027-01	A Outfall 002B		25-Jul-24 08:30	Amber Glass NM Bottle, 1L	Aqueous	

Checkmarks indicate that information on the COC reconciled with the sample label.
Any discrepancies are noted in the following columns.

	Yes	No	NA
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Adequate Sample Volume?	✓		
Container Type Appropriate for Analysis(es)	✓		

Comments:

Ⓐ No back up volume.

Preservation Documented: Na₂S₂O₃ Trizma NH₄CH₃CO₂ None Other

Verified by/Date: JT 08/05/24
K2 08/05/24

<div style="display: inline-block; vertical-align: middle;"> Specialty Analytical 9011 SE Jannsen Rd Clackamas, OR 97015 Phone: 503-607-1331 www.specialtyanalytical.com </div>		Chain of Custody Record												
		Date: <u>7/25/24</u> Page: <u>1</u> of: <u>1</u>		Laboratory Project No (internal): <u>2407228</u>										
Client: <u>Weyerhaeuser Longview</u>		Project Name: <u>Priority Pollutants</u>		Project No: <u>Outfall 00</u> PO No:		Temperature on Receipt: <u>1.9</u> °C		Cooling: <u>ice packs</u> Shipped Via: <u>SA</u>						
Address: <u>3401 Industrial Way</u>		Collected by: <u>Solomon</u>		State Collected: OR <input type="checkbox"/> WA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		Custody Seal: <u>Y</u> N <input type="checkbox"/> Intact <input type="checkbox"/> Broken <input type="checkbox"/> Cooler <input type="checkbox"/> Bottle <input type="checkbox"/>		MDL <input type="checkbox"/> TIER IV <input type="checkbox"/> EDD <input type="checkbox"/>						
City, State, Zip: <u>Longview, WA 98632</u>		Report To (PM): <u>Carter, Mar</u>		Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by lab (after 60 days)										
Telephone: <u>780-851-3378</u>		AP Email: <u>APemail Invoice @ weyerhaeuser.com</u> PM Email: <u>Carter, mar @ wy.com</u>												
Sample Name	Sample Date	Sample Time	Sample Matrix*	# of Containers	Cyanide***	Phenolics	624 Vols	625 Semi Vols	608 Pest/PCBs	Dioxin Furan	PP13 metals (No Hg)	1631 LL Hg	Cr6 (Hex Chrome)	Please note if you know or suspect that your sample may contain hazardous materials or chemicals Comments:
<u>1 Outfall 00213</u>	<u>7/25/24</u>	<u>6:30 AM</u>	<u>WW</u>	<u>15</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>***Total, WAD, & Available Cn</u>
2														
3														
4														<u>PH 6.26</u>
5														<u>Temp 17.8</u>
6														
7														
8														
9														
10														
* Matrix: A=Air, AQ=Aqueous, L=Liquid, O=Oil, P=Product, S=Soil, SD=Sediment, SL=Solid, W=Water, DW=Drinking Water, GW=Ground Water, SW=Storm Water, WW=Waste Water, M=Miscellaneous														
Turn-around Time: Standard: <input checked="" type="checkbox"/> 3 Day: <input type="checkbox"/> 2 Day: <input type="checkbox"/> Next Day: <input type="checkbox"/> Same Day: <input type="checkbox"/> Samples received after 3pm are considered as received the following business day Expedited turn-around requests should be coordinated in advance														
Relinquished <u>x</u> <u>[Signature]</u>	Date/Time <u>7/25/24 11:30 AM</u>		Received <u>x</u> <u>[Signature]</u>		Date/Time <u>7-25-24 1245</u>									
Relinquished <u>x</u> <u>[Signature]</u>	Date/Time <u>7-25-24 1545</u>		Received <u>x</u> <u>[Signature]</u>		Date/Time <u>7/25/24 1545</u>									
Relinquished <u>x</u>	Date/Time		Received <u>x</u>		Date/Time									

Appendix A

LIST OF POLLUTANTS WITH ANALYTICAL METHODS, DETECTION LIMITS AND QUANTITATION LEVELS

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table for permit and application required monitoring unless:

- Another permit condition specifies other methods, detection levels, or quantitation levels.
- The method used produces measurable results in the sample and EPA has listed it as an EPA-approved method in 40 CFR Part 136.

If the Permittee uses an alternative method, not specified in the permit and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection limit (MDL) and a quantitation limit (QL) to Ecology with appropriate laboratory documentation.

When the permit requires the Permittee to measure the base neutral compounds in the list of priority pollutants, it must measure all of the base neutral pollutants listed in the table below. The list includes EPA required base neutral priority pollutants and several additional polynuclear aromatic hydrocarbons (PAHs). The Water Quality Program added several PAHs to the list of base neutrals below from Ecology's Persistent Bioaccumulative Toxics (PBT) List. It only added those PBT parameters of interest to Appendix A that did not increase the overall cost of analysis unreasonably.

Ecology added this appendix to the permit in order to reduce the number of analytical "non-detects" in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost.

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122.), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit appendix A list does not include those parameters.

CONVENTIONAL POLLUTANTS

Pollutant	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L</i> <i>unless specified</i>
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B ³		2 mg/L
Fecal Coliform		SM 9221E,9222	N/A	Specified in method - sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H ⁺ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH ₃ -B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Chemical Oxygen Demand		SM5220-D		10 mg/L
Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G		50.0
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ - B/C/D/EF/G/H		300
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10

NONCONVENTIONAL POLLUTANTS

Pollutant & CAS No. (if available)	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ µg/L unless specified	Quantitation Level (QL)² µg/L unless specified
Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S ² F/D/E/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO3B		2 mg/L
Temperature (max. 7-day avg.)		Analog recorder or Use micro- recording devices known as thermistors		0.2° C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B, 9222B, 9223B	N/A	Specified in method - sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total dissolved solids		SM2540 C		20 mg/L

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
METALS, CYANIDE & TOTAL PHENOLS					
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2
Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
METALS, CYANIDE & TOTAL PHENOLS					
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
ACID COMPOUNDS					
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
ACID COMPOUNDS					
4,6-dinitro-o-cresol (2-methyl-4,6,- dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2
Parachlorometa cresol (4-chloro-3- methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
VOLATILE COMPOUNDS					
Acrolein	2	107-02-8	624	5	10
Acrylonitrile	3	107-13-1	624	1.0	2.0
Benzene	4	71-43-2	624.1	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624.1	3.1	9.3
1,2-Dichlorobenzene	25	95-50-1	624	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624	4.4	17.6
Dichlorobromomethane	48	75-27-4	624.1	2.2	6.6

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
VOLATILE COMPOUNDS					
1,1-Dichloroethane	13	75-34-3	624.1	4.7	14.1
1,2-Dichloroethane	10	107-06-2	624.1	2.8	8.4
1,1-Dichloroethylene	29	75-35-4	624.1	2.8	8.4
1,2-Dichloropropane	32	78-87-5	624.1	6.0	18.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene) ⁶	33	542-75-6	624.1	5.0	15.0
Ethylbenzene	38	100-41-4	624.1	7.2	21.6
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624	1.0	2.0
Methylene chloride	44	75-09-2	624.1	2.8	8.4
1,1,2,2-Tetrachloroethane	15	79-34-5	624.1	6.9	20.7
Tetrachloroethylene	85	127-18-4	624.1	4.1	12.3
Toluene	86	108-88-3	624.1	6.0	18.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
VOLATILE COMPOUNDS					
1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4
Benzo(b)fluoranthene (3,4-benzofluoranthene) ⁷	74	205-99-2	610/625.1	4.8	14.4
Benzo(j)fluoranthene ⁷		205-82-3	625	0.5	1.0
Benzo(k)fluoranthene (11,12-benzofluoranthene) ⁷	75	207-08-9	610/625.1	2.5	7.5
Benzo(r,s,t)pentaphene		189-55-9	625	1.3	5.0
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloroisopropyl)ether	42	39638-32-9	625	0.5	1.0
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Chrysene	76	218-01-9	610/625.1	2.5	7.5
Dibenzo (a,h)acridine		226-36-8	610M/625M	2.5	10.0
Dibenzo (a,j)acridine		224-42-0	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
Dibenzo(a,e)pyrene		192-65-4	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene		189-64-0	625M	2.5	10.0
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (<i>as Azobenzene</i>)	37	122-66-7	1625B	5.0	20

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7
Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3- <i>cd</i>)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
3-Methyl cholanthrene		56-49-5	625	2.0	8.0
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7
N-Nitrosodimethylamine	61	62-75-9	607/625	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625	1.0	2.0

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)					
Perylene		198-55-0	625	1.9	7.6
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

<i>PRIORITY POLLUTANT</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
DIOXIN					
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
PESTICIDES/PCBs					
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane ⁸	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L

<i>PRIORITY POLLUTANTS</i>	PP #	CAS Number (if available)	Recommended Analytical Protocol	Detection (DL)¹ <i>µg/L unless specified</i>	Quantitation Level (QL)² <i>µg/L unless specified</i>
PESTICIDES/PCBs					
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L
PCB-1242 ⁹	106	53469-21-9	608.3	0.065	0.195
PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195
PCB-1016 ⁹	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/L

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1, 2, \text{ or } 5) \times 10^n$, where n is an integer. (64 FR 30417).

ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

3. Soluble Biochemical Oxygen Demand method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.
4. NWTPH Dx - Northwest Total Petroleum Hydrocarbons Diesel Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>
5. NWTPH Gx - Northwest Total Petroleum Hydrocarbons Gasoline Extended Range – see <https://fortress.wa.gov/ecy/publications/documents/97602.pdf>
6. 1, 3-dichloroproylene (mixed isomers) You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
7. Total Benzo(a)fluoranthenes - Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzo(a)fluoranthenes.
8. Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 14/42 ng/L.
9. PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.



Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: 2407228
Date: 8/27/2024

Definitions:

KEY TO FLAGS

A: This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was qualified against gasoline calibration standards.

A1: This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was qualified against diesel calibration standards.

A2: This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was qualified against lube oil calibration standards.

A3: The results was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.

A4: The product appears to be aged or degraded.

B: The blank exhibited a positive result greater than the reporting limit for this compound.

BC: Sample concentration is >10x positive result in blank. Data is considered acceptable.

CN: See Case Narrative.

E: Result exceeds the calibration range for this compound. The result should be considered an estimate.

F: The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.

FS: Follow-up testing is suggested.

G: Result may be biased high due to biogenic interferences. Clean up is recommended.

H: Sample was analyzed outside recommended holding time.

HT: ☐ At client's request, samples was analyzed outside of recommended holding time.

HP: Sample was analyzed outside recommended holding time due to VOA having pH >2.



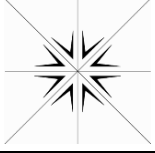
Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: 2407228
Date: 8/27/2024

Definitions:

- J: The results for this analyte is between the MDL and the PQL and should be considered an estimated concentration.
- K: Diesel result is biased high due to amount of Oil contained in the sample.
- L: Diesel result is biased high due to amount of Gasoline contained in the sample.
- M: Oil result is biased high due to amount of Diesel contained in the sample.
- N: Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC: Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI: Result is outside control limits due to matrix interference.
- NH: Sample matrix is non-homogeneous
- MSA: Value determined by Method of Standard Addition.
- O: Laboratory Control Standard (LCS) exceeded laboratory control limits but meets CCV criteria. Data meets EPA requirements.
- Q: Detection levels elevated due to sample matrix.
- R: RPD control limits were exceeded
- RF: Duplicate failed due to result being at or near the method-reporting limit.
- RP: Matrix spike values exceed established QC limits; post digestion spike is in control.
- S: Recovery is outside control limits.
- SC: CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
-



Specialty Analytical
9011 SE Jannsen Ra
Clackamas, Oregon 97015
TEL: 503-607-1331 FAX: 503-607-1336
Website: www.specialtyanalytical.com

Definition Only

WO#: **2407228**

Date: **8/27/2024**

Definitions:

SL: LCS exceeded recovery control limits, but associated MS/MSD passing. Data meets EPA requirements.

SV: CCV exceeded low recovery control limits. ND as reported evaluated using EPA method 8260D section 11.4.3.2

TA: Sample treated with ascorbic acid for the removal of thiocyanates.

TS: Sample treated with Sodium Sulfite for the removal of chlorine.