MAUL FOSTER ALONGI
3140 NE Broadway Street | Portland, OR 97232 | 971 544-2139 | www.maulfoster.com

October 21, 2021
Project No. 8006.67.01

Mr. Max Hueftle, PE, BCEE
Lane Regional Air Protection Agency
1010 Main Street
Springfield, OR 97477

Re: Final Liquid-Oil Sampling Results and Lab Reports

Dear Mr. Hueftle:

J.H. Baxter & Co. (Baxter) owns and operates a wood preservation facility located at 3494 Roosevelt Boulevard in Eugene, Oregon 97402 (the facility). In February, March, and June of 2021, multiple raw material and process water samples were collected at the facility and sent for subsequent analyses to the RJ Lee Group, Inc. (RJ Lee) and Cape Fear Analytical LLC (CFA) laboratories. MFA conducted an independent review of the quality of the analytical results presented in each RJ Lee and CFA draft lab report.

On September 10, 2021, MFA provided three summary tables to the Lane Regional Air Protection Agency (LRAPA) containing the validated liquid- and oil-based sampling results. These summary tables were submitted to LRAPA prior to receiving the final consolidated lab report from RJ Lee addressing final review comments from MFA. MFA received the final consolidated lab report from RJ Lee on October 15, 2021.

MFA conducted another round of quality assurance/quality control review of the final consolidated lab report from RJ Lee. During this final review, MFA identified the following revisions in the final consolidated lab report:

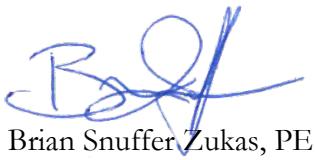
- Units were updated for sample ID PCPHO-01 from ug/L to mg/kg. The units were incorrectly shown in a previous version of the lab report.
- Analytical results for biphenyl for sample IDs STRM-01 and POND-01, and for quinoline for sample ID POND-01 only, were added. These analytical results were incorrectly left off the previous version of the lab report.
- RJ Lee erroneously included the February 11, 2021 phenol result in the final consolidated lab report, which was previously invalidated by MFA for multiple reasons, and is only included in the final consolidated lab report to avoid any further delays with providing the lab reports to LRAPA.

Updated summary tables incorporating these revisions to the initial summary tables provided to LRAPA are presented in Attachment A. As shown in the summary tables, additional

qualifying flags were added by MFA for various samples, primarily sample ID HOHW-01, due to laboratory issues with surrogate recoveries. The final laboratory reports from RJ Lee and CFA are presented in Attachment B.

On behalf of Baxter, MFA appreciates your patience and understanding as the analytical laboratories worked through the complex challenges presented by these difficult sample matrices. MFA looks forward to continued collaboration with LRAPA as the facility continues through the Cleaner Air Oregon permitting process steps. If you have any questions or comments, please contact me at 971-254-8077.

Sincerely,



Brian Snuffer Zukas, PE
Project Air Quality Engineer

Attachments: Attachment A—Updated Liquid-Oil Sampling Summary Tables
Attachment B—Final Laboratory Reports

cc: Georgia Baxter-Krause, (J.H. Baxter & Co.)
Chad Darby (Maul Foster and Alongi, Inc.)

ATTACHMENT A

UPDATED LIQUID-OIL SAMPLING SUMMARY TABLES

MAUL FOSTER ALONGI

Table 1
Analytical Results—Dioxins/Furans
J.H. Baxter Co.—Eugene, Oregon

Location:	CAS Number	Penta Hot Well Influent	Bunker C Oil Solution	50/50 Blend Preservative Solution	Creosote Treating Solution	Penta (PCP) Preservative Solution		Heavy Oil Hot Well Influent	Heavy Oil OWS Chamber Influent		Penta OWS Chamber Influent	Evaporator Influent [a]	Carbon Filter Inlet (Pre-Treat)	Evaporator Blowdown (Recycle)	Stormwater Treatment Influent	Mill Pond
Sample Name:		PCPHW-01	OIL-01	BLND-01	CREO-01	PCP-01	PCP-01-DUP	HOHW-01	OWSHO-01	OWSHO-01-DUP	PCPHO-01	EVAP-02	CFI-01	EV-OUT-01	STRM-01	POND-01
Collection Date:		2/11/2021	2/11/2021	2/11/2021	3/31/2021	2/11/2021	2/11/2021	2/11/2021	2/11/2021	2/11/2021	2/11/2021	6/2/2021	6/2/2021	6/2/2021	2/11/2021	2/11/2021
Units:		pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/g	pg/L	pg/L	pg/L	pg/L	pg/L
1,2,3,4,6,7,8-HpCDD	35822-46-9	22,500 J	2,580 UJ	728,000 J	2,380 U	2,500,000 J	2,670,000 J	15,400 J	2,640 J	2,500 UJ	2,070,000 J	55,300 J	386,000 J	7,970,000 J	96,100 J	13,900 J
1,2,3,4,6,7,8-HpCDF	67562-39-4	18,400 J	2,580 UJ	125,000 J	2,380 U	2,050,000 J	2,180,000 J	12,600 J	2,580 UJ	2,500 UJ	1,740,000 J	16,600 J	188,000 J	2,080,000 J	13,400 J	2,790 J
1,2,3,4,7,8,9-HpCDF	55673-89-7	2,580 UJ	2,580 UJ	3,460 J	2,380 U	147,000 J	150,000 J	2,450 UJ	2,580 UJ	2,500 UJ	126,000 J	1,030 J	12,700 J	144,000 J	631 J	508 UJ
1,2,3,4,7,8-HxCDD	39227-28-6	2,580 UJ	2,580 UJ	4,880 J	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	3,480 J	98,300 J	6,900 J	511 J
1,2,3,4,7,8-HxCDF	70648-26-9	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	18,800 J	18,400 J	2,450 UJ	2,580 UJ	2,500 UJ	14,400 J	274 UJ	2,590 J	30,200 J	597 J	508 UJ
1,2,3,6,7,8-HxCDD	57653-85-7	2,580 UJ	2,580 UJ	89,400 J	2,380 U	137,000 J	132,000 J	2,450 UJ	2,580 UJ	2,500 UJ	99,200 J	5,690 J	26,300 J	982,000 J	15,300 J	1,390 J
1,2,3,6,7,8-HxCDF	57117-44-9	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	15,200 J	688 J	508 UJ
1,2,3,7,8,9-HxCDD	19408-74-3	2,580 UJ	2,580 UJ	20,600 J	2,380 U	21,600 J	23,700 J	2,450 UJ	2,580 UJ	2,500 UJ	17,500 J	2,310 J	13,200 J	413,000 J	14,900 J	1,260 J
1,2,3,7,8,9-HxCDF	72918-21-9	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	9,760 UJ	508 UJ	508 UJ
1,2,3,7,8-PeCDD	40321-76-4	2,580 UJ	2,580 UJ	4,220 J	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	676 J	2,490 UJ	106,000 J	11,000 J	554 J
1,2,3,7,8-PeCDF	57117-41-6	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	9,760 UJ	508 UJ	508 UJ
2,3,4,6,7,8-HxCDF	60851-34-5	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	17,000 J	508 UJ	508 UJ
2,3,4,7,8-PeCDF	57117-31-4	2,580 UJ	2,580 UJ	2,690 UJ	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	9,760 UJ	508 UJ	508 UJ
2,3,7,8-TCDD	1746-01-6	515 UJ	515 UJ	538 UJ	476 U	2,450 UJ	2,660 UJ	490 UJ	515 UJ	500 UJ	2,660 UJ	55 UJ	498 UJ	4,470 J	834 J	102 U
2,3,7,8-TCDF	51207-31-9	515 UJ	515 UJ	538 UJ	476 U	2,450 UJ	2,660 UJ	490 UJ	515 UJ	500 UJ	2,660 UJ	55 UJ	498 UJ	1,950 UJ	102 UJ	102 UJ
OCDD	3268-87-9	96,700 J	5,720 J	1,920,000 J	4,760 U	6,110,000 J	12,500,000 J	66,200 J	9,710 J	7,490 J	9,910,000 J	184,000 J	1,650,000 J	25,000,000 J	210,000 J	47,300 J
OCDF	39001-02-0	206,000 J	9,740 J	225,000 J	4,760 U	19,900,000 J	27,100,000 J	138,000 J	17,800 J	13,800 J	21,500,000 J	163,000 J	2,020,000 J	20,600,000 J	31,400 J	7,770 J
Total HpCDF	38998-75-3	142,000 J	5,370 J	502,000 J	2,380 U	15,900,000 J	17,800,000 J	95,300 J	10,600 J	8,360 J	13,900,000 J	98,600 J	1,130,000 J	14,300,000 J	37,400 J	7,710 J
Total HpCDD	37871-00-4	35,100 J	2,580 UJ	2,570,000 J	2,380 U	3,650,000 J	4,090,000 J	23,600 J	2,640 J	2,500 UJ	3,150,000 J	102,000 J	800,000 J	14,600,000 J	206,000 J	29,600 J
Total HxCDF	55684-94-1	14,100 J	2,580 UJ	160,000 J	2,380 U	1,740,000 J	1,730,000 J	9,390 J	2,580 UJ	2,500 UJ	1,350,000 J	13,600 J	141,000 J	1,820,000 J	13,200 J	1,620 J
Total HxCDD	34465-46-8	2,580 UJ	2,580 UJ	823,000 J	2,380 U	452,000 J	454,000 J	2,450 UJ	2,580 UJ	2,500 UJ	339,000 J	26,500 J	155,000 J	4,780,000 J	174,000 J	14,000 J
Total PentaCDF	30402-15-4	2,580 UJ	2,580 UJ	3,110 J	2,380 U	12,300 UJ	15,300 J	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	274 UJ	2,490 UJ	31,800 J	3,620 J	508 UJ
Total PentaCDD	36088-22-9	2,580 UJ	2,580 UJ	15,400 J	2,380 U	12,300 UJ	13,300 UJ	2,450 UJ	2,580 UJ	2,500 UJ	13,300 UJ	2,030 J	5,860 J	551,000 J	83,200 J	2,650 J
Total TetraCDF	30402-14-3	515 UJ	515 UJ	538 UJ	476 U	7,530 J	7,550 J	490 UJ	515 UJ	500 UJ	3,700 J	55 UJ	1,220 J	17,100 J	128 J	102 UJ
Total TetraCDD	41903-57-5	515 UJ	515 UJ	538 UJ	476 U	3,760 J	4,000 J	490 UJ	515 UJ	500 UJ	2,660 UJ	55 UJ	498 UJ	47,500 J	12,400 J	102 UJ
2,3,7,8-TCDD TEQ [b][1]	NA	1,290 J	1,290 J	8,940 J	2,380 U	25,000 J	26,700 J	1,230 J	1,290 J	1,250 J	20,700 J	2,450 J	13,800 J	384,000 J	11,000 J	554 J

Notes and acronyms are provided on the following page.

Table 1
Analytical Results—Dioxins/Furans
J.H. Baxter Co.—Eugene, Oregon

NOTES:

Results have been validated.

CAS = chemical abstracts service.

J = result is estimated.

NA = not applicable.

pg/g = picograms per gram.

pg/L = picograms per liter.

TEF = toxic equivalency factor.

TEQ = toxicity equivalence.

U = result is non-detect at the method reporting limit.

UJ = result is non-detect with an estimated detection limit.

[a] The evaporator influent was sampled on February 11, 2021 and analyzed per EPA Method 1613B. Results from this initial analysis, displayed below, were taken prior to replacement of the carbon in the treatment system while the carbon filters were operating in parallel.

The evaporator influent was re-sampled on June 2, 2021 subsequent to replacement of the carbon, but prior to re-configuring the carbon filters in series. Re-configuring the carbon filters in series has improved the overall collection and removal efficiency of the treatment system based on ongoing evaporator influent sampling (pentachlorophenol was selected as a surrogate for tracking purposes). Thus, the June re-sample results do not reflect the current treatment system configuration and will need to be scaled to calculate actual emission rates.

Initial sampling results from February are provided below, but will not be utilized for purposes of compliance with the Cleaner Air Oregon program.

Location:	Evaporator Influent	
Sample Name:	EVAP-01	EVAP-01-DUP
Collection Date:	2/11/2021	2/11/2021
Units:	pg/L	pg/L
1,2,3,4,6,7,8-HpCDD	371,000 J	454,000 J
1,2,3,4,6,7,8-HpCDF	203,000 J	253,000 J
1,2,3,4,7,8,9-HpCDF	13,600 J	18,200 J
1,2,3,4,7,8-HxCDD	3,370 J	4,540 J
1,2,3,4,7,8-HxCDF	2,490 UJ	2,520 UJ
1,2,3,6,7,8-HxCDD	24,000 J	30,300 J
1,2,3,6,7,8-HxCDF	2,490 UJ	2,520 UJ
1,2,3,7,8,9-HxCDD	12,000 J	15,700 J
1,2,3,7,8,9-HxCDF	2,490 UJ	2,520 UJ
1,2,3,7,8-PeCDD	4,700 J	5,940 J
1,2,3,7,8-PeCDF	2,490 UJ	2,520 UJ
2,3,4,6,7,8-HxCDF	2,490 UJ	2,520 UJ
2,3,4,7,8-PeCDF	2,490 UJ	2,520 UJ
2,3,7,8-TCDD	497 UJ	507 J
2,3,7,8-TCDF	497 UJ	504 UJ
OCDD	1,700,000 J	2,100,000 J
OCDF	2,280,000 J	2,930,000 J
Total HpCDF	1,560,000 J	1,920,000 J
Total HpCDD	722,000 J	891,000 J
Total HxCDF	156,000 J	193,000 J
Total HxCDD	164,000 J	213,000 J
Total PentaCDF	4,100 J	6,800 J
Total PentaCDD	28,200 J	38,200 J
Total TetraCDF	1,470 J	2,140 J
Total TetraCDD	2,890 J	4,240 J
2,3,7,8-TCDD TEQ[a][1]	4,700 J	5,940 J

[b] The 2,3,7,8-TCDD TEQ is calculated as the sum of each detected congener concentration multiplied by the corresponding TEF. Non-detect values are also multiplied by one-half.

REFERENCE:

[1] 2005 World Health Organization consensus TEF values for mammals (Van den Berg et al., 2006).

MAUL FOSTER ALONGI

Table 2
Analytical Results—Polycyclic Aromatic Hydrocarbons, Pentachlorophenol, and Phenols
J.H. Baxter Co.—Eugene, Oregon

Location:	CAS Number	Penta Hot Well Influent		Bunker C Oil Solution		50/50 Blend Preservative Solution		Penta (PCP) Preservative Solution			Heavy Oil Hot Well Influent		Heavy Oil Chamber Oil Water Separator Influent			Penta Chamber Oil Water Separator Influent		Evaporator Influent (Carbon Filter Discharge)			Carbon Filter Inlet (Pre-Treat)	Evaporator Blowdown (Recycle)	Stormwater Treatment Influent	Mill Pond
Sample Name:		PCPHW-01	PCPHW-02	OIL-01	OIL-02	BLND-01	BLND-02	PCP-01	PCP-01-DUP	PCP-02	HOHW-01	HOHW-02	OWSHO-01	OWSHO-01-DUP	OWSHO-02	PCPHO-01	OWSPCP-02	EVAP-01	EVAP-01-DUP	EVAP-02	CFI-01	EV-OUT-01	STRM-01	POND-01
Collection Date:		2/11/2021	6/3/2021	2/11/2021	6/3/2021	2/11/2021	6/3/2021	2/11/2021	2/11/2021	6/3/2021	2/11/2021	6/3/2021	2/11/2021	2/11/2021	6/3/2021	2/11/2021	6/3/2021	2/11/2021	2/11/2021	6/2/2021	6/2/2021	6/3/2021	2/11/2021	2/11/2021
Units:		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ug/L	ug/L	ug/L	ug/L	ug/L	mg/kg	mg/kg	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1-Methylnaphthalene	90-12-0	-- [a]	2,500	-- [a]	986	-- [a]	15,400	-- [a]	-- [a]	100 U	-- [a]	25,200 J-	-- [a]	-- [a]	1,320 J-	-- [a]	296	-- [a]	-- [a]	155 J- [b]	4,140 J-	240 J- [b]	5.4 UJ	22 J-
1-Methylphenanthrene	832-69-9	-- [a]	96 U	-- [a]	1,300	-- [a]	1,280	-- [a]	-- [a]	100 U	-- [a]	26 J-	-- [a]	-- [a]	20 UJ	-- [a]	98 U	-- [a]	-- [a]	1.9 UJ [b]	20 UJ	50.2 J- [b]	5.4 UJ	5.4 UJ
2-Methylnaphthalene	91-57-6	-- [a]	5,910	-- [a]	1,790	-- [a]	30,000	-- [a]	-- [a]	100 U	-- [a]	60,000 J-	-- [a]	-- [a]	2,580 J-	-- [a]	563	-- [a]	-- [a]	325 J- [b]	8,530 J-	573 J- [b]	5.4 UJ	56 J-
2-Methylphenol	95-48-7	-- [a]	96 U	-- [a]	97 U	-- [a]	112	-- [a]	-- [a]	100 U	-- [a]	11,700 J-	-- [a]	-- [a]	772 J-	-- [a]	98 U	-- [a]	-- [a]	893 J- [b]	2,180 J-	720 J- [b]	5.4 UJ	5.4 UJ
5-Methylchrysene	3697-24-3	-- [a]	96 U	-- [a]	905	-- [a]	381	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	20 UJ	-- [a]	98 U	-- [a]	-- [a]	1.9 UJ [b]	24 J-	21.2 J- [b]	5.4 UJ	5.4 UJ
Acenaphthene	83-32-9	-- [a]	755	-- [a]	345	-- [a]	40,000	-- [a]	-- [a]	100 U	-- [a]	9,850 J-	-- [a]	-- [a]	1,610 J-	-- [a]	177	-- [a]	-- [a]	203 J- [b]	5,940 J-	20 UJ [b]	5.4 UJ	7.5 J-
Acenaphthylene	208-96-8	-- [a]	96 U	-- [a]	3,470	-- [a]	100 U	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	20 UJ	-- [a]	98 U	-- [a]	-- [a]	19 UJ [b]	64.4 J-	1,160 J- [b]	5.4 UJ	5.4 UJ
Anthracene	120-12-7	-- [a]	96 U	-- [a]	2,380	-- [a]	6,750	-- [a]	-- [a]	100 U	-- [a]	200 J-	-- [a]	-- [a]	322 J-	-- [a]	98 U	-- [a]	-- [a]	21.9 J- [b]	1,250 J-	245 J- [b]	5.4 UJ	5.4 UJ
Benzo(a)anthracene	56-55-3	-- [a]	96 U	-- [a]	2,670	-- [a]	6,430	-- [a]	-- [a]	100 U	-- [a]	22.4 J	-- [a]	-- [a]	155 J-	-- [a]	98 U	-- [a]	-- [a]	4.88 J [b]	645 J-	559 J- [b]	5.4 UJ	5.4 UJ
Benzo(a)pyrene	50-32-8	-- [a]	96 U	-- [a]	1,980	-- [a]	1,820	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	42.4 J	-- [a]	98 U	-- [a]	-- [a]	2.13 J [b]	166 J-	41.6 J [b]	5.4 UJ	5.4 UJ
Benzo(b)fluoranthene	205-99-2	-- [a]	96 U	-- [a]	1,380	-- [a]	1,840	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	54.4 J	-- [a]	98 U	-- [a]	-- [a]	2.56 J [b]	205 J-	210 J- [b]	5.4 UJ	5.4 UJ
Benzo(g,h,i)perylene	191-24-2	-- [a]	96 U	-- [a]	1,020	-- [a]	564	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	20 UJ	-- [a]	98 U	-- [a]	-- [a]	1.9 UJ [b]	46.6 J-	29.2 J- [b]	5.4 UJ	5.4 UJ
Benzo(k)fluoranthene	207-08-9	-- [a]	96 U	-- [a]	1,360	-- [a]	1,980	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	48.6 J-	-- [a]	98 U	-- [a]	-- [a]	1.96 J- [b]	209 J-	216 J- [b]	5.4 UJ	5.4 UJ
Biphenyl	92-52-4	--	96 U	--	396	--	8,450	--	--	100 U	--	6,990 J-	--	--	461 J-	--	98 U	--	--	48.9 J- [b]	1,770 J-	109 J- [b]	5.4 UJ	5.4 J-
Carbazole	86-74-8	-- [a]	96 U	-- [a]	1,310	-- [a]	7,970	-- [a]	-- [a]	100 U	-- [a]	67.8 J-	-- [a]	-- [a]	539 J-	-- [a]	98 U	-- [a]	-- [a]	82.8 J- [b]	1,650 J-	742 J- [b]	5.4 UJ	5.4 UJ
Chrysene	218-01-9	-- [a]	96 U	-- [a]	3,680	-- [a]	5,900	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	138 J-	-- [a]	98 U	-- [a]	-- [a]	3.42 J- [b]	605 J-	567 J- [b]	5.4 UJ	5.4 UJ
Dibenz(a,h)anthracene	53-70-3	-- [a]	96 U	-- [a]	97 U	-- [a]	100 U	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	20 UJ	-- [a]	98 U	-- [a]	-- [a]	1.9 UJ [b]	30.2 J	31.8 J [b]	5.4 UJ	5.4 UJ
Dibenzofuran	132-64-9	-- [a]	352	-- [a]	1,420	-- [a]	23,200	-- [a]	-- [a]	100 U	-- [a]	4,100 J-	-- [a]	-- [a]	866 J-	-- [a]	138	-- [a]	-- [a]	42.2 J- [b]	3,310 J-	106 J- [b]	5.4 UJ	5.4 UJ
Fluoranthene	206-44-0	-- [a]	96 U	-- [a]	5,970	-- [a]	40,100	-- [a]	-- [a]	100 U	-- [a]	165 J-	-- [a]	-- [a]	1,170 J-	-- [a]	119	-- [a]	-- [a]	45 J- [b]	4,240 J-	2,460 J- [b]	5.4 UJ	5.4 UJ
Fluorene	86-73-7	-- [a]	198	-- [a]	2,420	-- [a]	21,700	-- [a]	-- [a]	100 U	-- [a]	1,930 J-	-- [a]	-- [a]	722 J-	-- [a]	113	-- [a]	-- [a]	42.6 J- [b]	2,940 J-	184 J- [b]	5.4 UJ	5.4 UJ
Indeno(1,2,3-c,d)pyrene	193-39-5	-- [a]	96 U	-- [a]	901	-- [a]	576	-- [a]	-- [a]	100 U	-- [a]	20 UJ	-- [a]	-- [a]	25.6 J	-- [a]	98 U	-- [a]	-- [a]	1.9 UJ [b]	55.2 J	41 J [b]	5.4 UJ	5.4 UJ
Naphthalene	91-20-3	-- [a]	16,500	-- [a]	18,600	-- [a]	21,400	-- [a]	-- [a]	100 U	-- [a]	143,000 J-	-- [a]	-- [a]	6,030 J-	-- [a]	1,150	-- [a]	-- [a]	1,490 J- [b]	14,600 J-	819 J- [b]	6.1 J	170 J-
Pentachlorophenol	87-86-5	-- [a]	37,800	-- [a]	97 U [c]	-- [a]	1,070 [c]	-- [a]	-- [a]	68,900	-- [a]	--	-- [a]	-- [a]	330,000 J	-- [a]	67,100	-- [a]	-- [a]	258,000 J [b]	389,000 J	2,820,000 J [b]	100 J	32 J
Phenanthrene	85-01-8	-- [a]	118	-- [a]	9,350	-- [a]	54,400	-- [a]	-- [a]	100 U	-- [a]	1,040 J-	-- [a]	-- [a]	1,700 J-	-- [a]	164	-- [a]	-- [a]	66.4 J- [b]	6,530 J-	967 J- [b]	5.4 UJ	5.4 UJ
Phenol	108-95-2	100 U	--	900	--	794	--	250 U	250 U	--	197,000 J-	36,000 J-	4,990 J-	4,220 J-	--	65	--	1,700 J-	2,000 J-	--	--	--	5.4 UJ	5.4 UJ
Pyrene	129-00-0	-- [a]	96 U	-- [a]	4,850	-- [a]	24,700	-- [a]	-- [a]	100 U	-- [a]	54.2 J-	-- [a]	-- [a]	629 J-	-- [a]	98 U	-- [a]	-- [a]	16.3 J- [b]	65.4 J-	1,490 J- [b]	5.4 UJ	5.4 UJ
Quinoline	91-22-5	-- [a]	96 U	-- [a]	319	-- [a]	8,300	-- [a]	-- [a]	100 U	-- [a]	90,000 J-	-- [a]	-- [a]	10,700 J-	-- [a]	115	-- [a]	-- [a]	11,000 J- [b]	35,300 J-	5,200 J- [b]	5.4 UJ	19 J-

NOTES:

Results have been validated.

-- = not analyzed.

CAS = chemical abstracts service.

J = result is estimated.

J- = result is estimated with a potential low bias.

mg/kg = milligrams per kilogram.

NA = not applicable.

PAH = polycyclic aromatic hydrocarbon.

ug/L = micrograms per liter.

U = result is non-detect at the method reporting limit.

UJ = result is non-detect with an estimated detection limit.

[a] Analysis performed, but following recommendations from the analytical laboratory, the sampling result was invalidated due to analytical quality control issues.

[b] The June 2, 2021 sampling results were collected prior to re-configuring the carbon filters in series. Re-configuring the carbon filters in series has improved the overall collection and removal efficiency of the treatment system based on ongoing evaporator influent sampling. Thus, the June sampling results do not reflect the current treatment system configuration and will need to be scaled to calculate actual emission rates.

[c] Analysis for pentachlorophenol was not requested in the chain of custody form and is not shown in the analytical laboratory report, but is presented the electronic data deliverable provided by the analytical laboratory. See samples OIL-02 and BLND-02.

Table 3
Analytical Results—Aldehydes, BTEX, Methanol, Ammonia, and Metals
J.H. Baxter Co.—Eugene, Oregon

Location:	(Units)	CAS Number	Penta Hot Well Influent	Bunker C Oil Solution	50/50 Blend Preservative Solution	Heavy Oil Hot Well Influent		ACZA Hot Well Influent	Heavy Oil Chamber Oil Water Separator Influent		Penta Chamber Oil Water Separator Influent		Evaporator Influent (Carbon Filter Discharge)			Storm Water Treatment Influent	Mill Pond
Sample Name:			PCPHW-01	OIL-01	BLND-01	HOHW-01	HOHW-02	ACZAHW-01	OWSHO-01	OWSHO-01-DUP	PCPHO-01	OWSPCP-02	EVAP-01	EVAP-01-DUP	EVAP-02	STRM-01	POND-01
Collection Date:			2/11/2021	2/11/2021	2/11/2021	2/11/2021	6/3/2021	2/11/2021	2/11/2021	2/11/2021	2/11/2021	6/3/2021	2/11/2021	2/11/2021	6/2/2021	2/11/2021	2/11/2021
Aldehydes																	
Acetaldehyde	(mg/L)	75-07-0	5.5	--	--	0.59	24.68 J	0.87	5.65	5.73	1.42	--	2.11	1.98	--	--	--
Acrolein	(mg/L)	107-02-8	0.32 J-	--	--	0.25 R	0.25 UJ	0.25 R	0.25 UJ	0.25 R	0.25 R	--	0.25 R	0.25 R	--	--	--
Formaldehyde	(mg/L)	50-00-0	26.88	--	--	0.25 U	2.18	0.25 U	1.38	1.37	0.57 J	--	0.68 J	0.64 J	--	--	--
Propanal	(mg/L)	123-38-6	1.11 J-	--	--	0.25 UJ	2.51 J	0.25 UJ	0.72 J-	0.77 J-	1.86 J-	--	0.25 UJ	0.25 UJ	--	--	--
Miscellaneous																	
Methanol	(mg/L)	67-56-1	1,980	--	--	50 U	--	623 R	387	441	--	--	191 R	145 R	--	--	--
Methanol	(mg/kg)	67-56-1	--	--	--	--	--	--	--	--	25 U	--	--	--	--	--	--
Ammonia-N	(mg/L)	7664-41-7	--	--	--	--	--	14,100	185	169	--	--	157	171	--	--	--
BTEX																	
Benzene	(ug/L)	71-43-2	3.06 U	--	--	4,950	--	52.9 J	36.6 J	4.4 UJ	--	--	3.95 UJ	4.95 UJ	--	0.5 UJ	0.5 UJ
Ethylbenzene	(ug/L)	100-41-4	0.25 U	--	--	17,800	--	70.7 J	113 J	189 J	--	--	23.9 J	42.1 J	--	0.64 UJ	2.86 UJ
m,p-Xylene	(ug/L)	179601-23-1	0.25 U	--	--	31,000 J	--	141 J	340 J	586 J	--	--	52.4 J	84.9 J	--	1 UJ	5.56 J
o-Xylene	(ug/L)	95-47-6	0.25 U	--	--	13,600	--	62.5 J	231 J	408 J	--	--	28.2 J	41.7 J	--	0.5 UJ	2.64 UJ
Toluene	(ug/L)	108-88-3	0.5 U	--	--	12,700	--	26.7 J	28.5 J	43.4 J	--	--	15.2 J	24.1 J	--	0.62 UJ	1.86 UJ
Benzene	(mg/kg)	71-43-2	--	261	50 U	--	--	--	--	--	--	--	--	--	--	--	--
Ethylbenzene	(mg/kg)	100-41-4	--	65.5	50 U	--	--	--	--	--	--	--	--	--	--	--	--
m,p-Xylene	(mg/kg)	179601-23-1	--	359	50 U	--	--	--	--	--	--	--	--	--	--	--	--
o-Xylene	(mg/kg)	95-47-6	--	141	50 U	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	(mg/kg)	108-88-3	--	290	50 U	--	--	--	--	--	--	--	--	--	--	--	--
Total Metals																	
Arsenic	(ug/L)	7440-38-2	--	--	--	--	--	--	--	--	--	--	5,645.79 J	7,405.85 J	37,030.51	--	--
Barium	(ug/L)	7440-39-3	--	--	--	--	--	--	--	--	--	--	10 U	10 U	100 U	--	--
Beryllium	(ug/L)	7440-41-7	--	--	--	--	--	--	--	--	--	--	10 U	10 U	20 U	--	--
Cadmium	(ug/L)	7440-43-9	--	--	--	--	--	--	--	--	--	--	10 U	10 U	20 U	--	--
Chromium	(ug/L)	7440-47-3	--	--	--	--	--	--	--	--	--	--	10 U	10 U	20 U	--	--
Cobalt	(ug/L)	7440-48-4	--	--	--	--	--	--	--	--	--	--	10 U	10 U	20 U	--	--
Copper	(ug/L)	7440-50-8	--	--	--	--	--	--	--	--	--	--	3,560.88	3,436.34	30,603	--	--
Lead	(ug/L)	7439-92-1	--	--	--	--	--	--	--	--	--	--	10 U	10 U	100 U	--	--
Manganese	(ug/L)	7439-96-5	--	--	--	--	--	--	--	--	--	--	25.769	14.348	20 U	--	--
Mercury	(ug/L)	7439-97-6	--	--	--	--	--	--	--	--	--	--	5 U	5 U	10 U	--	--
Nickel	(ug/L)	7440-02-0	--	--	--	--	--	--	--	--	--	--	10 U	10 U	20 U	--	--
Selenium	(ug/L)	7782-49-2	--	--	--	--	--	--	--	--	--	--	10 U	20 U	100 U	--	--
Vanadium	(ug/L)	7440-62-2	--	--	--	--	--	--	--	--	--	--	15.443	21.997	25.615	--	--
Zinc	(ug/L)	7440-66-6	--	--	--	--	--	--	--	--	--	--	309.72 J	274.84 J	2130.84	--	--

NOTES:

Results have been validated.

-- = not analyzed.

BTEX = benzene, toluene, ethylbenzene, and xylenes.

CAS = chemical abstracts service.

J = result is estimated.

J- = result is estimated with a potential low bias.

mg/kg = milligrams per kilogram.

mg/L = milligrams per liter.

R = result is rejected.

U = result is non-detect at the method reporting limit.

ug/L = micrograms per liter.

UJ = result is non-detect with an estimated detection limit.

ATTACHMENT B

FINAL LABORATORY REPORTS

ATTACHMENT B.1

CAPE FEAR ANALYTICAL LLC REPORT WO17794
(FEBRUARY, 2021 SAMPLES)

CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421
www.capefearanalytical.com

March 19, 2021

Mr. Paul Ioannides
RJ Lee Group
350 Hochberg Road
Monroeville, Pennsylvania 15146

Re: Dioxin Subcontract
Work Order: 17794

Dear Mr. Ioannides:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on February 25, 2021. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,

Cynde Larkins

Cynde Larkins
Project Manager

Enclosures

problem solved

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.
Columbia Basin Analytical Laboratories
2710 North 20th Avenue, Pasco, WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

CFA WO# 17794

Request for Laboratory Analytical Services
Chain of Custody

CC06004 Rev. 02

Lab Use Only	Purchase Order No.:	Client Job No.:
	Project No.:	Client No.:
	Date Logged In:	Logged In By:
Report Results To	Name: Brian Snuffer Zukas	
	Company: Maul Foster & Alongi, Inc	
	Address: 3140 NE Broadway Street	
	City, State, Zip: Portland, OR 97232	
	Phone: 509-303-3607	Fax:
	Call with Verbal Results:	
	Email Results To: jfurlong@rjleegroup.com	
	Fax Results To:	
Send Invoice To	Name: Same as above	
	Company:	Email: jfurlong@rjleegroup.com & hhartman@rileegroup.com
	Address:	
	City, State, Zip:	
	Phone:	Fax:
Special Instructions		

Turnaround Request: TAT: 8 hrs 1 day 3 day 5 day 10 day — 5 to 7 day

Drinking Water Sample Only:
- Sample Purpose: Information ☐ Regulatory ☐
- System ID No.:
- DOH Source No.:
- Multiple Sources Nos.:
- Sample Purpose: A ☐ B ☐ Other ☐

Chemistry Analysis Key:
- **Preservation:** Unpres, 4°C, HNO_3, Other, H_2SO_4, HCl, NaOH, Na_2SO_4
- **Matrix:** WW=Wastewater, GW=Groudwater, S=Soil/Sludge, E=Extract, SW=Surface Water, DW=Drinking Water, O=Oil, X=Other
- **Container:** P=Plastic, G=Glass, W=Wipe, A=Air (filter or tube)
- Date:_____Time_____

Sample Identification	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	Analysis Requested: Dioxens - 1613B	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
PCPHW-01	Pento Treating Solution (oil based)	02/11/21	12:25:00 PM			X						
OIL-01	Bunker Coil Solution (oil based)	02/11/21	10:05:00 AM			X						
BLND-01	50/50 Blend Solution (oil based)	02/11/21	10:14:00 AM			X						
PCP-01	Penta Hot Well Influent (oil based)	02/11/21	1:00:00 PM			X						
PCP-01-DUP	Penta Hot Well Influent (oil based)	02/11/21	1:00:00 PM			X						
HOHW-01	Heavy Oil Hot Well (oil based)	02/11/21	10:45:00 AM			X						
OWSHO-01	Heavy Oil Chamber Influent (oil based)	02/11/21	11:18:00 AM			X						
OWSHO-01 DUP	Heavy Oil Chamber Influent (oil based)	02/11/21	11:18:00 AM			X						
PCPHO-01	Penta Chamber Influtent (oil based)	02/11/21	11:30:00 AM			X						
EVAP-01	Evaporator Influent (Liquid Based)	02/11/21	11:52:00 AM			X						
EVAP-01 DUP	Evaporator Influent (Liquid Based)	02/11/21	11:52:00 AM			X						
STRM-01	Storm Water Treatment System Influent (Liquid Based)	02/11/21	12:06:00 PM			X						
POND-01	Mill Pond	02/11/21	12:00:00 PM			X						

Chain of Custody	Relinquished By (Signature): JJ Furlong	Date: 02/17/21	Time: 11:05	Received By (Signature):	Date: 2/25/21 Time: 11:20
	Relinquished By (Print Name): JJ Furlong	Relinquished To: FedEx		Received By (Print Name): Rebecca O'Toole	Relinquished To:
	Company Name: RJ Lee Group, Inc	Method of Shipment: FedEx		Company Name: CFA	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

Questions?
Contact Client Services:
(509) 545-4989

2710 North 20th Avenue
Pasco, WA 99301
Tel: (509) 545-4989
Fax: (509) 544-6010

temp. @ CFA rec't = 14.2°C

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client: RJ LEE Group	Work Order: 17794
Shipping Company: FedEx	Date/Time Received: 2/25/21 11:20

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			✓
Samples identified as Foreign Soil?			✓

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?		✓	
Samples < 2x background?		✓	

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			✓

Air Witness: _____

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Custody seal/s present on cooler?			✓	Seal intact? Yes No
3	Chain of Custody documents included with shipment?	✓			
4	Samples requiring cold preservation within 0-6°C?			✓	Preservation Method: ice bags loose ice blue ice dry ice none other (describe) Temperature Blank present: Yes (No) 14.1 to 1.7 = 14.2° thermosafe polar pack
5	Aqueous samples found to have visible solids?	✓			Sample IDs, containers affected: EVAP-01, EVAP01 Dup, STRM-01, POND-01 minimal solids all other samples are oily
5	Samples requiring chemical preservation at proper pH?			✓	Sample IDs, containers affected and pH observed: EVAP-01, EVAP-01 Dup PH= 11, Strm-01, Pond-01 PH=7 If preservative added, Lot#: did not take PH of oily samples
7	Samples requiring preservation have no residual chlorine?			✓	Sample IDs, containers affected: EVAP-01, EVAP-01 Dup - could not determine - Sample is yellow If preservative added, Lot#: did not take chlorine test for oily samples
8	Samples received within holding time?	✓			Sample IDs, tests affected:
9	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
10	Date & time of COC match date & time on containers?			✓	Sample IDs, containers affected: No time on Sample labels
11	Number of containers received match number indicated on COC?			✓	List type and number of containers / Sample IDs, containers affected: COC did not list # of containers received 8-1L amber, 17-40ml received 24 2ml vials for all samples except DUP HWD
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: MO Date: 2/25/21

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
RJ Lee Group, Inc. (RJLG)
SDG 17794

Method/Analysis Information

Product:	**Dioxins/Furans by EPA Method 1613B in Liquids, Dioxins/Furans by EPA Method 1613B in Solids**
Analytical Method:	EPA Method 1613B
Extraction Method:	SW846 3520C, SW846 3540C
Analytical Batch Number:	46287, 46224
Clean Up Batch Number:	46286, 46223
Extraction Batch Number:	46285, 46222

Sample Analysis

Samples were received at 14.2°C.
(17794001,17794002,17794003,17794004,17794005,17794006,17794007,17794008,17794009, 17794010,17794011,17794012,17794013).
The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
12028785	Method Blank (MB)
12028786	Laboratory Control Sample (LCS)
12028787	Laboratory Control Sample Duplicate (LCSD)
12028788	17794001(PCPHW-01) Matrix Spike (MS)
12028789	17794001(PCPHW-01) Matrix Spike Duplicate (MSD)
12028846	Method Blank (MB)
12028847	Laboratory Control Sample (LCS)
12028848	Laboratory Control Sample Duplicate (LCSD)
17794001	PCPHW-01
17794002	OIL-01
17794003	BLND-01
17794004	PCP-01
17794005	PCP-01-DUP
17794006	HOHW-01
17794007	OWSHO-01
17794008	OWSHO-01 DUP
17794009	PCPHO-01

17794010	EVAP-01
17794011	EVAP-01 DUP
17794012	STRM-01
17794013	POND-01

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 19.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (CCV) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement
The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
One surrogate recovered marginally above accceptance criteria. 17794002 (OIL-01) and 17794003 (BLND-01)- Batch 46224.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
Sample 17794001 (PCPHW-01)- Batch 46224 was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
One MS recovery was above the acceptance limits due to matrix interference. 12028788 (PCPHW-01)- Batch 46224.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries were within the established acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Analytical Comments
Diphenyl ether (DPE) interferences were detected and co-eluted with furan totals peaks as well as a 2378-substituted furan peak. The contributions cannot be completely contributed to the interferences by professional judgment and the concentrations are flagged with a P and should be considered estimated. 17794004 (PCP-01), 17794005 (PCP-01-DUP), 17794009 (PCPHO-01)- Batch 46224, 17794010 (EVAP-01) and 17794011 (EVAP-01 DUP)- Batch 46287.

Analytical Method Verification
Concentrations of some target analytes exceed the instrument calibration range, but are not saturated. These values are considered estimates and are flagged as E. Further dilution was not performed so as not to dilute out the isotopes used for quantitation. 17794003 (BLND-01), 17794004 (PCP-01), 17794005 (PCP-01-DUP) and 17794009 (PCPHO-01)- Batch 46224. 17794011 (EVAP-01 DUP) and 17794012 (STRM-01)- Batch 46287.

Sample Dilutions
Sample extracts were diluted 50x and re-spiked with surrogates due to extremely high levels of target analytes. Sample concentrations are not recovery-corrected. –Batch 46224. An additional 5x dilution was performed at the analysis step, as some analytes were still over range. Samples 17794004 (PCP-01), 17794005 (PCP-01-DUP), 17794009 (PCPHO-01).

Samples 17794010 (EVAP-01) and 17794011 (EVAP-01 DUP)- Batch 46287 were diluted 5x due to the presence of over-range target analytes.

Sample Re-extraction/Re-analysis
Samples were re-extracted due to low native recoveries in the associated LCS/LCSD. Additionally, the samples were re-extracted at a reduced volume of 100mL due to high levels of target analytes. 17794010 (EVAP-01), 17794011 (EVAP-01 DUP), 17794012 (STRM-01) and 17794013 (POND-01)- Batch 46287.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration

This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP750_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um
HRP763_1	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report
for

RJLG001 RJ Lee Group, Inc.

Client SDG: 17794 CFA Work Order: 17794

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

E Value is estimated - Concentration of the target analyte exceeds the instrument calibration range

K Estimated Maximum Possible Concentration

P Diphenyl ether interference is present; value is estimated

Q Quantitative Interference; value is estimated

U Analyte was analyzed for, but not detected above the specified detection limit.

DL Indicates that sample is diluted.

RA Indicates that sample is re-analyzed without re-extraction.

RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature:  **Name: Erin Suhrie**

Date: 19 MAR 2021 **Title: Data Validator**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794001**	**Date Collected:**	**02/11/2021 12:25**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHW-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 01:47**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-4**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	515	pg/g	515
40321-76-4	1,2,3,7,8-PeCDD	U	2580	pg/g	2580
39227-28-6	1,2,3,4,7,8-HxCDD	QU	2580	pg/g	2580
57653-85-7	1,2,3,6,7,8-HxCDD	QU	2580	pg/g	2580
19408-74-3	1,2,3,7,8,9-HxCDD	QU	2580	pg/g	2580
35822-46-9	1,2,3,4,6,7,8-HpCDD		22500	pg/g	2580
3268-87-9	1,2,3,4,6,7,8,9-OCDD		96700	pg/g	5150
51207-31-9	2,3,7,8-TCDF	U	515	pg/g	515
57117-41-6	1,2,3,7,8-PeCDF	U	2580	pg/g	2580
57117-31-4	2,3,4,7,8-PeCDF	U	2580	pg/g	2580
70648-26-9	1,2,3,4,7,8-HxCDF	U	2580	pg/g	2580
57117-44-9	1,2,3,6,7,8-HxCDF	QU	2580	pg/g	2580
60851-34-5	2,3,4,6,7,8-HxCDF	QU	2580	pg/g	2580
72918-21-9	1,2,3,7,8,9-HxCDF	QU	2580	pg/g	2580
67562-39-4	1,2,3,4,6,7,8-HpCDF		18400	pg/g	2580
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2580	pg/g	2580
39001-02-0	1,2,3,4,6,7,8,9-OCDF		206000	pg/g	5150
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	QU	515	pg/g	515
36088-22-9	Total Pentachlorodibenzo-p-dioxin	QU	2580	pg/g	2580
34465-46-8	Total Hexachlorodibenzo-p-dioxin	QU	2580	pg/g	2580
37871-00-4	Total Heptachlorodibenzo-p-dioxin		35100	pg/g	2580
30402-14-3	Total Tetrachlorodibenzofuran	QU	515	pg/g	515
30402-15-4	Total Pentachlorodibenzofuran	QU	2580	pg/g	2580
55684-94-1	Total Hexachlorodibenzofuran	Q	14100	pg/g	2580
38998-75-3	Total Heptachlorodibenzofuran		142000	pg/g	2580
3333-30-0	TEQ WHO2005 ND=0		499	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		3410	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		93200	103000	pg/g	90.4	(25%-164%)
13C-1,2,3,7,8-PeCDD		86700	103000	pg/g	84.1	(25%-181%)
13C-1,2,3,4,7,8-HxCDD	Q	96000	103000	pg/g	93.2	(32%-141%)
13C-1,2,3,6,7,8-HxCDD	Q	93900	103000	pg/g	91.1	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		98600	103000	pg/g	95.7	(23%-140%)
13C-OCDD		204000	206000	pg/g	99.1	(17%-157%)
13C-2,3,7,8-TCDF		94400	103000	pg/g	91.6	(24%-169%)
13C-1,2,3,7,8-PeCDF		92200	103000	pg/g	89.4	(24%-185%)
13C-2,3,4,7,8-PeCDF		94100	103000	pg/g	91.3	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		94000	103000	pg/g	91.2	(26%-152%)
13C-1,2,3,6,7,8-HxCDF	Q	92300	103000	pg/g	89.5	(26%-123%)
13C-2,3,4,6,7,8-HxCDF	Q	94800	103000	pg/g	91.9	(28%-136%)
13C-1,2,3,7,8,9-HxCDF	Q	93500	103000	pg/g	90.7	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794001**	**Date Collected:**	**02/11/2021 12:25**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHW-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 01:47**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-4**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		94500	103000	pg/g	91.7	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF	Q	88400	103000	pg/g	85.7	(26%-138%)
37Cl-2,3,7,8-TCDD		7710	10300	pg/g	74.8	(35%-197%)

Comments:

Q Quantitative Interference; value is estimated

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794002**	**Date Collected:**	**02/11/2021 10:05**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OIL-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 04:16**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-7**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	515	pg/g	515
40321-76-4	1,2,3,7,8-PeCDD	U	2580	pg/g	2580
39227-28-6	1,2,3,4,7,8-HxCDD	U	2580	pg/g	2580
57653-85-7	1,2,3,6,7,8-HxCDD	U	2580	pg/g	2580
19408-74-3	1,2,3,7,8,9-HxCDD	U	2580	pg/g	2580
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	2580	pg/g	2580
3268-87-9	1,2,3,4,6,7,8,9-OCDD		5720	pg/g	5150
51207-31-9	2,3,7,8-TCDF	U	515	pg/g	515
57117-41-6	1,2,3,7,8-PeCDF	U	2580	pg/g	2580
57117-31-4	2,3,4,7,8-PeCDF	U	2580	pg/g	2580
70648-26-9	1,2,3,4,7,8-HxCDF	U	2580	pg/g	2580
57117-44-9	1,2,3,6,7,8-HxCDF	U	2580	pg/g	2580
60851-34-5	2,3,4,6,7,8-HxCDF	U	2580	pg/g	2580
72918-21-9	1,2,3,7,8,9-HxCDF	U	2580	pg/g	2580
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	2580	pg/g	2580
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2580	pg/g	2580
39001-02-0	1,2,3,4,6,7,8,9-OCDF		9740	pg/g	5150
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	515	pg/g	515
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2580	pg/g	2580
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2580	pg/g	2580
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	2580	pg/g	2580
30402-14-3	Total Tetrachlorodibenzofuran	U	515	pg/g	515
30402-15-4	Total Pentachlorodibenzofuran	U	2580	pg/g	2580
55684-94-1	Total Hexachlorodibenzofuran	U	2580	pg/g	2580
38998-75-3	Total Heptachlorodibenzofuran		5370	pg/g	2580
3333-30-0	TEQ WHO2005 ND=0		4.64	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		2940	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-2,3,7,8-TCDD		92300	103000	pg/g	89.5		(25%-164%)
13C-1,2,3,7,8-PeCDD		77100	103000	pg/g	74.8		(25%-181%)
13C-1,2,3,4,7,8-HxCDD		112000	103000	pg/g	109		(32%-141%)
13C-1,2,3,6,7,8-HxCDD		89000	103000	pg/g	86.3		(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		135000	103000	pg/g	131		(23%-140%)
13C-OCDD		337000	206000	pg/g	164	*	(17%-157%)
13C-2,3,7,8-TCDF		102000	103000	pg/g	98.6		(24%-169%)
13C-1,2,3,7,8-PeCDF		80600	103000	pg/g	78.2		(24%-185%)
13C-2,3,4,7,8-PeCDF		74900	103000	pg/g	72.6		(21%-178%)
13C-1,2,3,4,7,8-HxCDF		104000	103000	pg/g	101		(26%-152%)
13C-1,2,3,6,7,8-HxCDF		67600	103000	pg/g	65.5		(26%-123%)
13C-2,3,4,6,7,8-HxCDF		93100	103000	pg/g	90.3		(28%-136%)
13C-1,2,3,7,8,9-HxCDF		85800	103000	pg/g	83.2		(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794002**	**Date Collected:**	**02/11/2021 10:05**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OIL-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 04:16**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-7**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		100000	103000	pg/g	97.5	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		125000	103000	pg/g	121	(26%-138%)
37Cl-2,3,7,8-TCDD		7540	10300	pg/g	73.2	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794003**	**Date Collected:**	**02/11/2021 10:14**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**BLND-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 05:06**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-8**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0186 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	538	pg/g	538
40321-76-4	1,2,3,7,8-PeCDD		4220	pg/g	2690
39227-28-6	1,2,3,4,7,8-HxCDD	Q	4880	pg/g	2690
57653-85-7	1,2,3,6,7,8-HxCDD	Q	89400	pg/g	2690
19408-74-3	1,2,3,7,8,9-HxCDD	Q	20600	pg/g	2690
35822-46-9	1,2,3,4,6,7,8-HpCDD		728000	pg/g	2690
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1920000	pg/g	5380
51207-31-9	2,3,7,8-TCDF	U	538	pg/g	538
57117-41-6	1,2,3,7,8-PeCDF	U	2690	pg/g	2690
57117-31-4	2,3,4,7,8-PeCDF	U	2690	pg/g	2690
70648-26-9	1,2,3,4,7,8-HxCDF	U	2690	pg/g	2690
57117-44-9	1,2,3,6,7,8-HxCDF	QU	2690	pg/g	2690
60851-34-5	2,3,4,6,7,8-HxCDF	QU	2690	pg/g	2690
72918-21-9	1,2,3,7,8,9-HxCDF	QU	2690	pg/g	2690
67562-39-4	1,2,3,4,6,7,8-HpCDF		125000	pg/g	2690
55673-89-7	1,2,3,4,7,8,9-HpCDF		3460	pg/g	2690
39001-02-0	1,2,3,4,6,7,8,9-OCDF		225000	pg/g	5380
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	QU	538	pg/g	538
36088-22-9	Total Pentachlorodibenzo-p-dioxin	Q	15400	pg/g	2690
34465-46-8	Total Hexachlorodibenzo-p-dioxin	Q	823000	pg/g	2690
37871-00-4	Total Heptachlorodibenzo-p-dioxin	E	2570000	pg/g	2690
30402-14-3	Total Tetrachlorodibenzofuran	QU	538	pg/g	538
30402-15-4	Total Pentachlorodibenzofuran	Q	3110	pg/g	2690
55684-94-1	Total Hexachlorodibenzofuran	Q	160000	pg/g	2690
38998-75-3	Total Heptachlorodibenzofuran		502000	pg/g	2690
3333-30-0	TEQ WHO2005 ND=0		24900	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		26200	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-2,3,7,8-TCDD		97300	108000	pg/g	90.5		(25%-164%)
13C-1,2,3,7,8-PeCDD		84300	108000	pg/g	78.4		(25%-181%)
13C-1,2,3,4,7,8-HxCDD	Q	112000	108000	pg/g	104		(32%-141%)
13C-1,2,3,6,7,8-HxCDD	Q	91200	108000	pg/g	84.8		(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		140000	108000	pg/g	130		(23%-140%)
13C-OCDD		351000	215000	pg/g	163	*	(17%-157%)
13C-2,3,7,8-TCDF		105000	108000	pg/g	97.6		(24%-169%)
13C-1,2,3,7,8-PeCDF		91800	108000	pg/g	85.4		(24%-185%)
13C-2,3,4,7,8-PeCDF		96200	108000	pg/g	89.4		(21%-178%)
13C-1,2,3,4,7,8-HxCDF		106000	108000	pg/g	98.4		(26%-152%)
13C-1,2,3,6,7,8-HxCDF	Q	71100	108000	pg/g	66.1		(26%-123%)
13C-2,3,4,6,7,8-HxCDF	Q	97300	108000	pg/g	90.5		(28%-136%)
13C-1,2,3,7,8,9-HxCDF	Q	82000	108000	pg/g	76.3		(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794003**	**Date Collected:**	**02/11/2021 10:14**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**BLND-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 05:06**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-8**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0186 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		102000	108000	pg/g	94.9	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF	Q	124000	108000	pg/g	116	(26%-138%)
37Cl-2,3,7,8-TCDD		8070	10800	pg/g	75.0	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**

Q **Quantitative Interference; value is estimated**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794004**	**Date Collected:**	**02/11/2021 13:00**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCP-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 04:35**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-9**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0204 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	2450	pg/g	2450
40321-76-4	1,2,3,7,8-PeCDD	U	12300	pg/g	12300
39227-28-6	1,2,3,4,7,8-HxCDD	U	12300	pg/g	12300
57653-85-7	1,2,3,6,7,8-HxCDD		137000	pg/g	12300
19408-74-3	1,2,3,7,8,9-HxCDD		21600	pg/g	12300
35822-46-9	1,2,3,4,6,7,8-HpCDD		2500000	pg/g	12300
3268-87-9	1,2,3,4,6,7,8,9-OCDD		6110000	pg/g	24500
51207-31-9	2,3,7,8-TCDF	U	2450	pg/g	2450
57117-41-6	1,2,3,7,8-PeCDF	U	12300	pg/g	12300
57117-31-4	2,3,4,7,8-PeCDF	U	12300	pg/g	12300
70648-26-9	1,2,3,4,7,8-HxCDF		18800	pg/g	12300
57117-44-9	1,2,3,6,7,8-HxCDF	U	12300	pg/g	12300
60851-34-5	2,3,4,6,7,8-HxCDF	U	12300	pg/g	12300
72918-21-9	1,2,3,7,8,9-HxCDF	U	12300	pg/g	12300
67562-39-4	1,2,3,4,6,7,8-HpCDF	P	2050000	pg/g	12300
55673-89-7	1,2,3,4,7,8,9-HpCDF		147000	pg/g	12300
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	19900000	pg/g	24500
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		3760	pg/g	2450
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	12300	pg/g	12300
34465-46-8	Total Hexachlorodibenzo-p-dioxin		452000	pg/g	12300
37871-00-4	Total Heptachlorodibenzo-p-dioxin		3650000	pg/g	12300
30402-14-3	Total Tetrachlorodibenzofuran	P	7530	pg/g	2450
30402-15-4	Total Pentachlorodibenzofuran	PU	12300	pg/g	12300
55684-94-1	Total Hexachlorodibenzofuran	P	1740000	pg/g	12300
38998-75-3	Total Heptachlorodibenzofuran	E	15900000	pg/g	12300
3333-30-0	TEQ WHO2005 ND=0		72500	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		84400	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		89200	98000	pg/g	91.0	(25%-164%)
13C-1,2,3,7,8-PeCDD		77700	98000	pg/g	79.2	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		84900	98000	pg/g	86.6	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		80400	98000	pg/g	82.0	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		94900	98000	pg/g	96.8	(23%-140%)
13C-OCDD		216000	196000	pg/g	110	(17%-157%)
13C-2,3,7,8-TCDF		89800	98000	pg/g	91.5	(24%-169%)
13C-1,2,3,7,8-PeCDF		84200	98000	pg/g	85.9	(24%-185%)
13C-2,3,4,7,8-PeCDF		87000	98000	pg/g	88.7	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		86000	98000	pg/g	87.7	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		81400	98000	pg/g	83.0	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		84000	98000	pg/g	85.7	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		82800	98000	pg/g	84.4	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794004**	**Date Collected:**	**02/11/2021 13:00**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCP-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 04:35**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-9**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0204 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF	P	87000	98000	pg/g	88.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		86600	98000	pg/g	88.4	(26%-138%)
37Cl-2,3,7,8-TCDD		7380	9800	pg/g	75.3	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**

P **Diphenyl ether interference is present; value is estimated**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794005**	**Date Collected:**	**02/11/2021 13:00**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCP-01-DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 05:25**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-10**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0188 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	2660	pg/g	2660
40321-76-4	1,2,3,7,8-PeCDD	U	13300	pg/g	13300
39227-28-6	1,2,3,4,7,8-HxCDD	U	13300	pg/g	13300
57653-85-7	1,2,3,6,7,8-HxCDD		132000	pg/g	13300
19408-74-3	1,2,3,7,8,9-HxCDD		23700	pg/g	13300
35822-46-9	1,2,3,4,6,7,8-HpCDD		2670000	pg/g	13300
3268-87-9	1,2,3,4,6,7,8,9-OCDD	E	12500000	pg/g	26600
51207-31-9	2,3,7,8-TCDF	U	2660	pg/g	2660
57117-41-6	1,2,3,7,8-PeCDF	U	13300	pg/g	13300
57117-31-4	2,3,4,7,8-PeCDF	U	13300	pg/g	13300
70648-26-9	1,2,3,4,7,8-HxCDF		18400	pg/g	13300
57117-44-9	1,2,3,6,7,8-HxCDF	U	13300	pg/g	13300
60851-34-5	2,3,4,6,7,8-HxCDF	U	13300	pg/g	13300
72918-21-9	1,2,3,7,8,9-HxCDF	U	13300	pg/g	13300
67562-39-4	1,2,3,4,6,7,8-HpCDF	P	2180000	pg/g	13300
55673-89-7	1,2,3,4,7,8,9-HpCDF		150000	pg/g	13300
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	27100000	pg/g	26600
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		4000	pg/g	2660
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	13300	pg/g	13300
34465-46-8	Total Hexachlorodibenzo-p-dioxin		454000	pg/g	13300
37871-00-4	Total Heptachlorodibenzo-p-dioxin		4090000	pg/g	13300
30402-14-3	Total Tetrachlorodibenzofuran	P	7550	pg/g	2660
30402-15-4	Total Pentachlorodibenzofuran	P	15300	pg/g	13300
55684-94-1	Total Hexachlorodibenzofuran	P	1730000	pg/g	13300
38998-75-3	Total Heptachlorodibenzofuran	E	17800000	pg/g	13300
3333-30-0	TEQ WHO2005 ND=0		79300	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		92200	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		94800	106000	pg/g	89.1	(25%-164%)
13C-1,2,3,7,8-PeCDD		82300	106000	pg/g	77.4	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		97600	106000	pg/g	91.7	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		90800	106000	pg/g	85.3	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		107000	106000	pg/g	100	(23%-140%)
13C-OCDD		261000	213000	pg/g	123	(17%-157%)
13C-2,3,7,8-TCDF		94100	106000	pg/g	88.4	(24%-169%)
13C-1,2,3,7,8-PeCDF		89800	106000	pg/g	84.4	(24%-185%)
13C-2,3,4,7,8-PeCDF		90200	106000	pg/g	84.8	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		99300	106000	pg/g	93.3	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		91400	106000	pg/g	85.9	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		95100	106000	pg/g	89.4	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		91900	106000	pg/g	86.4	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794005**	**Date Collected:**	**02/11/2021 13:00**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCP-01-DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 05:25**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-10**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0188 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF	P	97000	106000	pg/g	91.2	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		92300	106000	pg/g	86.8	(26%-138%)
37Cl-2,3,7,8-TCDD		7910	10600	pg/g	74.4	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**
K **Estimated Maximum Possible Concentration**
P **Diphenyl ether interference is present; value is estimated**
U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794006**	**Date Collected:**	**02/11/2021 10:45**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**HOHW-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 00:26**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-4**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0204 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	490	pg/g	490
40321-76-4	1,2,3,7,8-PeCDD	U	2450	pg/g	2450
39227-28-6	1,2,3,4,7,8-HxCDD	U	2450	pg/g	2450
57653-85-7	1,2,3,6,7,8-HxCDD	U	2450	pg/g	2450
19408-74-3	1,2,3,7,8,9-HxCDD	U	2450	pg/g	2450
35822-46-9	1,2,3,4,6,7,8-HpCDD		15400	pg/g	2450
3268-87-9	1,2,3,4,6,7,8,9-OCDD		66200	pg/g	4900
51207-31-9	2,3,7,8-TCDF	U	490	pg/g	490
57117-41-6	1,2,3,7,8-PeCDF	U	2450	pg/g	2450
57117-31-4	2,3,4,7,8-PeCDF	U	2450	pg/g	2450
70648-26-9	1,2,3,4,7,8-HxCDF	U	2450	pg/g	2450
57117-44-9	1,2,3,6,7,8-HxCDF	U	2450	pg/g	2450
60851-34-5	2,3,4,6,7,8-HxCDF	U	2450	pg/g	2450
72918-21-9	1,2,3,7,8,9-HxCDF	U	2450	pg/g	2450
67562-39-4	1,2,3,4,6,7,8-HpCDF		12600	pg/g	2450
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2450	pg/g	2450
39001-02-0	1,2,3,4,6,7,8,9-OCDF		138000	pg/g	4900
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	490	pg/g	490
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2450	pg/g	2450
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2450	pg/g	2450
37871-00-4	Total Heptachlorodibenzo-p-dioxin		23600	pg/g	2450
30402-14-3	Total Tetrachlorodibenzofuran	U	490	pg/g	490
30402-15-4	Total Pentachlorodibenzofuran	U	2450	pg/g	2450
55684-94-1	Total Hexachlorodibenzofuran		9390	pg/g	2450
38998-75-3	Total Heptachlorodibenzofuran		95300	pg/g	2450
3333-30-0	TEQ WHO2005 ND=0		341	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		3110	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		86500	98000	pg/g	88.2	(25%-164%)
13C-1,2,3,7,8-PeCDD		78200	98000	pg/g	79.8	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		80900	98000	pg/g	82.6	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		76600	98000	pg/g	78.2	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		85000	98000	pg/g	86.7	(23%-140%)
13C-OCDD		181000	196000	pg/g	92.6	(17%-157%)
13C-2,3,7,8-TCDF		86000	98000	pg/g	87.7	(24%-169%)
13C-1,2,3,7,8-PeCDF		84600	98000	pg/g	86.3	(24%-185%)
13C-2,3,4,7,8-PeCDF		86000	98000	pg/g	87.7	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		79500	98000	pg/g	81.1	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		76300	98000	pg/g	77.9	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		80100	98000	pg/g	81.7	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		78900	98000	pg/g	80.5	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794006**	**Date Collected:**	**02/11/2021 10:45**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**HOHW-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 00:26**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-4**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0204 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		77900	98000	pg/g	79.5	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		81500	98000	pg/g	83.1	(26%-138%)
37Cl-2,3,7,8-TCDD		7190	9800	pg/g	73.3	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794007**	**Date Collected:**	**02/11/2021 11:18**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OWSHO-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 01:16**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-5**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	515	pg/g	515
40321-76-4	1,2,3,7,8-PeCDD	U	2580	pg/g	2580
39227-28-6	1,2,3,4,7,8-HxCDD	U	2580	pg/g	2580
57653-85-7	1,2,3,6,7,8-HxCDD	U	2580	pg/g	2580
19408-74-3	1,2,3,7,8,9-HxCDD	U	2580	pg/g	2580
35822-46-9	1,2,3,4,6,7,8-HpCDD		2640	pg/g	2580
3268-87-9	1,2,3,4,6,7,8,9-OCDD		9710	pg/g	5150
51207-31-9	2,3,7,8-TCDF	U	515	pg/g	515
57117-41-6	1,2,3,7,8-PeCDF	U	2580	pg/g	2580
57117-31-4	2,3,4,7,8-PeCDF	U	2580	pg/g	2580
70648-26-9	1,2,3,4,7,8-HxCDF	U	2580	pg/g	2580
57117-44-9	1,2,3,6,7,8-HxCDF	U	2580	pg/g	2580
60851-34-5	2,3,4,6,7,8-HxCDF	U	2580	pg/g	2580
72918-21-9	1,2,3,7,8,9-HxCDF	U	2580	pg/g	2580
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	2580	pg/g	2580
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2580	pg/g	2580
39001-02-0	1,2,3,4,6,7,8,9-OCDF		17800	pg/g	5150
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	515	pg/g	515
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2580	pg/g	2580
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2580	pg/g	2580
37871-00-4	Total Heptachlorodibenzo-p-dioxin		2640	pg/g	2580
30402-14-3	Total Tetrachlorodibenzofuran	U	515	pg/g	515
30402-15-4	Total Pentachlorodibenzofuran	U	2580	pg/g	2580
55684-94-1	Total Hexachlorodibenzofuran	U	2580	pg/g	2580
38998-75-3	Total Heptachlorodibenzofuran		10600	pg/g	2580
3333-30-0	TEQ WHO2005 ND=0		34.6	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		2960	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		83800	103000	pg/g	81.3	(25%-164%)
13C-1,2,3,7,8-PeCDD		80500	103000	pg/g	78.1	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		92500	103000	pg/g	89.7	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		86200	103000	pg/g	83.6	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		99700	103000	pg/g	96.7	(23%-140%)
13C-OCDD		202000	206000	pg/g	98.0	(17%-157%)
13C-2,3,7,8-TCDF		78300	103000	pg/g	75.9	(24%-169%)
13C-1,2,3,7,8-PeCDF		83600	103000	pg/g	81.1	(24%-185%)
13C-2,3,4,7,8-PeCDF		89100	103000	pg/g	86.5	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		90500	103000	pg/g	87.8	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		85800	103000	pg/g	83.2	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		92300	103000	pg/g	89.5	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		90000	103000	pg/g	87.3	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794007**	**Date Collected:**	**02/11/2021 11:18**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OWSHO-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 01:16**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-5**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0194 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		89500	103000	pg/g	86.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		90400	103000	pg/g	87.7	(26%-138%)
37Cl-2,3,7,8-TCDD		6930	10300	pg/g	67.2	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794008**	**Date Collected:**	**02/11/2021 11:18**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OWSHO-01 DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 02:06**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-6**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	500	pg/g	500
40321-76-4	1,2,3,7,8-PeCDD	U	2500	pg/g	2500
39227-28-6	1,2,3,4,7,8-HxCDD	U	2500	pg/g	2500
57653-85-7	1,2,3,6,7,8-HxCDD	U	2500	pg/g	2500
19408-74-3	1,2,3,7,8,9-HxCDD	U	2500	pg/g	2500
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	2500	pg/g	2500
3268-87-9	1,2,3,4,6,7,8,9-OCDD		7490	pg/g	5000
51207-31-9	2,3,7,8-TCDF	U	500	pg/g	500
57117-41-6	1,2,3,7,8-PeCDF	U	2500	pg/g	2500
57117-31-4	2,3,4,7,8-PeCDF	U	2500	pg/g	2500
70648-26-9	1,2,3,4,7,8-HxCDF	U	2500	pg/g	2500
57117-44-9	1,2,3,6,7,8-HxCDF	U	2500	pg/g	2500
60851-34-5	2,3,4,6,7,8-HxCDF	U	2500	pg/g	2500
72918-21-9	1,2,3,7,8,9-HxCDF	U	2500	pg/g	2500
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	2500	pg/g	2500
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2500	pg/g	2500
39001-02-0	1,2,3,4,6,7,8,9-OCDF		13800	pg/g	5000
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	500	pg/g	500
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2500	pg/g	2500
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2500	pg/g	2500
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	2500	pg/g	2500
30402-14-3	Total Tetrachlorodibenzofuran	U	500	pg/g	500
30402-15-4	Total Pentachlorodibenzofuran	U	2500	pg/g	2500
55684-94-1	Total Hexachlorodibenzofuran	U	2500	pg/g	2500
38998-75-3	Total Heptachlorodibenzofuran		8360	pg/g	2500
3333-30-0	TEQ WHO2005 ND=0		6.39	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		2860	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		83100	100000	pg/g	83.1	(25%-164%)
13C-1,2,3,7,8-PeCDD		76700	100000	pg/g	76.7	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		87100	100000	pg/g	87.1	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		82500	100000	pg/g	82.5	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		89500	100000	pg/g	89.5	(23%-140%)
13C-OCDD		193000	200000	pg/g	96.6	(17%-157%)
13C-2,3,7,8-TCDF		82500	100000	pg/g	82.5	(24%-169%)
13C-1,2,3,7,8-PeCDF		82800	100000	pg/g	82.8	(24%-185%)
13C-2,3,4,7,8-PeCDF		85200	100000	pg/g	85.2	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		86000	100000	pg/g	86.0	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		82800	100000	pg/g	82.8	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		85100	100000	pg/g	85.1	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		84400	100000	pg/g	84.4	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794008**	**Date Collected:**	**02/11/2021 11:18**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**OWSHO-01 DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 02:06**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-6**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		85000	100000	pg/g	85.0	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		85800	100000	pg/g	85.8	(26%-138%)
37Cl-2,3,7,8-TCDD		7020	10000	pg/g	70.2	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794009**	**Date Collected:**	**02/11/2021 11:30**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHO-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 03:45**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-8**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0188 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	2660	pg/g	2660
40321-76-4	1,2,3,7,8-PeCDD	U	13300	pg/g	13300
39227-28-6	1,2,3,4,7,8-HxCDD	U	13300	pg/g	13300
57653-85-7	1,2,3,6,7,8-HxCDD		99200	pg/g	13300
19408-74-3	1,2,3,7,8,9-HxCDD		17500	pg/g	13300
35822-46-9	1,2,3,4,6,7,8-HpCDD		2070000	pg/g	13300
3268-87-9	1,2,3,4,6,7,8,9-OCDD		9910000	pg/g	26600
51207-31-9	2,3,7,8-TCDF	U	2660	pg/g	2660
57117-41-6	1,2,3,7,8-PeCDF	U	13300	pg/g	13300
57117-31-4	2,3,4,7,8-PeCDF	U	13300	pg/g	13300
70648-26-9	1,2,3,4,7,8-HxCDF		14400	pg/g	13300
57117-44-9	1,2,3,6,7,8-HxCDF	U	13300	pg/g	13300
60851-34-5	2,3,4,6,7,8-HxCDF	U	13300	pg/g	13300
72918-21-9	1,2,3,7,8,9-HxCDF	U	13300	pg/g	13300
67562-39-4	1,2,3,4,6,7,8-HpCDF	P	1740000	pg/g	13300
55673-89-7	1,2,3,4,7,8,9-HpCDF		126000	pg/g	13300
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	21500000	pg/g	26600
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	2660	pg/g	2660
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	13300	pg/g	13300
34465-46-8	Total Hexachlorodibenzo-p-dioxin		339000	pg/g	13300
37871-00-4	Total Heptachlorodibenzo-p-dioxin		3150000	pg/g	13300
30402-14-3	Total Tetrachlorodibenzofuran	P	3700	pg/g	2660
30402-15-4	Total Pentachlorodibenzofuran	PU	13300	pg/g	13300
55684-94-1	Total Hexachlorodibenzofuran	P	1350000	pg/g	13300
38998-75-3	Total Heptachlorodibenzofuran	E	13900000	pg/g	13300
3333-30-0	TEQ WHO2005 ND=0		61900	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		74900	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		111000	106000	pg/g	104	(25%-164%)
13C-1,2,3,7,8-PeCDD		97100	106000	pg/g	91.3	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		110000	106000	pg/g	104	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		101000	106000	pg/g	95.2	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		121000	106000	pg/g	114	(23%-140%)
13C-OCDD		282000	213000	pg/g	132	(17%-157%)
13C-2,3,7,8-TCDF		111000	106000	pg/g	104	(24%-169%)
13C-1,2,3,7,8-PeCDF		108000	106000	pg/g	101	(24%-185%)
13C-2,3,4,7,8-PeCDF		107000	106000	pg/g	101	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		113000	106000	pg/g	106	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		104000	106000	pg/g	97.5	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		109000	106000	pg/g	102	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		106000	106000	pg/g	99.8	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794009**	**Date Collected:**	**02/11/2021 11:30**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHO-01**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 03:45**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-8**			**Dilution:**	**5**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0188 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF	P	112000	106000	pg/g	105	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		110000	106000	pg/g	103	(26%-138%)
37Cl-2,3,7,8-TCDD		8540	10600	pg/g	80.3	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**
K **Estimated Maximum Possible Concentration**
P **Diphenyl ether interference is present; value is estimated**
U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794010**	**Date Collected:**	**02/11/2021 11:52**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**EVAP-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 06:15**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-11**			**Dilution:**	**5**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**100.6 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	497	pg/L	497
40321-76-4	1,2,3,7,8-PeCDD		4700	pg/L	2490
39227-28-6	1,2,3,4,7,8-HxCDD		3370	pg/L	2490
57653-85-7	1,2,3,6,7,8-HxCDD		24000	pg/L	2490
19408-74-3	1,2,3,7,8,9-HxCDD		12000	pg/L	2490
35822-46-9	1,2,3,4,6,7,8-HpCDD		371000	pg/L	2490
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1700000	pg/L	4970
51207-31-9	2,3,7,8-TCDF	U	497	pg/L	497
57117-41-6	1,2,3,7,8-PeCDF	U	2490	pg/L	2490
57117-31-4	2,3,4,7,8-PeCDF	U	2490	pg/L	2490
70648-26-9	1,2,3,4,7,8-HxCDF	U	2490	pg/L	2490
57117-44-9	1,2,3,6,7,8-HxCDF	U	2490	pg/L	2490
60851-34-5	2,3,4,6,7,8-HxCDF	U	2490	pg/L	2490
72918-21-9	1,2,3,7,8,9-HxCDF	U	2490	pg/L	2490
67562-39-4	1,2,3,4,6,7,8-HpCDF	P	203000	pg/L	2490
55673-89-7	1,2,3,4,7,8,9-HpCDF		13600	pg/L	2490
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	2280000	pg/L	4970
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		2890	pg/L	497
36088-22-9	Total Pentachlorodibenzo-p-dioxin		28200	pg/L	2490
34465-46-8	Total Hexachlorodibenzo-p-dioxin		164000	pg/L	2490
37871-00-4	Total Heptachlorodibenzo-p-dioxin		722000	pg/L	2490
30402-14-3	Total Tetrachlorodibenzofuran	P	1470	pg/L	497
30402-15-4	Total Pentachlorodibenzofuran	P	4100	pg/L	2490
55684-94-1	Total Hexachlorodibenzofuran	P	156000	pg/L	2490
38998-75-3	Total Heptachlorodibenzofuran	E	1560000	pg/L	2490
3333-30-0	TEQ WHO2005 ND=0		15700	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		16900	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		14100	19900	pg/L	70.8	(25%-164%)
13C-1,2,3,7,8-PeCDD		11300	19900	pg/L	56.8	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		10200	19900	pg/L	51.2	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		12100	19900	pg/L	60.7	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		12600	19900	pg/L	63.1	(23%-140%)
13C-OCDD		27300	39800	pg/L	68.7	(17%-157%)
13C-2,3,7,8-TCDF		13800	19900	pg/L	69.6	(24%-169%)
13C-1,2,3,7,8-PeCDF		12500	19900	pg/L	62.7	(24%-185%)
13C-2,3,4,7,8-PeCDF		12300	19900	pg/L	61.9	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		11600	19900	pg/L	58.6	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		12000	19900	pg/L	60.3	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		11800	19900	pg/L	59.4	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		12300	19900	pg/L	61.6	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794010**	**Date Collected:**	**02/11/2021 11:52**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**EVAP-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 06:15**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-11**			**Dilution:**	**5**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**100.6 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF	P	11000	19900	pg/L	55.2	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		11800	19900	pg/L	59.3	(26%-138%)
37Cl-2,3,7,8-TCDD		1460	1990	pg/L	73.6	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**

P **Diphenyl ether interference is present; value is estimated**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794011**	**Date Collected:**	**02/11/2021 11:52**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**EVAP-01 DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 07:04**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-12**			**Dilution:**	**5**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**99.3 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		507	pg/L	504
40321-76-4	1,2,3,7,8-PeCDD		5940	pg/L	2520
39227-28-6	1,2,3,4,7,8-HxCDD		4540	pg/L	2520
57653-85-7	1,2,3,6,7,8-HxCDD		30300	pg/L	2520
19408-74-3	1,2,3,7,8,9-HxCDD		15700	pg/L	2520
35822-46-9	1,2,3,4,6,7,8-HpCDD		454000	pg/L	2520
3268-87-9	1,2,3,4,6,7,8,9-OCDD	E	2100000	pg/L	5040
51207-31-9	2,3,7,8-TCDF	U	504	pg/L	504
57117-41-6	1,2,3,7,8-PeCDF	U	2520	pg/L	2520
57117-31-4	2,3,4,7,8-PeCDF	U	2520	pg/L	2520
70648-26-9	1,2,3,4,7,8-HxCDF	U	2520	pg/L	2520
57117-44-9	1,2,3,6,7,8-HxCDF	U	2520	pg/L	2520
60851-34-5	2,3,4,6,7,8-HxCDF	U	2520	pg/L	2520
72918-21-9	1,2,3,7,8,9-HxCDF	U	2520	pg/L	2520
67562-39-4	1,2,3,4,6,7,8-HpCDF	P	253000	pg/L	2520
55673-89-7	1,2,3,4,7,8,9-HpCDF		18200	pg/L	2520
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	2930000	pg/L	5040
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		4240	pg/L	504
36088-22-9	Total Pentachlorodibenzo-p-dioxin		38200	pg/L	2520
34465-46-8	Total Hexachlorodibenzo-p-dioxin		213000	pg/L	2520
37871-00-4	Total Heptachlorodibenzo-p-dioxin		891000	pg/L	2520
30402-14-3	Total Tetrachlorodibenzofuran	P	2140	pg/L	504
30402-15-4	Total Pentachlorodibenzofuran	P	6800	pg/L	2520
55684-94-1	Total Hexachlorodibenzofuran	P	193000	pg/L	2520
38998-75-3	Total Heptachlorodibenzofuran	E	1920000	pg/L	2520
3333-30-0	TEQ WHO2005 ND=0		20300	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		21200	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		12000	20100	pg/L	59.4	(25%-164%)
13C-1,2,3,7,8-PeCDD		9950	20100	pg/L	49.4	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		8020	20100	pg/L	39.8	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		9900	20100	pg/L	49.2	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		10200	20100	pg/L	50.9	(23%-140%)
13C-OCDD		21400	40300	pg/L	53.1	(17%-157%)
13C-2,3,7,8-TCDF		12200	20100	pg/L	60.8	(24%-169%)
13C-1,2,3,7,8-PeCDF		11100	20100	pg/L	55.3	(24%-185%)
13C-2,3,4,7,8-PeCDF		11000	20100	pg/L	54.4	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		9550	20100	pg/L	47.4	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		10400	20100	pg/L	51.4	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		10300	20100	pg/L	51.0	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		10300	20100	pg/L	51.0	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794011**	**Date Collected:**	**02/11/2021 11:52**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**EVAP-01 DUP**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 07:04**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-12**			**Dilution:**	**5**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**99.3 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF	P	9020	20100	pg/L	44.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		10100	20100	pg/L	50.3	(26%-138%)
37Cl-2,3,7,8-TCDD		1460	2010	pg/L	72.7	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**
K **Estimated Maximum Possible Concentration**
P **Diphenyl ether interference is present; value is estimated**
U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794012**	**Date Collected:**	**02/11/2021 12:06**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**STRM-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 19:01**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a-11**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**98.5 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		834	pg/L	102
40321-76-4	1,2,3,7,8-PeCDD		11000	pg/L	508
39227-28-6	1,2,3,4,7,8-HxCDD		6900	pg/L	508
57653-85-7	1,2,3,6,7,8-HxCDD		15300	pg/L	508
19408-74-3	1,2,3,7,8,9-HxCDD		14900	pg/L	508
35822-46-9	1,2,3,4,6,7,8-HpCDD		96100	pg/L	508
3268-87-9	1,2,3,4,6,7,8,9-OCDD		210000	pg/L	1020
51207-31-9	2,3,7,8-TCDF	U	102	pg/L	102
57117-41-6	1,2,3,7,8-PeCDF	U	508	pg/L	508
57117-31-4	2,3,4,7,8-PeCDF	U	508	pg/L	508
70648-26-9	1,2,3,4,7,8-HxCDF		597	pg/L	508
57117-44-9	1,2,3,6,7,8-HxCDF		688	pg/L	508
60851-34-5	2,3,4,6,7,8-HxCDF	U	508	pg/L	508
72918-21-9	1,2,3,7,8,9-HxCDF	U	508	pg/L	508
67562-39-4	1,2,3,4,6,7,8-HpCDF		13400	pg/L	508
55673-89-7	1,2,3,4,7,8,9-HpCDF		631	pg/L	508
39001-02-0	1,2,3,4,6,7,8,9-OCDF		31400	pg/L	1020
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		12400	pg/L	102
36088-22-9	Total Pentachlorodibenzo-p-dioxin		83200	pg/L	508
34465-46-8	Total Hexachlorodibenzo-p-dioxin		174000	pg/L	508
37871-00-4	Total Heptachlorodibenzo-p-dioxin	E	206000	pg/L	508
30402-14-3	Total Tetrachlorodibenzofuran		128	pg/L	102
30402-15-4	Total Pentachlorodibenzofuran		3620	pg/L	508
55684-94-1	Total Hexachlorodibenzofuran		13200	pg/L	508
38998-75-3	Total Heptachlorodibenzofuran		37400	pg/L	508
3333-30-0	TEQ WHO2005 ND=0		16800	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		17000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		10200	20300	pg/L	50.2	(25%-164%)
13C-1,2,3,7,8-PeCDD		8710	20300	pg/L	42.9	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		9020	20300	pg/L	44.4	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		8900	20300	pg/L	43.8	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		9190	20300	pg/L	45.3	(23%-140%)
13C-OCDD		18000	40600	pg/L	44.3	(17%-157%)
13C-2,3,7,8-TCDF		10400	20300	pg/L	51.4	(24%-169%)
13C-1,2,3,7,8-PeCDF		9200	20300	pg/L	45.3	(24%-185%)
13C-2,3,4,7,8-PeCDF		9590	20300	pg/L	47.2	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		8890	20300	pg/L	43.8	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		9370	20300	pg/L	46.2	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		8890	20300	pg/L	43.8	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		8740	20300	pg/L	43.0	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794012**	**Date Collected:**	**02/11/2021 12:06**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**STRM-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 19:01**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a-11**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**98.5 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		7820	20300	pg/L	38.5	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		8310	20300	pg/L	40.9	(26%-138%)
37Cl-2,3,7,8-TCDD		1620	2030	pg/L	79.9	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**

K **Estimated Maximum Possible Concentration**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794013**	**Date Collected:**	**02/11/2021 12:00**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**POND-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 02:55**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-7**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**98.4 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	102	pg/L	102
40321-76-4	1,2,3,7,8-PeCDD		554	pg/L	508
39227-28-6	1,2,3,4,7,8-HxCDD		511	pg/L	508
57653-85-7	1,2,3,6,7,8-HxCDD		1390	pg/L	508
19408-74-3	1,2,3,7,8,9-HxCDD		1260	pg/L	508
35822-46-9	1,2,3,4,6,7,8-HpCDD		13900	pg/L	508
3268-87-9	1,2,3,4,6,7,8,9-OCDD		47300	pg/L	1020
51207-31-9	2,3,7,8-TCDF	U	102	pg/L	102
57117-41-6	1,2,3,7,8-PeCDF	U	508	pg/L	508
57117-31-4	2,3,4,7,8-PeCDF	U	508	pg/L	508
70648-26-9	1,2,3,4,7,8-HxCDF	U	508	pg/L	508
57117-44-9	1,2,3,6,7,8-HxCDF	U	508	pg/L	508
60851-34-5	2,3,4,6,7,8-HxCDF	U	508	pg/L	508
72918-21-9	1,2,3,7,8,9-HxCDF	U	508	pg/L	508
67562-39-4	1,2,3,4,6,7,8-HpCDF		2790	pg/L	508
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	508	pg/L	508
39001-02-0	1,2,3,4,6,7,8,9-OCDF		7770	pg/L	1020
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	102	pg/L	102
36088-22-9	Total Pentachlorodibenzo-p-dioxin		2650	pg/L	508
34465-46-8	Total Hexachlorodibenzo-p-dioxin		14000	pg/L	508
37871-00-4	Total Heptachlorodibenzo-p-dioxin		29600	pg/L	508
30402-14-3	Total Tetrachlorodibenzofuran	U	102	pg/L	102
30402-15-4	Total Pentachlorodibenzofuran	U	508	pg/L	508
55684-94-1	Total Hexachlorodibenzofuran		1620	pg/L	508
38998-75-3	Total Heptachlorodibenzofuran		7710	pg/L	508
3333-30-0	TEQ WHO2005 ND=0		1050	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		1300	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		14400	20300	pg/L	71.1	(25%-164%)
13C-1,2,3,7,8-PeCDD		13200	20300	pg/L	65.2	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		13000	20300	pg/L	64.1	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		12800	20300	pg/L	62.8	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		14400	20300	pg/L	70.8	(23%-140%)
13C-OCDD		27300	40700	pg/L	67.1	(17%-157%)
13C-2,3,7,8-TCDF		14800	20300	pg/L	72.9	(24%-169%)
13C-1,2,3,7,8-PeCDF		14200	20300	pg/L	69.9	(24%-185%)
13C-2,3,4,7,8-PeCDF		14800	20300	pg/L	72.9	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		13000	20300	pg/L	63.9	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		12900	20300	pg/L	63.4	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		12900	20300	pg/L	63.6	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		13400	20300	pg/L	66.1	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**17794013**	**Date Collected:**	**02/11/2021 12:00**	**Matrix:**	**WATER**
Client Sample:	**1613B Water**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**POND-01**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/19/2021 02:55**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_4-7**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**98.4 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		12000	20300	pg/L	59.3	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		13600	20300	pg/L	66.7	(26%-138%)
37Cl-2,3,7,8-TCDD		1630	2030	pg/L	80.0	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12028847	LCS for batch 46285	13C-2,3,7,8-TCDD		72.6	(20%-175%)
		13C-1,2,3,7,8-PeCDD		63.2	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		71.3	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		64.1	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		70.3	(22%-166%)
		13C-OCDD		69.2	(13%-199%)
		13C-2,3,7,8-TCDF		70.1	(22%-152%)
		13C-1,2,3,7,8-PeCDF		65.4	(21%-192%)
		13C-2,3,4,7,8-PeCDF		67.2	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		69.7	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		65.6	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		65.5	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		67.3	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		61.1	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		65.2	(20%-186%)
		37Cl-2,3,7,8-TCDD		76.7	(31%-191%)
12028848	LCSD for batch 46285	13C-2,3,7,8-TCDD		71.5	(20%-175%)
		13C-1,2,3,7,8-PeCDD		62.1	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		71.0	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		66.5	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		68.3	(22%-166%)
		13C-OCDD		62.8	(13%-199%)
		13C-2,3,7,8-TCDF		71.7	(22%-152%)
		13C-1,2,3,7,8-PeCDF		64.8	(21%-192%)
		13C-2,3,4,7,8-PeCDF		68.0	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		69.4	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		69.0	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		66.5	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		64.2	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		60.4	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		62.7	(20%-186%)
		37Cl-2,3,7,8-TCDD		75.3	(31%-191%)
12028846	MB for batch 46285	13C-2,3,7,8-TCDD		61.0	(25%-164%)
		13C-1,2,3,7,8-PeCDD		53.1	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		59.4	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		56.9	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		60.2	(23%-140%)
		13C-OCDD		57.1	(17%-157%)
		13C-2,3,7,8-TCDF		61.3	(24%-169%)
		13C-1,2,3,7,8-PeCDF		55.7	(24%-185%)
		13C-2,3,4,7,8-PeCDF		57.5	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		58.2	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		60.6	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		57.6	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		55.9	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		50.7	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		53.0	(26%-138%)
		37Cl-2,3,7,8-TCDD		73.5	(35%-197%)
17794012	STRM-01	13C-2,3,7,8-TCDD		50.2	(25%-164%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
17794012	STRM-01	13C-1,2,3,7,8-PeCDD		42.9		(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		44.4		(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		43.8		(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		45.3		(23%-140%)
		13C-OCDD		44.3		(17%-157%)
		13C-2,3,7,8-TCDF		51.4		(24%-169%)
		13C-1,2,3,7,8-PeCDF		45.3		(24%-185%)
		13C-2,3,4,7,8-PeCDF		47.2		(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		43.8		(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		46.2		(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		43.8		(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		43.0		(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		38.5		(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		40.9		(26%-138%)
		37Cl-2,3,7,8-TCDD		79.9		(35%-197%)
17794013	POND-01	13C-2,3,7,8-TCDD		71.1		(25%-164%)
		13C-1,2,3,7,8-PeCDD		65.2		(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		64.1		(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		62.8		(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		70.8		(23%-140%)
		13C-OCDD		67.1		(17%-157%)
		13C-2,3,7,8-TCDF		72.9		(24%-169%)
		13C-1,2,3,7,8-PeCDF		69.9		(24%-185%)
		13C-2,3,4,7,8-PeCDF		72.9		(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		63.9		(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		63.4		(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		63.6		(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		66.1		(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		59.3		(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		66.7		(26%-138%)
		37Cl-2,3,7,8-TCDD		80.0		(35%-197%)
17794010	EVAP-01	13C-2,3,7,8-TCDD		70.8	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		56.8	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		51.2	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		60.7	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		63.1	D	(23%-140%)
		13C-OCDD		68.7	D	(17%-157%)
		13C-2,3,7,8-TCDF		69.6	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		62.7	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		61.9	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		58.6	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		60.3	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		59.4	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		61.6	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF	P	55.2	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		59.3	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		73.6	D	(35%-197%)
17794011	EVAP-01 DUP	13C-2,3,7,8-TCDD		59.4	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		49.4	D	(25%-181%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
17794011	EVAP-01 DUP	13C-1,2,3,4,7,8-HxCDD		39.8	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		49.2	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		50.9	D	(23%-140%)
		13C-OCDD		53.1	D	(17%-157%)
		13C-2,3,7,8-TCDF		60.8	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		55.3	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		54.4	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		47.4	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		51.4	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		51.0	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		51.0	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF	P	44.8	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		50.3	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		72.7	D	(35%-197%)

* Recovery outside Acceptance Limits
Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12028786	LCS for batch 46222	13C-2,3,7,8-TCDD		81.0	(20%-175%)
		13C-1,2,3,7,8-PeCDD		84.2	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		83.4	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		84.7	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		90.2	(22%-166%)
		13C-OCDD		91.1	(13%-199%)
		13C-2,3,7,8-TCDF		85.4	(22%-152%)
		13C-1,2,3,7,8-PeCDF		85.3	(21%-192%)
		13C-2,3,4,7,8-PeCDF		93.3	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		80.4	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		85.9	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		84.0	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		87.7	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		80.1	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		86.1	(20%-186%)
		37Cl-2,3,7,8-TCDD		70.0	(31%-191%)
12028787	LCSD for batch 46222	13C-2,3,7,8-TCDD		76.1	(20%-175%)
		13C-1,2,3,7,8-PeCDD		66.2	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		89.2	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		94.1	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		90.5	(22%-166%)
		13C-OCDD		85.2	(13%-199%)
		13C-2,3,7,8-TCDF		82.3	(22%-152%)
		13C-1,2,3,7,8-PeCDF		73.7	(21%-192%)
		13C-2,3,4,7,8-PeCDF		75.8	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		95.7	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		90.3	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		92.8	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		86.9	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		83.6	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		87.3	(20%-186%)
		37Cl-2,3,7,8-TCDD		79.6	(31%-191%)
12028785	MB for batch 46222	13C-2,3,7,8-TCDD		81.6	(25%-164%)
		13C-1,2,3,7,8-PeCDD		80.0	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		84.3	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		86.5	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		88.4	(23%-140%)
		13C-OCDD		79.8	(17%-157%)
		13C-2,3,7,8-TCDF		85.8	(24%-169%)
		13C-1,2,3,7,8-PeCDF		83.7	(24%-185%)
		13C-2,3,4,7,8-PeCDF		89.9	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		81.9	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		83.9	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		85.5	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		89.4	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		78.5	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		83.2	(26%-138%)
		37Cl-2,3,7,8-TCDD		69.7	(35%-197%)
17794001	PCPHW-01	13C-2,3,7,8-TCDD		90.4	(25%-164%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
17794001	PCPHW-01	13C-1,2,3,7,8-PeCDD		84.1	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD	Q	93.2	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD	Q	91.1	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		95.7	(23%-140%)
		13C-OCDD		99.1	(17%-157%)
		13C-2,3,7,8-TCDF		91.6	(24%-169%)
		13C-1,2,3,7,8-PeCDF		89.4	(24%-185%)
		13C-2,3,4,7,8-PeCDF		91.3	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		91.2	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF	Q	89.5	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF	Q	91.9	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF	Q	90.7	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		91.7	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF	Q	85.7	(26%-138%)
		37Cl-2,3,7,8-TCDD		74.8	(35%-197%)
12028788	PCPHW-01(17794001MS)	13C-2,3,7,8-TCDD		65.3	(25%-164%)
		13C-1,2,3,7,8-PeCDD		59.1	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		63.4	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		65.4	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		66.3	(23%-140%)
		13C-OCDD		69.2	(17%-157%)
		13C-2,3,7,8-TCDF		66.5	(24%-169%)
		13C-1,2,3,7,8-PeCDF		64.0	(24%-185%)
		13C-2,3,4,7,8-PeCDF		66.5	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		62.8	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		63.8	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		63.4	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		65.0	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		62.3	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		61.5	(26%-138%)
		37Cl-2,3,7,8-TCDD		54.2	(35%-197%)
12028789	PCPHW-01(17794001MSD)	13C-2,3,7,8-TCDD		77.6	(25%-164%)
		13C-1,2,3,7,8-PeCDD		69.9	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		78.8	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		79.5	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		81.0	(23%-140%)
		13C-OCDD		87.1	(17%-157%)
		13C-2,3,7,8-TCDF		78.9	(24%-169%)
		13C-1,2,3,7,8-PeCDF		75.5	(24%-185%)
		13C-2,3,4,7,8-PeCDF		78.6	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		78.0	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		77.5	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		78.0	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		78.4	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		76.8	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		74.1	(26%-138%)
		37Cl-2,3,7,8-TCDD		65.0	(35%-197%)
17794002	OIL-01	13C-2,3,7,8-TCDD		89.5	(25%-164%)
		13C-1,2,3,7,8-PeCDD		74.8	(25%-181%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
17794002	OIL-01	13C-1,2,3,4,7,8-HxCDD		109	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		86.3	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		131	(23%-140%)
		13C-OCDD		164 *	(17%-157%)
		13C-2,3,7,8-TCDF		98.6	(24%-169%)
		13C-1,2,3,7,8-PeCDF		78.2	(24%-185%)
		13C-2,3,4,7,8-PeCDF		72.6	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		101	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		65.5	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		90.3	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		83.2	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		97.5	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		121	(26%-138%)
		37Cl-2,3,7,8-TCDD		73.2	(35%-197%)
17794003	BLND-01	13C-2,3,7,8-TCDD		90.5	(25%-164%)
		13C-1,2,3,7,8-PeCDD		78.4	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD	Q	104	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD	Q	84.8	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		130	(23%-140%)
		13C-OCDD		163 *	(17%-157%)
		13C-2,3,7,8-TCDF		97.6	(24%-169%)
		13C-1,2,3,7,8-PeCDF		85.4	(24%-185%)
		13C-2,3,4,7,8-PeCDF		89.4	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		98.4	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF	Q	66.1	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF	Q	90.5	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF	Q	76.3	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		94.9	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF	Q	116	(26%-138%)
		37Cl-2,3,7,8-TCDD		75.0	(35%-197%)
17794006	HOHW-01	13C-2,3,7,8-TCDD		88.2	(25%-164%)
		13C-1,2,3,7,8-PeCDD		79.8	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		82.6	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		78.2	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		86.7	(23%-140%)
		13C-OCDD		92.6	(17%-157%)
		13C-2,3,7,8-TCDF		87.7	(24%-169%)
		13C-1,2,3,7,8-PeCDF		86.3	(24%-185%)
		13C-2,3,4,7,8-PeCDF		87.7	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		81.1	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		77.9	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		81.7	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		80.5	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		79.5	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		83.1	(26%-138%)
		37Cl-2,3,7,8-TCDD		73.3	(35%-197%)
17794007	OWSHO-01	13C-2,3,7,8-TCDD		81.3	(25%-164%)
		13C-1,2,3,7,8-PeCDD		78.1	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		89.7	(32%-141%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
17794007	OWSHO-01	13C-1,2,3,6,7,8-HxCDD		83.6		(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		96.7		(23%-140%)
		13C-OCDD		98.0		(17%-157%)
		13C-2,3,7,8-TCDF		75.9		(24%-169%)
		13C-1,2,3,7,8-PeCDF		81.1		(24%-185%)
		13C-2,3,4,7,8-PeCDF		86.5		(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		87.8		(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		83.2		(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		89.5		(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		87.3		(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		86.8		(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		87.7		(26%-138%)
		37Cl-2,3,7,8-TCDD		67.2		(35%-197%)
17794008	OWSHO-01 DUP	13C-2,3,7,8-TCDD		83.1		(25%-164%)
		13C-1,2,3,7,8-PeCDD		76.7		(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		87.1		(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		82.5		(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		89.5		(23%-140%)
		13C-OCDD		96.6		(17%-157%)
		13C-2,3,7,8-TCDF		82.5		(24%-169%)
		13C-1,2,3,7,8-PeCDF		82.8		(24%-185%)
		13C-2,3,4,7,8-PeCDF		85.2		(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		86.0		(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		82.8		(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		85.1		(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		84.4		(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		85.0		(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		85.8		(26%-138%)
		37Cl-2,3,7,8-TCDD		70.2		(35%-197%)
17794009	PCPHO-01	13C-2,3,7,8-TCDD		104	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		91.3	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		104	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		95.2	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		114	D	(23%-140%)
		13C-OCDD		132	D	(17%-157%)
		13C-2,3,7,8-TCDF		104	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		101	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		101	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		106	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		97.5	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		102	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		99.8	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF	P	105	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		103	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		80.3	D	(35%-197%)
17794004	PCP-01	13C-2,3,7,8-TCDD		91.0	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		79.2	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		86.6	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		82.0	D	(28%-130%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 17794

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
17794004	PCP-01	13C-1,2,3,4,6,7,8-HpCDD		96.8	D	(23%-140%)
		13C-OCDD		110	D	(17%-157%)
		13C-2,3,7,8-TCDF		91.5	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		85.9	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		88.7	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		87.7	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		83.0	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		85.7	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		84.4	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF	P	88.8	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		88.4	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		75.3	D	(35%-197%)
17794005	PCP-01-DUP	13C-2,3,7,8-TCDD		89.1	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		77.4	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		91.7	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		85.3	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		100	D	(23%-140%)
		13C-OCDD		123	D	(17%-157%)
		13C-2,3,7,8-TCDF		88.4	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		84.4	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		84.8	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		93.3	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		85.9	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		89.4	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		86.4	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF	P	91.2	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		86.8	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		74.4	D	(35%-197%)

* Recovery outside Acceptance Limits
Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 46197 **Matrix:** WATER

Lab Sample ID: 12028766

Instrument: HRP750 **Analysis Date:** 03/04/2021 02:35 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46197

Batch ID: 46199

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	180	89.9	73-146
40321-76-4	LCS	1,2,3,7,8-PeCDD	1000	898	89.8	
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	1000	839	83.9	
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	1000	867	86.7	
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	1000	786	78.6	
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	1000	813	81.3	
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	2000	1580	79	
51207-31-9	LCS	2,3,7,8-TCDF	200	168	83.9	80-147
57117-41-6	LCS	1,2,3,7,8-PeCDF	1000	769	76.9	
57117-31-4	LCS	2,3,4,7,8-PeCDF	1000	845	84.5	
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	1000	834	83.4	
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	1000	836	83.6	
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	1000	809	80.9	
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	1000	735	73.5	
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	1000	868	86.8	
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	1000	782	78.2	
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	2000	1570	78.5	

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 46197 **Matrix:** WATER

Lab Sample ID: 12028767

Instrument: HRP750 **Analysis Date:** 03/04/2021 03:24 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46197

Batch ID: 46199

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	173	86.5	73-146	3.87	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	1000	920	92		2.41	
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	1000	886	88.6		5.45	
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	1000	917	91.7		5.62	
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	1000	848	84.8		7.54	
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	1000	868	86.8		6.60	
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	2000	1750	87.6		10.4	
51207-31-9	LCSD	2,3,7,8-TCDF	200	161	80.3	80-147	4.48	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	1000	806	80.6		4.63	
57117-31-4	LCSD	2,3,4,7,8-PeCDF	1000	907	90.7		7.05	
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	1000	864	86.4		3.50	
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	1000	919	91.9		9.52	
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	1000	835	83.5		3.17	
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	1000	971	97.1		27.7	
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	1000	780	78		10.7	
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	1000	930	93		17.3	
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	2000	1830	91.5		15.3	

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 46222 **Matrix:** OIL

Lab Sample ID: 12028786

Instrument: HRP763 **Analysis Date:** 03/17/2021 23:18 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46222

Batch ID: 46224

CAS No.		Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	186	92.8	67-158
40321-76-4	LCS	1,2,3,7,8-PeCDD	1000	1110	111	70-142
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	1000	1020	102	70-164
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	1000	1050	105	76-134
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	1000	1090	109	64-162
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	1000	959	95.9	70-140
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	2000	1960	98.1	78-144
51207-31-9	LCS	2,3,7,8-TCDF	200	177	88.6	75-158
57117-41-6	LCS	1,2,3,7,8-PeCDF	1000	935	93.5	80-134
57117-31-4	LCS	2,3,4,7,8-PeCDF	1000	964	96.4	68-160
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	1000	992	99.2	72-134
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	1000	1030	103	84-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	1000	1010	101	70-156
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	1000	986	98.6	78-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	1000	1050	105	82-122
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	1000	1040	104	78-138
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	2000	1920	96.2	63-170

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 46222 **Matrix:** OIL

Lab Sample ID: 12028787

Instrument: HRP763 **Analysis Date:** 03/18/2021 00:08 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46222

Batch ID: 46224

CAS No.		Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	214	107	67-158	14.2	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	1000	1130	113	70-142	2.07	0-20
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	1000	988	98.8	70-164	3.09	0-20
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	1000	1000	100	76-134	4.49	0-20
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	1000	923	92.3	64-162	16.9	0-20
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	1000	1050	105	70-140	8.62	0-20
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	2000	2150	108	78-144	9.20	0-20
51207-31-9	LCSD	2,3,7,8-TCDF	200	190	95.1	75-158	7.06	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	1000	908	90.8	80-134	2.97	0-20
57117-31-4	LCSD	2,3,4,7,8-PeCDF	1000	962	96.2	68-160	0.193	0-20
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	1000	911	91.1	72-134	8.49	0-20
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	1000	1020	102	84-130	1.50	0-20
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	1000	1010	101	70-156	0.393	0-20
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	1000	1010	101	78-130	1.93	0-20
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	1000	1120	112	82-122	6.41	0-20
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	1000	1080	108	78-138	3.89	0-20
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	2000	2150	107	63-170	11.0	0-20

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Matrix Spike

Client ID: PCPHW-01(17794001MS) **Matrix:** Oil

Lab Sample ID: 12028788

Instrument: HRP763 **Analysis Date:** 03/18/2021 02:37 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46222

Batch ID: 46224

CAS No.		Parmname	Amount Added pg/g		Spike Conc. pg/g	Recovery %	Acceptance Limits
1746-01-6	MS	2,3,7,8-TCDD	10100	U	9740	96.4	70-130
40321-76-4	MS	1,2,3,7,8-PeCDD	50500	U	57400	114	70-130
39227-28-6	MS	1,2,3,4,7,8-HxCDD	50500	QU	52100	103	70-130
57653-85-7	MS	1,2,3,6,7,8-HxCDD	50500	QU	54600	108	70-130
19408-74-3	MS	1,2,3,7,8,9-HxCDD	50500	QU	55300	109	70-130
35822-46-9	MS	1,2,3,4,6,7,8-HpCDD	50500		68800	91.6	70-130
3268-87-9	MS	1,2,3,4,6,7,8,9-OCDD	101000		178000	80.1	70-130
51207-31-9	MS	2,3,7,8-TCDF	10100	U	9230	91.4	70-130
57117-41-6	MS	1,2,3,7,8-PeCDF	50500	U	48300	95.6	70-130
57117-31-4	MS	2,3,4,7,8-PeCDF	50500	U	49200	97.4	70-130
70648-26-9	MS	1,2,3,4,7,8-HxCDF	50500	U	51400	102	70-130
57117-44-9	MS	1,2,3,6,7,8-HxCDF	50500	QU	51400	102	70-130
60851-34-5	MS	2,3,4,6,7,8-HxCDF	50500	QU	51800	103	70-130
72918-21-9	MS	1,2,3,7,8,9-HxCDF	50500	QU	50100	99.2	70-130
67562-39-4	MS	1,2,3,4,6,7,8-HpCDF	50500		70500	103	70-130
55673-89-7	MS	1,2,3,4,7,8,9-HpCDF	50500	U	54100	107	70-130
39001-02-0	MS	1,2,3,4,6,7,8,9-OCDF	101000		271000	64.5 *	70-130

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Matrix Spike Duplicate

Client ID: PCPHW-01(17794001MSD) **Matrix:** Oil

Lab Sample ID: 12028789

Instrument: HRP763 **Analysis Date:** 03/18/2021 03:27 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 46222

Batch ID: 46224

CAS No.		Parmname	Amount Added pg/g		Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	MSD	2,3,7,8-TCDD	10200	U	9940	97.4	70-130	2.03	0-20
40321-76-4	MSD	1,2,3,7,8-PeCDD	51000	U	58700	115	70-130	2.16	0-20
39227-28-6	MSD	1,2,3,4,7,8-HxCDD	51000	QU	53000	104	70-130	1.59	0-20
57653-85-7	MSD	1,2,3,6,7,8-HxCDD	51000	QU	55800	109	70-130	2.29	0-20
19408-74-3	MSD	1,2,3,7,8,9-HxCDD	51000	QU	53900	106	70-130	2.46	0-20
35822-46-9	MSD	1,2,3,4,6,7,8-HpCDD	51000		72300	97.5	70-130	4.93	0-20
3268-87-9	MSD	1,2,3,4,6,7,8,9-OCDD	102000		199000	99.9	70-130	11.2	0-20
51207-31-9	MSD	2,3,7,8-TCDF	10200	U	9440	92.5	70-130	2.28	0-20
57117-41-6	MSD	1,2,3,7,8-PeCDF	51000	U	48500	95.1	70-130	0.478	0-20
57117-31-4	MSD	2,3,4,7,8-PeCDF	51000	U	50200	98.5	70-130	2.16	0-20
70648-26-9	MSD	1,2,3,4,7,8-HxCDF	51000	U	50500	98.9	70-130	1.86	0-20
57117-44-9	MSD	1,2,3,6,7,8-HxCDF	51000	QU	52600	103	70-130	2.33	0-20
60851-34-5	MSD	2,3,4,6,7,8-HxCDF	51000	QU	51900	102	70-130	0.201	0-20
72918-21-9	MSD	1,2,3,7,8,9-HxCDF	51000	QU	50900	99.7	70-130	1.50	0-20
67562-39-4	MSD	1,2,3,4,6,7,8-HpCDF	51000		75500	112	70-130	6.87	0-20
55673-89-7	MSD	1,2,3,4,7,8,9-HpCDF	51000	U	57400	113	70-130	5.93	0-20
39001-02-0	MSD	1,2,3,4,6,7,8,9-OCDF	102000		309000	101	70-130	13.2	0-20

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 46285 **Matrix:** WATER

Lab Sample ID: 12028847

Instrument: HRP763 **Analysis Date:** 03/17/2021 11:34 **Dilution:** 1

Analyst: CLP **Prep Batch ID:** 46285

Batch ID: 46287

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	167	83.4	67-158
40321-76-4	LCS	1,2,3,7,8-PeCDD	1000	994	99.4	70-142
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	1000	930	93	70-164
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	1000	920	92	74-134
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	1000	951	95.1	64-162
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	1000	867	86.7	70-140
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	2000	1740	86.8	78-144
51207-31-9	LCS	2,3,7,8-TCDF	200	159	79.7	75-158
57117-41-6	LCS	1,2,3,7,8-PeCDF	1000	853	85.3	80-134
57117-31-4	LCS	2,3,4,7,8-PeCDF	1000	861	86.1	68-160
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	1000	887	88.7	72-134
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	1000	891	89.1	84-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	1000	900	90	70-156
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	1000	887	88.7	78-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	1000	964	96.4	82-122
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	1000	947	94.7	78-138
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	2000	1680	83.8	63-170

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 17794 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 46285 **Matrix:** WATER

Lab Sample ID: 12028848

Instrument: HRP763 **Analysis Date:** 03/17/2021 12:23 **Dilution:** 1

Analyst: CLP **Prep Batch ID:** 46285

Batch ID: 46287

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	181	90.4	67-158	7.98	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	1000	1070	107	70-142	7.01	0-20
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	1000	971	97.1	70-164	4.33	0-20
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	1000	1020	102	74-134	10.1	0-20
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	1000	1010	101	64-162	6.21	0-20
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	1000	936	93.6	70-140	7.56	0-20
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	2000	1870	93.7	78-144	7.65	0-20
51207-31-9	LCSD	2,3,7,8-TCDF	200	168	84.2	75-158	5.41	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	1000	921	92.1	80-134	7.66	0-20
57117-31-4	LCSD	2,3,4,7,8-PeCDF	1000	922	92.2	68-160	6.86	0-20
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	1000	944	94.4	72-134	6.23	0-20
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	1000	981	98.1	84-130	9.57	0-20
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	1000	957	95.7	70-156	6.10	0-20
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	1000	967	96.7	78-130	8.60	0-20
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	1000	1040	104	82-122	8.07	0-20
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	1000	1020	102	78-138	7.02	0-20
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	2000	1790	89.7	63-170	6.90	0-20

Method Blank Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 46197**	**Instrument ID:**	**HRP750**	**Data File:**	**A03MAR21C_2-3**
Lab Sample ID:	**12028765**	**Prep Date:**	**01-MAR-21**	**Analyzed:**	**03/04/21 04:14**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 46197	12028766	A03MAR21C_2-1	03/04/21	0235
02	LCSD for batch 46197	12028767	A03MAR21C_2-2	03/04/21	0324

Method Blank Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Matrix:**	**OIL**
Client ID:	**MB for batch 46222**	**Instrument ID:**	**HRP763**	**Data File:**	**b17mar21a_2-3**
Lab Sample ID:	**12028785**	**Prep Date:**	**02-MAR-21**	**Analyzed:**	**03/18/21 00:57**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 46222	12028786	b17mar21a_2-1	03/17/21	2318
02	LCSD for batch 46222	12028787	b17mar21a_2-2	03/18/21	0008
03	PCPHW-01	17794001	b17mar21a_2-4	03/18/21	0147
04	PCPHW-01(17794001MS)	12028788	b17mar21a_2-5	03/18/21	0237
05	PCPHW-01(17794001MSD)	12028789	b17mar21a_2-6	03/18/21	0327
06	OIL-01	17794002	b17mar21a_2-7	03/18/21	0416
07	BLND-01	17794003	b17mar21a_2-8	03/18/21	0506
08	HOHW-01	17794006	b17mar21a_4-4	03/19/21	0026
09	OWSHO-01	17794007	b17mar21a_4-5	03/19/21	0116
10	OWSHO-01 DUP	17794008	b17mar21a_4-6	03/19/21	0206
11	PCPHO-01	17794009	b17mar21a_4-8	03/19/21	0345
12	PCP-01	17794004	b17mar21a_4-9	03/19/21	0435
13	PCP-01-DUP	17794005	b17mar21a_4-10	03/19/21	0525

Method Blank Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 46285**	**Instrument ID:**	**HRP763**	**Data File:**	**b17mar21a-4**
Lab Sample ID:	**12028846**	**Prep Date:**	**09-MAR-21**	**Analyzed:**	**03/17/21 13:13**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 46285	12028847	A13MAR21A-2	03/13/21	1534
02	LCSD for batch 46285	12028848	A13MAR21A-3	03/13/21	1624
03	LCS for batch 46285	12028847	b17mar21a-2	03/17/21	1134
04	LCSD for batch 46285	12028848	b17mar21a-3	03/17/21	1223
05	STRM-01	17794012	b17mar21a-11	03/17/21	1901
06	POND-01	17794013	b17mar21a_4-7	03/19/21	0255
07	EVAP-01	17794010	b17mar21a_4-11	03/19/21	0615
08	EVAP-01 DUP	17794011	b17mar21a_4-12	03/19/21	0704

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028765**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46197**				
Client ID:	**MB for batch 46197**			**Prep Basis:**	**As Received**
Batch ID:	**46199**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/04/2021 04:14**	**Analyst:**	**MLL**	**Instrument:**	**HRP750**
Data File:	**A03MAR21C_2-3**			**Dilution:**	**1**
Prep Batch:	**46197**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**01-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD	U	50.0	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	50.0	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	50.0	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	50.0	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	50.0	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	100	pg/L	100
51207-31-9	2,3,7,8-TCDF	U	10.0	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF	U	50.0	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF	U	50.0	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	50.0	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	50.0	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	50.0	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	50.0	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	50.0	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	50.0	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	100	pg/L	100
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	10.0	pg/L	10.0
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
30402-14-3	Total Tetrachlorodibenzofuran	U	10.0	pg/L	10.0
30402-15-4	Total Pentachlorodibenzofuran	U	50.0	pg/L	50.0
55684-94-1	Total Hexachlorodibenzofuran	U	50.0	pg/L	50.0
38998-75-3	Total Heptachlorodibenzofuran	U	50.0	pg/L	50.0
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		57.0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1160	2000	pg/L	57.8	(31%-137%)
13C-1,2,3,7,8-PeCDD		1090	2000	pg/L	54.3	
13C-1,2,3,4,7,8-HxCDD		966	2000	pg/L	48.3	
13C-1,2,3,6,7,8-HxCDD		1210	2000	pg/L	60.4	
13C-1,2,3,4,6,7,8-HpCDD		1170	2000	pg/L	58.4	
13C-OCDD		2090	4000	pg/L	52.3	
13C-2,3,7,8-TCDF		1260	2000	pg/L	63.2	(29%-140%)
13C-1,2,3,7,8-PeCDF		1130	2000	pg/L	56.6	
13C-2,3,4,7,8-PeCDF		1140	2000	pg/L	57.0	
13C-1,2,3,4,7,8-HxCDF		1080	2000	pg/L	54.1	
13C-1,2,3,6,7,8-HxCDF		1200	2000	pg/L	60.0	
13C-2,3,4,6,7,8-HxCDF		1090	2000	pg/L	54.4	
13C-1,2,3,7,8,9-HxCDF		989	2000	pg/L	49.5	

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028765**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46197**				
Client ID:	**MB for batch 46197**			**Prep Basis:**	**As Received**
Batch ID:	**46199**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/04/2021 04:14**	**Analyst:**	**MLL**	**Instrument:**	**HRP750**
Data File:	**A03MAR21C_2-3**			**Dilution:**	**1**
Prep Batch:	**46197**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**01-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		981	2000	pg/L	49.0	
13C-1,2,3,4,7,8,9-HpCDF		1030	2000	pg/L	51.4	
37Cl-2,3,7,8-TCDD		134	200	pg/L	67.2	(42%-164%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028766**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46197**				
Client ID:	**LCS for batch 46197**			**Prep Basis:**	**As Received**
Batch ID:	**46199**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/04/2021 02:35**	**Analyst:**	**MLL**	**Instrument:**	**HRP750**
Data File:	**A03MAR21C_2-1**			**Dilution:**	**1**
Prep Batch:	**46197**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**01-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		180	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		898	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		839	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		867	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		786	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		813	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1580	pg/L	100
51207-31-9	2,3,7,8-TCDF		168	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		769	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		845	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		834	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		836	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		809	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		735	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		868	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		782	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1570	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1160	2000	pg/L	58.0	(25%-141%)
13C-1,2,3,7,8-PeCDD		1250	2000	pg/L	62.4	
13C-1,2,3,4,7,8-HxCDD		1000	2000	pg/L	50.2	
13C-1,2,3,6,7,8-HxCDD		1270	2000	pg/L	63.5	
13C-1,2,3,4,6,7,8-HpCDD		1060	2000	pg/L	52.9	
13C-OCDD		1960	4000	pg/L	49.0	
13C-2,3,7,8-TCDF		1320	2000	pg/L	65.8	(26%-126%)
13C-1,2,3,7,8-PeCDF		1250	2000	pg/L	62.7	
13C-2,3,4,7,8-PeCDF		1290	2000	pg/L	64.3	
13C-1,2,3,4,7,8-HxCDF		1040	2000	pg/L	52.1	
13C-1,2,3,6,7,8-HxCDF		1260	2000	pg/L	63.0	
13C-2,3,4,6,7,8-HxCDF		1190	2000	pg/L	59.6	
13C-1,2,3,7,8,9-HxCDF		1020	2000	pg/L	50.9	
13C-1,2,3,4,6,7,8-HpCDF		1070	2000	pg/L	53.6	
13C-1,2,3,4,7,8,9-HpCDF		965	2000	pg/L	48.2	
37Cl-2,3,7,8-TCDD		145	200	pg/L	72.5	(37%-158%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028767**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46197**				
Client ID:	**LCSD for batch 46197**			**Prep Basis:**	**As Received**
Batch ID:	**46199**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/04/2021 03:24**	**Analyst:**	**MLL**	**Instrument:**	**HRP750**
Data File:	**A03MAR21C_2-2**			**Dilution:**	**1**
Prep Batch:	**46197**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**01-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		173	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		920	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		886	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		917	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		848	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		868	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1750	pg/L	100
51207-31-9	2,3,7,8-TCDF		161	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		806	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		907	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		864	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		919	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		835	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		971	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		780	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		930	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1830	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1390	2000	pg/L	69.4	(25%-141%)
13C-1,2,3,7,8-PeCDD		1440	2000	pg/L	71.8	
13C-1,2,3,4,7,8-HxCDD		1170	2000	pg/L	58.3	
13C-1,2,3,6,7,8-HxCDD		1420	2000	pg/L	71.2	
13C-1,2,3,4,6,7,8-HpCDD		1260	2000	pg/L	63.1	
13C-OCDD		2090	4000	pg/L	52.2	
13C-2,3,7,8-TCDF		1500	2000	pg/L	74.9	(26%-126%)
13C-1,2,3,7,8-PeCDF		1460	2000	pg/L	73.0	
13C-2,3,4,7,8-PeCDF		1440	2000	pg/L	72.1	
13C-1,2,3,4,7,8-HxCDF		1160	2000	pg/L	57.8	
13C-1,2,3,6,7,8-HxCDF		1360	2000	pg/L	68.0	
13C-2,3,4,6,7,8-HxCDF		1280	2000	pg/L	64.1	
13C-1,2,3,7,8,9-HxCDF		1090	2000	pg/L	54.3	
13C-1,2,3,4,6,7,8-HpCDF		1220	2000	pg/L	61.1	
13C-1,2,3,4,7,8,9-HpCDF		1070	2000	pg/L	53.5	
37Cl-2,3,7,8-TCDD		157	200	pg/L	78.5	(37%-158%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028785**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 46222**				
Client ID:	**MB for batch 46222**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 00:57**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-3**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**1 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/g	10.0
40321-76-4	1,2,3,7,8-PeCDD	U	50.0	pg/g	50.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	50.0	pg/g	50.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	50.0	pg/g	50.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	50.0	pg/g	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	50.0	pg/g	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	100	pg/g	100
51207-31-9	2,3,7,8-TCDF	U	10.0	pg/g	10.0
57117-41-6	1,2,3,7,8-PeCDF	U	50.0	pg/g	50.0
57117-31-4	2,3,4,7,8-PeCDF	U	50.0	pg/g	50.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	50.0	pg/g	50.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	50.0	pg/g	50.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	50.0	pg/g	50.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	50.0	pg/g	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	50.0	pg/g	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	50.0	pg/g	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	100	pg/g	100
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	10.0	pg/g	10.0
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	50.0	pg/g	50.0
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	50.0	pg/g	50.0
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	50.0	pg/g	50.0
30402-14-3	Total Tetrachlorodibenzofuran	U	10.0	pg/g	10.0
30402-15-4	Total Pentachlorodibenzofuran	U	50.0	pg/g	50.0
55684-94-1	Total Hexachlorodibenzofuran	U	50.0	pg/g	50.0
38998-75-3	Total Heptachlorodibenzofuran	U	50.0	pg/g	50.0
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		57.0	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1630	2000	pg/g	81.6	(25%-164%)
13C-1,2,3,7,8-PeCDD		1600	2000	pg/g	80.0	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		1690	2000	pg/g	84.3	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		1730	2000	pg/g	86.5	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		1770	2000	pg/g	88.4	(23%-140%)
13C-OCDD		3190	4000	pg/g	79.8	(17%-157%)
13C-2,3,7,8-TCDF		1720	2000	pg/g	85.8	(24%-169%)
13C-1,2,3,7,8-PeCDF		1670	2000	pg/g	83.7	(24%-185%)
13C-2,3,4,7,8-PeCDF		1800	2000	pg/g	89.9	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		1640	2000	pg/g	81.9	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		1680	2000	pg/g	83.9	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		1710	2000	pg/g	85.5	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		1790	2000	pg/g	89.4	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028785**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 46222**				
Client ID:	**MB for batch 46222**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 00:57**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-3**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**1 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		1570	2000	pg/g	78.5	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		1660	2000	pg/g	83.2	(26%-138%)
37Cl-2,3,7,8-TCDD		139	200	pg/g	69.7	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028786**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 46222**				
Client ID:	**LCS for batch 46222**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 23:18**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-1**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**1 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		186	pg/g	10.0
40321-76-4	1,2,3,7,8-PeCDD		1110	pg/g	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		1020	pg/g	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		1050	pg/g	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		1090	pg/g	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		959	pg/g	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1960	pg/g	100
51207-31-9	2,3,7,8-TCDF		177	pg/g	10.0
57117-41-6	1,2,3,7,8-PeCDF		935	pg/g	50.0
57117-31-4	2,3,4,7,8-PeCDF		964	pg/g	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		992	pg/g	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		1030	pg/g	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		1010	pg/g	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		986	pg/g	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		1050	pg/g	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		1040	pg/g	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1920	pg/g	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1620	2000	pg/g	81.0	(20%-175%)
13C-1,2,3,7,8-PeCDD		1680	2000	pg/g	84.2	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1670	2000	pg/g	83.4	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1690	2000	pg/g	84.7	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1800	2000	pg/g	90.2	(22%-166%)
13C-OCDD		3640	4000	pg/g	91.1	(13%-199%)
13C-2,3,7,8-TCDF		1710	2000	pg/g	85.4	(22%-152%)
13C-1,2,3,7,8-PeCDF		1710	2000	pg/g	85.3	(21%-192%)
13C-2,3,4,7,8-PeCDF		1870	2000	pg/g	93.3	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1610	2000	pg/g	80.4	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1720	2000	pg/g	85.9	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1680	2000	pg/g	84.0	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1750	2000	pg/g	87.7	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1600	2000	pg/g	80.1	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1720	2000	pg/g	86.1	(20%-186%)
37Cl-2,3,7,8-TCDD		140	200	pg/g	70.0	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028787**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 46222**				
Client ID:	**LCSD for batch 46222**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 00:08**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-2**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**1 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		214	pg/g	10.0
40321-76-4	1,2,3,7,8-PeCDD		1130	pg/g	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		988	pg/g	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		1000	pg/g	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		923	pg/g	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		1050	pg/g	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		2150	pg/g	100
51207-31-9	2,3,7,8-TCDF		190	pg/g	10.0
57117-41-6	1,2,3,7,8-PeCDF		908	pg/g	50.0
57117-31-4	2,3,4,7,8-PeCDF		962	pg/g	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		911	pg/g	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		1020	pg/g	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		1010	pg/g	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		1010	pg/g	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		1120	pg/g	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		1080	pg/g	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		2150	pg/g	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1520	2000	pg/g	76.1	(20%-175%)
13C-1,2,3,7,8-PeCDD		1320	2000	pg/g	66.2	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1780	2000	pg/g	89.2	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1880	2000	pg/g	94.1	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1810	2000	pg/g	90.5	(22%-166%)
13C-OCDD		3410	4000	pg/g	85.2	(13%-199%)
13C-2,3,7,8-TCDF		1650	2000	pg/g	82.3	(22%-152%)
13C-1,2,3,7,8-PeCDF		1470	2000	pg/g	73.7	(21%-192%)
13C-2,3,4,7,8-PeCDF		1520	2000	pg/g	75.8	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1910	2000	pg/g	95.7	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1810	2000	pg/g	90.3	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1860	2000	pg/g	92.8	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1740	2000	pg/g	86.9	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1670	2000	pg/g	83.6	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1750	2000	pg/g	87.3	(20%-186%)
37Cl-2,3,7,8-TCDD		159	200	pg/g	79.6	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028788**	**Date Collected:**	**02/11/2021 12:25**	**Matrix:**	**Oil**
Client Sample:	**QC for batch 46222**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHW-01(17794001MS)**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 02:37**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-5**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0198 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		9740	pg/g	505
40321-76-4	1,2,3,7,8-PeCDD		57400	pg/g	2530
39227-28-6	1,2,3,4,7,8-HxCDD		52100	pg/g	2530
57653-85-7	1,2,3,6,7,8-HxCDD		54600	pg/g	2530
19408-74-3	1,2,3,7,8,9-HxCDD		55300	pg/g	2530
35822-46-9	1,2,3,4,6,7,8-HpCDD		68800	pg/g	2530
3268-87-9	1,2,3,4,6,7,8,9-OCDD		178000	pg/g	5050
51207-31-9	2,3,7,8-TCDF		9230	pg/g	505
57117-41-6	1,2,3,7,8-PeCDF		48300	pg/g	2530
57117-31-4	2,3,4,7,8-PeCDF		49200	pg/g	2530
70648-26-9	1,2,3,4,7,8-HxCDF		51400	pg/g	2530
57117-44-9	1,2,3,6,7,8-HxCDF		51400	pg/g	2530
60851-34-5	2,3,4,6,7,8-HxCDF		51800	pg/g	2530
72918-21-9	1,2,3,7,8,9-HxCDF		50100	pg/g	2530
67562-39-4	1,2,3,4,6,7,8-HpCDF		70500	pg/g	2530
55673-89-7	1,2,3,4,7,8,9-HpCDF		54100	pg/g	2530
39001-02-0	1,2,3,4,6,7,8,9-OCDF		271000	pg/g	5050

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		66000	101000	pg/g	65.3	(25%-164%)
13C-1,2,3,7,8-PeCDD		59700	101000	pg/g	59.1	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		64100	101000	pg/g	63.4	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		66000	101000	pg/g	65.4	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		66900	101000	pg/g	66.3	(23%-140%)
13C-OCDD		140000	202000	pg/g	69.2	(17%-157%)
13C-2,3,7,8-TCDF		67200	101000	pg/g	66.5	(24%-169%)
13C-1,2,3,7,8-PeCDF		64700	101000	pg/g	64.0	(24%-185%)
13C-2,3,4,7,8-PeCDF		67200	101000	pg/g	66.5	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		63500	101000	pg/g	62.8	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		64500	101000	pg/g	63.8	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		64000	101000	pg/g	63.4	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		65600	101000	pg/g	65.0	(29%-147%)
13C-1,2,3,4,6,7,8-HpCDF		63000	101000	pg/g	62.3	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		62200	101000	pg/g	61.5	(26%-138%)
37Cl-2,3,7,8-TCDD		5470	10100	pg/g	54.2	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028789**	**Date Collected:**	**02/11/2021 12:25**	**Matrix:**	**Oil**
Client Sample:	**QC for batch 46222**	**Date Received:**	**02/25/2021 11:20**		
Client ID:	**PCPHW-01(17794001MSD)**			**Prep Basis:**	**As Received**
Batch ID:	**46224**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/18/2021 03:27**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b17mar21a_2-6**			**Dilution:**	**1**
Prep Batch:	**46222**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**02-MAR-21**	**Prep Aliquot:**	**.0196 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		9940	pg/g	510
40321-76-4	1,2,3,7,8-PeCDD		58700	pg/g	2550
39227-28-6	1,2,3,4,7,8-HxCDD		53000	pg/g	2550
57653-85-7	1,2,3,6,7,8-HxCDD		55800	pg/g	2550
19408-74-3	1,2,3,7,8,9-HxCDD		53900	pg/g	2550
35822-46-9	1,2,3,4,6,7,8-HpCDD		72300	pg/g	2550
3268-87-9	1,2,3,4,6,7,8,9-OCDD		199000	pg/g	5100
51207-31-9	2,3,7,8-TCDF		9440	pg/g	510
57117-41-6	1,2,3,7,8-PeCDF		48500	pg/g	2550
57117-31-4	2,3,4,7,8-PeCDF		50200	pg/g	2550
70648-26-9	1,2,3,4,7,8-HxCDF		50500	pg/g	2550
57117-44-9	1,2,3,6,7,8-HxCDF		52600	pg/g	2550
60851-34-5	2,3,4,6,7,8-HxCDF		51900	pg/g	2550
72918-21-9	1,2,3,7,8,9-HxCDF		50900	pg/g	2550
67562-39-4	1,2,3,4,6,7,8-HpCDF		75500	pg/g	2550
55673-89-7	1,2,3,4,7,8,9-HpCDF		57400	pg/g	2550
39001-02-0	1,2,3,4,6,7,8,9-OCDF		309000	pg/g	5100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		79200	102000	pg/g	77.6	(25%-164%)
13C-1,2,3,7,8-PeCDD		71300	102000	pg/g	69.9	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		80400	102000	pg/g	78.8	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		81100	102000	pg/g	79.5	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		82600	102000	pg/g	81.0	(23%-140%)
13C-OCDD		178000	204000	pg/g	87.1	(17%-157%)
13C-2,3,7,8-TCDF		80600	102000	pg/g	78.9	(24%-169%)
13C-1,2,3,7,8-PeCDF		77000	102000	pg/g	75.5	(24%-185%)
13C-2,3,4,7,8-PeCDF		80200	102000	pg/g	78.6	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		79500	102000	pg/g	78.0	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		79100	102000	pg/g	77.5	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		79600	102000	pg/g	78.0	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		80000	102000	pg/g	78.4	(29%-147%)
13C-1,2,3,4,6,7,8-HpCDF		78400	102000	pg/g	76.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		75600	102000	pg/g	74.1	(26%-138%)
37Cl-2,3,7,8-TCDD		6630	10200	pg/g	65.0	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028846**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46285**				
Client ID:	**MB for batch 46285**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 13:13**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a-4**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD	U	50.0	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	50.0	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	50.0	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	50.0	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	50.0	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	100	pg/L	100
51207-31-9	2,3,7,8-TCDF	U	10.0	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF	U	50.0	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF	U	50.0	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	50.0	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	50.0	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	50.0	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	50.0	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	50.0	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	50.0	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	100	pg/L	100
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		57.0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1220	2000	pg/L	61.0	(25%-164%)
13C-1,2,3,7,8-PeCDD		1060	2000	pg/L	53.1	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		1190	2000	pg/L	59.4	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		1140	2000	pg/L	56.9	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		1200	2000	pg/L	60.2	(23%-140%)
13C-OCDD		2280	4000	pg/L	57.1	(17%-157%)
13C-2,3,7,8-TCDF		1230	2000	pg/L	61.3	(24%-169%)
13C-1,2,3,7,8-PeCDF		1110	2000	pg/L	55.7	(24%-185%)
13C-2,3,4,7,8-PeCDF		1150	2000	pg/L	57.5	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		1160	2000	pg/L	58.2	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		1210	2000	pg/L	60.6	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		1150	2000	pg/L	57.6	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		1120	2000	pg/L	55.9	(29%-147%)
13C-1,2,3,4,6,7,8-HpCDF		1010	2000	pg/L	50.7	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		1060	2000	pg/L	53.0	(26%-138%)
37Cl-2,3,7,8-TCDD		147	200	pg/L	73.5	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028847**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46285**				
Client ID:	**LCS for batch 46285**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 11:34**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a-2**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		167	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		994	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		930	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		920	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		951	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		867	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1740	pg/L	100
51207-31-9	2,3,7,8-TCDF		159	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		853	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		861	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		887	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		891	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		900	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		887	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		964	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		947	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1680	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1450	2000	pg/L	72.6	(20%-175%)
13C-1,2,3,7,8-PeCDD		1260	2000	pg/L	63.2	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1430	2000	pg/L	71.3	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1280	2000	pg/L	64.1	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1410	2000	pg/L	70.3	(22%-166%)
13C-OCDD		2770	4000	pg/L	69.2	(13%-199%)
13C-2,3,7,8-TCDF		1400	2000	pg/L	70.1	(22%-152%)
13C-1,2,3,7,8-PeCDF		1310	2000	pg/L	65.4	(21%-192%)
13C-2,3,4,7,8-PeCDF		1340	2000	pg/L	67.2	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1390	2000	pg/L	69.7	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1310	2000	pg/L	65.6	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1310	2000	pg/L	65.5	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1350	2000	pg/L	67.3	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1220	2000	pg/L	61.1	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1300	2000	pg/L	65.2	(20%-186%)
37Cl-2,3,7,8-TCDD		153	200	pg/L	76.7	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**17794**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12028848**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 46285**				
Client ID:	**LCSD for batch 46285**			**Prep Basis:**	**As Received**
Batch ID:	**46287**	**Method:**	**EPA Method 1613B**		
Run Date:	**03/17/2021 12:23**	**Analyst:**	**CLP**	**Instrument:**	**HRP763**
Data File:	**b17mar21a-3**			**Dilution:**	**1**
Prep Batch:	**46285**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**09-MAR-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		181	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		1070	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		971	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		1020	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		1010	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		936	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1870	pg/L	100
51207-31-9	2,3,7,8-TCDF		168	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		921	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		922	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		944	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		981	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		957	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		967	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		1040	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		1020	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1790	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1430	2000	pg/L	71.5	(20%-175%)
13C-1,2,3,7,8-PeCDD		1240	2000	pg/L	62.1	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1420	2000	pg/L	71.0	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1330	2000	pg/L	66.5	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1370	2000	pg/L	68.3	(22%-166%)
13C-OCDD		2510	4000	pg/L	62.8	(13%-199%)
13C-2,3,7,8-TCDF		1430	2000	pg/L	71.7	(22%-152%)
13C-1,2,3,7,8-PeCDF		1300	2000	pg/L	64.8	(21%-192%)
13C-2,3,4,7,8-PeCDF		1360	2000	pg/L	68.0	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1390	2000	pg/L	69.4	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1380	2000	pg/L	69.0	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1330	2000	pg/L	66.5	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1280	2000	pg/L	64.2	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1210	2000	pg/L	60.4	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1250	2000	pg/L	62.7	(20%-186%)
37Cl-2,3,7,8-TCDD		151	200	pg/L	75.3	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

ATTACHMENT B.2

RJ LEE GROUP, INC REPORT W102103
(FEBRUARY, 2021 SAMPLES)



RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

Separate analytical reports were initially issued to Maul Foster for Columbia Basin Analytical Laboratory Work Order W102103. This report consolidates the individual analytical reports into a single document. The following changes were made to the analytical reports:

- *2-Methylphenol has been reported in the EPA 8270D results for samples W102103-13 (STRM-01) and W12103-14 (POND-01).*
- *The occurrence of measurable levels of pentachlorophenol in CB-S2 in the EPA 8270D Quality Control Report for Non-Potable water, associated with samples W102103-13 and W102103-14, has been 'B' flagged.*
- *Formatting edits to remove extra line spaces on some of the reports*
- *Formatting edits to remove margin overruns on some of the reports*

This combined report is separated into seven sections determined by analyses presented in the original reports and the CoC/Login report. A separator page appears between the data sets with a brief description of the data following the separator.

10/15/2021

Joe Sears, Ph.D., Laboratory Technical Manager

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

SECTION 1

Laboratory Report Cover Letter
EPA 8270D; Non-Potable Water & Oils
Client Project; JH Baxter & Co.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

September 13, 2021

Revised Report, W102103 Maul Foster, Rev. 2

The report (Revision 1) issued to Maul Foster & Alongi, Inc. on April 15, 2021 regarding the analysis of samples for BTEX and semivolatile compounds has been revised to correct errors found in the BTEX report and to report only phenol in the samples, per request of Maul Foster & Alongi. Revised reports for the aldehydes and methanol analysis are included herein to incorporate changes to the report templates. The remainder of this cover letter contains the original narrative from the initial report. Excluded from this report of the listed parameters are the CBAL Login Report and the Chain of Custody. The Rev. 2 report includes the Aldehydes by EPA TO-11a Modified, BTEX by EPA 8260C and EPA 8015D, Phenol by EPA 8270D, and Methanol by EPA 8015D. The following is a list of changes made to the reports:

- *EPA 8270D sample results – all analytes, with the exception of phenol, have been removed from the reports for samples W102103-01, -02, -03, -04, -05, -08, -09, -10, -11, and -12. The results for W102103-06 have been removed from the report.*
- *The reporting units for W102103-10 have been changed from ug/L to mg/Kg to reflect the use of sample weight rather than sample volume for the analysis of the oil-based matrix.*
- *A column has been added to the 8270D QC Reports (Oils and NPW), associated with the samples in the bullet point above, showing the acceptance limits for the analyte recoveries (Range %).*
- *EPA 8270D W102103-013 (STRM-01) and W102103-14 (POND-01) reports have been modified to include a column (Range %) to show the acceptance limits for the surrogate recoveries.*
- *A separate QC report has been prepared to reflect the EPA 8270D analytes reported in samples W102103-13 (STRM-01) and W102103-14 (POND-01). The report includes a column (Range %) for the acceptance limits for the percent recovery of the surrogates and analytes in the QC.*
- *The BTEX report has been corrected to remove a duplicate entry for W102103-13 (STRM-01). The results for W102103-14 (POND-01) have been incorporated in its place.*
- *The BTEX sample reports and BTEX QC Report have been modified to include a column for the acceptance criteria (Range %) for the recovery of spiked analytes and surrogates.*
- *The EPA 8015D analysis for methanol QC report has been updated to include a column for the acceptance criteria (Range %) for the batch QC samples.*
- *The 'S' flags in the TO-11a report have been changed to 'R' flags to maintain consistency with the EPA 8270E report formats. 'S' = Surrogate recovery failure; 'R' = Analyte % Recovery failure.*
- *The TO-11a QC report has an added column to show the acceptance criteria (Range %) for the analyte recovery in the batch QC samples.*
- *The definitions of the qualifiers in the TO-11a report have been updated to be consistent throughout the analytical reports.*
- *The phone number for RJLee Group, Inc., Columbia Basin Analytical Laboratory has been updated in the headers of all reports to reflect a recent phone number change.*
- *Revision of the EDD with the Rev. 2 sample data.*

Revised Report, W102103 Maul Foster, Rev. 1

The report issued to Maul Foster & Alongi, Inc. regarding the analysis of samples for the compounds shown below has been revised to incorporate a series of errors in the original report found by both Maul Foster and RJ Lee Group. The remainder of this cover letter contains the original narrative from the initial report. Excluded from this report of the listed parameters are the CBAL Login Report and the Chain of Custody. The revised reports include the Aldehydes by EPA TO-11a Modified, the BTEX by EPA 8260C and EPA 8015D, and the Semivolatiles by EPA 8270D.

Subject: Analysis of samples for PAHs, Phenol, PCP, Chlorinated Phenols, BTEX, and aldehydes.
CBAL Work Order W102103.

Several samples were received on February 12, 2021 from sampling activities conducted by Columbia Basin Analytical Laboratory (CBAL) personnel on February 11, 2021. The samples were assigned a Work Order number of W102103 with each sample receiving a sub-number of -01 through -14. A copy of the Chain of Custody and CBAL Login Report accompanies this laboratory report as a reference of sample identifications and requested analyses for each sample.

The sample matrix was either oil or aqueous based. Appropriate EPA methods were employed for the analysis of each sample, depending upon the matrix type. The semivolatiles analysis (Phenol, Chlorinated Phenols, Polynuclear Aromatic Hydrocarbons were performed by EPA 8270D using either liquid/liquid shakeout (aqueous matrix) or waste dilution (oil matrix) for the sample preparation. The analysis of benzene, toluene, ethylbenzene, and xylenes was performed by EPA 8260C (aqueous matrix) or EPA 8015D (oil matrix). The analysis of the aldehydes was performed by a modified EPA TO-11a method in which the aldehyde of interest was derivatized with 2,4-Dinitrophenylhydrazine and analyzed by high performance liquid chromatography. The analysis of method in the samples is pending a method modification that will permit the isolation of the methanol from the oil matrix. The methanol analysis should be completed during the week of April 12-16.

Due to the complexity of the sample matrix and concentration difference of the target analytes in the samples, multiple dilutions of most samples were required to bring the analyte concentration within the range of the respective calibration curves. This resulted in a significantly greater number of re-analyses of the samples.

The report includes this cover letter, the individual sample reports for each analytical method, a Quality Control report for each method a copy of the Chain of Custody, and a copy of the Columbia Basin Analytical Laboratory Login Report.

The results provided in this report relate only to the items tested. Samples were received in acceptable conditions unless otherwise noted in the comments above. Sample results for solid matrices have been corrected for the dry weight determinations unless otherwise state in the report. Information provided by the customer can affect the validity of the results. The results in this report apply to the sample as it was received. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratory.

I certify that this report complies with the Columbia Basin Analytical Laboratory Quality Assurance Program and that all Quality Assurance measures were implemented and adhered to in the analysis of this sample set. Release of the data contained in this laboratory report has been authorized by the Laboratory Director or a designee as verified by the following signature.



04/05/2021

Joe Sears, Ph.D., Laboratory Technical Manager

If you have any questions, please feel free to contact Joe Sears at jsears@rjleegroup.com or at 509-792-1955.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
e-mail:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID										
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Reporting Limit (mg/kg)	Surr %REC	Qualifier
PCPHW-01	W102103-01	Phenol	108-95-2	*Y*	Oil	*T*	< 100	100		D=10

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 09/07/21

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
e-mail:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	%REC	Qualifier
OIL-01	W102103-02	Phenol	108-95-2	*Y*	Oil	*T*	900	250		D=50

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee Group
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
e-mail:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID								Reporting		
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	Surr %REC	Qualifier
BLND-01	W102103-03	Phenol	108-95-2	*Y*	Oil	*T*	794	250		D=50

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID								Reporting		
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	Surr %REC	Qualifier
PCP-01	W102103-04	Phenol	108-95-2	*Y*	Oil	*T*	< 250	250		D=50

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 09/07/21

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report; W102103**		Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	%REC	Qualifier
PCP-01 DUP	W102103-05	Phenol	108-95-2	*Y*	Oil	*T*	< 250	250		D=50

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee Group
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	03/29/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Qualifier
HOHW-01	W102103-06	Phenol	108-95-2	*Y*	NPW	*T*	197000	2500		D=50

Comments: Reporting Limits have been adjusted for sample volume and dilution factors. Surrogate not detected at the high dilution factors.

mg/L = milligrams per liter (ppm)
N/A = Not Applicable
Int. STD. = Internal Standard
Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	03/29/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Qualifier
OWSHO-01	W102103-08	Phenol	108-95-2	*N*	NPW	*T*	4990	50		

Comments: Reporting Limits have been adjusted for sample volume and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee Group
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	03/29/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Qualifier
OWSHO-DUP	W102103-09	Phenol	108-95-2	*N*	NPW	*T*	4220	500		D=10

Comments: Reporting Limits have been adjusted for sample volume and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	02/26/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/Kg	Limit mg/Kg	%REC	Qualifier
PCPHO-01	W102103-10	Phenol	108-95-2	*N*	Oil	*T*	65	50		D=10

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 09/07/21

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	03/29/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Qualifier
EVAP-01	W102103-11	Phenol	108-95-2	*N*	NPW	*T*	1700	57		D=10

Comments: Reporting Limits have been adjusted for sample volume and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee Group
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**		RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**		Samples Received:	02/12/21
	Portland, OR 97209			Prep/Date:	03/29/21
Attention:	Brian Snuffer	**Revised Report;**	**W102103**	Report Date:	09/07/21
Telephone:	503-314-8589	**Rev. 2; 09/07/21**		Sampling Date:	02/11/21
Fax:	bsnuffer@maulfoster.com			Purchase Order No.:	Q01132020-115
				Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Qualifier
EVAP-01 DUP	W102103-12	Phenol	108-95-2	*N*	NPW	*T*	2000	59		D=10

Comments: Reporting Limits have been adjusted for sample volume and dilution factors

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/07/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270D

Revised Report;
W102103 Rev. 2; 09/07/21

RJ Lee Group Project: W102103
Samples Received: 02/12/21
Prep/Date: 02/26/21
Report Date: 09/08/21
Sampling Date: 02/11/21
Purchase Order No.: Q01132020-115
Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
STRM-01	W102103-13	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	2-Fluorophenol	367-12-4	Y	NPW	Surr	15	5.0	70-130	60	S
STRM-01	W102103-13	Phenol-d6	13127-88-3	Y	NPW	Surr	13	5.0	70-130	52	S
STRM-01	W102103-13	Phenol	108-95-2	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	2-Methylphenol	95-48-7	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	8.0	5.0	70-130	32	S
STRM-01	W102103-13	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	Naphthalene	91-20-3	Y	NPW	T	6.1	5.4			
STRM-01	W102103-13	2-Methylnaphthalene	91-57-6	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	1-Methylnaphthalene	90-12-0	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	13	5.0	70-130	52	S
STRM-01	W102103-13	Acenaphthylene	208-96-8	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Acenaphthene	83-32-9	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Dibenzofuran	100-02-7	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Fluorene	86-73-7	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	8.6	5.0	70-130	34.4	S
STRM-01	W102103-13	Pentachlorophenol	87-86-5	Y	NPW	T	100	5.4			
STRM-01	W102103-13	Phenanthrene	85-01-8	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Anthracene	120-12-7	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Carbazole	86-74-8	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Fluoranthene	206-44-0	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	Pyrene	129-00-0	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Terphenyl-d14	1718-51-0	Y	NPW	Surr	13	5.0	70-130	52	S
STRM-01	W102103-13	Benzo(a)anthracene	56-55-3	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Chrysene	218-01-9	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Benzo(a)pyrene	50-32-8	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 5.4	5.4			
		Secondary PAHs									
STRM-01	W102103-13	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40	1.0			
STRM-01	W102103-13	Quinoline	91-22-5	N	NPW	T	< 5.4	5.4			
STRM-01	W102103-13	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40	1.0	70-130	160	S
STRM-01	W102103-13	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	14	5.0			
STRM-01	W102103-13	Biphenyl	92-52-4	Y	NPW	T	< 5.4	5.4			

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
STRM-01	W102103-13	Phenanthrene-d10	2531-84-2	*N*	NPW	*Int. Std*	40	1.0			
STRM-01	W102103-13	1-Methylphenanthrene	832-69-9	*N*	NPW	*T*	< 5.4	5.4			
STRM-01	W102103-13	Chrysene-d12	610-48-0	*N*	NPW	*Int. Std*	40	1.0			
STRM-01	W102103-13	5-Methylchrysene	3697-24-3	*N*	NPW	*T*	< 5.4	5.4			
STRM-01	W102103-13	Terphenyl-d14	1719-03-5	*N*	NPW	*Surr*	14	5.0	70-130	56	S
STRM-01	W102103-13	Perylene-d12	1520-96-3	*Y*	NPW	*Int. Std*	40	1.0			

Comments: Reporting Limits have been adjusted for sample volume and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270D

Revised Report;
W102103 Rev. 2; 09/07/21

RJ Lee Group Project: W102103
Samples Received: 02/12/21
Prep/Date: 02/26/21
Report Date: 09/08/21
Sampling Date: 02/11/21
Purchase Order No.: Q01132020-115
Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%	%REC	Qualifier
POND-01	W102103-14	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	2-Fluorophenol	367-12-4	Y	NPW	Surr	8.1	5.0	70-130	32.4	S
POND-01	W102103-14	Phenol-d6	13127-88-3	Y	NPW	Surr	7.6	5.0	70-130	30.4	S
POND-01	W102103-14	Phenol	108-95-2	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	2-Methylphenol	95-48-7	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	8.1	5.0	70-130	32.4	S
POND-01	W102103-14	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	Naphthalene	91-20-3	Y	NPW	T	170	5.4			
POND-01	W102103-14	2-Methylnaphthalene	91-57-6	Y	NPW	T	56	5.4			
POND-01	W102103-14	1-Methylnaphthalene	90-12-0	Y	NPW	T	22	5.4			
POND-01	W102103-14	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	14	5.0	70-130	56	S
POND-01	W102103-14	Acenaphthylene	208-96-8	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Acenaphthene	83-32-9	Y	NPW	T	7.5	5.4			
POND-01	W102103-14	Dibenzofuran	100-02-7	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Fluorene	86-73-7	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	9.6	5.0	70-130	38.4	S
POND-01	W102103-14	Pentachlorophenol	87-86-5	Y	NPW	T	32	5.4			
POND-01	W102103-14	Phenanthrene	85-01-8	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Anthracene	120-12-7	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Carbazole	86-74-8	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Fluoranthene	206-44-0	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	Pyrene	129-00-0	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Terphenyl-d14	1718-51-0	Y	NPW	Surr	20	5.0	70-130	80	
POND-01	W102103-14	Benzo(a)anthracene	56-55-3	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Chrysene	218-01-9	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Benzo(a)pyrene	50-32-8	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 5.4	5.4			
POND-01	W102103-14	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 5.4	5.4			
		Secondary PAHs									
POND-01	W102103-14	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40	1.0			
POND-01	W102103-14	Quinoline	91-22-5	N	NPW	T	19	5.4			
POND-01	W102103-14	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40	1.0	70-130	160	S
POND-01	W102103-14	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	16	5.0			
POND-01	W102103-14	Biphenyl	92-52-4	Y	NPW	T	5.4	5.4			

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%	%REC	Qualifier
POND-01	W102103-14	Phenanthrene-d10	2531-84-2	*N*	NPW	*Int. Std*	40	1.0			
POND-01	W102103-14	1-Methylphenanthrene	832-69-9	*N*	NPW	*T*	< 5.4	5.4			
POND-01	W102103-14	Chrysene-d12	610-48-0	*N*	NPW	*Int. Std*	40	1.0			
POND-01	W102103-14	5-Methylchrysene	3697-24-3	*N*	NPW	*T*	< 5.4	5.4			
POND-01	W102103-14	Terphenyl-d14	1719-03-5	*N*	NPW	*Surr*	20	5.0	70-130	80	
POND-01	W102103-14	Perylene-d12	1520-96-3	*Y*	NPW	*Int. Std*	40	1.0			

Comments: Reporting Limits have been adjusted for sample volume and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8270D
Oils

Revised Report;
W102103 Rev. 2; 09/07/21

RJ Lee Group Job No.: W102103
Samples Received: 2/12/2021
Analysis/Prep Date 2/26/2021
Report Date: 9/7/2021
Client Project: JH Baxter & Co.
COC No.: Q01132020-115

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV2	12.891	19988637	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV2	8.271	17176276	25.0	25.8	80-120	103		
Phenol-d6	13127-88-3	Surr	CCV2	12.324	18866584	25.0	25.1	80-120	100		
Phenol	108-95-2	T	CCV2	12.387	22139450	25.0	25.4	80-120	102		
Nitrobenzene-d5	4165-60-0	Surr	CCV2	16.664	17858064	25.0	25.8	80-120	103		
Naphthalene-d8	1146-65-2	Int. Std	CCV2	19.240	79644924	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	27.971	43805011	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV2	24.395	34927188	25.0	24.8	80-120	99.2		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	35.782	70922227	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV2	32.363	5042682	25.0	23.3	80-120	93.2		
Chrysene-d12	1719-03-5	Int. Std	CCV2	49.607	50928426	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CCV2	43.902	32178832	25.0	26.3	80-120	105		
Perylene-d12	1520-96-3	Int. Std	CCV2	56.713	26087053	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/mL**	**Result ug/mL**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S	12.893	22349598	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CB-S	8.276	18507171	25.0	24.9	80-120	99.6		
Phenol-d6	13127-88-3	Surr	CB-S	12.324	19414035	25.0	23.1	80-120	92.4		
Phenol	108-95-2	T	CB-S								
Nitrobenzene-d5	4165-60-0	Surr	CB-S	16.661	20141034	25.0	26.0	80-120	104		
Naphthalene-d8	1146-65-2	Int. Std	CB-S	19.231	87255442	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CB-S	27.971	42995689	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S	24.395	36413037	25.0	26.3	80-120	105		
Phenanthrene-d10	1517-22-2	Int. Std	CB-S	35.784	69520162	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S	32.379	4513391	25.0	21.3	80-120	85.2		
Fluoranthene	206-44-0	T	CB-S								
Chrysene-d12	1719-03-5	Int. Std	CB-S	49.608	51421011	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CB-S	43.906	34748755	25.0	28.1	80-120	112		
Perylene-d12	1520-96-3	Int. Std	CB-S	56.727	25153890	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/mL**	**Result ug/mL**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	RL	12.879	24131378	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	RL	8.290	648147	1.00	0.810	60-140	81.0		
Phenol-d6	13127-88-3	Surr	RL	12.338	727913	1.00	0.800	60-140	80.0		
Phenol	108-95-2	T	RL	12.396	845176	1.00	0.800	60-140	80.0		
Nitrobenzene-d5	4165-60-0	Surr	RL	16.666	720465	1.00	0.860	60-140	86.0		
Naphthalene-d8	1146-65-2	Int. Std	RL	19.231	89506602	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	RL	27.964	45834521	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	RL	24.413	1431718	1.00	0.970	60-140	97.0		
Phenanthrene-d10	1517-22-2	Int. Std	RL	35.776	75656535	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	RL	32.407	151950	1.00	0.660	60-140	66.0		
Chrysene-d12	1719-03-5	Int. Std	RL	49.612	55073899	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	RL	43.911	1247460	1.00	0.940	60-140	94.0		

Perylene-d12	1520-96-3	Int. Std	RL	56.722	29224182	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/Kg**	**Result ug/Kg**	**Range %**	**%REC**	**%RPD**	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCS	12.895	21137457	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	LCS	8.273	17941403	25.0	25.5	70-130	102		
Phenol-d6	13127-88-3	Surr	LCS	12.335	20036629	25.0	25.2	70-130	101		
Phenol	108-95-2	T	LCS	12.388	22080612	25.0	24.0	70-130	96.0		
Nitrobenzene-d5	4165-60-0	Surr	LCS	16.668	19610503	25.0	26.8	70-130	107		
Naphthalene-d8	1146-65-2	Int. Std	LCS	19.243	85051089	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	LCS	27.973	46998106	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	LCS	24.393	40012805	25.0	26.5	70-130	106		
Phenanthrene-d10	1517-22-2	Int. Std	LCS	35.783	76630767	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	LCS	32.365	5379942	25.0	23.0	70-130	92.0		
Chrysene-d12	1719-03-5	Int. Std	LCS	49.615	56199026	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	LCS	43.906	37541424	25.0	27.8	70-130	111		
Perylene-d12	1520-96-3	Int. Std	LCS	56.723	48540370	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/Kg**	**Result ug/Kg**	**Range %**	**%REC**	**%RPD**	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCSD	12.897	21597433	40.0	40.0		100	0.00	
2-Fluorophenol	367-12-4	Surr	LCSD	8.276	18713949	25.0	26.1	70-130	104	1.94	
Phenol-d6	13127-88-3	Surr	LCSD	12.328	20756626	25.0	25.5	70-130	102	0.99	
Phenol	108-95-2	T	LCSD	12.396	23267199	25.0	24.7	70-130	98.8	2.87	
Nitrobenzene-d5	4165-60-0	Surr	LCSD	16.671	20026528	25.0	26.7	70-130	107	0.00	
Naphthalene-d8	1146-65-2	Int. Std	LCSD	19.245	86483447	40.0	40.0		100	0.00	
Acenaphthene-d10	15067-26-2	Int. Std	LCSD	27.975	47993357	40.0	40.0		100	0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCSD	24.398	40859592	25.0	26.5	70-130	106	0.00	
Phenanthrene-d10	1517-22-2	Int. Std	LCSD	35.790	77735366	40.0	40.0		100	0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCSD	32.370	5549374	25.0	23.4	70-130	93.6	1.72	
Chrysene-d12	1719-03-5	Int. Std	LCSD	49.616	51960088	40.0	40.0		100	0.00	
Terphenyl-d14	1718-51-0	Surr	LCSD	43.911	36904255	25.0	29.6	70-130	118	6.11	
Perylene-d12	1520-96-3	Int. Std	LCSD	56.722	39053967	40.0	40.0		100	0.00	
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/Kg**	**Result ug/Kg**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	MRL1	12.892	20762817	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	MRL1	8.270	17333422	25.0	25.1	70-130	100		
Phenol-d6	13127-88-3	Surr	MRL1	12.323	18984242	25.0	24.3	70-130	97.2		
Phenol	108-95-2	T	MRL1	12.390	853687	1.00	0.940	60-140	94.0		
Nitrobenzene-d5	4165-60-0	Surr	MRL1	16.666	18115834	25.0	25.2	70-130	101		
Naphthalene-d8	1146-65-2	Int. Std	MRL1	19.235	80600004	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	MRL1	27.973	42084199	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	MRL1	24.398	35821380	25.0	26.5	70-130	106		
Phenanthrene-d10	1517-22-2	Int. Std	MRL1	35.782	70489629	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	MRL1	32.368	4487678	25.0	20.8	70-130	83.2		
Chrysene-d12	1719-03-5	Int. Std	MRL1	49.620	50776321	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	MRL1	43.914	35098769	25.0	28.8	70-130	115		
Perylene-d12	1520-96-3	Int. Std	MRL1	56.731	40507842	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/Kg**	**Result ug/Kg**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	BLK1	12.893	21662116	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	BLK1	8.269	18082826	25.0	25.1	70-130	100		
Phenol-d6	13127-88-3	Surr	BLK1	12.322	19134742	25.0	23.45	70-130	93.8		
Phenol	108-95-2	T	BLK1			0.00	0				
Nitrobenzene-d5	4165-60-0	Surr	BLK1	16.665	18212498	25.0	24.25	70-130	97.0		
Naphthalene-d8	1146-65-2	Int. Std	BLK1	19.241	82114816	40.0	40		100		
Acenaphthene-d10	15067-26-2	Int. Std	BLK1	27.974	42232053	40.0	40		100		

2,4,6-Trichlorophenol	88-06-2	T	BLK1			0.00	0				
2,4,5-Trichlorophenol	95-95-4	T	BLK1			0.00	0				
2-Fluorobiphenyl	321-60-8	Surr	BLK1	24.404	35878605	25.0	26.41	70-130	106		
Phenanthrene-d10	1517-22-2	Int. Std	BLK1	35.786	69020964	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	BLK1	32.381	4218028	25.0	20.01	70-130	80.0		
Chrysene-d12	1719-03-5	Int. Std	BLK1	49.606	50112663	40.0	40		100		
Terphenyl-d14	1718-51-0	Surr	BLK1	43.907	33518354	25.0	27.83	70-130	111		
Perylene-d12	1520-96-3	Int. Std	BLK1	56.725	37908948	40.0	40		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/mL**	**Result ug/mL**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV3	12.884	21173794	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV3	8.271	18048260	25.0	25.6	80-120	102		
Phenol-d6	13127-88-3	Surr	CCV3	12.319	20746022	25.0	26.0	80-120	104		
Nitrobenzene-d5	4165-60-0	Surr	CCV3	16.659	18653222	25.0	25.4	80-120	102		
Naphthalene-d8	1146-65-2	Int. Std	CCV3	19.233	83316912	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	27.961	46861117	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV3	24.389	37096049	25.0	24.6	80-120	98.4		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	35.775	77677898	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV3	32.354	5797261	25.0	24.4	80-120	97.6		
Chrysene-d12	1719-03-5	Int. Std	CCV3	49.610	57026942	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CCV3	43.898	36223937	25.0	26.4	80-120	106		
Perylene-d12	1520-96-3	Int. Std	CCV3	56.712	29606391	40.0	40.0		100		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/mL**	**Result ug/mL**	**Range %**	**%REC**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S3	12.884	21097468	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	CB-S3	8.262	18133136	25.0	25.84	80-120	103		
Phenol-d6	13127-88-3	Surr	CB-S3	12.320	19996225	25.0	25.16	80-120	101		
Phenol	108-95-2	T	CB-S3			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB-S3	16.658	18127763	25.0	24.78	80-120	99.1		
Naphthalene-d8	1146-65-2	Int. Std	CB-S3	19.228	79655782	40.0	40		100		
Acenaphthene-d10	15067-26-2	Int. Std	CB-S3	27.966	41582269	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S3	24.393	35098585	25.0	26.24	80-120	105		
Phenanthrene-d10	1517-22-2	Int. Std	CB-S3	35.778	72039864	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S3	32.370	4859350	25.0	22.08	80-120	88.3		
Chrysene-d12	1719-03-5	Int. Std	CB-S3	49.616	51877006	40.0	40		100		
Terphenyl-d14	1718-51-0	Surr	CB-S3	43.909	36738987	25.0	29.47	80-120	118		
Perylene-d12	1520-96-3	Int. Std	CB-S3	56.723	27410329	40.0	40		100		

Comments: Reporting Limits have been adjusted for sample volumes and diltution factors. QC parameters are for the reporting of phenol only in Oil samples W102103-01, -02, -03, -04, -05, and -10.

N/A = Not Applicable
Int. STD. = Internal Standard
T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an estim

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/7/2021

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8270D
NPW

Revised Report;
W102103 Rev. 2; 09/07/21

RJ Lee Group Job No.: W102103
Samples Received: 2/12/2021
Analysis/Prep Date 3/29/2021
Report Date: 9/7/2021
Client Project: JH Baxter & Co.
COC No.:

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV1	9.194	21862784	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV1	6.565	16778747	25.0	23.8	80-120	95.2		
Phenol-d6	13127-88-3	Surr	CCV1	8.828	19386596	25.0	24.2	80-120	96.8		
Phenol	108-95-2	T	CCV1	8.861	21416981	25.0	24.5	80-120	98.0		
2-Methylphenol	95-48-7	T	CCV1	10.141	12148713	25.0	23.4	80-120	93.6		
Nitrobenzene-d5	4165-60-0	Surr	CCV1	11.401	30066755	25.0	24.1	80-120	96.4		
Naphthalene-d8	1146-65-2	Int. Std	CCV1	12.560	78770084	40.0	40.0		100		
Acenaphthene-d10	90-12-0	Int. Std	CCV1	17.073	44274714	40.0	40.0		100		
2-Fluorobiphenyl	95-95-4	Surr	CCV1	15.159	37484259	25.0	25.6	80-120	102		
Phenanthrene-d10	100-01-6	Int. Std	CCV1	21.105	72326350	40.0	40.0		100		
2,4,6-Tribromophenol	1517-22-2	Surr	CCV1	19.330	4705935	25.0	24.7	80-120	98.8		
Chrysene-d12	206-44-0	Int. Std	CCV1	28.213	50140252	40.0	40.0		100		
Terphenyl-d14	129-00-0	Surr	CCV1	25.171	31249408	25.0	24.8	80-120	99.2		
Perylene-d12	218-01-9	Int. Std	CCV1	31.892	38866653	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB	9.186	22171520	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CB								
Phenol-d6	13127-88-3	Surr	CB								
Phenol	108-95-2	T	CB								
Nitrobenzene-d5	4165-60-0	Surr	CB								
Naphthalene-d8	1146-65-2	Int. Std	CB	12.555	80748456	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CB	17.069	44632885	40.0	40.0		100		
2-Fluorobiphenyl	95-95-4	T	CB								
Phenanthrene-d10	1517-22-2	Int. Std	CB	21.101	68193241	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	28.206	42266715	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CB								
Perylene-d12	1520-96-3	Int. Std	CB	31.892	38124681	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	RL	9.190	22299748	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	RL	6.582	627898	1.00	0.870	60-140	87.0		
Phenol-d6	13127-88-3	Surr	RL	8.827	698493	1.00	0.850	60-140	85.0		
Phenol	108-95-2	T	RL	8.876	813217	1.00	0.910	60-140	91.0		
Nitrobenzene-d5	4165-60-0	Surr	RL	11.391	1147132	1.00	0.900	60-140	90.0		
Naphthalene-d8	1146-65-2	Int. Std	RL	12.558	81105063	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	RL	17.071	45164188	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	RL	15.164	1476608	1.00	0.990	60-140	99.0		
Phenanthrene-d10	1517-22-2	Int. Std	RL	21.102	71419655	40.0	40.0		100		

2,4,6-Tribromophenol	118-79-6	Surr	RL	19.338	142497	1.00	0.760	60-140	76.0		
Chrysene-d12	1719-03-5	Int. Std	RL	28.204	50983081	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	RL	25.167	1193660	1.00	0.930	60-140	93.0		
Perylene-d12	1520-96-3	Int. Std	RL	31.884	37745631	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCS	9.193	24157994	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	LCS	6.594	14557744	25.0	18.7	70-130	74.8		
Phenol-d6	13127-88-3	Surr	LCS	8.835	11711714	25.0	13.2	70-130	52.8		**S**
Phenol	108-95-2	T	LCS	8.869	6544300	25.0	6.78	70-130	27.1		**R**
Nitrobenzene-d5	4165-60-0	Surr	LCS	11.395	20011199	25.0	14.5	70-130	58.0		**S**
Naphthalene-d8	1146-65-2	Int. Std	LCS	12.560	88372937	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	LCS	17.071	49652200	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	LCS	15.156	23415862	25.0	14.3	70-130	57.2		**S**
Phenanthrene-d10	1517-22-2	Int. Std	LCS	21.104	77828132	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	LCS	19.328	7611896	25.0	37.1	70-130	148		**S**
Chrysene-d12	1719-03-5	Int. Std	LCS	28.214	56402638	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	LCS	25.170	31016804	25.0	21.9	70-130	87.6		
Perylene-d12	1520-96-3	Int. Std	LCS	31.893	47252530	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCSD	9.192	20748284	40.0	40.0		100	0.00	
2-Fluorophenol	367-12-4	Surr	LCSD	6.587	11931336	25.0	17.8	70-130	71.2	4.93	
Phenol-d6	13127-88-3	Surr	LCSD	8.828	9513943	25.0	12.5	70-130	50.0	5.45	**S**
Phenol	108-95-2	T	LCSD	8.862	5400577	25.0	6.52	70-130	26.1	3.76	**R**
Nitrobenzene-d5	4165-60-0	Surr	LCSD	11.392	17998511	25.0	15.2	70-130	60.8	4.71	**S**
Naphthalene-d8	1146-65-2	Int. Std	LCSD	12.559	76222534	40.0	40.0		100	0.00	
Acenaphthene-d10	15067-26-2	Int. Std	LCSD	17.074	42815261	40.0	40.0		100	0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCSD	15.157	19763876	25.0	14.0	70-130	56.0	2.12	**S**
Phenanthrene-d10	1517-22-2	Int. Std	LCSD	21.106	67308814	40.0	40.0		100	0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCSD	19.331	6007310	25.0	33.8	70-130	135	9.19	**S**
Chrysene-d12	1719-03-5	Int. Std	LCSD	28.210	47757969	40.0	40.0		100	0.00	
Terphenyl-d14	1718-51-0	Surr	LCSD	25.171	25961470	25.0	21.6	70-130	86.4	1.38	
Perylene-d12	1520-96-3	Int. Std	LCSD	31.891	38866366	40.0	40.0		100	0.00	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	MRL1	9.187	23141271	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	MRL1	6.579	16837758	25.0	22.6	70-130	90.4		
Phenol-d6	13127-88-3	Surr	MRL1	8.825	13600104	25.0	16.0	70-130	64.0		
Phenol	108-95-2	T	MRL1	8.854	730996	2.00	0.790	60-140	39.5		R
Nitrobenzene-d5	4165-60-0	Surr	MRL1	11.186	12974398	25.0	9.81	70-130	39.2		S
Naphthalene-d8	1146-65-2	Int. Std	MRL1	12.555	84862062	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	MRL1	17.068	47700840	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	MRL1	15.153	28080621	25.0	17.8	70-130	71.2		
Phenanthrene-d10	1517-22-2	Int. Std	MRL1	21.101	75384942	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	MRL1	19.325	7177434	25.0	36.1	70-130	144		S
Chrysene-d12	1719-03-5	Int. Std	MRL1	28.206	55251434	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	MRL1	25.166	32229135	25.0	23.2	70-130	92.8		
Perylene-d12	1520-96-3	Int. Std	MRL1	31.887	44713710	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	BLK1	9.189	23225396	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	BLK1	6.591	17784934	25.0	23.76	70-130	95.0		
Phenol-d6	13127-88-3	Surr	BLK1	8.828	14590501	25.0	17.14	70-130	68.6		S
Phenol	108-95-2	T	BLK1	8.862	305894	0.00	0.33				
Nitrobenzene-d5	4165-60-0	Surr	BLK1	11.189	12265110	25.0	9.24	70-130	37.0		S
Naphthalene-d8	1146-65-2	Int. Std	BLK1	12.556	84404617	40.0	40		100		
Acenaphthene-d10	15067-26-2	Int. Std	BLK1	17.070	46885135	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	BLK1	15.157	26232131	25.0	16.92	70-130	67.7		S
Phenanthrene-d10	1517-22-2	Int. Std	BLK1	21.103	71492313	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	BLK1	19.327	6698220	25.0	35.52	70-130	142		S
Chrysene-d12	1719-03-5	Int. Std	BLK1	28.208	52966151	40.0	40		100		
Terphenyl-d14	1718-51-0	Surr	BLK1	25.169	28213236	25.0	21.16	70-130	84.6		
Perylene-d12	1520-96-3	Int. Std	BLK1	31.891	42630672	40.0	40		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV2	9.195	18231011	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV2	6.584	14095262	25.0	24.0	80-120	96.0		
Phenol-d6	13127-88-3	Surr	CCV2	8.844	17156814	25.0	25.7	80-120	103		
Phenol	108-95-2	T	CCV2	8.878	18670319	25.0	25.7	80-120	103		
Nitrobenzene-d5	4165-60-0	Surr	CCV2	11.196	15177195	25.0	14.6	80-120	58.4		**S**
Naphthalene-d8	1146-65-2	Int. Std	CCV2	12.561	66442230	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	17.072	37230299	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV2	15.157	31009425	25.0	25.2	80-120	101		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	21.105	60633974	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV2	19.334	3614469	25.0	22.6	80-120	90.4		
Chrysene-d12	1719-03-5	Int. Std	CCV2	28.216	39860485	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CCV2	25.172	25714624	40.0	25.6	80-120	64.0		**S**
Perylene-d12	1520-96-3	Int. Std	CCV2	31.897	34118557	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S2	9.195	23441248	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	CB-S2	6.580	18709538	25.0	24.77	80-120	99.1		
Phenol-d6	13127-88-3	Surr	CB-S2	8.845	20604782	25.0	23.99	80-120	96.0		
Phenol	108-95-2	T	CB-S2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB-S2	11.200	17668471	25.0	13.18	80-120	52.7		S
Naphthalene-d8	1146-65-2	Int. Std	CB-S2	12.566	79376260	40.0	40		100		
Acenaphthene-d10	15067-26-2	Int. Std	CB-S2	17.075	39513585	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S2	15.165	31127563	25.0	23.83	80-120	95.3		
Phenanthrene-d10	1517-22-2	Int. Std	CB-S2	21.112	71434208	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S2	19.337	3969126	25.0	21.06	80-120	84.2		
Chrysene-d12	1719-03-5	Int. Std	CB-S2	28.219	47916213	40.0	40		100		
Terphenyl-d14	1718-51-0	Surr	CB-S2	25.178	33141397	25.0	27.48	80-120	110		
Perylene-d12	1520-96-3	Int. Std	CB-S2	31.902	35951231	40.0	40		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier

1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV3	9.192	19755988	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV3	6.574	15358936	25.0	24.1	80-120	96.4		
Phenol-d6	13127-88-3	Surr	CCV3	8.834	18002341	25.0	24.9	80-120	99.6		
Phenol	108-95-2	T	CCV3	8.873	20084030	25.0	25.5	80-120	102		
Nitrobenzene-d5	4165-60-0	Surr	CCV3	11.193	15818464	25.0	14.0	80-120	56.0		S
Naphthalene-d8	1146-65-2	Int. Std	CCV3	12.557	70696015	40.0	40.0		100		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	17.071	39673052	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV3	15.158	32786447	25.0	25.0	80-120	100		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	21.106	64488015	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV3	19.331	4062250	25.0	23.9	80-120	95.6		
Chrysene-d12	1719-03-5	Int. Std	CCV3	28.218	41091701	40.0	40.0		100		
Terphenyl-d14	1718-51-0	Surr	CCV3	25.173	26833892	40.0	26.0	80-120	65.0		S
Perylene-d12	1520-96-3	Int. Std	CCV3	31.897	33961635	40.0	40.0		100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S2	9.188	23143158	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	CB-S2	6.570	17552363	25.0	23.53	80-120	94.1		
Phenol-d6	13127-88-3	Surr	CB-S2	8.835	19715074	25.0	23.25	80-120	93.0		
Phenol	108-95-2	T	CB-S2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB-S2	11.190	17391925	25.0	13.14	80-120	52.6		S
Naphthalene-d8	1146-65-2	Int. Std	CB-S2	12.554	81158835	40.0	40		100		
Acenaphthene-d10	15067-26-2	Int. Std	CB-S2	17.068	43015862	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S2	15.155	31455258	25.0	22.12	80-120	88.5		
Phenanthrene-d10	1517-22-2	Int. Std	CB-S2	21.103	75065766	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S2	19.330	4131246	25.0	20.86	80-120	83.4		
Chrysene-d12	1719-03-5	Int. Std	CB-S2	28.215	54168180	40.0	40		100		
Terphenyl-d14	1718-51-0	Surr	CB-S2	25.174	36509577	25.0	26.78	80-120	107		
Perylene-d12	1520-96-3	Int. Std	CB-S2	31.898	37684413	40.0	40		100		

Comments: Reporting Limits have been adjusted for sample volumes and diltution factors. QC parameters are for the reporting of phenol only in NPW samples W102103-06, -08, -09, -11, and -12.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an esti

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/7/2021

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group* , Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8270D
NPW - Samples W102103-13 & W102103-14
Revised Report; W102103 Rev. 2;
09/09/21

RJ Lee Group Job No.:	W102103
Samples Received:	2/12/2021
Analysis/Prep Date	3/29/2021
Report Date:	9/9/2021
Client Project:	JH Baxter & Co.
COC No.:	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV1	9.194	21862784	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV1	6.565	16778747	25.0	23.8	80-120	95.2		
Phenol-d6	13127-88-3	Surr	CCV1	8.828	19386596	25.0	24.2	80-120	96.8		
Phenol	108-95-2	T	CCV1	8.861	21416981	25.0	24.5	80-120	98.0		
2-Methylphenol	95-48-7	T	CCV1	10.141	12148713	25.0	23.4	80-120	93.6		
Nitrobenzene-d5	4165-60-0	Surr	CCV1	11.401	30066755	25.0	24.1	80-120	96.4		
Naphthalene-d8	1146-65-2	Int. Std	CCV1	12.560	78770084	40.0	40.0		100		
Naphthalene	120-83-2	T	CCV1	12.614	51107712	25.0	25.1	80-120	100		
2-Methylnaphthalene	59-50-7	T	CCV1	14.204	35248318	25.0	25.3	80-120	101		
1-Methylnaphthalene	91-57-6	T	CCV1	14.542	32579093	25.0	25.5	80-120	102		
Acenaphthene-d10	90-12-0	Int. Std	CCV1	17.073	44274714	40.0	40.0		100		
2-Fluorobiphenyl	95-95-4	Surr	CCV1	15.159	37484259	25.0	25.6	80-120	102		
Acenaphthylene	321-60-8	T	CCV1	16.830	43553125	40.0	25.0	80-120	62.5		R
Acenaphthene	208-96-8	T	CCV1	17.164	28669615	25.0	24.5	80-120	98.0		
Dibenzofuran	83-32-9	T	CCV1	17.548	41346912	25.0	24.9	80-120	99.6		
Fluorene	58-90-2	T	CCV1	18.478	34845196	25.0	25.5	80-120	102		
Phenanthrene-d10	100-01-6	Int. Std	CCV1	21.105	72326350	40.0	40.0		100		
2,4,6-Tribromophenol	1517-22-2	Surr	CCV1	19.330	4705935	25.0	24.7	80-120	98.8		
Pentachlorophenol	118-79-6	T	CCV1	20.505	3821969	25.0	22.4	80-120	89.6		
Phenanthrene	87-86-5	T	CCV1	21.169	47499409	25.0	24.3	80-120	97.2		
Anthracene	85-01-8	T	CCV1	21.279	48687833	25.0	25.4	80-120	102		
Carbazole	120-12-7	T	CCV1	22.183	33803774	25.0	20.7	80-120	82.8		
Fluoranthene	86-74-8	T	CCV1	24.312	48754501	25.0	25.2	80-120	101		
Chrysene-d12	206-44-0	Int. Std	CCV1	28.213	50140252	40.0	40.0		100		
Pyrene	1719-03-5	T	CCV1	25.007	48743313	25.0	26.1	80-120	104		
Terphenyl-d14	129-00-0	Surr	CCV1	25.171	31249408	25.0	24.8	80-120	99.2		
Benzo(a)anthracene	1718-51-0	T	CCV1	28.128	37269922	25.0	24.8	80-120	99.2		
Chrysene	56-55-3	T	CCV1	28.285	35277375	25.0	24.3	80-120	97.2		
Perylene-d12	218-01-9	Int. Std	CCV1	31.892	38866653	40.0	40.0		100		
Benzo(b)fluoranthene	1520-96-3	T	CCV1	30.884	31793657	25.0	26.7	80-120	107		
Benzo(k)fluoranthene	205-99-2	T	CCV1	30.884	31873866	25.0	23.6	80-120	94.4		
Benzo(a)pyrene	207-08-9	T	CCV1	31.703	25246137	25.0	24.1	80-120	96.4		
Indeno(1,2,3-c,d)pyrene	50-32-8	T	CCV1	34.750	24219641	25.0	23.7	80-120	94.8		
Dibenz(a,h)anthracene	193-39-5	T	CCV1	34.750	19504693	25.0	23.2	80-120	92.8		
Benzo(g,h,i)perylene	53-70-3	T	CCV1	35.839	18676081	25.0	22.9	80-120	91.6		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB	9.186	22171520	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CB								

Phenol-d6	13127-88-3	Surr	CB								
Phenol	108-95-2	T	CB								
2-Methylphenol	95-48-7	T	CB								
Nitrobenzene-d5	4165-60-0	Surr	CB								
Naphthalene-d8	1146-65-2	Int. Std	CB	12.555	80748456	40.0	40.0		100		
Naphthalene	91-20-3	T	CB								
2-Methylnaphthalene	91-57-6	T	CB								
1-Methylnaphthalene	90-12-0	T	CB								
Acenaphthene-d10	15067-26-2	Int. Std	CB	17.069	44632885	40.0	40.0		100		
2-Fluorobiphenyl	95-95-4	T	CB								
Acenaphthylene	321-60-8	Surr	CB								
Acenaphthene	83-32-9	T	CB								
Dibenzofuran	100-02-7	T	CB								
Fluorene	86-73-7	T	CB								
Phenanthrene-d10	1517-22-2	Int. Std	CB	21.101	68193241	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB								
Pentachlorophenol	87-86-5	T	CB								
Phenanthrene	85-01-8	T	CB								
Anthracene	120-12-7	T	CB								
Carbazole	86-74-8	T	CB								
Fluoranthene	206-44-0	T	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	28.206	42266715	40.0	40.0		100		
Pyrene	129-00-0	T	CB								
Terphenyl-d14	1718-51-0	Surr	CB								
Benzo(a)anthracene	56-55-3	T	CB	28.206	88615						
Chrysene	218-01-9	T	CB								
Perylene-d12	1520-96-3	Int. Std	CB	31.892	38124681	40.0	40.0		100		
Benzo(b)fluoranthene	205-99-2	T	CB								
Benzo(k)fluoranthene	207-08-9	T	CB								
Benzo(a)pyrene	50-32-8	T	CB	31.893	116125						
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB								
Dibenz(a,h)anthracene	53-70-3	T	CB								
Benzo(g,h,i)perylene	191-24-2	T	CB								

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	RL	9.190	22299748	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	RL	6.582	627898	1.00	0.870	60-140	87.0		
Phenol-d6	13127-88-3	Surr	RL	8.827	698493	1.00	0.850	60-140	85.0		
Phenol	108-95-2	T	RL	8.876	813217	1.00	0.910	60-140	91.0		
2-Methylphenol	95-48-7	T	RL	10.148	425045	1.00	0.800	60-140	80.0		
Nitrobenzene-d5	4165-60-0	Surr	RL	11.391	1147132	1.00	0.900	60-140	90.0		
Naphthalene-d8	1146-65-2	Int. Std	RL	12.558	81105063	40.0	40.0		100		
Naphthalene	91-20-3	T	RL	12.611	2184657	1.00	1.04	60-140	104		
2-Methylnaphthalene	91-57-6	T	RL	14.218	1387362	1.00	0.970	60-140	97.0		
1-Methylnaphthalene	90-12-0	T	RL	14.548	1275967	1.00	0.970	60-140	97.0		
Acenaphthene-d10	15067-26-2	Int. Std	RL	17.071	45164188	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	RL	15.164	1476608	1.00	0.990	60-140	99.0		
Acenaphthylene	208-96-8	T	RL	16.829	1614889	1.00	0.910	60-140	91.0		
Acenaphthene	83-32-9	T	RL	17.155	1145909	1.00	0.960	60-140	96.0		
Dibenzofuran	100-02-7	T	RL	17.549	1593048	1.00	0.940	60-140	94.0		
Fluorene	86-73-7	T	RL	18.475	1301182	1.00	0.930	60-140	93.0		
Phenanthrene-d10	1517-22-2	Int. Std	RL	21.102	71419655	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	RL	19.338	142497	1.00	0.760	60-140	76.0		

Pentachlorophenol	87-86-5	T	RL	20.539	26183	1.00	1.64	60-140	164		R
Phenanthrene	85-01-8	T	RL	21.164	1851424	1.00	0.960	60-140	96.0		
Anthracene	120-12-7	T	RL	21.275	1730007	1.00	0.920	60-140	92.0		
Carbazole	86-74-8	T	RL	22.192	1354001	1.00	0.840	60-140	84.0		
Fluoranthene	206-44-0	T	RL	24.312	1658918	1.00	0.870	60-140	87.0		
Chrysene-d12	1719-03-5	Int. Std	RL	28.204	50983081	40.0	40.0		100		
Pyrene	129-00-0	T	RL	25.000	1790079	1.00	0.940	60-140	94.0		
Terphenyl-d14	1718-51-0	Surr	RL	25.167	1193660	1.00	0.930	60-140	93.0		
Benzo(a)anthracene	56-55-3	T	RL	28.115	1171178	1.00	0.770	60-140	77.0		
Chrysene	218-01-9	T	RL	28.274	1356215	1.00	0.920	60-140	92.0		
Perylene-d12	1520-96-3	Int. Std	RL	31.884	37745631	40.0	40.0		100		
Benzo(b)fluoranthene	205-99-2	T	RL	30.809	925657	1.00	0.800	60-140	80.0		
Benzo(k)fluoranthene	207-08-9	T	RL	30.876	1012609	1.00	0.770	60-140	77.0		
Benzo(a)pyrene	50-32-8	T	RL	31.692	765111	1.00	0.750	60-140	75.0		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	RL	34.742	674477	1.00	0.680	60-140	68.0		
Dibenz(a,h)anthracene	53-70-3	T	RL	34.746	518066	1.00	0.630	60-140	63.0		
Benzo(g,h,i)perylene	191-24-2	T	RL	35.836	632579	1.00	0.800	60-140	80.0		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCS	9.193	24157994	40.0	40.0		100	0.00	
2-Fluorophenol	367-12-4	Surr	LCS	6.594	14557744	25.0	18.7	70-130	74.8	4.93	
Phenol-d6	13127-88-3	Surr	LCS	8.835	11711714	25.0	13.2	70-130	52.8	5.45	S
Phenol	108-95-2	T	LCS	8.869	6544300	25.0	6.78	70-130	27.1	3.76	R
2-Methylphenol	95-48-7	T	LCS	10.141	5436475	25.0	9.46	70-130	37.8	9.71	R
Nitrobenzene-d5	4165-60-0	Surr	LCS	11.395	20011199	25.0	14.5	70-130	58.0	4.71	S
Naphthalene-d8	1146-65-2	Int. Std	LCS	12.560	88372937	40.0	40.0		100	0.00	
Naphthalene	91-20-3	T	LCS	12.612	38697612	25.0	16.9	70-130	67.6	6.73	R
2-Methylnaphthalene	91-57-6	T	LCS	14.204	24904741	25.0	15.9	70-130	63.6	5.16	R
1-Methylnaphthalene	90-12-0	T	LCS	14.542	22341951	25.0	15.6	70-130	62.4	2.60	R
Acenaphthene-d10	15067-26-2	Int. Std	LCS	17.071	49652200	40.0	40.0		100	0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCS	15.156	23415862	25.0	14.3	70-130	57.2	2.12	S
Acenaphthylene	208-96-8	T	LCS	16.827	28454055	40.0	14.6	70-130	36.5	2.78	R
Acenaphthene	83-32-9	T	LCS	17.160	19616690	25.0	15.0	70-130	60.0	4.08	R
Dibenzofuran	100-02-7	T	LCS	17.545	28919953	25.0	15.5	70-130	62.0	5.30	R
Fluorene	86-73-7	T	LCS	18.474	25551168	25.0	16.7	70-130	66.8	5.54	R
Phenanthrene-d10	1517-22-2	Int. Std	LCS	21.104	77828132	40.0	40.0		100	0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCS	19.328	7611896	25.0	37.1	70-130	148	9.19	S
Pentachlorophenol	87-86-5	T	LCS	20.503	8731516	25.0	45.9	70-130	184	19.70	R,c
Phenanthrene	85-01-8	T	LCS	21.164	43499681	25.0	20.6	70-130	82.4	6.00	
Anthracene	120-12-7	T	LCS	21.274	41198080	25.0	20.0	70-130	80.0	2.53	
Carbazole	86-74-8	T	LCS	22.180	35062803	25.0	19.9	70-130	79.6	1.50	
Fluoranthene	206-44-0	T	LCS	24.312	46715878	25.0	22.4	70-130	89.6	0.45	
Chrysene-d12	1719-03-5	Int. Std	LCS	28.214	56402638	40.0	40.0		100	0.00	
Pyrene	129-00-0	T	LCS	25.005	47311978	25.0	22.6	70-130	90.4	2.62	
Terphenyl-d14	1718-51-0	Surr	LCS	25.170	31016804	25.0	21.9	70-130	87.6	1.38	
Benzo(a)anthracene	56-55-3	T	LCS	28.127	39349085	25.0	23.3	70-130	93.2	0.43	
Chrysene	218-01-9	T	LCS	28.282	39473223	25.0	24.1	70-130	96.4	0.42	
Perylene-d12	1520-96-3	Int. Std	LCS	31.893	47252530	40.0	40.0		100	0.00	
Benzo(b)fluoranthene	205-99-2	T	LCS	30.817	37825265	25.0	26.1	70-130	104	2.93	
Benzo(k)fluoranthene	207-08-9	T	LCS	30.886	37247636	25.0	22.6	70-130	90.4	0.44	
Benzo(a)pyrene	50-32-8	T	LCS	31.700	28648894	25.0	22.5	70-130	90.0	1.34	
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCS	34.754	31426479	25.0	25.3	70-130	101	5.49	

Dibenz(a,h)anthracene	53-70-3	T	LCS	34.758	25246928	25.0	24.7	70-130	98.8	6.26	
Benzo(g,h,i)perylene	191-24-2	T	LCS	35.844	24395003	25.0	24.6	70-130	98.4	5.43	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCSD	9.192	20748284	40.0	40.0		100	0.00	
2-Fluorophenol	367-12-4	Surr	LCSD	6.587	11931336	25.0	17.8	70-130	71.2	4.93	
Phenol-d6	13127-88-3	Surr	LCSD	8.828	9513943	25.0	12.5	70-130	50.0	5.45	**S**
Phenol	108-95-2	T	LCSD	8.862	5400577	25.0	6.52	70-130	26.1	3.76	**R**
2-Methylphenol	95-48-7	T	LCSD	10.139	4228690	25.0	8.57	70-130	34.3	9.71	**R**
Nitrobenzene-d5	4165-60-0	Surr	LCSD	11.392	17998511	25.0	15.2	70-130	60.8	4.71	**S**
Naphthalene-d8	1146-65-2	Int. Std	LCSD	12.559	76222534	40.0	40.0		100	0.00	
Naphthalene	91-20-3	T	LCSD	12.611	31098461	25.0	15.8	70-130	63.2	6.73	**R**
2-Methylnaphthalene	91-57-6	T	LCSD	14.208	20333324	25.0	15.1	70-130	60.4	5.16	**R**
1-Methylnaphthalene	90-12-0	T	LCSD	14.542	18745811	25.0	15.2	70-130	60.8	2.60	**R**
Acenaphthene-d10	15067-26-2	Int. Std	LCSD	17.074	42815261	40.0	40.0		100	0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCSD	15.157	19763876	25.0	14.0	70-130	56.0	2.12	**S**
Acenaphthylene	208-96-8	T	LCSD	16.829	23882149	40.0	14.2	70-130	35.5	2.78	**R**
Acenaphthene	83-32-9	T	LCSD	17.163	16281400	25.0	14.4	70-130	57.6	4.08	**R**
Dibenzofuran	100-02-7	T	LCSD	17.546	23574700	25.0	14.7	70-130	58.8	5.30	**R**
Fluorene	86-73-7	T	LCSD	18.476	20826446	25.0	15.8	70-130	63.2	5.54	**R**
Phenanthrene-d10	1517-22-2	Int. Std	LCSD	21.106	67308814	40.0	40.0		100	0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCSD	19.331	6007310	25.0	33.8	70-130	135	9.19	**S**
Pentachlorophenol	87-86-5	T	LCSD	20.508	6160830	25.0	37.7	70-130	151	19.70	**R,c**
Phenanthrene	85-01-8	T	LCSD	21.170	35406047	25.0	19.4	70-130	77.6	6.00	
Anthracene	120-12-7	T	LCSD	21.279	34723169	25.0	19.5	70-130	78.0	2.53	
Carbazole	86-74-8	T	LCSD	22.183	30656837	25.0	20.2	70-130	80.8	1.50	
Fluoranthene	206-44-0	T	LCSD	24.313	40471174	25.0	22.5	70-130	90.0	0.45	
Chrysene-d12	1719-03-5	Int. Std	LCSD	28.210	47757969	40.0	40.0		100	0.00	
Pyrene	129-00-0	T	LCSD	25.004	41252996	25.0	23.2	70-130	92.8	2.62	
Terphenyl-d14	1718-51-0	Surr	LCSD	25.171	25961470	25.0	21.6	70-130	86.4	1.38	
Benzo(a)anthracene	56-55-3	T	LCSD	28.126	33085420	25.0	23.2	70-130	92.8	0.43	
Chrysene	218-01-9	T	LCSD	28.285	33167864	25.0	24.0	70-130	96.0	0.42	
Perylene-d12	1520-96-3	Int. Std	LCSD	31.891	38866366	40.0	40.0		100	0.00	
Benzo(b)fluoranthene	205-99-2	T	LCSD	30.815	30161968	25.0	25.3	70-130	101	2.93	
Benzo(k)fluoranthene	207-08-9	T	LCSD	30.882	30386173	25.0	22.5	70-130	90.0	0.44	
Benzo(a)pyrene	50-32-8	T	LCSD	31.699	23207144	25.0	22.2	70-130	88.8	1.34	
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCSD	34.747	24441988	25.0	23.9	70-130	95.6	5.49	
Dibenz(a,h)anthracene	53-70-3	T	LCSD	34.747	19557170	25.0	23.2	70-130	92.8	6.26	
Benzo(g,h,i)perylene	191-24-2	T	LCSD	35.836	19013878	25.0	23.3	70-130	93.2	5.43	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	MRL1	9.187	23141271	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	MRL1	6.579	16837758	25.0	22.6	70-130	90.4		
Phenol-d6	13127-88-3	Surr	MRL1	8.825	13600104	25.0	16.0	70-130	64.0		
Phenol	108-95-2	T	MRL1	8.854	730996	2.00	0.790	60-140	39.5		R
2-Methylphenol	95-48-7	T	MRL1	10.136	500721	2.00	0.910	60-140	45.5		R
Nitrobenzene-d5	4165-60-0	Surr	MRL1	11.186	12974398	25.0	9.81	70-130	39.2		S
Naphthalene-d8	1146-65-2	Int. Std	MRL1	12.555	84862062	40.0	40.0		100		
Naphthalene	91-20-3	T	MRL1	12.607	4175898	2.00	1.90	60-140	95.0		
2-Methylnaphthalene	91-57-6	T	MRL1	14.205	2603886	2.00	1.73	60-140	86.5		

1-Methylnaphthalene	90-12-0	T	MRL1	14.536	2348195	2.00	1.70	60-140	85.0		
Acenaphthene-d10	15067-26-2	Int. Std	MRL1	17.068	47700840	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	MRL1	15.153	28080621	25.0	17.8	70-130	71.2		
Acenaphthylene	208-96-8	T	MRL1	16.822	2880465	2.00	1.54	60-140	77.0		
Acenaphthene	83-32-9	T	MRL1	17.153	2070114	2.00	1.64	60-140	82.0		
Dibenzofuran	100-02-7	T	MRL1	17.541	2909325	2.00	1.62	60-140	81.0		
Fluorene	86-73-7	T	MRL1	18.467	2373004	2.00	1.61	60-140	80.5		
Phenanthrene-d10	1517-22-2	Int. Std	MRL1	21.101	75384942	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	MRL1	19.325	7177434	25.0	36.1	70-130	144		S
Pentachlorophenol	87-86-5	T	MRL1	20.507	204502	2.00	2.57	60-140	129		
Phenanthrene	85-01-8	T	MRL1	21.164	3435889	2.00	1.68	60-140	84.0		
Anthracene	120-12-7	T	MRL1	21.273	3247077	2.00	1.63	60-140	81.5		
Carbazole	86-74-8	T	MRL1	22.180	3140994	2.00	1.84	60-140	92.0		
Fluoranthene	206-44-0	T	MRL1	24.305	3775334	2.00	1.87	60-140	93.5		
Chrysene-d12	1719-03-5	Int. Std	MRL1	28.206	55251434	40.0	40.0		100		
Pyrene	129-00-0	T	MRL1	24.996	4057480	2.00	1.97	60-140	98.5		
Terphenyl-d14	1718-51-0	Surr	MRL1	25.166	32229135	25.0	23.2	70-130	92.8		
Benzo(a)anthracene	56-55-3	T	MRL1	28.116	2919294	2.00	1.77	60-140	88.5		
Chrysene	218-01-9	T	MRL1	28.271	3220362	2.00	2.01	60-140	101		
Perylene-d12	1520-96-3	Int. Std	MRL1	31.887	44713710	40.0	40.0		100		
Benzo(b)fluoranthene	205-99-2	T	MRL1	30.810	2468447	2.00	1.80	60-140	90.0		
Benzo(k)fluoranthene	207-08-9	T	MRL1	30.877	2743799	2.00	1.76	60-140	88.0		
Benzo(a)pyrene	50-32-8	T	MRL1	31.692	1955343	2.00	1.62	60-140	81.0		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	MRL1	34.729	2049714	2.00	1.74	60-140	87.0		
Dibenz(a,h)anthracene	53-70-3	T	MRL1	34.744	1664678	2.00	1.72	60-140	86.0		
Benzo(g,h,i)perylene	191-24-2	T	MRL1	35.833	1806134	2.00	1.92	60-140	96.0		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	BLK1	9.189	23225396	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	BLK1	6.591	17784934	25.0	23.76	70-130	95.0		
Phenol-d6	13127-88-3	Surr	BLK1	8.828	14590501	25.0	17.14	70-130	68.6		S
Phenol	108-95-2	T	BLK1	8.862	305894	0.00	0.33				
2-Methylphenol	95-48-7	T	BLK1			0.00	0				
Nitrobenzene-d5	4165-60-0	Surr	BLK1	11.189	12265110	25.0	9.24	70-130	37.0		S
Naphthalene-d8	1146-65-2	Int. Std	BLK1	12.556	84404617	40.0	40		100		
Naphthalene	91-20-3	T	BLK1	12.611	3540277	0.00	1.62				
2-Methylnaphthalene	91-57-6	T	BLK1	14.213	819084	0.00	0.55				
1-Methylnaphthalene	90-12-0	T	BLK1	14.542	293794	0.00	0.21				
Acenaphthene-d10	15067-26-2	Int. Std	BLK1	17.070	46885135	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	BLK1	15.157	26232131	25.0	16.92	70-130	67.7		S
Acenaphthylene	208-96-8	T	BLK1			0.00	0				
Acenaphthene	83-32-9	T	BLK1			0.00	0				
Dibenzofuran	100-02-7	T	BLK1	17.550	130656	0.00	0.07				
Fluorene	86-73-7	T	BLK1			0.00	0				
Phenanthrene-d10	1517-22-2	Int. Std	BLK1	21.103	71492313	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	BLK1	19.327	6698220	25.0	35.52	70-130	142		
Pentachlorophenol	87-86-5	T	BLK1	20.507	1192655	0.00	8.1				
Phenanthrene	85-01-8	T	BLK1	21.166	110249	0.00	0.06				
Anthracene	120-12-7	T	BLK1			0.00	0				
Carbazole	86-74-8	T	BLK1			0.00	0				
Fluoranthene	206-44-0	T	BLK1			0.00	0				
Chrysene-d12	1719-03-5	Int. Std	BLK1	28.208	52966151	40.0	40		100		

Pyrene	129-00-0	T	BLK1			0.00	0				
Terphenyl-d14	1718-51-0	Surr	BLK1	25.169	28213236	25.0	21.16	70-130	84.6		
Benzo(a)anthracene	56-55-3	T	BLK1	28.206	85505	0.00	0.05				
Chrysene	218-01-9	T	BLK1	28.206	98328	0.00	0.06				
Perylene-d12	1520-96-3	Int. Std	BLK1	31.891	42630672	40.0	40		100		
Benzo(b)fluoranthene	205-99-2	T	BLK1			0.00	0				
Benzo(k)fluoranthene	207-08-9	T	BLK1			0.00	0				
Benzo(a)pyrene	50-32-8	T	BLK1			0.00	0				
Indeno(1,2,3-c,d)pyrene	193-39-5	T	BLK1			0.00	0				
Dibenz(a,h)anthracene	53-70-3	T	BLK1			0.00	0				
Benzo(g,h,i)perylene	191-24-2	T	BLK1			0.00	0				

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV2	9.195	18231011	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV2	6.584	14095262	25.0	24.0	80-120	96.0		
Phenol-d6	13127-88-3	Surr	CCV2	8.844	17156814	25.0	25.7	80-120	103		
Phenol	108-95-2	T	CCV2	8.878	18670319	25.0	25.7	80-120	103		
2-Methylphenol	95-48-7	T	CCV2	10.155	10053472	25.0	23.2	80-120	92.8		
Nitrobenzene-d5	4165-60-0	Surr	CCV2	11.196	15177195	25.0	14.6	80-120	58.4		S
Naphthalene-d8	1146-65-2	Int. Std	CCV2	12.561	66442230	40.0	40.0		100		
Naphthalene	91-20-3	T	CCV2	12.616	43871373	25.0	25.5	80-120	102		
2-Methylnaphthalene	91-57-6	T	CCV2	14.209	30359631	25.0	25.8	80-120	103		
1-Methylnaphthalene	90-12-0	T	CCV2	14.543	27883248	25.0	25.9	80-120	104		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	17.072	37230299	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV2	15.157	31009425	25.0	25.2	80-120	101		
Acenaphthylene	208-96-8	T	CCV2	16.830	38016767	40.0	26.0	80-120	65.0		R
Acenaphthene	83-32-9	T	CCV2	17.162	24827617	25.0	25.2	80-120	101		
Dibenzofuran	100-02-7	T	CCV2	17.543	36096729	25.0	25.8	80-120	103		
Fluorene	86-73-7	T	CCV2	18.477	30067437	25.0	26.2	80-120	105		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	21.105	60633974	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV2	19.334	3614469	25.0	22.6	80-120	90.4		
Pentachlorophenol	87-86-5	T	CCV2	20.512	1484192	25.0	11.2	80-120	44.8		R
Phenanthrene	85-01-8	T	CCV2	21.168	41571161	25.0	25.3	80-120	101		
Anthracene	120-12-7	T	CCV2	21.282	41704931	25.0	26.0	80-120	104		
Carbazole	86-74-8	T	CCV2	22.189	34992348	25.0	25.5	80-120	102		
Fluoranthene	206-44-0	T	CCV2	24.315	38955907	25.0	24.0	80-120	96.0		
Chrysene-d12	1719-03-5	Int. Std	CCV2	28.216	39860485	40.0	40.0		100		
Pyrene	129-00-0	T	CCV2	25.008	38743178	25.0	26.1	80-120	104		
Terphenyl-d14	1718-51-0	Surr	CCV2	25.172	25714624	40.0	25.6	80-120	64.0		S
Benzo(a)anthracene	56-55-3	T	CCV2	28.130	28759117	25.0	24.1	80-120	96.4		
Chrysene	218-01-9	T	CCV2	28.290	28329417	25.0	24.5	80-120	98.0		
Perylene-d12	1520-96-3	Int. Std	CCV2	31.897	34118557	40.0	40.0		100		
Benzo(b)fluoranthene	205-99-2	T	CCV2	30.825	24288467	25.0	23.2	80-120	92.8		
Benzo(k)fluoranthene	207-08-9	T	CCV2	30.890	26616819	25.0	22.4	80-120	89.6		
Benzo(a)pyrene	50-32-8	T	CCV2	31.706	21334634	25.0	23.2	80-120	92.8		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV2	34.763	21316594	25.0	23.8	80-120	95.2		
Dibenz(a,h)anthracene	53-70-3	T	CCV2	34.763	17732989	25.0	24.0	80-120	96.0		
Benzo(g,h,i)perylene	191-24-2	T	CCV2	35.838	16050602	25.0	22.4	80-120	89.6		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier

1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S2	9.195	23441248	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	CB-S2	6.580	18709538	25.0	24.77	80-120	99.1		
Phenol-d6	13127-88-3	Surr	CB-S2	8.845	20604782	25.0	23.99	80-120	96.0		
Phenol	108-95-2	T	CB-S2			0.00					
2-Methylphenol	95-48-7	T	CB-S2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB-S2	11.200	17668471	25.0	13.18	80-120	52.7		S
Naphthalene-d8	1146-65-2	Int. Std	CB-S2	12.566	79376260	40.0	40		100		
Naphthalene	91-20-3	T	CB-S2	12.611	133805	0.00	0.07				
2-Methylnaphthalene	91-57-6	T	CB-S2	14.198	919456	0.00	0.65				
1-Methylnaphthalene	90-12-0	T	CB-S2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB-S2	17.075	39513585	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S2	15.165	31127563	25.0	23.83	80-120	95.3		
Acenaphthylene	208-96-8	T	CB-S2	16.769	3764502	0.00	2.42				
Acenaphthene	83-32-9	T	CB-S2	17.087	1501847	0.00	1.44				
Dibenzofuran	100-02-7	T	CB-S2	17.522	4879996	0.00	3.29				
Fluorene	86-73-7	T	CB-S2	18.450	432593	0.00	0.35				
Phenanthrene-d10	1517-22-2	Int. Std	CB-S2	21.112	71434208	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S2	19.337	3969126	25.0	21.06	80-120	84.2		
Pentachlorophenol	87-86-5	T	CB-S2	20.515	4598719	0.00	26.97				B
Phenanthrene	85-01-8	T	CB-S2	21.171	687051	0.00	0.36				
Anthracene	120-12-7	T	CB-S2	21.171	669459	0.00	0.35				
Carbazole	86-74-8	T	CB-S2	22.202	145060	0.00	0.09				
Fluoranthene	206-44-0	T	CB-S2	24.319	134806	0.00	0.07				
Chrysene-d12	1719-03-5	Int. Std	CB-S2	28.219	47916213	40.0	40		100		
Pyrene	129-00-0	T	CB-S2	25.006	178064	0.00	0.1				
Terphenyl-d14	1718-51-0	Surr	CB-S2	25.178	33141397	25.0	27.48	80-120	110		
Benzo(a)anthracene	56-55-3	T	CB-S2	28.217	22069	0.00	0.02				
Chrysene	218-01-9	T	CB-S2	28.217	93092	0.00	0.07				
Perylene-d12	1520-96-3	Int. Std	CB-S2	31.902	35951231	40.0	40		100		
Benzo(b)fluoranthene	205-99-2	T	CB-S2			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB-S2			0.00					
Benzo(a)pyrene	50-32-8	T	CB-S2			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB-S2			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB-S2			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB-S2			0.00					

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV3	9.192	19755988	40.0	40.0		100		
2-Fluorophenol	367-12-4	Surr	CCV3	6.574	15358936	25.0	24.1	80-120	96.4		
Phenol-d6	13127-88-3	Surr	CCV3	8.834	18002341	25.0	24.9	80-120	99.6		
Phenol	108-95-2	T	CCV3	8.873	20084030	25.0	25.5	80-120	102		
2-Methylphenol	95-48-7	T	CCV3	10.150	10722611	25.0	22.8	80-120	91.2		
Nitrobenzene-d5	4165-60-0	Surr	CCV3	11.193	15818464	25.0	14.0	80-120	56.0		**S**
Naphthalene-d8	1146-65-2	Int. Std	CCV3	12.557	70696015	40.0	40.0		100		
Naphthalene	91-20-3	T	CCV3	12.612	46324708	25.0	25.3	80-120	101		
2-Methylnaphthalene	91-57-6	T	CCV3	14.206	30728008	25.0	24.5	80-120	98.0		
1-Methylnaphthalene	90-12-0	T	CCV3	14.541	28830244	25.0	25.1	80-120	100		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	17.071	39673052	40.0	40.0		100		
2-Fluorobiphenyl	321-60-8	Surr	CCV3	15.158	32786447	25.0	25.0	80-120	100		
Acenaphthylene	208-96-8	T	CCV3	16.829	40029993	40.0	25.7	80-120	64.3		**R**
Acenaphthene	83-32-9	T	CCV3	17.161	26292009	25.0	25.1	80-120	100		
Dibenzofuran	100-02-7	T	CCV3	17.546	36466615	25.0	24.5	80-120	98.0		

Fluorene	86-73-7	T	CCV3	18.476	31638530	25.0	25.8	80-120	103		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	21.106	64488015	40.0	40.0		100		
2,4,6-Tribromophenol	118-79-6	Surr	CCV3	19.331	4062250	25.0	23.9	80-120	95.6		
Pentachlorophenol	87-86-5	T	CCV3	20.511	1934214	25.0	13.4	80-120	53.6		R
Phenanthrene	85-01-8	T	CCV3	21.170	42302058	25.0	24.2	80-120	96.8		
Anthracene	120-12-7	T	CCV3	21.281	44130215	25.0	25.9	80-120	104		
Carbazole	86-74-8	T	CCV3	22.188	32886696	25.0	22.6	80-120	90.4		
Fluoranthene	206-44-0	T	CCV3	24.317	41339185	25.0	24.0	80-120	96.0		
Chrysene-d12	1719-03-5	Int. Std	CCV3	28.218	41091701	40.0	40.0		100		
Pyrene	129-00-0	T	CCV3	25.009	41082040	25.0	26.9	80-120	108		
Terphenyl-d14	1718-51-0	Surr	CCV3	25.173	26833892	40.0	26.0	80-120	65.0		S
Benzo(a)anthracene	56-55-3	T	CCV3	28.130	29578644	25.0	24.1	80-120	96.4		
Chrysene	218-01-9	T	CCV3	28.290	30037872	25.0	25.2	80-120	101		
Perylene-d12	1520-96-3	Int. Std	CCV3	31.897	33961635	40.0	40.0		100		
Benzo(b)fluoranthene	205-99-2	T	CCV3	30.825	25278767	25.0	24.3	80-120	97.2		
Benzo(k)fluoranthene	207-08-9	T	CCV3	30.888	26925164	25.0	22.8	80-120	91.2		
Benzo(a)pyrene	50-32-8	T	CCV3	31.706	21501235	25.0	23.5	80-120	94.0		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV3	34.753	20590552	25.0	23.1	80-120	92.4		
Dibenz(a,h)anthracene	53-70-3	T	CCV3	34.753	16883316	25.0	22.9	80-120	91.6		
Benzo(g,h,i)perylene	191-24-2	T	CCV3	35.833	15332661	25.0	21.5	80-120	86.0		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	Range %	%REC	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB-S2	9.188	23143158	40.0	40		100		
2-Fluorophenol	367-12-4	Surr	CB-S2	6.570	17552363	25.0	23.53	80-120	94.1		
Phenol-d6	13127-88-3	Surr	CB-S2	8.835	19715074	25.0	23.25	80-120	93.0		
Phenol	108-95-2	T	CB-S2			0.00					
2-Methylphenol	95-48-7	T	CB-S2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB-S2	11.190	17391925	25.0	13.14	80-120	52.6		S
Naphthalene-d8	1146-65-2	Int. Std	CB-S2	12.554	81158835	40.0	40		100		
Naphthalene	91-20-3	T	CB-S2	12.614	98931	0.00	0.05				
2-Methylnaphthalene	91-57-6	T	CB-S2	14.228	91201	0.00	0.06				
1-Methylnaphthalene	90-12-0	T	CB-S2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB-S2	17.068	43015862	40.0	40		100		
2-Fluorobiphenyl	321-60-8	Surr	CB-S2	15.155	31455258	25.0	22.12	80-120	88.5		
Acenaphthylene	208-96-8	T	CB-S2	16.830	122801	0.00	0.07				
Acenaphthene	83-32-9	T	CB-S2			0.00					
Dibenzofuran	100-02-7	T	CB-S2	17.560	220187	0.00	0.14				
Fluorene	86-73-7	T	CB-S2			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB-S2	21.103	75065766	40.0	40		100		
2,4,6-Tribromophenol	118-79-6	Surr	CB-S2	19.330	4131246	25.0	20.86	80-120	83.4		
Pentachlorophenol	87-86-5	T	CB-S2			0.00					
Phenanthrene	85-01-8	T	CB-S2	21.162	138500	0.00	0.07				
Anthracene	120-12-7	T	CB-S2	21.162	86448	0.00	0.04				
Carbazole	86-74-8	T	CB-S2			0.00					
Fluoranthene	206-44-0	T	CB-S2	24.312	97380	0.00	0.05				
Chrysene-d12	1719-03-5	Int. Std	CB-S2	28.215	54168180	40.0	40		100		
Pyrene	129-00-0	T	CB-S2	25.001	176579	0.00	0.09				
Terphenyl-d14	1718-51-0	Surr	CB-S2	25.174	36509577	25.0	26.78	80-120	107		
Benzo(a)anthracene	56-55-3	T	CB-S2	28.216	28137	0.00	0.02				
Chrysene	218-01-9	T	CB-S2	28.216	97612	0.00	0.06				
Perylene-d12	1520-96-3	Int. Std	CB-S2	31.898	37684413	40.0	40		100		
Benzo(b)fluoranthene	205-99-2	T	CB-S2			0.00					

Benzo(k)fluoranthene	207-08-9	T	CB-S2			0.00					
Benzo(a)pyrene	50-32-8	T	CB-S2			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB-S2			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB-S2			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB-S2			0.00					

Comments: Reporting Limits have been adjusted for sample volumes and diltution factors. This QC report pertains to the analysis of NPW samples W102103-13 and W102103-14.

N/A = Not Applicable
Int. STD. = Internal Standard
T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an esti

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears Date: 9/9/2021
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

SECTION 2

EPA TO-11a – Modified - Aldehydes; Non-Potable Water and Oils
Client Project; JH Baxter & Co.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ LeeGroup, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project:	W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA Method TO-11A - Modified**	CoC No.:	-
	Portland, OR 97209		Samples Received:	02/12/21
Attention:	Brian Snuffer	**Revised Report;**	Prep Date:	03/09/21
Telephone:	503-314-8589	**W102103 Rev. 2; 09/08/21**	Report Date:	09/08/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.:	Q01132020-115
			Client Project:	JH Baxter & Co.

Sample ID			CAS	Sampling		Analysis	Report	Report	Range		
Client	RJLG	Analyte	Number	Date	Matrix	Date	Units	Limit	%	Result	Qualifier
PCPHW-01	W102103-01	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		26.88	
PCPHW-01	W102103-01	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		5.50	
PCPHW-01	W102103-01	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		0.32	
PCPHW-01	W102103-01	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		1.11	
HOHW-01	W102103-06	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
HOHW-01	W102103-06	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		0.59	
HOHW-01	W102103-06	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
HOHW-01	W102103-06	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
ACZAHW-01	W102103-07	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
ACZAHW-01	W102103-07	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		0.870	
ACZAHW-01	W102103-07	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
ACZAHW-01	W102103-07	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
OWSHO-01	W102103-08	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		1.38	
OWSHO-01	W102103-08	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		5.65	
OWSHO-01	W102103-08	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
OWSHO-01	W102103-08	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		0.72	
OWSHO-01 Dup	W102103-09	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		1.37	
OWSHO-01 Dup	W102103-09	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		5.73	
OWSHO-01 Dup	W102103-09	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
OWSHO-01 Dup	W102103-09	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		0.77	
PCPHO-01	W102103-10	Formaldehyde	50-00-0	02/18/21	Oil	03/09/21	mg/L	0.25		0.57	
PCPHO-01	W102103-10	Acetaldehyde	75-07-0	02/18/21	Oil	03/09/21	mg/L	0.25		1.42	
PCPHO-01	W102103-10	Acrolein	107-02-8	02/18/21	Oil	03/09/21	mg/L	0.25		<0.25	
PCPHO-01	W102103-10	Propanal	123-38-6	02/18/21	Oil	03/09/21	mg/L	0.25		1.86	
EVAP-01	W102103-11	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		0.68	
EVAP-01	W102103-11	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		2.11	
EVAP-01	W102103-11	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
EVAP-01	W102103-11	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
EVAP-01 Dup	W102103-12	Formaldehyde	50-00-0	02/18/21	NPW	03/09/21	mg/L	0.25		0.64	
EVAP-01 Dup	W102103-12	Acetaldehyde	75-07-0	02/18/21	NPW	03/09/21	mg/L	0.25		1.98	
EVAP-01 Dup	W102103-12	Acrolein	107-02-8	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	
EVAP-01 Dup	W102103-12	Propanal	123-38-6	02/18/21	NPW	03/09/21	mg/L	0.25		<0.25	

Comments: Sample results and reporting limits have been adjusted for analysis volumes and dilution factors.

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match

Sample ID			CAS	Sampling		Analysis	Report	Report	Range		
Client	RJLG	Analyte	Number	Date	Matrix	Date	Units	Limit	%	Result	Qualifier

p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an estimate

Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Seaman Date: 09/08/21

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

QUALITY CONTROL REPORT

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

EPA Method TO-11A - Modified
NPW
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
CoC No.:	-
Samples Received:	02/12/21
Prep Date:	03/09/21
Report Date:	09/08/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CCB	9.838		0.00	< 0.025				
Acetaldehyde	75-07-0	CCB	12.657		0.00	< 0.025				
Acrolein	107-02-8	CCB	15.703		0.00	< 0.025				
Propanal	123-38-6	CCB	16.532		0.00	< 0.025				

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CCV1	9.890	323	1.00	1.03	103	80-120		
Acetaldehyde	75-07-0	CCV1	12.687	292.16745	1.00	1.03	103	80-120		
Acrolein	107-02-8	CCV1	15.714	319.446198	1.00	1.01	101	80-120		
Propanal	123-38-6	CCV1	16.545	222.023254	1.00	1.02	102	80-120		

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	RL	9.938	3	0.0250	0.030	119	60-140		
Acetaldehyde	75-07-0	RL	12.785	2.76960278	0.0250	0.021	82.2	60-140		
Acrolein	107-02-8	RL	15.849	3.0388658	0.0250	0.026	104	60-140		
Propanal	123-38-6	RL	16.683	2.05161476	0.0250	0.023	90.6	60-140		

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	MRL1	9.931	8	0.0250	0.0462	185	60-140		**S**
Acetaldehyde	75-07-0	MRL1	12.785	5.25631618	0.0250	0.0213	85.0	60-140		
Acrolein	107-02-8	MRL1	15.911	3.53555989				60-140		ND
Propanal	123-38-6	MRL1	16.686	2.10440135	0.0250	0.0163	65.3	60-140		**S**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	LCS	9.930	336	1.00	0.960	96.0	70-130	1.4	
Acetaldehyde	75-07-0	LCS	12.779	220.238007	1.00	0.737	73.7	70-130	0.9	
Acrolein	107-02-8	LCS	15.849	302.304779				70-130		ND
Propanal	123-38-6	LCS	16.686	184.701035	1.00	0.585	58.5	70-130	0.6	**S**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	LCSD	9.938	344	1.00	0.988	98.8	70-130	1.4	
Acetaldehyde	75-07-0	LCSD	12.785	224.960037	1.00	0.751	75.1	70-130	0.9	
Acrolein	107-02-8	LCSD	15.850	309.052673				70-130		ND
Propanal	123-38-6	LCSD	16.686	189.907639	1.00	0.592	59.2	70-130	0.6	**S**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected mg/L	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	BLK1	9.930	5	0.00	0.021				B
Acetaldehyde	75-07-0	BLK1	12.790	3.19837	0.00	<0.025				
Acrolein	107-02-8	BLK1	15.838		0.00	<0.025				
Propanal	123-38-6	BLK1	16.674		0.00	<0.025				

Comments: Sample results and reporting limits have been adjusted for analysis volumes and dilution factors.

Report Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration rang
I = Response failure of an internal standard; concentration should be c
ND = Not Determined

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears

Joe Sears, Ph.D., Laboratory Technical Manager

9/8/2021
Date

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

SECTION 3

EPA 8260C & 8015D - BTEX; Non-Potable Water & Oils
Client Project; JH Baxter & Co.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200
	Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX
NPW
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
PCPHW-01	W102103-01	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
PCPHW-01	W102103-01	Benzene	71-43-2	*N*	NPW	*T*	3.06	0.25			
PCPHW-01	W102103-01	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.9	0.25	70-130	103.6	
PCPHW-01	W102103-01	Toluene	108-88-3	*N*	NPW	*T*	0.500	0.25			
PCPHW-01	W102103-01	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
PCPHW-01	W102103-01	Ethylbenzene	100-41-4	*N*	NPW	*T*	< 0.25	0.25			
PCPHW-01	W102103-01	m,p-Xylene	179601-23-1	*N*	NPW	*T*	< 0.25	0.25			
PCPHW-01	W102103-01	o-Xylene	95-47-6	*N*	NPW	*T*	< 0.25	0.25			
PCPHW-01	W102103-01	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	24.7	0.25	70-130	98.8	

Comments: Reporting Limits have been adjusted for sample volumes and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project: W102103
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8015D BTEX**	Samples Received: 02/12/21
	Portland, OR 97209	**Oil**	Analysis Prep/Date: 03/09/21
Attention:	Brian Snuffer	**Revised Report;**	Report Date: 09/08/21
Telephone:	503-314-8589	**W102103 Rev. 2; 09/08/21**	Sampling Date: 02/11/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.: Q01132020-115
			Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/Kg	Limit mg/Kg	%	%REC	Qualifier
OIL-01	W102103-02	1,4-Difluorobenzene	540-36-3	*N*	Oil	*Int. Std*	25.0	1.0			
OIL-01	W102103-02	Benzene	71-43-2	*N*	Oil	*T*	261	50			D=50
OIL-01	W102103-02	Toluene-d8	2037-26-5	*N*	Oil	*Surr*	25.0	1.0	70-130	100	
OIL-01	W102103-02	Toluene	108-88-3	*N*	Oil	*T*	290	50			D=50
OIL-01	W102103-02	Ethylbenzene	100-41-4	*N*	Oil	*T*	65.5	50			D=50
OIL-01	W102103-02	m,p-Xylene	179601-23-1	*N*	Oil	*T*	359	50			D=50
OIL-01	W102103-02	o-Xylene	95-47-6	*N*	Oil	*T*	141	50			D=50
OIL-01	W102103-02	4-Bromofluorobenzene (BFB)	460-00-4	*N*	Oil	*Surr*	25.9	1.0	70-130	103.6	

Comments: Reporting Limits have been adjusted for sample weights and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200
	Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8015D BTEX
Oil
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/09/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/Kg	Limit mg/Kg	%	%REC	Qualifier
BLND-01	W102103-03	1,4-Difluorobenzene	540-36-3	*N*	Oil	*Int. Std*	25.0	1.0			
BLND-01	W102103-03	Benzene	71-43-2	*N*	Oil	*T*	< 50	50			D=50
BLND-01	W102103-03	Toluene-d8	2037-26-5	*N*	Oil	*Surr*	25.4	1.0	70-130	101.6	
BLND-01	W102103-03	Toluene	108-88-3	*N*	Oil	*T*	< 50	50			D=50
BLND-01	W102103-03	Ethylbenzene	100-41-4	*N*	Oil	*T*	< 50	50			D=50
BLND-01	W102103-03	m,p-Xylene	179601-23-1	*N*	Oil	*T*	< 50	50			D=50
BLND-01	W102103-03	o-Xylene	95-47-6	*N*	Oil	*T*	< 50	50			D=50
BLND-01	W102103-03	4-Bromofluorobenzene (BFB)	460-00-4	*N*	Oil	*Surr*	25.4	1.0	70-130	101.6	

Comments: Reporting Limits have been adjusted for sample weights and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200
	Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX
NPW
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
HOHW-01	W102103-06	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
HOHW-01	W102103-06	Benzene	71-43-2	*N*	NPW	*T*	4950	50			D=200
HOHW-01	W102103-06	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	24.7	0.25	70-130	98.8	
HOHW-01	W102103-06	Toluene	108-88-3	*N*	NPW	*T*	12700	50			D=200
HOHW-01	W102103-06	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
HOHW-01	W102103-06	Ethylbenzene	100-41-4	*N*	NPW	*T*	17800	50			D=200
HOHW-01	W102103-06	m,p-Xylene	179601-23-1	*N*	NPW	*T*	31000	50			D=200, E
HOHW-01	W102103-06	o-Xylene	95-47-6	*N*	NPW	*T*	13600	50			D=200
HOHW-01	W102103-06	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.1	0.25	70-130	100.4	

Comments: Reporting Limits have been adjusted for sample volumes and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200
	Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX
NPW
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
ACZAHW-01	W102103-07	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
ACZAHW-01	W102103-07	Benzene	71-43-2	*N*	NPW	*T*	52.9	2.5			D=10
ACZAHW-01	W102103-07	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.1	0.25	70-130	100.4	
ACZAHW-01	W102103-07	Toluene	108-88-3	*N*	NPW	*T*	26.7	2.5			D=10
ACZAHW-01	W102103-07	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
ACZAHW-01	W102103-07	Ethylbenzene	100-41-4	*N*	NPW	*T*	70.7	2.5			D=10
ACZAHW-01	W102103-07	m,p-Xylene	179601-23-1	*N*	NPW	*T*	141	2.5			D=10
ACZAHW-01	W102103-07	o-Xylene	95-47-6	*N*	NPW	*T*	62.5	2.5			D=10
ACZAHW-01	W102103-07	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.0	0.25	70-130	100	

Comments: Reporting Limits have been adjusted for sample volumes and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
OWSHO-01	W102103-08	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
OWSHO-01	W102103-08	Benzene	71-43-2	*N*	NPW	*T*	36.6	2.5			D=10
OWSHO-01	W102103-08	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.0	0.25	70-130	100	
OWSHO-01	W102103-08	Toluene	108-88-3	*N*	NPW	*T*	28.5	2.5			D=10
OWSHO-01	W102103-08	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
OWSHO-01	W102103-08	Ethylbenzene	100-41-4	*N*	NPW	*T*	113	2.5			D=10
OWSHO-01	W102103-08	m,p-Xylene	179601-23-1	*N*	NPW	*T*	340	2.5			D=10
OWSHO-01	W102103-08	o-Xylene	95-47-6	*N*	NPW	*T*	231	2.5			D=10
OWSHO-01	W102103-08	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.1	0.25	70-130	100	

Comments: Reporting Limits have been adjusted for sample volume and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
OOWSHO-01 Dup	W102103-09	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
OOWSHO-01 Dup	W102103-09	Benzene	71-43-2	*N*	NPW	*T*	4.40	2.5			D=10
OOWSHO-01 Dup	W102103-09	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.4	0.25	70-130	102	
OOWSHO-01 Dup	W102103-09	Toluene	108-88-3	*N*	NPW	*T*	43.4	2.5			D=10
OOWSHO-01 Dup	W102103-09	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
OOWSHO-01 Dup	W102103-09	Ethylbenzene	100-41-4	*N*	NPW	*T*	189	2.5			D=10
OOWSHO-01 Dup	W102103-09	m,p-Xylene	179601-23-1	*N*	NPW	*T*	586	2.5			D=10
OOWSHO-01 Dup	W102103-09	o-Xylene	95-47-6	*N*	NPW	*T*	408	2.5			D=10
OOWSHO-01 Dup	W102103-09	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.2	0.25	70-130	101	

Comments: Reporting Limits have been adjusted for sample volume and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
EVAP-01	W102103-11	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
EVAP-01	W102103-11	Benzene	71-43-2	*N*	NPW	*T*	3.95	1.3			D=5
EVAP-01	W102103-11	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.2	0.25	70-130	101	
EVAP-01	W102103-11	Toluene	108-88-3	*N*	NPW	*T*	15.2	1.3			D=5
EVAP-01	W102103-11	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
EVAP-01	W102103-11	Ethylbenzene	100-41-4	*N*	NPW	*T*	23.9	1.3			D=5
EVAP-01	W102103-11	m,p-Xylene	179601-23-1	*N*	NPW	*T*	52.4	1.3			D=5
EVAP-01	W102103-11	o-Xylene	95-47-6	*N*	NPW	*T*	28.2	1.3			D=5
EVAP-01	W102103-11	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.0	0.25	70-130	100	

Comments: Reporting Limits have been adjusted for sample volume and diluition factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
EVAP-01 Dup	W102103-12	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
EVAP-01 Dup	W102103-12	Benzene	71-43-2	*N*	NPW	*T*	4.95	1.3			D=5
EVAP-01 Dup	W102103-12	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.2	0.25	70-130	100.8	
EVAP-01 Dup	W102103-12	Toluene	108-88-3	*N*	NPW	*T*	24.1	1.3			D=5
EVAP-01 Dup	W102103-12	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
EVAP-01 Dup	W102103-12	Ethylbenzene	100-41-4	*N*	NPW	*T*	42.1	1.3			D=5
EVAP-01 Dup	W102103-12	m,p-Xylene	179601-23-1	*N*	NPW	*T*	84.9	1.3			D=5
EVAP-01 Dup	W102103-12	o-Xylene	95-47-6	*N*	NPW	*T*	41.7	1.3			D=5
EVAP-01 Dup	W102103-12	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.1	0.25	70-130	100.4	

Comments: Reporting Limits have been adjusted for sample volumes and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
STRM-01	W102103-13	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
STRM-01	W102103-13	Benzene	71-43-2	*N*	NPW	*T*	< 0.50	0.50			D=2
STRM-01	W102103-13	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.0	0.25	70-130	100	
STRM-01	W102103-13	Toluene	108-88-3	*N*	NPW	*T*	0.620	0.50			D=2
STRM-01	W102103-13	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
STRM-01	W102103-13	Ethylbenzene	100-41-4	*N*	NPW	*T*	0.640	0.50			D=2
STRM-01	W102103-13	m,p-Xylene	179601-23-1	*N*	NPW	*T*	1.00	0.50			D=2
STRM-01	W102103-13	o-Xylene	95-47-6	*N*	NPW	*T*	< 0.50	0.50			D=2
STRM-01	W102103-13	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.0	0.25	70-130	100	

Comments: Reporting Limits have been adjusted for sample volumes and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200 Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
e-mail:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8260C BTEX

Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	03/03/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Range	Surr	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%	%REC	Qualifier
POND-01	W102103-14	1,4-Difluorobenzene	540-36-3	*N*	NPW	*Int. Std*	25.0	0.25			
POND-01	W102103-14	Benzene	71-43-2	*N*	NPW	*T*	< 0.50	0.50			D=2
POND-01	W102103-14	Toluene-d8	2037-26-5	*N*	NPW	*Surr*	25.0	0.25	70-130	100	
POND-01	W102103-14	Toluene	108-88-3	*N*	NPW	*T*	1.86	0.50			D=2
POND-01	W102103-14	Chlorobenzene-d5	3114-55-4	*N*	NPW	*Int. Std*	25.0	0.25			
POND-01	W102103-14	Ethylbenzene	100-41-4	*N*	NPW	*T*	2.86	0.50			D=2
POND-01	W102103-14	m,p-Xylene	179601-23-1	*N*	NPW	*T*	5.56	0.50			D=2
POND-01	W102103-14	o-Xylene	95-47-6	*N*	NPW	*T*	2.64	0.50			D=2
POND-01	W102103-14	4-Bromofluorobenzene (BFB)	460-00-4	*N*	NPW	*Surr*	25.0	0.25	70-130	100	

Comments: Reporting Limits have been adjusted for sample volumes and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8260C BTEX
NPW
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Job No.:	W102103
Samples Received:	2/12/2021
Analysis/Prep Date	3/3/2021
Report Date:	9/8/2021
Client Project:	JH Baxter & Co.
COC No.:	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CCV1	10.379	20345805	25.0	25.0		100		
Benzene	71-43-2	T	CCV1	9.826	30408895	25.0	29.3	80-120	117		
Toluene-d8	2037-26-5	Surr	CCV1	13.298	22016387	25.0	25.1	80-120	100		
Toluene	108-88-3	T	CCV1	13.426	26364586	25.0	26.4	80-120	106		
Chlorobenzene-d5	3114-55-4	Int. Std	CCV1	15.669	17477850	25.0	25.0		100		
Ethylbenzene	100-41-4	T	CCV1	16.072	28507725	25.0	25.9	80-120	104		
m,p-Xylene	179601-23-1	T	CCV1	16.264	22944679	50.0	53.9	80-120	108		
o-Xylene	95-47-6	T	CCV1	16.872	22873703	25.0	26.4	80-120	106		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CCV1	17.585	8510275	25.0	25.0	80-120	100		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CB	10.358	20232598	25.0	25.0		100		
Benzene	71-43-2	T	CB	9.798	5027481		4.25				
Toluene-d8	2037-26-5	Surr	CB	13.289	21876798	25.0	25.0	80-120	100		
Toluene	108-88-3	T	CB	13.416	843916		0.740				
Chlorobenzene-d5	3114-55-4	Int. Std	CB	15.665	17241478	25.0	25.0		100		
Ethylbenzene	100-41-4	T	CB	16.069	607985		0.520				
m,p-Xylene	179601-23-1	T	CB	16.258	500376		1.02				
o-Xylene	95-47-6	T	CB	16.869	504499		0.540				
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CB	17.583	8510026	25.0	25.3	80-120	101		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	RL	10.355	20424583	25.0	25.0		100		
Benzene	71-43-2	T	RL	9.795	1457028	1.00	0.680	60-140	68.0		
Toluene-d8	2037-26-5	Surr	RL	13.287	22049054	25.0	25.0	80-120	100		
Toluene	108-88-3	T	RL	13.414	1219010	1.00	1.10	60-140	110		
Chlorobenzene-d5	3114-55-4	Int. Std	RL	15.664	17382418	25.0	25.0		100		
Ethylbenzene	100-41-4	T	RL	16.068	1302604	1.00	1.15	60-140	115		
m,p-Xylene	179601-23-1	T	RL	16.258	1054615	2.00	2.32	60-140	116		
o-Xylene	95-47-6	T	RL	16.868	1051632	1.00	1.17	60-140	117		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	RL	17.582	8533728	25.0	25.2	80-120	101		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Difluorobenzene	540-36-3	Int. Std	LCS	10.378	20719211	25.0	25.0		100	0.00	
Benzene	71-43-2	T	LCS	9.826	24455390	25.0	23.0	70-130	92.0	0.00	
Toluene-d8	2037-26-5	Surr	LCS	13.298	22545479	25.0	25.2	70-130	101	1.00	
Toluene	108-88-3	T	LCS	13.425	25411120	25.0	24.9	70-130	99.6	0.00	
Chlorobenzene-d5	3114-55-4	Int. Std	LCS	15.669	17875758	25.0	25.0		100	0.00	
Ethylbenzene	100-41-4	T	LCS	16.071	27731542	25.0	24.7	70-130	98.8	1.22	
m,p-Xylene	179601-23-1	T	LCS	16.263	22424865	50.0	51.5	70-130	103	0.98	
o-Xylene	95-47-6	T	LCS	16.872	22152092	25.0	25.0	70-130	100	0.00	
4-Bromofluorobenzene (BFB)	460-00-4	Surr	LCS	17.584	8703870	25.0	25.0	70-130	100	0.00	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	
1,4-Difluorobenzene	540-36-3	Int. Std	LCSD	10.329	20733338	25.0	25.0		100	0.00	
Benzene	71-43-2	T	LCSD	9.772	24457384	25.0	23.0	70-130	92.0	0.00	
Toluene-d8	2037-26-5	Surr	LCSD	13.277	22412306	25.0	25.0	70-130	100	1.00	
Toluene	108-88-3	T	LCSD	13.405	25426356	25.0	24.9	70-130	99.6	0.00	
Chlorobenzene-d5	3114-55-4	Int. Std	LCSD	15.658	17932444	25.0	25.0		100	0.00	
Ethylbenzene	100-41-4	T	LCSD	16.063	27535678	25.0	24.4	70-130	97.6	1.22	
m,p-Xylene	179601-23-1	T	LCSD	16.255	22238734	50.0	50.9	70-130	102	0.98	
o-Xylene	95-47-6	T	LCSD	16.865	22303082	25.0	25.1	70-130	100	0.00	
4-Bromofluorobenzene (BFB)	460-00-4	Surr	LCSD	17.580	8720178	25.0	25.0	70-130	100	0.00	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	MRL1	10.377	20500174	25.0	25.0		100		
Benzene	71-43-2	T	MRL1	9.825	1519738	1.00	0.740	60-140	74.0		
Toluene-d8	2037-26-5	Surr	MRL1	13.298	22116708	25.0	25.0	80-120	100		
Toluene	108-88-3	T	MRL1	13.425	1368571	1.00	1.25	60-140	125		
Chlorobenzene-d5	3114-55-4	Int. Std	MRL1	15.669	17517109	25.0	25.0		100		
Ethylbenzene	100-41-4	T	MRL1	16.071	1308276	1.00	1.14	60-140	114		
m,p-Xylene	179601-23-1	T	MRL1	16.262	1074718	2.00	2.35	60-140	118		
o-Xylene	95-47-6	T	MRL1	16.871	1059929	1.00	1.17	60-140	117		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	MRL1	17.584	8588876	25.0	25.2	80-120	101		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected (ug/mL)	Result (ug/mL)	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	BLK1	10.394	20257479	25.0	25		100		
Benzene	71-43-2	T	BLK1	9.844	5644533	0.00	4.85				
Toluene-d8	2037-26-5	Surr	BLK1	13.305	21954087	25.0	25.09	70-130	100		
Toluene	108-88-3	T	BLK1	13.433	889197	0.00	0.78				
Chlorobenzene-d5	3114-55-4	Int. Std	BLK1	15.673	17360719	25.0	25		100		
Ethylbenzene	100-41-4	T	BLK1	16.073	588166	0.00	0.5				
m,p-Xylene	179601-23-1	T	BLK1	16.264	464862	0.00	0.93				
o-Xylene	95-47-6	T	BLK1	16.873	441479	0.00	0.46				
4-Bromofluorobenzene (BFB)	460-00-4	Surr	BLK1	17.586	8524880	25.0	25.21	70-130	101		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CCV2	10.333	21699916	25.0	25.0		100		
Benzene	71-43-2	T	CCV2	9.772	27773275	25.0	25.0	80-120	100		
Toluene-d8	2037-26-5	Surr	CCV2	13.278	23527107	25.0	25.1	80-120	100		
Toluene	108-88-3	T	CCV2	13.406	25506176	25.0	23.9	80-120	95.6		
Chlorobenzene-d5	3114-55-4	Int. Std	CCV2	15.659	18811480	25.0	25.0		100		
Ethylbenzene	100-41-4	T	CCV2	16.064	27464178	25.0	23.2	80-120	92.8		
m,p-Xylene	179601-23-1	T	CCV2	16.255	22337127	50.0	48.7	80-120	97.4		
o-Xylene	95-47-6	T	CCV2	16.865	22546187	25.0	24.2	80-120	96.8		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CCV2	17.579	9130978	25.0	24.9	80-120	99.6		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	Range %	%REC	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CB2	10.333	21371659	25.0	25		100		
Benzene	71-43-2	T	CB2	9.772	4417603	0.00	3.4				
Toluene-d8	2037-26-5	Surr	CB2	13.279	22998440	25.0	24.91	80-120	99.6		
Toluene	108-88-3	T	CB2	13.406	798553	0.00	0.65				
Chlorobenzene-d5	3114-55-4	Int. Std	CB2	15.660	18319692	25.0	25		100		
Ethylbenzene	100-41-4	T	CB2	16.065	605489	0.00	0.48				
m,p-Xylene	179601-23-1	T	CB2	16.256	482797	0.00	0.91				
o-Xylene	95-47-6	T	CB2	16.866	463360	0.00	0.46				
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CB2	17.581	8969305	25.0	25.14	80-120	101		

Comments: Reporting Limits have been adjusted for sample volumes and diluition factors. QC report for the analysis of samples W102103-01, -06, -07, -08, -09, -11, -12, -13, and -14.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an estim

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matcl
chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/8/2021

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group* , Inc.| Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8015D BTEX
Oil
Revised Report;
W102103 Rev. 2; 09/08/21

RJ Lee Group Job No.:	W102103
Samples Received:	2/12/2021
Analysis/Prep Date	3/9/2021
Report Date:	9/8/2021
Client Project:	JH Baxter & Co.
Purchase Order:	Q01132020-115

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CCV1	10.925	34709965	25.0	25.0	100			
Benzene	71-43-2	T	CCV1	10.826	40879941	25.0	25.7	103	80-120		
Toluene-d8	2037-26-5	Surr	CCV1	13.248	37437485	25.0	25.5	102	80-120		
Toluene	108-88-3	T	CCV1	13.352	43505078	25.0	25.3	101	80-120		
Ethylbenzene	100-41-4	T	CCV1	15.495	47125792	25.0	25.1	100	80-120		
m,p-Xylene	179601-23-1	T	CCV1	15.655	39213490	50.0	49.7	99.4	80-120		
o-Xylene	95-47-6	T	CCV1	16.221	40880850	25.0	25.7	103	80-120		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CCV1	16.757	14470780	25.0	25.4	102	80-120		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CB-S	10.925	37476636	25.0	25.0	100			
Benzene	71-43-2	T	CB-S								
Toluene-d8	2037-26-5	Surr	CB-S	13.250	41040913	25.0	25.9	104	80-120		
Toluene	108-88-3	T	CB-S								
Ethylbenzene	100-41-4	T	CB-S								
m,p-Xylene	179601-23-1	T	CB-S								
o-Xylene	95-47-6	T	CB-S								
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CB-S	16.757	15610579	25.0	25.3	101	80-120		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	RL	10.924	33381599	25.0	25.0	100			
Benzene	71-43-2	T	RL	10.825	1592329	1.00	1.04	104	60-140		
Toluene-d8	2037-26-5	Surr	RL	13.248	36138108	25.0	25.6	102	80-120		
Toluene	108-88-3	T	RL	13.348	1582011	1.00	0.950	95.0	60-140		
Ethylbenzene	100-41-4	T	RL	15.494	1706731	1.00	0.940	94.0	60-140		
m,p-Xylene	179601-23-1	T	RL	15.656	1313602	2.00	1.73	86.5	60-140		
o-Xylene	95-47-6	T	RL	16.220	1416449	1.00	0.920	92.0	60-140		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	RL	16.756	13820771	25.0	25.2	101	80-120		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	
1,4-Difluorobenzene	540-36-3	Int. Std	LCS	10.924	31889472	25.0	25.0	100		0.00	
Benzene	71-43-2	T	LCS	10.825	37600172	25.0	25.7	103	70-130	0.97	
Toluene-d8	2037-26-5	Surr	LCS	13.248	34333973	25.0	25.5	102	70-130	0.98	
Toluene	108-88-3	T	LCS	13.351	39992267	25.0	25.3	101	70-130	0.99	
Ethylbenzene	100-41-4	T	LCS	15.494	43278811	25.0	25.1	100	70-130	1.00	
m,p-Xylene	179601-23-1	T	LCS	15.655	35666759	50.0	49.2	98.4	70-130	0.61	
o-Xylene	95-47-6	T	LCS	16.219	37966620	25.0	25.9	104	70-130	0.00	
4-Bromofluorobenzene (BFB)	460-00-4	Surr	LCS	16.756	13322061	25.0	25.4	102	70-130	0.00	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	
1,4-Difluorobenzene	540-36-3	Int. Std	LCSD	10.924	32319402	25.0	25.0	100		0.00	
Benzene	71-43-2	T	LCSD	10.825	38435939	25.0	25.9	104	70-130	0.97	
Toluene-d8	2037-26-5	Surr	LCSD	13.248	35205213	25.0	25.8	103	70-130	0.98	
Toluene	108-88-3	T	LCSD	13.351	40965445	25.0	25.5	102	70-130	0.99	
Ethylbenzene	100-41-4	T	LCSD	15.494	44087579	25.0	25.2	101	70-130	1.00	
m,p-Xylene	179601-23-1	T	LCSD	15.655	36426440	50.0	49.5	99.0	70-130	0.61	
o-Xylene	95-47-6	T	LCSD	16.219	38535651	25.0	26.0	104	70-130	0.00	
4-Bromofluorobenzene (BFB)	460-00-4	Surr	LCSD	16.756	13555763	25.0	25.5	102	70-130	0.00	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	MRL1	10.924	30568677	25.0	25.0	100			
Benzene	71-43-2	T	MRL1	10.824	1480040	1.00	1.06	106	60-140		
Toluene-d8	2037-26-5	Surr	MRL1	13.247	33557057	25.0	26.0	104	70-130		
Toluene	108-88-3	T	MRL1	13.346	1453577	1.00	0.960	96.0	60-140		
Ethylbenzene	100-41-4	T	MRL1	15.494	1543819	1.00	0.930	93.0	60-140		
m,p-Xylene	179601-23-1	T	MRL1	15.656	1207275	2.00	1.74	87.0	60-140		
o-Xylene	95-47-6	T	MRL1	16.220	1315704	1.00	0.940	94.0	60-140		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	MRL1	16.755	12731066	25.0	25.3	101	70-130		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	BLK1	10.923	26384641	25.0	25	100			
Benzene	71-43-2	T	BLK1			0.00	0				
Toluene-d8	2037-26-5	Surr	BLK1	13.248	29765763	25.0	26.68	107	70-130		
Toluene	108-88-3	T	BLK1			0.00	0				
Ethylbenzene	100-41-4	T	BLK1			0.00	0				
m,p-Xylene	179601-23-1	T	BLK1			0.00	0				
o-Xylene	95-47-6	T	BLK1			0.00	0				
4-Bromofluorobenzene (BFB)	460-00-4	Surr	BLK1	16.757	11358394	25.0	26.18	105	70-130		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CCV2	10.925	49106431	25.0	25.0	100			
Benzene	71-43-2	T	CCV2	10.825	55769440	25.0	24.8	99.2	80-120		
Toluene-d8	2037-26-5	Surr	CCV2	13.249	52822861	25.0	25.4	102	80-120		
Toluene	108-88-3	T	CCV2	13.351	61059719	25.0	25.1	100	80-120		
Ethylbenzene	100-41-4	T	CCV2	15.494	66612766	25.0	25.1	100	80-120		
m,p-Xylene	179601-23-1	T	CCV2	15.656	59403163	50.0	53.2	106	80-120		
o-Xylene	95-47-6	T	CCV2	16.220	57205609	25.0	25.4	102	80-120		
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CCV2	16.756	20498108	25.0	25.4	102	80-120		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Difluorobenzene	540-36-3	Int. Std	CB-S2	10.924	49026247	25.0	25	100			
Benzene	71-43-2	T	CB-S2			0.00					
Toluene-d8	2037-26-5	Surr	CB-S2	13.248	53920864	25.0	26.01	104	80-120		
Toluene	108-88-3	T	CB-S2			0.00					
Ethylbenzene	100-41-4	T	CB-S2			0.00					
m,p-Xylene	179601-23-1	T	CB-S2			0.00					
o-Xylene	95-47-6	T	CB-S2		19016	0.00	0				
4-Bromofluorobenzene (BFB)	460-00-4	Surr	CB-S2	16.755	21341005	25.0	26.48	106	80-120		

Comments: Reporting Limits have been adjusted for sample weights and dilution factors. QC report for the analysis of samples W102103-02, and -03.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an estim

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/8/2021

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

SECTION 4

EPA 8015D - Methanol; Non-Potable Water & Oil
Client Project; JH Baxter & Co.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Client:	Maul Foster & Alongi, Inc.
Address:	2001 NW 19th Avenue, Suite 200
	Portland, OR 97209
Attention:	Brian Snuffer
Telephone:	503-314-8589
Fax:	bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8015D Methanol
NPW & OIL

RJ Lee Group Project:	W102103
Samples Received:	02/12/21
Analysis Prep/Date:	04/12/21
Report Date:	09/08/21
Sampling Date:	02/11/21
Purchase Order No.:	Q01132020-115
Client Project:	JH Baxter & Co.

Sample ID												
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Report Units	Result	Reporting Limit	Range %	Surr %REC	Qualifier
PCPHW-01	W102103-01	Methanol	67-56-1	N	NPW	T	mg/L	1980	50		N/A	
HOHW-01	W102103-06	Methanol	67-56-1	N	NPW	T	mg/L	< 50	50		N/A	
ACZAHW-01	W102103-07	Methanol	67-56-1	N	NPW	T	mg/L	623	50		N/A	
OWSHO-01	W102103-08	Methanol	67-56-1	N	NPW	T	mg/L	387	50		N/A	
OWSHO-01 DUP	W102103-09	Methanol	67-56-1	N	NPW	T	mg/L	441	50		N/A	
PCPHO-01	W102103-10	Methanol	67-56-1	N	OIL	T	mg/Kg	< 25	25		N/A	
EVAP-01	W102103-11	Methanol	67-56-1	N	NPW	T	mg/L	191	50		N/A	
EVAP-01 DUP	W102103-12	Methanol	67-56-1	N	NPW	T	mg/L	145	50		N/A	

Comments: Reporting Limits have been adjusted for sample weight or volume and dilution factors.

mg/L = milligrams per liter (ppm)
mg/Kg = milligrams per kilogram
N/A = Not Applicable
Int. STD. = Internal Standard
Surr = Surrogate Compound
T = Target Analyte

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibratic
I = Response failure of an internal standard; concentration sho

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: _____ Date: 09/08/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8015D Methanol
NPW

RJ Lee Group Job No.: W102103
Samples Received: 2/12/2021
Analysis/Prep Date 4/12/2021
Report Date: 9/8/2021
Client Project: JH Baxter & Co.
COC No.: Q01132020-115

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Expected Units	Result ug/mL	Results Units	%REC	Range %	%RPD	Qualifier
Acetonitrile	75-05-8	Int. Std	CCV1	6.366	2129878	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CCV1	4.710	1134765	250	ug/mL	223	ug/mL	89.2	80-120		
Acetonitrile	75-05-8	Int. Std	CB	6.364	987127	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CB				ug/mL		ug/mL				
Acetonitrile	75-05-8	Int. Std	RL	6.363	677592	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	RL	4.707	40646	25.0	ug/mL	28.1	ug/mL	112	60-140		
Acetonitrile	75-05-8	Int. Std	LCS	6.363	626919	250	mg/L	250	mg/L	100		0.00	
Methanol	67-56-1	T	LCS	4.708	376444	250	mg/L	251	mg/L	100	70-130	6.19	
Acetonitrile	75-05-8	Int. Std	LCSD	6.365	1074707	250	mg/L	250	mg/L	100		0.00	
Methanol	67-56-1	T	LCSD	4.709	604011	250	mg/L	235	mg/L	94.0	70-130	6.19	
Acetonitrile	75-05-8	Int. Std	MRL1	6.364	716072	250	mg/L	250	mg/L	100			
Methanol	67-56-1	T	MRL1	4.707	40043	25.0	mg/L	26.4	mg/L	106	60-140		
Acetonitrile	75-05-8	Int. Std	BLK1	6.364	1136553	250	mg/L	250	mg/L	100			
Methanol	67-56-1	T	BLK1			0.00	mg/L	0	mg/L				
Acetonitrile	75-05-8	Int. Std	CCV2	6.365	720244	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CCV2	4.710	396908	250	ug/mL	230	ug/mL	92.0	80-120		
Acetonitrile	75-05-8	Int. Std	CB2	6.364	486733	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CB2			0.00	ug/mL		ug/mL				

Comments: Reporting Limits have been adjusted for analysis volumes and dilution factors. QC report for the analysis of samples W102103-01, -06, -07, -08, -09, -11, -12

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considere

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist id compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/8/2021

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group* , Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8015D Methanol
OIL

RJ Lee Group Job No.: W102103
Samples Received: 2/12/2021
Analysis/Prep Date 4/12/2021
Report Date: 9/8/2021
Client Project: JH Baxter & Co.
COC No.: Q01132020-115

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Expected Units	Result ug/mL	Results Units	%REC	Range %	%RPD	Qualifier
Acetonitrile	75-05-8	Int. Std	CCV1	6.366	2129878	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CCV1	4.710	1134765	250	ug/mL	223	ug/mL	89.2	80-120		
Acetonitrile	75-05-8	Int. Std	CB	6.364	987127	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CB				ug/mL		ug/mL				
Acetonitrile	75-05-8	Int. Std	RL	6.363	677592	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	RL	4.707	40646	25.0	ug/mL	28.1	ug/mL	112	60-140		
Acetonitrile	75-05-8	Int. Std	LCS	6.363	626919	250	mg/Kg	250	mg/Kg	100		0.00	
Methanol	67-56-1	T	LCS	4.708	376444	250	mg/Kg	251	mg/Kg	100	70-130	6.19	
Acetonitrile	75-05-8	Int. Std	LCSD	6.365	1074707	250	mg/Kg	250	mg/Kg	100		0.00	
Methanol	67-56-1	T	LCSD	4.709	604011	250	mg/Kg	235	mg/Kg	94.0	70-130	6.19	
Acetonitrile	75-05-8	Int. Std	MRL1	6.364	716072	250	mg/Kg	250	mg/Kg	100			
Methanol	67-56-1	T	MRL1	4.707	40043	25.0	mg/Kg	26.4	mg/Kg	106	60-140		
Acetonitrile	75-05-8	Int. Std	BLK1	6.364	1136553	250	mg/Kg	250	mg/Kg	100			
Methanol	67-56-1	T	BLK1			0.00	mg/Kg	0	mg/Kg				
Acetonitrile	75-05-8	Int. Std	CCV2	6.365	720244	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CCV2	4.710	396908	250	ug/mL	230	ug/mL	92.0	80-120		
Acetonitrile	75-05-8	Int. Std	CB2	6.364	486733	250	ug/mL	250	ug/mL	100			
Methanol	67-56-1	T	CB2			0.00	ug/mL		ug/mL				

Comments: Reporting Limits have been adjusted for analysis volumes and dilution factors. QC report for the analysis of sample W102103-10.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds

B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered

J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte Recovery Failure
S = Surrogate recovery failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 9/8/2021

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103 Rev. 2

SECTION 5

EPA 6020B-Modified - Metals; Non-Potable Water
Client Project; JH Baxter & Co.

RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955 | Fax: (509) 792-1934

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209

Subject: Metals Analysis Report:

Columbia Basin Analytical Laboratories received 2 sample(s) on 02/12/21 for analysis. These sample(s) have been assigned a login order number of W102103. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody. If provided by customer on COC, sample volume is recorded onthe laboratory report and has been used to calculate final results.

General Lab Comments

The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. Results included in the report apply to the sample as it was received. Information provided by customer can affect validity of results. The sample(s) were prepared and analyzed in compliance with EPA 6020B - Modified. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratories. Any questions, please contact our office.

Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature. This report has been administratively reviewed by the following individual:



04/06/21

Inorganics Manager Krystin Gilman

If you have any questions please feel free to contact Krystin Gilman at kgilman@rjleegroup.com or 509-545-4989.

This report has been reviewed and approved by the following individual:



04/06/21

Project Manager JJ Furlong

RJ LEE GROUP

Brian Snuffer
Maul Foster & Alongi, Inc.

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Client Project: JH Baxter & Co.

Laboratory Report

RJ Lee Group No.: W102103
COC No:
Samples Received: 02/12/21
Analysis/Prep Date: 02/23/21
Report Date: 04/06/21

Sample Name: EVAP-01
RJ Lee Grp. ID: W102103-11
Matrix: Non-Potable Water
Date Sampled: 02/11/21
Date Analyzed: 02/23/21

Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Arsenic	EPA 6020B - Modified	5,645.786	1,000.000	100	D
Barium	EPA 6020B - Modified	< 10.000	10.000	1	
Beryllium	EPA 6020B - Modified	< 10.000	10.000	1	
Cadmium	EPA 6020B - Modified	< 10.000	10.000	1	
Chromium	EPA 6020B - Modified	< 10.000	10.000	1	
Cobalt	EPA 6020B - Modified	< 10.000	10.000	1	
Copper	EPA 6020B - Modified	3,560.880	200.000	20	D
Lead	EPA 6020B - Modified	< 10.000	10.000	1	
Manganese	EPA 6020B - Modified	25.769	10.000	1	
Mercury	EPA 6020B - Modified	< 5.000	5.000	1	
Nickel	EPA 6020B - Modified	< 10.000	10.000	1	
Selenium	EPA 6020B - Modified	< 10.000	10.000	1	
Vanadium	EPA 6020B - Modified	15.443	10.000	1	
Zinc	EPA 6020B - Modified	309.720	200.000	20	B, D

RJ LEE GROUP

Sample Name: EVAP-01-DUP
RJ Lee Grp. ID: W102103-12
Matrix: Non-Potable Water
Date Sampled: 02/11/21
Date Analyzed: 02/23/21

Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Arsenic	EPA 6020B - Modified	7,405.846	1,000.000	100	D
Barium	EPA 6020B - Modified	< 10.000	10.000	1	
Beryllium	EPA 6020B - Modified	< 10.000	10.000	1	
Cadmium	EPA 6020B - Modified	< 10.000	10.000	1	
Chromium	EPA 6020B - Modified	< 10.000	10.000	1	
Cobalt	EPA 6020B - Modified	< 10.000	10.000	1	
Copper	EPA 6020B - Modified	3,436.340	200.000	20	D
Lead	EPA 6020B - Modified	< 10.000	10.000	1	
Manganese	EPA 6020B - Modified	14.348	10.000	1	
Mercury	EPA 6020B - Modified	< 5.000	5.000	1	
Nickel	EPA 6020B - Modified	< 10.000	10.000	1	
Selenium	EPA 6020B - Modified	< 20.000	20.000	2	D
Vanadium	EPA 6020B - Modified	21.997	10.000	1	
Zinc	EPA 6020B - Modified	274.840	200.000	20	B, D

RJ LEE GROUP

Brian Snuffer
Maul Foster & Alongi, Inc.

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Client Project: JH Baxter & Co.

Quality Control

EPA 6020B - Modified
Non-Potable Water

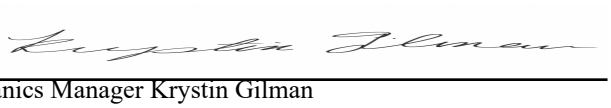
RJ Lee Group No.: W102103
COC No.:
Samples Received: 02/12/21
Analysis/Prep Date: 02/23/21
Report Date: 04/06/21

Analyte	CAS NO.	QC Sample ID	Expected µg/L	Result µg/L	RPD	% REC	Recovery Limits	Qualifier & Comments
Arsenic	7440-38-2	LRB	<10.00	<10.00				
Barium	7440-39-3	LRB	<10.00	<10.00				
Beryllium	7440-41-7	LRB	<10.00	<10.00				
Cadmium	7440-43-9	LRB	<10.00	<10.00				
Chromium	7440-47-3	LRB	<10.00	<10.00				
Cobalt	7440-48-4	LRB	<10.00	<10.00				
Copper	7440-50-8	LRB	<10.00	<10.00				
Lead	7439-92-1	LRB	<10.00	<10.00				
Manganese	7439-96-5	LRB	<10.00	<10.00				
Mercury	7439-97-6	LRB	<5.00	<5.00				
Nickel	7440-02-0	LRB	<10.00	<10.00				
Selenium	7782-49-2	LRB	<10.00	<10.00				
Vanadium	7440-62-2	LRB	<10.00	<10.00				
Zinc	7440-66-6	LRB	<10.0000	29.74				B
Arsenic	7440-38-2	LCS	100.00	109.51		110	80 - 120	
Barium	7440-39-3	LCS	100.00	110.74		111	80 - 120	
Beryllium	7440-41-7	LCS	100.00	113.15		113	80 - 120	
Cadmium	7440-43-9	LCS	100.00	107.32		107	80 - 120	
Chromium	7440-47-3	LCS	100.00	109.54		110	80 - 120	
Cobalt	7440-48-4	LCS	100.00	95.04		95.0	80 - 120	
Copper	7440-50-8	LCS	100.00	101.73		102	80 - 120	
Lead	7439-92-1	LCS	100.00	107.21		107	80 - 120	
Manganese	7439-96-5	LCS	100.00	95.35		95.3	80 - 120	
Mercury	7439-97-6	LCS	100.00	99.94		99.9	80 - 120	
Nickel	7440-02-0	LCS	100.00	102.17		102	80 - 120	
Selenium	7782-49-2	LCS	100.00	103.84		104	85 - 115	
Vanadium	7440-62-2	LCS	100.00	104.94		105	80 - 120	
Zinc	7440-66-6	LCS	100.00	114.65		115	80 - 120	B
Arsenic	7440-38-2	DUP	<1,000.0000	7,825.15	5.51			D W102103-12
Barium	7440-39-3	DUP	<10.0000	5.40	5.18			W102103-12
Beryllium	7440-41-7	DUP	<10.0000	0.03				W102103-12
Cadmium	7440-43-9	DUP	<10.0000	0.03	37.8			W102103-12
Chromium	7440-47-3	DUP	<10.0000	5.19	1.32			W102103-12
Cobalt	7440-48-4	DUP	<20.0000	0.90	0.0978			D W102103-12
Copper	7440-50-8	DUP	<200.0000	3,351.50	2.50			D W102103-12

Lead	7439-92-1	DUP	<10.0000	1.26	7.49			W102103-12
Manganese	7439-96-5	DUP	<20.0000	14.22	0.907			D W102103-12
Mercury	7439-97-6	DUP	<5.0000	0.50	1.58			W102103-12
Nickel	7440-02-0	DUP	<20.0000	6.53	11.5			D W102103-12
Selenium	7782-49-2	DUP	<20.00	<20.00				D W102103-12
Vanadium	7440-62-2	DUP	<10.0000	22.08	0.382			W102103-12
Zinc	7440-66-6	DUP	<20.0000	259.70	5.66			B, D W102103-12
Arsenic	7440-38-2	RL	10.00	10.35		104	70 - 130	
Barium	7440-39-3	RL	10.00	13.06		131	70 - 130	S
Beryllium	7440-41-7	RL	10.00	12.03		120	70 - 130	
Cadmium	7440-43-9	RL	10.00	11.12		111	70 - 130	
Chromium	7440-47-3	RL	10.00	12.14		121	70 - 130	
Cobalt	7440-48-4	RL	10.00	10.20		102	70 - 130	
Copper	7440-50-8	RL	10.00	9.90		99.0	70 - 130	
Lead	7439-92-1	RL	10.00	11.10		111	70 - 130	
Manganese	7439-96-5	RL	10.00	10.56		106	70 - 130	
Mercury	7439-97-6	RL	5.00	5.29		106	70 - 130	
Nickel	7440-02-0	RL	10.00	10.61		106	70 - 130	
Selenium	7782-49-2	RL	10.00	9.91		99.1	70 - 130	
Vanadium	7440-62-2	RL	10.00	10.97		110	70 - 130	
Zinc	7440-66-6	RL	10.00	32.30		323	70 - 130	B, S
Arsenic	7440-38-2	Matrix Spike	500.00	5,030.35		-123.1	80 - 120	S, D W102103-11
Barium	7440-39-3	Matrix Spike	500.00	574.35		114	70 - 130	D W102103-11
Beryllium	7440-41-7	Matrix Spike	100.00	86.66		86.7	70 - 130	D W102103-11
Cadmium	7440-43-9	Matrix Spike	500.00	522.82		105	70 - 130	D W102103-11
Chromium	7440-47-3	Matrix Spike	500.00	504.93		100	70 - 130	D W102103-11
Cobalt	7440-48-4	Matrix Spike	500.00	533.59		107	70 - 130	D W102103-11
Copper	7440-50-8	Matrix Spike	500.00	3,742.82		36.4	70 - 130	S, D W102103-11
Lead	7439-92-1	Matrix Spike	500.00	515.01		103	70 - 130	D W102103-11
Manganese	7439-96-5	Matrix Spike	500.00	546.11		104	70 - 130	D W102103-11
Mercury	7439-97-6	Matrix Spike	100.00	102.21		102	70 - 130	D W102103-11
Nickel	7440-02-0	Matrix Spike	500.00	551.50		109	70 - 130	D W102103-11
Selenium	7782-49-2	Matrix Spike	500.00	578.73		116	80 - 120	D W102103-11
Vanadium	7440-62-2	Matrix Spike	500.00	517.59		100	70 - 130	D W102103-11
Zinc	7440-66-6	Matrix Spike	500.00	809.04		99.9	70 - 130	B, D W102103-11

Report Qualifiers:

A = Target Analyte media breakthrough suspected
B = Analyte detected in the associated matrix blank
C = Aroclor/pesticide confirmation by GC/MS
D = Analyte analyzed in a dilution
E = The concentration indicated for this analyte is an estimated Value above the calibration range of the instrument
H = Sample holding time not met
J = Detected but below the MRL. Result is an estimated concentration
L = Sample condition at receipt out of compliance with defined method conditions
N = Specific analyte as a TIC
P = Analyte detected at or above MRL on initial analysis. Analyte Detected at greater than 40% RPD on confirmation
R = RPD/RSD outside accepted recovery limits
S = Spike Recovery outside accepted recovery limits
U = Analyte analyzed for but not detected
V = Analyte detected at or above MRL on initial analysis, but below MRL on confirmation
X = Aroclor/pesticide identification not confirmed by GC/MS



Inorganics Manager Krystin Gilman

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under ORELAP Lab Code 4061 AIHA-LAP, LLC Lab ID 178656 EPA ID WA01195 and WA DOE Lab ID C859. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid. Quality control data is available upon request.

Request for Laboratory Analytical Services - Chain of Custody

All samples 4.6°C (1.4°C wasted) Page 1 of 3

W102103

ATTENTION TO:

Did you complete a Submit a Sample Form Online? Yes [ ] No [ ]

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Purchase Order Number:	Signed CBAL Quote	**Client Job Number:**	

Report Results To	Name: BRIAN SNUFFER ZUKAS		
	Company: MAUL FOSTER & ALONGI, INC.		
	Address: 3140 NE BROADWAY STREET, PORTLAND, OR 97232		
	City, State, Zip:		
	Phone: 971-254-5077 Fax: Cell: 503-314-8589		
	Email results to: bsnuffer@maulfoster.com		
	If a hard copy of invoice is needed, check here ☐		
Invoice To	Name:	Email:	
	Company:	Fax:	
	Address:		
	City, State, Zip:		
	Phone:		
Date Results Needed	Standard TA assumed if left blank; please do not use vague terms like ASAP	Rush Charges Authorized ? (circle one)	Yes / No

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP/8270D	PAH/8270D	Dioxins - 1613B	BTEX - 8015	ALDEHYDES / ACROLEIN/TO-11	PHENOL/ 8270	Methanol/ 8015	Special Instructions or Comments
1 PCP-01	Penta Treating Solution (oil based)	Work Tank-2	2/11/21 12:25	✓	✓	✓	✓	✓	✓	✓	
2 OIL-01	Bunker Coil solution (oil based)	Work Tank-3	2/11/21 10:05		✓	✓	✓				
3 BLND-01	50/50 Blend Solution (oil based)	Work Tank-2	2/11/21 10:14		✓	✓	✓				
10 PCP-01	Penta Hot Well Influent (oil based)	Retort-85	2/11/21 13:00	✓	✓	✓	2/11/21 P.J.	2/11/21 P.J.	2/11/21 P.J.	2/11/21 P.J.	
11 PCP-01-DUP	Penta Hot Well Influent (oil based) Dup.	Retort-85	2/11/21 13:00	✓	✓	✓	2/11/21 P.J.	2/11/21 P.J.	2/11/21 P.J.	2/11/21 P.J.	
12 HOTW-01	Heavy oil Hot Well (oil based)	Retort-83	2/11/21 10:48		✓	✓	✓	✓	✓	✓	

Chain of Custody	Relinquished By (Signature): Scott Sutherke	Date: 2-11-21	Time: 1328	Received By (Signature): Erin Lesebeig	Date: 02/12/21 Time: 1400
	Relinquished By (Print Name): SCOTT SUTHERKE	Relinquished To: PAUL JOANNIDIS		Received By (Print Name): ERIN Lesebeig	Relinquished To:
	Company Name:	Method of Shipment:		Company Name: RJLG	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name): PAUL JOANNIDIS	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

R5_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

All samples <6°C (1.4°C received)

WI02103

ATTENTION TO:

Did you complete a Submit a Sample Form Online? Yes ☐ No ☐

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Report Results To	Name:		
	Company:		
	Address:		
	City, State, Zip:		
	Phone:	Fax:	
	Email results to:		
If a hard copy of invoice is needed, check here ☐			

Purchase Order Number:		**Client Job Number:**	
Invoice To	Name:	Email:	
	Company:	Fax:	
	Address:		
	City, State, Zip:		
	Phone:		
Date Results Needed	Standard TA assumed if left blank; please do not use vague terms like ASAP	Rush Charges Authorized ? (circle one)	Yes / No

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP/8270	PAH/8270	Dioxins/1613B	BTEX-8015	Aldehydes & Acrolein/TO-11	Phenol/8270	Methanol/8015	Ammonia/350.1	Metals/6020
ACZAHW-01	ACZA Hot Well (liquid based)	Retort-84	2/11/21 11:00					✓	✓	✓	✓	
OWSHO-01	Heavy Oil Chamber Influent (oil based)	OWS-32B	2/11/21 11:18	✓	✓	✓	✓	✓	✓	✓	✓	
OWSHO-01DUP	Heavy Oil Chamber Influent (oil based)	OWS-32B	2/11/21 11:18	✓	✓	✓	✓	✓	✓	✓	✓	
PCPHO-01	Penta Chamber Influent (oil based)	OWS-32B	2/11/21 11:30	✓	✓	✓		✓	✓	✓		
EVAP-01	Evaporator Influent (Liquid based)	Tank-43-C	2/11/21 11:52	✓	✓	✓	✓	✓	✓	✓	✓	✓
EVAP-01DUP	Evaporator Influent (Liquid based)	Tank-43-C	2/11/21 11:52	✓	✓	✓	✓	✓	✓	✓	✓	✓

Chain of Custody	Relinquished By (Signature): Scott Thielke	Date: 2-11-21	Time: 1328
	Relinquished By (Print Name): SCOTT THIELKE	Relinquished To: FAIR WIND	
	Company Name:	Method of Shipment: Delivered	
Chain of Custody	Relinquished By (Signature):	Date:	Time:
	Relinquished By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:	

Chain of Custody	Received By (Signature): Erin Leseberg	Date: 02/12/21	Time: 1400
	Received By (Print Name): ERIN LESEBERG	Relinquished To:	
	Company Name: RJLG	Method of Shipment: —	
Chain of Custody	Received By (Signature):	Date:	Time:
	Received By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:	

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

All samples 4°C (1.4°C received) Page 3 of 3

W102103

ATTENTION TO:

Did you complete a Submit a Sample Form Online? Yes ☐ No ☐

Lab Use Only	Project No.:	Client No.:	**Purchase Order Number:**	**Client Job Number:**	
	Date Logged In:	Logged In By:			
Report Results To	Name:		**Invoice To**	Name:	Email:
	Company:			Company:	Fax:
	Address:			Address:	
	City, State, Zip:			City, State, Zip:	
	Phone:	Fax:		Phone:	
	Email results to:		**Date Results Needed**	Standard TA assumed if left blank; please do not use vague terms like ASAP	Rush Charges Authorized ? (circle one) Yes / (No)

If a hard copy of invoice is needed, check here ☐

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PAH/8270	PCP/8270	Dioxins/1613B	BTEX/8015	Special Instructions or Comments
2C STRM-01	Storm Water Treatment System Influent (Liquid based)	Storage Tank	2/11/21 12:06	✓	✓	✓	✓	
2C POND-01	Mill Pond	Mill Pond	2/11/21 12:00	✓	✓	✓	✓	

Analysis Requested

Chain of Custody	Relinquished By (Signature): Scott Thielke	Date: 2-11-21	Time: 1328	Received By (Signature): Erin Loseberg
	Relinquished By (Print Name): Scott Thielke	Relinquished To: Paul Lothamer Delivery		Received By (Print Name): Erin Loseberg
	Company Name:	Method of Shipment:		Company Name: RJLG
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):
	Company Name:	Method of Shipment:		Company Name:

Chain of Custody	Received By (Signature): Erin Loseberg	Date: 02/12/21	Time: 1400	
	Received By (Print Name): Erin Loseberg	Relinquished To:		
	Company Name: RJLG	Method of Shipment:		
Chain of Custody	Received By (Signature):	Date:	Time:	
	Received By (Print Name):	Relinquished To:		
	Company Name:	Method of Shipment:		

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103

SECTION 6

Summit Environmental Technologies, Inc. Laboratory Report
SM4500-NH3 D 2011 - Ammonia; Non-potable Water
Client Project; JH Baxter & Co.

March 01, 2021

Maul Foster & Alongi, Inc.
3140 NE Broadway St
Portland, OR 97232
Attn. Brian Snuffer Zukas
bsnuffer@maulfoster.com

Subject: Chemical Analysis Report

Columbia Basin Analytical Laboratories received 14 sample(s) on 02/12/21 for analysis. These sample(s) have been assigned a login order number of W102103. On 02/17/21, 5 of the samples were outsourced to Summit Environmental Technologies, Inc. This report consists of the original results from Summit Environmental Technologies, Inc. and a copy of the chain of custody.

General Lab Comments

The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. Results included in this report apply to the sample(s) as it was received. Information provided by the customer can affect validity of results. The sample(s) were prepared and analyzed in compliance with SM4500-NH3 D. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratories. Any questions, please contact our office.

Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature. This report has been technically reviewed by the following individual:



03/01/21

Laboratory Director, A. Paul Ioannidis *for Brian J. Fackelman (Summit Environmental)* Date

If you have any questions, please feel free to contact Paul Ioannidis at pioannidis@rjleegroup.com or 509-792-1955.

This report has been administratively reviewed and approved by the following individual:



03/01/21

Project Manager, JJ Furlong Date

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

March 01, 2021

JJ Furlong
RJ Lee Group
2710 North 20th Ave.
Pasco, WA 99301
TEL: (509) 545-4989
FAX:

RE:

Dear JJ Furlong: Order No.: 21021279

Summit Environmental Technologies, Inc. received 5 sample(s) on 2/24/2021 for the analyses presented in the following report.

There were no problems with the analytical events associated with this report unless noted in the Case Narrative.

Quality control data is within laboratory defined or method specified acceptance limits except where noted.

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

Sincerely,



Brian J. Fackelman

Project Manager

3310 Win St.
Cuyahoga Falls, Ohio 44223

Arkansas 88-0735, California 2943, Colorado, Connecticut PH-0108, Florida NELAC E87688, Idaho OH00923, Illinois 200061, Indiana C-OH-13, Kansas E-10347, Kentucky (Underground Storage Tank) 3, Kentucky 90146, Maryland 339, Michigan 9988, Minnesota 1780279, Nevada OH009232020-1, New Hampshire 2996, New Jersey OH006, New York 11777, North Carolina 39705 and 631, North Dakota R-201, Ohio DW, Ohio VAP CL0052, Oklahoma 2019-155, Oregon OH200001, Pennsylvania 011, Rhode Island LA000317, South Carolina 92016001, Texas T104704466-19-16, Utah OH009232020-12, Virginia VELAP 10381, West Virginia 9957C

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Case Narrative

WO#: **21021279**
Date: **3/1/2021**

CLIENT: RJ Lee Group
Project:

WorkOrder Narrative:
21021279: This report in its entirety consists of the following documents: Cover Letter, Case Narrative, Analytical Results, QC Summary Report, Applicable Accreditation Information, Chain-of-Custody, Cooler Receipt Form, and other applicable forms as necessary. All documents contain the Summit Environmental Technologies, Inc., Work Order Number assigned to this report.

Summit Environmental Technologies, Inc., holds the accreditations/certifications listed at the bottom of the cover letter that may or may not pertain to this report. Please refer to the "Accreditation Program Analytes Report" for accredited analytes list.

The information contained in this analytical report is the sole property of Summit Environmental Technologies, Inc. and that of the customer. It cannot be reproduced in any form without the consent of Summit Environmental Technologies, Inc. or the customer for which this report was issued. The results contained in this report are only representative of the samples received. Conditions can vary at different times and at different sampling conditions. Summit Environmental Technologies, Inc. is not responsible for use or interpretation of the data included herein.

All results for Solid Samples are reported on an "as received" or "wet weight" basis unless indicated as "dry weight" using the "-dry" designation on the reporting units.

This report is believed to meet all of the requirements of the accrediting agency, where applicable. Any comments or problems with the analytical events associated with this report are noted below.

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Workorder Sample Summary

WO#: **21021279**

01-Mar-21

CLIENT: RJ Lee Group
Project:

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
21021279-001	ACZAHW-01		2/11/2021 11:00:00 AM	2/24/2021 12:55:00 PM	Non-Potable Water
21021279-002	OWSHO-01		2/11/2021 11:18:00 AM	2/24/2021 12:55:00 PM	Non-Potable Water
21021279-003	OWSHO-01 DUP		2/11/2021 11:18:00 AM	2/24/2021 12:55:00 PM	Non-Potable Water
21021279-004	EVAP-01		2/11/2021 11:52:00 AM	2/24/2021 12:55:00 PM	Non-Potable Water
21021279-005	EVAP-01 DUP		2/11/2021 11:52:00 AM	2/24/2021 12:55:00 PM	Non-Potable Water

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

DATES REPORT

WO#: **21021279**

01-Mar-21

Client: RJ Lee Group

Project:

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	Leachate Date	Prep Date	Analysis Date
21021279-001A	ACZAHW-01	2/11/2021 11:00:00 AM	Non-Potable Water	Ammonia (SM4500-NH3 D 2011)		3/1/2021 8:50:00 AM	3/1/2021 1:28:00 PM
21021279-002A	OWSHO-01	2/11/2021 11:18:00 AM		Ammonia (SM4500-NH3 D 2011)		3/1/2021 8:50:00 AM	3/1/2021 1:28:00 PM
21021279-003A	OWSHO-01 DUP			Ammonia (SM4500-NH3 D 2011)		3/1/2021 8:50:00 AM	3/1/2021 1:28:00 PM
21021279-004A	EVAP-01	2/11/2021 11:52:00 AM		Ammonia (SM4500-NH3 D 2011)		3/1/2021 8:50:00 AM	3/1/2021 1:28:00 PM
21021279-005A	EVAP-01 DUP			Ammonia (SM4500-NH3 D 2011)		3/1/2021 8:50:00 AM	3/1/2021 1:28:00 PM

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **21021279**

Date Reported: **3/1/2021**

CLIENT: RJ Lee Group

Collection Date: 2/11/2021 11:00:00 AM

Project:

Lab ID: 21021279-001

Matrix: NON-POTABLE WATER

Client Sample ID: ACZAHW-01

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
AMMONIA (SM4500-NH3 D 2011)				**A4500-NH3-D**	**A4500-NH3-** Analyst: **TRS**	
Ammonia-N	14100	250		mg/L	500	3/1/2021 1:28:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
U	Samples with CalcVal < MDL

Original

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **21021279**

Date Reported: **3/1/2021**

CLIENT: RJ Lee Group **Collection Date:** 2/11/2021 11:18:00 AM

Project:

Lab ID: 21021279-002 **Matrix:** NON-POTABLE WATER

Client Sample ID: OWSHO-01

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
AMMONIA (SM4500-NH3 D 2011)				**A4500-NH3-D**	**A4500-NH3-** Analyst: **TRS**	
Ammonia-N	185	5.00		mg/L	10	3/1/2021 1:28:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
U	Samples with CalcVal < MDL

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **21021279**

Date Reported: **3/1/2021**

CLIENT: RJ Lee Group **Collection Date:** 2/11/2021 11:18:00 AM

Project:

Lab ID: 21021279-003 **Matrix:** NON-POTABLE WATER

Client Sample ID: OWSHO-01 DUP

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
AMMONIA (SM4500-NH3 D 2011)				**A4500-NH3-D**	**A4500-NH3-** Analyst: **TRS**	
Ammonia-N	169	5.00		mg/L	10	3/1/2021 1:28:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
U	Samples with CalcVal < MDL

SUMMIT ENVIRONMENTAL TECHNOLOGIES, INC. Analytical Laboratories

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **21021279**

Date Reported: **3/1/2021**

CLIENT: RJ Lee Group **Collection Date:** 2/11/2021 11:52:00 AM

Project:

Lab ID: 21021279-004 **Matrix:** NON-POTABLE WATER

Client Sample ID: EVAP-01

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
AMMONIA (SM4500-NH3 D 2011)				**A4500-NH3-D**	**A4500-NH3-** Analyst: **TRS**	
Ammonia-N	157	5.00		mg/L	10	3/1/2021 1:28:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
U	Samples with CalcVal < MDL

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

Analytical Report

(consolidated)

WO#: **21021279**

Date Reported: **3/1/2021**

CLIENT: RJ Lee Group **Collection Date:** 2/11/2021 11:52:00 AM

Project:

Lab ID: 21021279-005 **Matrix:** NON-POTABLE WATER

Client Sample ID: EVAP-01 DUP

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
AMMONIA (SM4500-NH3 D 2011)				**A4500-NH3-D**	**A4500-NH3-** Analyst: **TRS**	
Ammonia-N	171	5.00		mg/L	10	3/1/2021 1:28:00 PM

Qualifiers:

H	Holding times for preparation or analysis exceeded
ND	Not Detected
RL	Reporting Detection Limit
W	Sample container temperature is out of limit as specified at testcode
M	Manual Integration used to determine area response
PL	Permit Limit
U	Samples with CalcVal < MDL

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **21021279**
01-Mar-21

Client: RJ Lee Group
Project: **BatchID:** **48064**

Sample ID: **21021327-003AMS**	SampType: **MS**	TestCode: **AMMONIA_N**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **BatchQC**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227657**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	13.2	0.500	10.00	2.630	106	80	120				

Sample ID: **21021327-003AMSD**	SampType: **MSD**	TestCode: **AMMONIA_N**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **BatchQC**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227658**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	13.3	0.500	10.00	2.630	107	80	120	13.20	0.755	20	

Sample ID: **21021329-002CDUP**	SampType: **DUP**	TestCode: **AMMONIA_N**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **BatchQC**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	4.98	0.500		0	0			4.860	2.44	20	

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analy
J	Analyte detected below quantitation limits	M	Manual Integration used to determine area response	MC	Value is below Minimum Compound
ND	Not Detected	P	Second column confirmation exceeds	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted reco

Summit Environmental Technologies, Inc.
3310 Win St.
Cuyahoga Falls, Ohio 44223
TEL: (330) 253-8211 FAX: (330) 253-4489
Website: http://www.settek.com

QC SUMMARY REPORT

WO#: **21021279**

01-Mar-21

Client: RJ Lee Group

Project:

BatchID: **48064**

Sample ID: **MB-48064**	SampType: **MBLK**	TestCode: **Ammonia_NP**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **PBW**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227646**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	ND	0.500		0	0						U

Sample ID: **LCS-48064**	SampType: **LCS**	TestCode: **Ammonia_NP**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **LCSW**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227647**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	9.92	0.500	10.00	0	99.2	85	115				

Sample ID: **RLC-48064**	SampType: **RLC**	TestCode: **Ammonia_NP**	Units: **mg/L**	Prep Date: **3/1/2021**	RunNo: **124419**
Client ID: **BatchQC**	Batch ID: **48064**	TestNo: **A4500-NH3-D A4500-NH3-D**		Analysis Date: **3/1/2021**	SeqNo: **3227648**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Ammonia-N	ND	0.500	0.2000	0	127	50	150				

Qualifiers:

B	Analyte detected in the associated Method Blank	E	Value above quantitation range	H	Holding times for preparation or analy
J	Analyte detected below quantitation limits	M	Manual Integration used to determine area response	MC	Value is below Minimum Compound
ND	Not Detected	P	Second column confirmation exceeds	PL	Permit Limit
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	S	Spike Recovery outside accepted reco

Summit Environmental Technologies, In
3310 Win S
Cuyahoga Falls, Ohio 4422
TEL: (330) 253-8211 FAX: (330) 253-44
Website: http://www.settek.co

Qualifiers and Acronyms

WO#: **21021279**
Date: **3/1/2021**

These commonly used Qualifiers and Acronyms may or may not be present in this report.

Qualifiers

U	The compound was analyzed for but was not detected.
J	The reported value is greater than the Method Detection Limit but less than the Reporting Limit.
H	The hold time for sample preparation and/or analysis was exceeded.
D	The result is reported from a dilution.
E	The result exceeded the linear range of the calibration or is estimated due to interference.
MC	The result is below the Minimum Compound Limit.
*****	The result exceeds the Regulatory Limit or Maximum Contamination Limit.
m	Manual integration was used to determine the area response.
d	Manual integration in which peak was deleted
N	The result is presumptive based on a Mass Spectral library search assuming a 1:1 response.
P	The second column confirmation exceeded 25% difference.
C	The result has been confirmed by GC/MS.
X	The result was not confirmed when GC/MS Analysis was performed.
B/MB+	The analyte was detected in the associated blank.
G	The ICB or CCB contained reportable amounts of analyte.
QC-/+	The CCV recovery failed low (-) or high (+).
R/QDR	The RPD was outside of accepted recovery limits.
QL-/+	The LCS or LCSD recovery failed low (-) or high (+).
QLR	The LCS/LCSD RPD was outside of accepted recovery limits.
QM-/+	The MS or MSD recovery failed low (-) or high (+).
QMR	The MS/MSD RPD was outside of accepted recovery limits.
QV-/+	The ICV recovery failed low (-) or high (+).
S	The spike result was outside of accepted recovery limits.
Z	Deviation; A deviation from the method was performed; Please refer to the Case Narrative for additional information

Acronyms

ND	Not Detected	**RL**	Reporting Limit
QC	Quality Control	**MDL**	Method Detection Limit
MB	Method Blank	**LOD**	Level of Detection
LCS	Laboratory Control Sample	**LOQ**	Level of Quantitation
LCSD	Laboratory Control Sample Duplicate	**PQL**	Practical Quantitation Limit
QCS	Quality Control Sample	**CRQL**	Contract Required Quantitation Limit
DUP	Duplicate	**PL**	Permit Limit
MS	Matrix Spike	**RegLvl**	Regulatory Limit
MSD	Matrix Spike Duplicate	**MCL**	Maximum Contamination Limit
RPD	Relative Percent Different	**MinCL**	Minimum Compound Limit
ICV	Initial Calibration Verification	**RA**	Reanalysis
ICB	Initial Calibration Blank	**RE**	Reextraction
CCV	Continuing Calibration Verification	**TIC**	Tentatively Identified Compound
CCB	Continuing Calibration Blank	**RT**	Retention Time
RLC	Reporting Limit Check	**CF**	Calibration Factor
DF	Dilution Factor	**RF**	Response Factor

This list of Qualifiers and Acronyms reflects the most commonly utilized Qualifiers and Acronyms for reporting. Please refer to the Analytical Notes in the Case Narrative for any Qualifiers or Acronyms that do not appear in this list or for additional information regarding the use of these Qualifiers on reported data.

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 15, 2021

Revised Report, W102103

SECTION 7

Chain of Custody and CBAL Sample Login Report
Client Project; JH Baxter & Co.

WORK ORDER Printed: 2/12/2021 3:53:01PM

W102103

RJ Lee Group Inc

Client: Maul Foster & Alongi, Inc.
Project: JH Baxter & Co.
COC #:
PO #: Q01132020-115 Rev.4
Project Manager: L. Joe Sears
Project Number: [none]
SDG Number:

Report To:
Maul Foster & Alongi, Inc.
Brian Snuffer
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Phone: (503) 314-8589
Fax:

Invoice To:
Maul Foster & Alongi, Inc.
Brian Snuffer
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Phone: (503) 314-8589
Fax:

Date Due: 3/1/2021 (10 day TAT)
Received By: Erin Leseberg
Logged In By: Erin Leseberg
Date Received: 02/12/21 14:00
Date Logged In: 02/12/21 15:30

Samples Received at:	1.4°C	Was sampled by Paul at site.
Custody Seals	No	
Containers Intact	Yes	
COC/Labels Agree	Yes	
Preservation Confirmed	No	
Received On Ice	Yes	

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W102103-01	PCPHW-01 Penta Treating Solution	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-01	PCPHW-01 Penta Treating Solution	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-01	PCPHW-01 Penta Treating Solution	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-02	OIL-01 Bunker Coil Solution	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-02	OIL-01 Bunker Coil Solution	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-03	BLND-01 50/50 Blend Solution	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-03	BLND-01 50/50 Blend Solution	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-04	PCP-01 Penta Hot Well Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-05	PCP-01-DUP Penta Hot Well Influent Dup	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021

W102103

RJ Lee Group Inc

Client: Maul Foster & Alongi, Inc.
Project: JH Baxter & Co.
COC #:
PO #: Q01132020-115 Rev.4
Project Manager: L. Joe Sears
Project Number: [none]
SDG Number:

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W102103-06	HOHW-01 Heavy Oil Hot Well	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-06	HOHW-01 Heavy Oil Hot Well	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-06	HOHW-01 Heavy Oil Hot Well	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-07	ACZAHW-01 ACZA Hot Well	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-07	ACZAHW-01 ACZA Hot Well	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-07	ACZAHW-01 ACZA Hot Well	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-08	OWSHO-01 Heavy Oil Chamber Influent	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-08	OWSHO-01 Heavy Oil Chamber Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-08	OWSHO-01 Heavy Oil Chamber Influent	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-09	OWSHO-01-DUP Heavy Oil Chamber Influent	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-09	OWSHO-01-DUP Heavy Oil Chamber Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-09	OWSHO-01-DUP Heavy Oil Chamber Influent	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-10	PCPHO-01 Penta Chamber Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-10	PCPHO-01 Penta Chamber Influent	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-10	PCPHO-01 Penta Chamber Influent	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-11	EVAP-01 Evaporator Influent	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021

W102103

RJ Lee Group Inc

Client: Maul Foster & Alongi, Inc.
Project: JH Baxter & Co.
COC #:
PO #: Q01132020-115 Rev.4
Project Manager: L. Joe Sears
Project Number: [none]
SDG Number:

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W102103-11	EVAP-01 Evaporator Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-11	EVAP-01 Evaporator Influent	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-12	EVAP-01-DUP Evaporator Influent	TO-11A Mod	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-12	EVAP-01-DUP Evaporator Influent	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-12	EVAP-01-DUP Evaporator Influent	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-13	STRM-01 Storm Water Treatment System Influe	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-13	STRM-01 Storm Water Treatment System Influe	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-14	POND-01 Mill Pond	EPA 8015D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-14	POND-01 Mill Pond	EPA 8270D	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-01	PCPHW-01 Penta Treating Solution	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-02	OIL-01 Bunker Coil Solution	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-03	BLND-01 50/50 Blend Solution	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-04	PCP-01 Penta Hot Well Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-05	PCP-01-DUP Penta Hot Well Influent Dup	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-06	HOHW-01 Heavy Oil Hot Well	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021

W102103

RJ Lee Group Inc

Client: Maul Foster & Alongi, Inc.
Project: JH Baxter & Co.
COC #:
PO #: Q01132020-115 Rev.4
Project Manager: L. Joe Sears
Project Number: [none]
SDG Number:

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W102103-08	OWSHO-01 Heavy Oil Chamber Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-09	OWSHO-01-DUP Heavy Oil Chamber Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-10	PCPHO-01 Penta Chamber Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-11	EVAP-01 Evaporator Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-12	EVAP-01-DUP Evaporator Influent	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-13	STRM-01 Storm Water Treatment System Influe	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-14	POND-01 Mill Pond	Dioxens	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-07	ACZAHW-01 ACZA Hot Well	Metals by ICP-MS	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-11	EVAP-01 Evaporator Influent	Metals by ICP-MS	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-12	EVAP-01-DUP Evaporator Influent	Metals by ICP-MS	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-07	ACZAHW-01 ACZA Hot Well	Ammonia - N	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-08	OWSHO-01 Heavy Oil Chamber Influent	Ammonia - N	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-09	OWSHO-01-DUP Heavy Oil Chamber Influent	Ammonia - N	Non-Potable Water	2/11/2021	10	3/1/2021
W102103-11	EVAP-01 Evaporator Influent	Ammonia - N	Non-Potable Water	2/11/2021	10	3/1/2021

W102103

RJ Lee Group Inc

Client: Maul Foster & Alongi, Inc.
Project: JH Baxter & Co.
COC #:
PO #: Q01132020-115 Rev.4
Project Manager: L. Joe Sears
Project Number: [none]
SDG Number:

RJLG ID	Sample Name	Analysis	Matrix	Date Sampled	TAT	Date Due
W102103-12	EVAP-01-DUP Evaporator Influent	Ammonia - N	Non-Potable Water	2/11/2021	10	3/1/2021

Request for Laboratory Analytical Services - Chain of Custody

All samples 4.6°C (1.4°C corrected)

W102103

Page 1 of 3

ATTENTION TO:

Did you complete a Submit a Sample Form Online? Yes / (No)

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Report Results To	Name: BRIAN SNUFFER ZUKAS		
	Company: MAUL FOSTER & ALONGI, INC.		
	Address: 3140 NE BROADWAY STREET, PORTLAND, OR 97232		
	City, State, Zip:		
	Phone: 971-254-5077	Fax: Cell: 503-314-8589	
	Email results to: bsnuffer@maulfoster.com		
	If a hard copy of invoice is needed, check here ☐		

Purchase Order Number:	Signed CBAL Quote	**Client Job Number:**	
Invoice To	Name:	Email:	
	Company:	Fax:	
	Address:		
	City, State, Zip:		
	Phone:		
Date Results Needed	Standard TA assumed if left blank; please do not use vague terms like ASAP	Rush Charges Authorized ? (circle one)	Yes / (No)

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP/8270D	PAH/8270D	Dioxins - 1613B	BTEX - 8015	Aldehydes / Acrolein/TO-11	Phenol/ 8270D	Methanol 8015	Special Instructions or Comments
1V PCP-HW-01	Penta Treating Solution (oil based)	Work Tank-20	2/11/21 12:25	✓	✓	✓	✓	✓	✓	✓	
2V OIL-01	Bunker Coil solution (oil based)	Work Tank-3	2/11/21 10:05		✓	✓	✓				
3V BLND-01	50/50 Blend Solution (oil based)	Work Tank-2	2/11/21 10:14		✓	✓	✓				
4V PCP-HW-01	Penta Hot Well Influent (oil based)	Retort-85	2/11/21 13:00	✓	✓	✓	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	
5V PCP-[redacted]-01-DUP	Penta Hot Well Influent (oil based) Dup.	Retort-85	2/11/21 13:00	✓	✓	✓	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	~~2/11/21~~ P.J.	
6V HOHW-01	Heavy oil Hot Well (oil based)	Retort-83	2/11/21 10:48		✓	✓	✓	✓	✓	✓	

Chain of Custody	Relinquished By (Signature): Scott Tuttle	Date: 2-11-21	Time: 1328	Received By (Signature): Erin Lesebergs	Date: 02/12/21 Time: 1400
	Relinquished By (Print Name): SCOTT TUTTLE	Relinquished To: PAUL JOANNIDIS		Received By (Print Name): ERIN LESEBERG	Relinquished To:
	Company Name:	Method of Shipment:		Company Name: RJLG	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name): PAUL JOANNIDIS	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 Phone
724.733.1799 Fax

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 Phone
509.544.6010 Fax

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

All samples 26°C (1.4°C [illegible])

Request for Laboratory Analytical Services - Chain of Custody

W102103

ATTENTION TO: | **Did you complete a Submit a Sample Form Online?** Yes ☐ No ☐

Lab Use Only	Project No.:	Client No.:	Purchase Order Number: / Client Job Number:
	Date Logged In:	Logged In By:	
Report Results To	Name:		**Invoice To** Name: / Email:
	Company:		Company: / Fax:
	Address:		Address:
	City, State, Zip:		City, State, Zip:
	Phone: / Fax:		Phone:
	Email results to:		**Date Results Needed** — Standard TA assumed if left blank; please do not use vague terms like ASAP — Rush Charges Authorized ? (circle one) Yes / No

If a hard copy of invoice is needed, check here ☐

Quality System Requirements (if applicable): Accreditations required to be followed: yes / no. Circle which ones to follow: ISO (Please specify): / cGMP: / Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP/8270	PAH/8270	Dioxins/1613B	BTEX-8015	Aldehydes & Acrolein/TO-11	Phenol/8270	Methanol/8015	Ammonia/350.1	Metals/6020
ACZAHW-01	ACZA Hot Well (liquid based)	Retort-84	2/11/21 11:00					✓	✓	✓	✓	
OWSHO-01	Heavy Oil Chamber Influent (oil based)	OWS-32B	2/11/21 11:18	✓	✓	✓	✓	✓	✓	✓	✓	
OWSHO-01DUP	Heavy Oil Chamber Influent (oil based)	OWS-32B	2/11/21 11:18	✓	✓	✓	✓	✓	✓	✓	✓	
PCPHO-01	Penta Chamber Influent (oil based)	OWS-32B	2/11/21 11:30	✓	✓	✓		✓	✓	✓		
EVAP-01	Evaporator Influent (Liquid based)	Tank-43-C	2/11/21 11:52	✓	✓	✓	✓	✓	✓	✓	✓	✓
EVAP-01DUP	Evaporator Influent (Liquid based)	Tank-43-C	2/11/21 11:52	✓	✓	✓	✓	✓	✓	✓	✓	✓

Chain of Custody	Relinquished By (Signature): [signature] Date: 2-11-21 Time: 1328	**Chain of Custody**	Received By (Signature): Erin Lieberg Date: 02/12/21 Time: 1400
	Relinquished By (Print Name): SCOTT TIMELER Relinquished To: FAST ADVANTAGE		Received By (Print Name): ERIN LIEBERG Relinquished To:
	Company Name: Method of Shipment: Delivered		Company Name: RJLG Method of Shipment: —
Chain of Custody	Relinquished By (Signature): Date: Time:	**Chain of Custody**	Received By (Signature): Date: Time:
	Relinquished By (Print Name): Relinquished To:		Received By (Print Name): Relinquished To:
	Company Name: Method of Shipment:		Company Name: Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 Phone
724.733.1799 Fax

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 Phone
509.544.6010 Fax

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

All samples 4°C (1.4°C measured)

W102103

ATTENTION TO:

Did you complete a Submit a Sample Form Online? Yes ☐ No ☐

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Report Results To	Name:		
	Company:		
	Address:		
	City, State, Zip:		
	Phone:	Fax:	
	Email results to:		
Purchase Order Number:		**Client Job Number:**	
Invoice To	Name:	Email:	
	Company:	Fax:	
	Address:		
	City, State, Zip:		
	Phone:		
Date Results Needed	Standard TA assumed if left blank; please do not use vague terms like ASAP	Rush Charges Authorized ? (circle one)	Yes / (No)

If a hard copy of invoice is needed, check here ☐

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PAH 8270	PCP/8270	Dioxins 1613B	BTEX 8015	Special Instructions or Comments
STRM-01	Storm Water Treatment System Influent (Liquid based)	Storage Tank	2/11/21 12:06	✓	✓	✓	✓	
POND-01	Mill Pond	Mill Pond	2/11/21 12:00	✓	✓	✓	✓	

Chain of Custody	Relinquished By (Signature): Scott Thielke	Date: 2-11-21	Time: 1328	**Chain of Custody**	Received By (Signature): Erin Loseberg	Date: 02/12/21	Time: 1400
	Relinquished By (Print Name): Scott Thielke	Relinquished To: PAL IOANMID			Received By (Print Name): Erin Loseberg	Relinquished To:	
	Company Name:	Method of Shipment: Delivery			Company Name: RJLG	Method of Shipment:	
Chain of Custody	Relinquished By (Signature):	Date:	Time:	**Chain of Custody**	Received By (Signature):	Date:	Time:
	Relinquished By (Print Name):	Relinquished To:			Received By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:			Company Name:	Method of Shipment:	

RS_09182013

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 Phone
724.733.1799 Fax

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 Phone
509.544.6010 Fax

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

ATTACHMENT B.3

CAPE FEAR ANALYTICAL LLC REPORT WO18324
(MARCH AND JUNE, 2021 SAMPLES)

CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421
www.capefearanalytical.com

August 04, 2021

Mr. Paul Ioannides
RJ Lee Group
350 Hochberg Road
Monroeville, Pennsylvania 15146

Re: Dioxin Subcontract
Work Order: 18324

Dear Mr. Ioannides:

Cape Fear Analytical, LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 18, 2021. This revised data report has been prepared and reviewed in accordance with CFA's standard operating procedures. Refer to the fractional case narrative for revision details.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (910) 795-0421.

Sincerely,

Cynde Larkins

Cynde Larkins
Project Manager

Enclosures

problem solved

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

CFA WO#18324

RJ LeeGroup, Inc.
Columbia Basin Analytical Laboratories
2710 North 20th Avenue, Pasco, WA 99301
Tel: (509) 792-1955 | Fax: (509) 792-1934

Request for Laboratory Analytical Services
Chain of Custody

CC06004 Rev. 02

	Purchase Order No.:	Client Job No.:
Lab Use Only	Project No.:	Client No:
	Date Logged In:	Logged In By:
Report Results To	Name: Paul Ioannidis	
	Company: RJ Lee Group, Inc	
	Address: 2710 N 20th Ave	
	City, State, Zip: Pasco, WA 99301	
	Phone: 509-792-1955	Fax:
	Call with Verbal Results:	
	Email Results To: p.ioannidis@rjleegroup.com	
	Fax Results To:	
Send Invoice To	Name: Steven Brown	
	Company: RJ Lee Group, Inc	Email: sbrown@rjleegroup.com
	Address: 350 Hocberg Road	copy jfurlong@rjleegroup.com
	City, State, Zip: Monroeville, PA 15146	
	Phone: 724-387-1953	Fax:
Special Instructions		

Turnaround Request: TAT: 8 hrs 1 day 3 day 5 day 10 day

Drinking Water Sample Only:
Sample Purpose: Information □ Regulatory □
System ID No.:
DOH Source No.:
Multiple Sources Nos.:
Sample Purpose: A □ B □ Other □

Chemistry Analysis Key:
Preservation: Unpres, 4°C, HNO_3, Other, H_2SO_4, HCl, NaOH, Na_2SO_4
Matrix: WW=Wastewater, GW=Groudwater, S=Soil/Sludge, E=Extract, SW=Surface Water, DW=Drinking Water, O=Oil, X=Other
Container: P=Plastic, G=Glass, W=Wipe, A=Air (filter or tube)
Date:_____ Time_____

Sample Identification	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	Analysis Requested: Dioxin	Furans	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
CREO-01	Creosote Treating Solution - oil based	03/31/21	10:55:00 AM			X	X						
CFI-01	Carbon Filter Inlet (Pretreat) Liquid based	06/02/21	11:10:00 AM			X	X						
EVAP-02	Evaporator influent (carbon filter discharge) Liquid based	06/02/21	11:45:00 AM			X	X						
EV-OUT-01	Evaporator Flowdown (recycle) Liquid Based	06/03/21	12:00:00 PM			X	X						

Chain of Custody:
Relinquished By (Signature): JJF
Relinquished By (Print Name): JJ Furlong
Company Name: RJ Lee Group, Inc
Date: 06/17/21 Time: 14:00
Relinquished To: shipping container
Method of Shipment: FedEx

Chain of Custody:
Received By (Signature): Cynde Larkins Date: 18JUN21 Time: 1540
Received By (Print Name): Cynde Larkins Relinquished To:
Company Name: CFA Method of Shipment: FedEx

Chain of Custody:
Relinquished By (Signature): Date: Time:
Relinquished By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Chain of Custody:
Received By (Signature): Date: Time:
Received By (Print Name): Relinquished To:
Company Name: Method of Shipment:

Questions? Contact Client Services: (724) 387-1833

350 Hochberg Road
Monroeville, PA 15146
Tel: (724) 325-1776
Fax: (724) 733-1799

3583 Investment Blvd., Su. 7
Hayward, CA 94545
Tel: (510) 567-0480
Fax: (510) 567-0488

10503 Battleview Parkway
Manassas, VA 20109
Tel: (703) 368-7880
Fax: (703) 368-7761

2710 North 20th Avenue
Pasco, WA 99301
Tel: (509) 792-1955
Fax: (509) 792-1934

temp. = 8.9°C

SAMPLE RECEIPT CHECKLIST

Cape Fear Analytical

Client:	RJLG	Work Order:	18324
Shipping Company:	FedEx	Date/Time Received:	18 JUN21 1540

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?			✓
Samples identified as Foreign Soil?			✓

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?		✓	
Samples < 2x background?		✓	

* Notify RSO of any responses in this column immediately.

Air Sample Receipt Specifics	Yes	NA	No
Air sample in shipment?			✓

Air Witness: _____

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Custody seal/s present on cooler?			✓	Seal intact? Yes No
3	Chain of Custody documents included with shipment?	✓			
4	Samples requiring cold preservation within 0-6°C?			✓	Preservation Method: Temperature Blank present: Yes (No) Ice bags loose ice (blue ice) dry ice none other (describe) 9.0° - 0.1 = 8.9°C
5	Aqueous samples found to have visible solids?			✓	Sample IDs, containers affected:
5	Samples requiring chemical preservation at proper pH?		✓		Sample IDs, containers affected and pH observed: pH=11 on all If preservative added, Lot#:
7	Samples requiring preservation have no residual chlorine?	✓			Sample IDs, containers affected: If preservative added, Lot#:
8	Samples received within holding time?	✓			Sample IDs, tests affected:
9	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
10	Date & time of COC match date & time on containers?			✓	Sample IDs, containers affected: CFI-01 collection time on label is 1140 COC has 1110.
11	Number of containers received match number indicated on COC?	✓			List type and number of containers / Sample IDs, containers affected:
12	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: CF Date: 18JUN21

CF-UD-F-7

High Resolution Dioxins and Furans Analysis

Case Narrative

HDOX Case Narrative
RJ Lee Group, Inc. (RJLG)
SDG 18324

Revision 1
This SDG has been revised at the clients request to include a re-extraction and re-analysis of sample 18324004 (EV-OUT-01). The re-analysis used a smaller aliquot (100mL) and a dilution (20x) of the extract to reduce matrix interference and bring the detections closer to our initial calibration range. Surrogate recoveries are such that the lab can quantify the detections. Please see the additional comments in the narration below for more details.

Method/Analysis Information

Product:	**Dioxins/Furans by EPA Method 1613B in Liquids, Dioxins/Furans by EPA Method 1613B in Solids**
Analytical Method:	EPA Method 1613B
Extraction Method:	SW846 3520C, SW846 3540C
Analytical Batch Number:	47288, 47211
Clean Up Batch Number:	47285, 47210
Extraction Batch Number:	47284, 47209

Sample Analysis
Samples were received out of the recommended temperature requirement of 0-6°C at 8.9°C. The client was notified and instructed the laboratory to proceed with analysis (18324001, 18324002, 18324003, 18324004). The following samples were analyzed using the analytical protocol as established in EPA Method 1613B:

Sample ID	Client ID
12029659	Method Blank (MB)
12029660	Laboratory Control Sample (LCS)
12029661	Laboratory Control Sample Duplicate (LCSD)
12029723	Method Blank (MB)
12029724	Laboratory Control Sample (LCS)
12029725	Laboratory Control Sample Duplicate (LCSD)
18324001	CREO-01
18324002	CFI-01
18324003	EVAP-02
18324004	EV-OUT-01

The samples in this SDG were analyzed on an "as received" basis.

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-002 REV# 20.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (CVS) met the acceptance criteria. A known software issue is present in the ending resolution report for e02AUG21b-9. The display shows high mass noise instead of the correct PFK mass in Function 4 regarding mass 404. This mass was correctly identified in Functions 2 and 3. CFA accepted the resolution report based on the mass's presence at adequate resolution in the surrounding experiment captured at the same time.

Quality Control (QC) Information

Certification Statement
The test results presented in this document are certified to meet all requirements of the 2009 TNI Standard.

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Sample EV-OUT-01 (18324004) did not meet acceptance criteria for surrogate recovery, but all are >10%. This is likely due to matrix interference. Data is reported with a possible low bias.
Sample EVAP-02 (18324003) did not meet acceptance criteria for surrogate recovery, but all are >10%. This is likely due to matrix interference. There was no sample volume left for re-extraction; therefore, the data is reported with a possible low bias.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
Sample 18324001 (CREO-01) was extracted using an approximate 1g aliquot then diluted 50x and re-spiked with surrogates due to the oily matrix. Sample concentrations are not recovery-corrected.

Samples 18324002 (CFI-01) and 18324004 (EV-OUT-01) were extracted using an approximate 100 mL aliquot due to suspected high levels of target analytes.

Concentrations of some target analytes exceed the instrument calibration range for sample 18324004 (EV-OUT-01). These values are considered estimates and are flagged as E.

Sample Dilutions
Samples 18324002 (CFI-01), 18324003 (EVAP-02), and 18324004 (EV-OUT-01) were diluted due to the nature of the matrix and the presence of over range target analytes.

Miscellaneous Information

Nonconformance (NCR) Documentation
The following NCR was generated for this SDG: 648502 18324003 (EVAP-02) and 18324004 (EV-OUT-01)- Batch 47288.

Manual Integrations
Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction. Manual integrations were required for data files in this SDG.

System Configuration
This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP750_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um
HRP763_1	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um
HRP757_2	Primary Dioxin Analysis	Dioxin Analysis	DB-5MS	60m x 0.25mm, 0.25um

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report
for

RJLG001 RJ Lee Group, Inc.

Client SDG: 18324 CFA Work Order: 18324

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

E Value is estimated - Concentration of the target analyte exceeds the instrument calibration range

J Value is estimated

K Estimated Maximum Possible Concentration

U Analyte was analyzed for, but not detected above the specified detection limit.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature:  **Name: Alexis Finks**

Date: 04 AUG 2021 **Title: Data Validator**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324001**	**Date Collected:**	**03/31/2021 10:55**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**CREO-01**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 18:00**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-9**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.021 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	476	pg/g	476
40321-76-4	1,2,3,7,8-PeCDD	U	2380	pg/g	2380
39227-28-6	1,2,3,4,7,8-HxCDD	U	2380	pg/g	2380
57653-85-7	1,2,3,6,7,8-HxCDD	U	2380	pg/g	2380
19408-74-3	1,2,3,7,8,9-HxCDD	U	2380	pg/g	2380
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	2380	pg/g	2380
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	4760	pg/g	4760
51207-31-9	2,3,7,8-TCDF	U	476	pg/g	476
57117-41-6	1,2,3,7,8-PeCDF	U	2380	pg/g	2380
57117-31-4	2,3,4,7,8-PeCDF	U	2380	pg/g	2380
70648-26-9	1,2,3,4,7,8-HxCDF	U	2380	pg/g	2380
57117-44-9	1,2,3,6,7,8-HxCDF	U	2380	pg/g	2380
60851-34-5	2,3,4,6,7,8-HxCDF	U	2380	pg/g	2380
72918-21-9	1,2,3,7,8,9-HxCDF	U	2380	pg/g	2380
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	2380	pg/g	2380
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2380	pg/g	2380
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	4760	pg/g	4760
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	476	pg/g	476
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2380	pg/g	2380
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2380	pg/g	2380
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	2380	pg/g	2380
30402-14-3	Total Tetrachlorodibenzofuran	U	476	pg/g	476
30402-15-4	Total Pentachlorodibenzofuran	U	2380	pg/g	2380
55684-94-1	Total Hexachlorodibenzofuran	U	2380	pg/g	2380
38998-75-3	Total Heptachlorodibenzofuran	U	2380	pg/g	2380
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		2720	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		90300	95200	pg/g	94.8	(25%-164%)
13C-1,2,3,7,8-PeCDD		71300	95200	pg/g	74.9	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		73400	95200	pg/g	77.1	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		77700	95200	pg/g	81.5	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		89700	95200	pg/g	94.2	(23%-140%)
13C-OCDD		158000	190000	pg/g	82.7	(17%-157%)
13C-2,3,7,8-TCDF		83300	95200	pg/g	87.5	(24%-169%)
13C-1,2,3,7,8-PeCDF		85700	95200	pg/g	90.0	(24%-185%)
13C-2,3,4,7,8-PeCDF		78900	95200	pg/g	82.8	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		83900	95200	pg/g	88.1	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		85500	95200	pg/g	89.8	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		83800	95200	pg/g	88.0	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		85000	95200	pg/g	89.3	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324001**	**Date Collected:**	**03/31/2021 10:55**	**Matrix:**	**Oil**
Client Sample:	**1613B Oil**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**CREO-01**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 18:00**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-9**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.021 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		88700	95200	pg/g	93.2	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		88000	95200	pg/g	92.4	(26%-138%)
37Cl-2,3,7,8-TCDD		8380	9520	pg/g	88.0	(35%-197%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324002**	**Date Collected:**	**06/02/2021 11:10**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**CFI-01**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/14/2021 23:33**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a_4-11**			**Dilution:**	**5**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**100.4 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	498	pg/L	498
40321-76-4	1,2,3,7,8-PeCDD	U	2490	pg/L	2490
39227-28-6	1,2,3,4,7,8-HxCDD		3480	pg/L	2490
57653-85-7	1,2,3,6,7,8-HxCDD		26300	pg/L	2490
19408-74-3	1,2,3,7,8,9-HxCDD		13200	pg/L	2490
35822-46-9	1,2,3,4,6,7,8-HpCDD		386000	pg/L	2490
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1650000	pg/L	4980
51207-31-9	2,3,7,8-TCDF	U	498	pg/L	498
57117-41-6	1,2,3,7,8-PeCDF	U	2490	pg/L	2490
57117-31-4	2,3,4,7,8-PeCDF	U	2490	pg/L	2490
70648-26-9	1,2,3,4,7,8-HxCDF		2590	pg/L	2490
57117-44-9	1,2,3,6,7,8-HxCDF	U	2490	pg/L	2490
60851-34-5	2,3,4,6,7,8-HxCDF	U	2490	pg/L	2490
72918-21-9	1,2,3,7,8,9-HxCDF	U	2490	pg/L	2490
67562-39-4	1,2,3,4,6,7,8-HpCDF		188000	pg/L	2490
55673-89-7	1,2,3,4,7,8,9-HpCDF		12700	pg/L	2490
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	2020000	pg/L	4980
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	498	pg/L	498
36088-22-9	Total Pentachlorodibenzo-p-dioxin		5860	pg/L	2490
34465-46-8	Total Hexachlorodibenzo-p-dioxin		155000	pg/L	2490
37871-00-4	Total Heptachlorodibenzo-p-dioxin		800000	pg/L	2490
30402-14-3	Total Tetrachlorodibenzofuran		1220	pg/L	498
30402-15-4	Total Pentachlorodibenzofuran	U	2490	pg/L	2490
55684-94-1	Total Hexachlorodibenzofuran		141000	pg/L	2490
38998-75-3	Total Heptachlorodibenzofuran	E	1130000	pg/L	2490
3333-30-0	TEQ WHO2005 ND=0		11500	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		14100	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		8360	19900	pg/L	42.0	(25%-164%)
13C-1,2,3,7,8-PeCDD		8640	19900	pg/L	43.4	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		7240	19900	pg/L	36.3	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		7410	19900	pg/L	37.2	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		8260	19900	pg/L	41.5	(23%-140%)
13C-OCDD		16400	39800	pg/L	41.2	(17%-157%)
13C-2,3,7,8-TCDF		7540	19900	pg/L	37.9	(24%-169%)
13C-1,2,3,7,8-PeCDF		7740	19900	pg/L	38.8	(24%-185%)
13C-2,3,4,7,8-PeCDF		7870	19900	pg/L	39.5	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		6960	19900	pg/L	34.9	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		6640	19900	pg/L	33.3	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		6820	19900	pg/L	34.2	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		7100	19900	pg/L	35.6	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324002**	**Date Collected:**	**06/02/2021 11:10**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**CFI-01**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/14/2021 23:33**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a_4-11**			**Dilution:**	**5**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**100.4 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		7590	19900	pg/L	38.1	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		8500	19900	pg/L	42.7	(26%-138%)
37Cl-2,3,7,8-TCDD		1820	1990	pg/L	91.4	(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**

K **Estimated Maximum Possible Concentration**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324003**	**Date Collected:**	**06/02/2021 11:45**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**EVAP-02**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/15/2021 00:23**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a_4-12**			**Dilution:**	**5**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**913 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	54.8	pg/L	54.8
40321-76-4	1,2,3,7,8-PeCDD		676	pg/L	274
39227-28-6	1,2,3,4,7,8-HxCDD	U	274	pg/L	274
57653-85-7	1,2,3,6,7,8-HxCDD		5690	pg/L	274
19408-74-3	1,2,3,7,8,9-HxCDD		2310	pg/L	274
35822-46-9	1,2,3,4,6,7,8-HpCDD		55300	pg/L	274
3268-87-9	1,2,3,4,6,7,8,9-OCDD		184000	pg/L	548
51207-31-9	2,3,7,8-TCDF	U	54.8	pg/L	54.8
57117-41-6	1,2,3,7,8-PeCDF	U	274	pg/L	274
57117-31-4	2,3,4,7,8-PeCDF	U	274	pg/L	274
70648-26-9	1,2,3,4,7,8-HxCDF	U	274	pg/L	274
57117-44-9	1,2,3,6,7,8-HxCDF	U	274	pg/L	274
60851-34-5	2,3,4,6,7,8-HxCDF	U	274	pg/L	274
72918-21-9	1,2,3,7,8,9-HxCDF	U	274	pg/L	274
67562-39-4	1,2,3,4,6,7,8-HpCDF		16600	pg/L	274
55673-89-7	1,2,3,4,7,8,9-HpCDF		1030	pg/L	274
39001-02-0	1,2,3,4,6,7,8,9-OCDF		163000	pg/L	548
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	54.8	pg/L	54.8
36088-22-9	Total Pentachlorodibenzo-p-dioxin		2030	pg/L	274
34465-46-8	Total Hexachlorodibenzo-p-dioxin		26500	pg/L	274
37871-00-4	Total Heptachlorodibenzo-p-dioxin		102000	pg/L	274
30402-14-3	Total Tetrachlorodibenzofuran	U	54.8	pg/L	54.8
30402-15-4	Total Pentachlorodibenzofuran	U	274	pg/L	274
55684-94-1	Total Hexachlorodibenzofuran		13600	pg/L	274
38998-75-3	Total Heptachlorodibenzofuran		98600	pg/L	274
3333-30-0	TEQ WHO2005 ND=0		2310	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		2470	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-2,3,7,8-TCDD		446	2190	pg/L	20.4	*	(25%-164%)
13C-1,2,3,7,8-PeCDD		434	2190	pg/L	19.8	*	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		368	2190	pg/L	16.8	*	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		399	2190	pg/L	18.2	*	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		388	2190	pg/L	17.7	*	(23%-140%)
13C-OCDD		734	4380	pg/L	16.8	*	(17%-157%)
13C-2,3,7,8-TCDF		394	2190	pg/L	18.0	*	(24%-169%)
13C-1,2,3,7,8-PeCDF		399	2190	pg/L	18.2	*	(24%-185%)
13C-2,3,4,7,8-PeCDF		367	2190	pg/L	16.8	*	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		346	2190	pg/L	15.8	*	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		337	2190	pg/L	15.4	*	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		311	2190	pg/L	14.2	*	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		311	2190	pg/L	14.2	*	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324003**	**Date Collected:**	**06/02/2021 11:45**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**EVAP-02**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/15/2021 00:23**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a_4-12**			**Dilution:**	**5**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**913 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		356	2190	pg/L	16.3	*	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		370	2190	pg/L	16.9	*	(26%-138%)
37Cl-2,3,7,8-TCDD		206	219	pg/L	93.9		(35%-197%)

Comments:

K **Estimated Maximum Possible Concentration**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324004**	**Date Collected:**	**06/02/2021 12:00**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**EV-OUT-01**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 20:22**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-6**			**Dilution:**	**20**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**102.5 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		4470	pg/L	1950
40321-76-4	1,2,3,7,8-PeCDD		106000	pg/L	9760
39227-28-6	1,2,3,4,7,8-HxCDD		98300	pg/L	9760
57653-85-7	1,2,3,6,7,8-HxCDD		982000	pg/L	9760
19408-74-3	1,2,3,7,8,9-HxCDD		413000	pg/L	9760
35822-46-9	1,2,3,4,6,7,8-HpCDD	E	7970000	pg/L	9760
3268-87-9	1,2,3,4,6,7,8,9-OCDD	E	25000000	pg/L	19500
51207-31-9	2,3,7,8-TCDF	U	1950	pg/L	1950
57117-41-6	1,2,3,7,8-PeCDF	U	9760	pg/L	9760
57117-31-4	2,3,4,7,8-PeCDF	U	9760	pg/L	9760
70648-26-9	1,2,3,4,7,8-HxCDF		30200	pg/L	9760
57117-44-9	1,2,3,6,7,8-HxCDF		15200	pg/L	9760
60851-34-5	2,3,4,6,7,8-HxCDF		17000	pg/L	9760
72918-21-9	1,2,3,7,8,9-HxCDF	U	9760	pg/L	9760
67562-39-4	1,2,3,4,6,7,8-HpCDF		2080000	pg/L	9760
55673-89-7	1,2,3,4,7,8,9-HpCDF		144000	pg/L	9760
39001-02-0	1,2,3,4,6,7,8,9-OCDF	E	20600000	pg/L	19500
41903-57-5	Total Tetrachlorodibenzo-p-dioxin		47500	pg/L	1950
36088-22-9	Total Pentachlorodibenzo-p-dioxin		551000	pg/L	9760
34465-46-8	Total Hexachlorodibenzo-p-dioxin	E	4780000	pg/L	9760
37871-00-4	Total Heptachlorodibenzo-p-dioxin	E	14600000	pg/L	9760
30402-14-3	Total Tetrachlorodibenzofuran		17100	pg/L	1950
30402-15-4	Total Pentachlorodibenzofuran		31800	pg/L	9760
55684-94-1	Total Hexachlorodibenzofuran		1820000	pg/L	9760
38998-75-3	Total Heptachlorodibenzofuran	E	14300000	pg/L	9760
3333-30-0	TEQ WHO2005 ND=0		382000	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		384000	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-2,3,7,8-TCDD		7080	19500	pg/L	36.3		(25%-164%)
13C-1,2,3,7,8-PeCDD		6200	19500	pg/L	31.8		(25%-181%)
13C-1,2,3,4,7,8-HxCDD		4710	19500	pg/L	24.2	*	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		5610	19500	pg/L	28.8		(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		5250	19500	pg/L	26.9		(23%-140%)
13C-OCDD		10100	39000	pg/L	25.9		(17%-157%)
13C-2,3,7,8-TCDF		5750	19500	pg/L	29.5		(24%-169%)
13C-1,2,3,7,8-PeCDF		5870	19500	pg/L	30.1		(24%-185%)
13C-2,3,4,7,8-PeCDF		5540	19500	pg/L	28.4		(21%-178%)
13C-1,2,3,4,7,8-HxCDF		4660	19500	pg/L	23.9	*	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		4710	19500	pg/L	24.1	*	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		4650	19500	pg/L	23.9	*	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		4980	19500	pg/L	25.5	*	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**18324004**	**Date Collected:**	**06/02/2021 12:00**	**Matrix:**	**Water**
Client Sample:	**1613B Water**	**Date Received:**	**06/18/2021 15:40**		
Client ID:	**EV-OUT-01**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 20:22**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-6**			**Dilution:**	**20**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**102.5 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%		Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		4420	19500	pg/L	22.6	*	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		4060	19500	pg/L	20.8	*	(26%-138%)
37Cl-2,3,7,8-TCDD		1510	1950	pg/L	77.4		(35%-197%)

Comments:

E **Value is estimated - Concentration of the target analyte exceeds the instrument calibration range**
J **Value is estimated**
K **Estimated Maximum Possible Concentration**
U **Analyte was analyzed for, but not detected above the specified detection limit.**

Quality Control Summary

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12029724	LCS for batch 47284	13C-2,3,7,8-TCDD		59.0	(20%-175%)
		13C-1,2,3,7,8-PeCDD		62.5	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		62.9	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		61.7	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		70.2	(22%-166%)
		13C-OCDD		68.1	(13%-199%)
		13C-2,3,7,8-TCDF		56.2	(22%-152%)
		13C-1,2,3,7,8-PeCDF		58.5	(21%-192%)
		13C-2,3,4,7,8-PeCDF		58.1	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		59.0	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		56.4	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		61.5	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		61.0	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		63.6	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		69.1	(20%-186%)
		37Cl-2,3,7,8-TCDD		85.0	(31%-191%)
12029725	LCSD for batch 47284	13C-2,3,7,8-TCDD		65.2	(20%-175%)
		13C-1,2,3,7,8-PeCDD		65.8	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		67.2	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		65.2	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		70.0	(22%-166%)
		13C-OCDD		65.3	(13%-199%)
		13C-2,3,7,8-TCDF		64.9	(22%-152%)
		13C-1,2,3,7,8-PeCDF		63.1	(21%-192%)
		13C-2,3,4,7,8-PeCDF		63.3	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		64.6	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		62.0	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		64.7	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		63.4	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		66.2	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		70.6	(20%-186%)
		37Cl-2,3,7,8-TCDD		96.4	(31%-191%)
12029723	MB for batch 47284	13C-2,3,7,8-TCDD		63.1	(25%-164%)
		13C-1,2,3,7,8-PeCDD		66.6	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		63.8	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		62.9	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		69.5	(23%-140%)
		13C-OCDD		67.8	(17%-157%)
		13C-2,3,7,8-TCDF		62.4	(24%-169%)
		13C-1,2,3,7,8-PeCDF		62.2	(24%-185%)
		13C-2,3,4,7,8-PeCDF		62.9	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		59.9	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		58.9	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		63.0	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		62.1	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		63.8	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		70.3	(26%-138%)
		37Cl-2,3,7,8-TCDD		95.3	(35%-197%)
18324002	CFI-01	13C-2,3,7,8-TCDD		42.0 D	(25%-164%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
18324002	CFI-01	13C-1,2,3,7,8-PeCDD		43.4	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		36.3	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		37.2	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		41.5	D	(23%-140%)
		13C-OCDD		41.2	D	(17%-157%)
		13C-2,3,7,8-TCDF		37.9	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		38.8	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		39.5	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		34.9	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		33.3	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		34.2	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		35.6	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		38.1	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		42.7	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		91.4	D	(35%-197%)
18324003	EVAP-02	13C-2,3,7,8-TCDD		20.4 *	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		19.8 *	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		16.8 *	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		18.2 *	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		17.7 *	D	(23%-140%)
		13C-OCDD		16.8 *	D	(17%-157%)
		13C-2,3,7,8-TCDF		18.0 *	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		18.2 *	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		16.8 *	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		15.8 *	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		15.4 *	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		14.2 *	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		14.2 *	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		16.3 *	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		16.9 *	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		93.9	D	(35%-197%)
12029852	LCS for batch 47439	13C-2,3,7,8-TCDD		61.3		(20%-175%)
		13C-1,2,3,7,8-PeCDD		64.7		(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		64.5		(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		58.7		(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		62.4		(22%-166%)
		13C-OCDD		53.9		(13%-199%)
		13C-2,3,7,8-TCDF		55.6		(22%-152%)
		13C-1,2,3,7,8-PeCDF		57.6		(21%-192%)
		13C-2,3,4,7,8-PeCDF		59.7		(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		57.7		(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		52.8		(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		56.7		(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		60.1		(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		51.6		(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		56.0		(20%-186%)
		37Cl-2,3,7,8-TCDD		67.4		(31%-191%)
12029853	LCSD for batch 47439	13C-2,3,7,8-TCDD		73.5		(20%-175%)
		13C-1,2,3,7,8-PeCDD		73.3		(21%-227%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)		Acceptance Limits
12029853	LCSD for batch 47439	13C-1,2,3,4,7,8-HxCDD		72.0		(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		65.3		(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		67.5		(22%-166%)
		13C-OCDD		58.3		(13%-199%)
		13C-2,3,7,8-TCDF		68.3		(22%-152%)
		13C-1,2,3,7,8-PeCDF		65.8		(21%-192%)
		13C-2,3,4,7,8-PeCDF		68.1		(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		63.6		(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		59.9		(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		62.7		(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		65.0		(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		57.6		(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		61.7		(20%-186%)
		37Cl-2,3,7,8-TCDD		79.6		(31%-191%)
12029851	MB for batch 47439	13C-2,3,7,8-TCDD		68.3		(25%-164%)
		13C-1,2,3,7,8-PeCDD		66.6		(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		65.8		(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		61.4		(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		62.0		(23%-140%)
		13C-OCDD		51.8		(17%-157%)
		13C-2,3,7,8-TCDF		60.8		(24%-169%)
		13C-1,2,3,7,8-PeCDF		59.5		(24%-185%)
		13C-2,3,4,7,8-PeCDF		60.7		(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		57.4		(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		56.2		(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		58.9		(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		59.4		(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		51.8		(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		55.9		(26%-138%)
		37Cl-2,3,7,8-TCDD		78.6		(35%-197%)
18324004	EV-OUT-01	13C-2,3,7,8-TCDD		36.3	D	(25%-164%)
		13C-1,2,3,7,8-PeCDD		31.8	D	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		24.2 *	D	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		28.8	D	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		26.9	D	(23%-140%)
		13C-OCDD		25.9	D	(17%-157%)
		13C-2,3,7,8-TCDF		29.5	D	(24%-169%)
		13C-1,2,3,7,8-PeCDF		30.1	D	(24%-185%)
		13C-2,3,4,7,8-PeCDF		28.4	D	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		23.9 *	D	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		24.1 *	D	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		23.9 *	D	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		25.5 *	D	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		22.6 *	D	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		20.8 *	D	(26%-138%)
		37Cl-2,3,7,8-TCDD		77.4	D	(35%-197%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits

* Recovery outside Acceptance Limits
Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12029660	LCS for batch 47209	13C-2,3,7,8-TCDD		88.8	(20%-175%)
		13C-1,2,3,7,8-PeCDD		81.8	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		77.7	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		82.7	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		96.2	(22%-166%)
		13C-OCDD		81.4	(13%-199%)
		13C-2,3,7,8-TCDF		94.0	(22%-152%)
		13C-1,2,3,7,8-PeCDF		91.3	(21%-192%)
		13C-2,3,4,7,8-PeCDF		89.6	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		86.6	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		86.7	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		89.2	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		88.5	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		95.3	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		93.4	(20%-186%)
		37Cl-2,3,7,8-TCDD		83.3	(31%-191%)
12029661	LCSD for batch 47209	13C-2,3,7,8-TCDD		91.0	(20%-175%)
		13C-1,2,3,7,8-PeCDD		84.7	(21%-227%)
		13C-1,2,3,4,7,8-HxCDD		79.2	(21%-193%)
		13C-1,2,3,6,7,8-HxCDD		79.8	(25%-163%)
		13C-1,2,3,4,6,7,8-HpCDD		95.7	(22%-166%)
		13C-OCDD		83.0	(13%-199%)
		13C-2,3,7,8-TCDF		95.3	(22%-152%)
		13C-1,2,3,7,8-PeCDF		94.0	(21%-192%)
		13C-2,3,4,7,8-PeCDF		93.3	(13%-328%)
		13C-1,2,3,4,7,8-HxCDF		85.0	(19%-202%)
		13C-1,2,3,6,7,8-HxCDF		86.2	(21%-159%)
		13C-2,3,4,6,7,8-HxCDF		88.9	(22%-176%)
		13C-1,2,3,7,8,9-HxCDF		90.0	(17%-205%)
		13C-1,2,3,4,6,7,8-HpCDF		94.4	(21%-158%)
		13C-1,2,3,4,7,8,9-HpCDF		95.1	(20%-186%)
		37Cl-2,3,7,8-TCDD		88.3	(31%-191%)
12029659	MB for batch 47209	13C-2,3,7,8-TCDD		95.2	(25%-164%)
		13C-1,2,3,7,8-PeCDD		80.0	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		76.5	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		83.0	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		92.2	(23%-140%)
		13C-OCDD		78.0	(17%-157%)
		13C-2,3,7,8-TCDF		92.1	(24%-169%)
		13C-1,2,3,7,8-PeCDF		89.8	(24%-185%)
		13C-2,3,4,7,8-PeCDF		88.1	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		83.6	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		87.8	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		88.6	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		87.9	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		91.3	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		91.3	(26%-138%)
		37Cl-2,3,7,8-TCDD		88.5	(35%-197%)
18324001	CREO-01	13C-2,3,7,8-TCDD		94.8	(25%-164%)

Hi-Res Dioxins/Furans
Surrogate Recovery Report

SDG Number: 18324

Matrix Type: SOLID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
18324001	CREO-01	13C-1,2,3,7,8-PeCDD		74.9	(25%-181%)
		13C-1,2,3,4,7,8-HxCDD		77.1	(32%-141%)
		13C-1,2,3,6,7,8-HxCDD		81.5	(28%-130%)
		13C-1,2,3,4,6,7,8-HpCDD		94.2	(23%-140%)
		13C-OCDD		82.7	(17%-157%)
		13C-2,3,7,8-TCDF		87.5	(24%-169%)
		13C-1,2,3,7,8-PeCDF		90.0	(24%-185%)
		13C-2,3,4,7,8-PeCDF		82.8	(21%-178%)
		13C-1,2,3,4,7,8-HxCDF		88.1	(26%-152%)
		13C-1,2,3,6,7,8-HxCDF		89.8	(26%-123%)
		13C-2,3,4,6,7,8-HxCDF		88.0	(28%-136%)
		13C-1,2,3,7,8,9-HxCDF		89.3	(29%-147%)
		13C-1,2,3,4,6,7,8-HpCDF		93.2	(28%-143%)
		13C-1,2,3,4,7,8,9-HpCDF		92.4	(26%-138%)
		37Cl-2,3,7,8-TCDD		88.0	(35%-197%)

* Recovery outside Acceptance Limits
Column to be used to flag recovery values
D Sample Diluted

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 47209 **Matrix:** OIL

Lab Sample ID: 12029660

Instrument: HRP750 **Analysis Date:** 07/03/2021 15:30 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 47209

Batch ID: 47211

CAS No.		Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	10000	10200	102	67-158
40321-76-4	LCS	1,2,3,7,8-PeCDD	50000	56200	112	70-142
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	50000	57300	115	70-164
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	50000	53700	107	76-134
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	50000	56500	113	64-162
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	50000	51100	102	70-140
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	100000	105000	105	78-144
51207-31-9	LCS	2,3,7,8-TCDF	10000	10400	104	75-158
57117-41-6	LCS	1,2,3,7,8-PeCDF	50000	51300	103	80-134
57117-31-4	LCS	2,3,4,7,8-PeCDF	50000	52300	105	68-160
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	50000	49500	99	72-134
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	50000	48600	97.3	84-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	50000	48200	96.5	70-156
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	50000	49400	98.8	78-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	50000	48400	96.8	82-122
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	50000	48500	97	78-138
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	100000	103000	103	63-170

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 47209 **Matrix:** OIL

Lab Sample ID: 12029661

Instrument: HRP750 **Analysis Date:** 07/03/2021 16:20 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 47209

Batch ID: 47211

CAS No.		Parmname	Amount Added pg/g	Spike Conc. pg/g	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	10000	10200	102	67-158	0.166	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	50000	54400	109	70-142	3.31	0-20
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	50000	53700	107	70-164	6.38	0-20
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	50000	54400	109	76-134	1.31	0-20
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	50000	57200	114	64-162	1.17	0-20
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	50000	50500	101	70-140	1.25	0-20
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	100000	102000	102	78-144	2.88	0-20
51207-31-9	LCSD	2,3,7,8-TCDF	10000	10100	101	75-158	2.34	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	50000	50700	101	80-134	1.23	0-20
57117-31-4	LCSD	2,3,4,7,8-PeCDF	50000	51200	102	68-160	2.08	0-20
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	50000	49300	98.5	72-134	0.488	0-20
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	50000	49300	98.7	84-130	1.42	0-20
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	50000	47100	94.1	70-156	2.44	0-20
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	50000	48600	97.2	78-130	1.57	0-20
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	50000	48400	96.7	82-122	0.0124	0-20
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	50000	48900	97.8	78-138	0.829	0-20
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	100000	104000	104	63-170	1.32	0-20

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 47284 **Matrix:** WATER

Lab Sample ID: 12029724

Instrument: HRP763 **Analysis Date:** 07/13/2021 11:24 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 47284

Batch ID: 47288

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	184	92.2	67-158
40321-76-4	LCS	1,2,3,7,8-PeCDD	1000	952	95.2	70-142
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	1000	917	91.7	70-164
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	1000	966	96.6	76-134
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	1000	974	97.4	64-162
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	1000	936	93.6	70-140
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	2000	1890	94.5	78-144
51207-31-9	LCS	2,3,7,8-TCDF	200	195	97.6	75-158
57117-41-6	LCS	1,2,3,7,8-PeCDF	1000	1010	101	80-134
57117-31-4	LCS	2,3,4,7,8-PeCDF	1000	1030	103	68-160
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	1000	1060	106	72-134
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	1000	1060	106	84-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	1000	1060	106	70-156
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	1000	1050	105	78-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	1000	1020	102	82-122
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	1000	984	98.4	78-138
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	2000	1960	98.1	63-170

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 47284 **Matrix:** WATER

Lab Sample ID: 12029725

Instrument: HRP763 **Analysis Date:** 07/13/2021 12:14 **Dilution:** 1

Analyst: MLL **Prep Batch ID:** 47284

Batch ID: 47288

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	196	98.2	67-158	6.27	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	1000	989	98.9	70-142	3.83	0-20
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	1000	955	95.5	70-164	4.09	0-20
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	1000	978	97.8	76-134	1.27	0-20
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	1000	992	99.2	64-162	1.90	0-20
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	1000	997	99.7	70-140	6.27	0-20
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	2000	1910	95.4	78-144	0.967	0-20
51207-31-9	LCSD	2,3,7,8-TCDF	200	201	100	75-158	2.74	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	1000	1060	106	80-134	4.12	0-20
57117-31-4	LCSD	2,3,4,7,8-PeCDF	1000	1060	106	68-160	2.96	0-20
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	1000	1060	106	72-134	0.439	0-20
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	1000	1110	111	84-130	4.80	0-20
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	1000	1100	110	70-156	3.54	0-20
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	1000	1080	108	78-130	3.33	0-20
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	1000	1070	107	82-122	4.77	0-20
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	1000	1020	102	78-138	3.29	0-20
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	2000	2060	103	63-170	4.81	0-20

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample

Client ID: LCS for batch 47439 **Matrix:** WATER

Lab Sample ID: 12029852

Instrument: HRP757 **Analysis Date:** 08/02/2021 17:10 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 47439

Batch ID: 47441

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits
1746-01-6	LCS	2,3,7,8-TCDD	200	187	93.5	67-158
40321-76-4	LCS	1,2,3,7,8-PeCDD	1000	972	97.2	70-142
39227-28-6	LCS	1,2,3,4,7,8-HxCDD	1000	986	98.6	70-164
57653-85-7	LCS	1,2,3,6,7,8-HxCDD	1000	964	96.4	76-134
19408-74-3	LCS	1,2,3,7,8,9-HxCDD	1000	1040	104	64-162
35822-46-9	LCS	1,2,3,4,6,7,8-HpCDD	1000	1020	102	70-140
3268-87-9	LCS	1,2,3,4,6,7,8,9-OCDD	2000	2020	101	78-144
51207-31-9	LCS	2,3,7,8-TCDF	200	196	97.9	75-158
57117-41-6	LCS	1,2,3,7,8-PeCDF	1000	948	94.8	80-134
57117-31-4	LCS	2,3,4,7,8-PeCDF	1000	968	96.8	68-160
70648-26-9	LCS	1,2,3,4,7,8-HxCDF	1000	997	99.7	72-134
57117-44-9	LCS	1,2,3,6,7,8-HxCDF	1000	986	98.6	84-130
60851-34-5	LCS	2,3,4,6,7,8-HxCDF	1000	995	99.5	70-156
72918-21-9	LCS	1,2,3,7,8,9-HxCDF	1000	1020	102	78-130
67562-39-4	LCS	1,2,3,4,6,7,8-HpCDF	1000	955	95.5	82-122
55673-89-7	LCS	1,2,3,4,7,8,9-HpCDF	1000	1020	102	78-138
39001-02-0	LCS	1,2,3,4,6,7,8,9-OCDF	2000	1870	93.3	63-170

Hi-Res Dioxins/Furans

Quality Control Summary
Spike Recovery Report

SDG Number: 18324 **Sample Type:** Laboratory Control Sample Duplicate

Client ID: LCSD for batch 47439 **Matrix:** WATER

Lab Sample ID: 12029853

Instrument: HRP757 **Analysis Date:** 08/02/2021 17:58 **Dilution:** 1

Analyst: MJC **Prep Batch ID:** 47439

Batch ID: 47441

CAS No.		Parmname	Amount Added pg/L	Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
1746-01-6	LCSD	2,3,7,8-TCDD	200	185	92.3	67-158	1.25	0-20
40321-76-4	LCSD	1,2,3,7,8-PeCDD	1000	953	95.3	70-142	2.02	0-20
39227-28-6	LCSD	1,2,3,4,7,8-HxCDD	1000	939	93.9	70-164	4.84	0-20
57653-85-7	LCSD	1,2,3,6,7,8-HxCDD	1000	956	95.6	76-134	0.810	0-20
19408-74-3	LCSD	1,2,3,7,8,9-HxCDD	1000	996	99.6	64-162	4.23	0-20
35822-46-9	LCSD	1,2,3,4,6,7,8-HpCDD	1000	1010	101	70-140	1.11	0-20
3268-87-9	LCSD	1,2,3,4,6,7,8,9-OCDD	2000	1940	97	78-144	3.80	0-20
51207-31-9	LCSD	2,3,7,8-TCDF	200	188	94	75-158	4.12	0-20
57117-41-6	LCSD	1,2,3,7,8-PeCDF	1000	933	93.3	80-134	1.65	0-20
57117-31-4	LCSD	2,3,4,7,8-PeCDF	1000	938	93.8	68-160	3.20	0-20
70648-26-9	LCSD	1,2,3,4,7,8-HxCDF	1000	976	97.6	72-134	2.14	0-20
57117-44-9	LCSD	1,2,3,6,7,8-HxCDF	1000	967	96.7	84-130	1.89	0-20
60851-34-5	LCSD	2,3,4,6,7,8-HxCDF	1000	983	98.3	70-156	1.24	0-20
72918-21-9	LCSD	1,2,3,7,8,9-HxCDF	1000	965	96.5	78-130	5.18	0-20
67562-39-4	LCSD	1,2,3,4,6,7,8-HpCDF	1000	929	92.9	82-122	2.81	0-20
55673-89-7	LCSD	1,2,3,4,7,8,9-HpCDF	1000	989	98.9	78-138	2.95	0-20
39001-02-0	LCSD	1,2,3,4,6,7,8,9-OCDF	2000	1840	92	63-170	1.47	0-20

Method Blank Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Matrix:**	**OIL**
Client ID:	**MB for batch 47209**	**Instrument ID:**	**HRP750**	**Data File:**	**A03JUL21A-8**
Lab Sample ID:	**12029659**	**Prep Date:**	**29-JUN-21**	**Analyzed:**	**07/03/21 17:10**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 47209	12029660	A03JUL21A-6	07/03/21	1530
02	LCSD for batch 47209	12029661	A03JUL21A-7	07/03/21	1620
03	CREO-01	18324001	A03JUL21A-9	07/03/21	1800

Method Blank Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 47284**	**Instrument ID:**	**HRP763**	**Data File:**	**b13jul21a-4**
Lab Sample ID:	**12029723**	**Prep Date:**	**06-JUL-21**	**Analyzed:**	**07/13/21 13:04**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 47284	12029724	b13jul21a-2	07/13/21	1124
02	LCSD for batch 47284	12029725	b13jul21a-3	07/13/21	1214
03	CFI-01	18324002	b13jul21a_4-11	07/14/21	2333
04	EVAP-02	18324003	b13jul21a_4-12	07/15/21	0023
05	EV-OUT-01	18324004	b13jul21a_2-10	07/14/21	0640

Method Blank Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 47439**	**Instrument ID:**	**HRP757**	**Data File:**	**e02aug21b-4**
Lab Sample ID:	**12029851**	**Prep Date:**	**29-JUL-21**	**Analyzed:**	**08/02/21 18:46**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 47439	12029852	e02aug21b-2	08/02/21	1710
02	LCSD for batch 47439	12029853	e02aug21b-3	08/02/21	1758
03	EV-OUT-01	18324004	e02aug21b-6	08/02/21	2022

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029659**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 47209**				
Client ID:	**MB for batch 47209**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 17:10**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-8**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	500	pg/g	500
40321-76-4	1,2,3,7,8-PeCDD	U	2500	pg/g	2500
39227-28-6	1,2,3,4,7,8-HxCDD	U	2500	pg/g	2500
57653-85-7	1,2,3,6,7,8-HxCDD	U	2500	pg/g	2500
19408-74-3	1,2,3,7,8,9-HxCDD	U	2500	pg/g	2500
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	2500	pg/g	2500
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	5000	pg/g	5000
51207-31-9	2,3,7,8-TCDF	U	500	pg/g	500
57117-41-6	1,2,3,7,8-PeCDF	U	2500	pg/g	2500
57117-31-4	2,3,4,7,8-PeCDF	U	2500	pg/g	2500
70648-26-9	1,2,3,4,7,8-HxCDF	U	2500	pg/g	2500
57117-44-9	1,2,3,6,7,8-HxCDF	U	2500	pg/g	2500
60851-34-5	2,3,4,6,7,8-HxCDF	U	2500	pg/g	2500
72918-21-9	1,2,3,7,8,9-HxCDF	U	2500	pg/g	2500
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	2500	pg/g	2500
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	2500	pg/g	2500
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	5000	pg/g	5000
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	500	pg/g	500
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	2500	pg/g	2500
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	2500	pg/g	2500
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	2500	pg/g	2500
30402-14-3	Total Tetrachlorodibenzofuran	U	500	pg/g	500
30402-15-4	Total Pentachlorodibenzofuran	U	2500	pg/g	2500
55684-94-1	Total Hexachlorodibenzofuran	U	2500	pg/g	2500
38998-75-3	Total Heptachlorodibenzofuran	U	2500	pg/g	2500
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/g	
3333-30-1	TEQ WHO2005 ND=0.5		2850	pg/g	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		95200	100000	pg/g	95.2	(25%-164%)
13C-1,2,3,7,8-PeCDD		80000	100000	pg/g	80.0	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		76500	100000	pg/g	76.5	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		83000	100000	pg/g	83.0	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		92200	100000	pg/g	92.2	(23%-140%)
13C-OCDD		156000	200000	pg/g	78.0	(17%-157%)
13C-2,3,7,8-TCDF		92100	100000	pg/g	92.1	(24%-169%)
13C-1,2,3,7,8-PeCDF		89800	100000	pg/g	89.8	(24%-185%)
13C-2,3,4,7,8-PeCDF		88100	100000	pg/g	88.1	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		83600	100000	pg/g	83.6	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		87800	100000	pg/g	87.8	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		88600	100000	pg/g	88.6	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		87900	100000	pg/g	87.9	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029659**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 47209**				
Client ID:	**MB for batch 47209**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 17:10**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-8**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		91300	100000	pg/g	91.3	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		91300	100000	pg/g	91.3	(26%-138%)
37Cl-2,3,7,8-TCDD		8850	10000	pg/g	88.5	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029660**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 47209**				
Client ID:	**LCS for batch 47209**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 15:30**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-6**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		10200	pg/g	500
40321-76-4	1,2,3,7,8-PeCDD		56200	pg/g	2500
39227-28-6	1,2,3,4,7,8-HxCDD		57300	pg/g	2500
57653-85-7	1,2,3,6,7,8-HxCDD		53700	pg/g	2500
19408-74-3	1,2,3,7,8,9-HxCDD		56500	pg/g	2500
35822-46-9	1,2,3,4,6,7,8-HpCDD		51100	pg/g	2500
3268-87-9	1,2,3,4,6,7,8,9-OCDD		105000	pg/g	5000
51207-31-9	2,3,7,8-TCDF		10400	pg/g	500
57117-41-6	1,2,3,7,8-PeCDF		51300	pg/g	2500
57117-31-4	2,3,4,7,8-PeCDF		52300	pg/g	2500
70648-26-9	1,2,3,4,7,8-HxCDF		49500	pg/g	2500
57117-44-9	1,2,3,6,7,8-HxCDF		48600	pg/g	2500
60851-34-5	2,3,4,6,7,8-HxCDF		48200	pg/g	2500
72918-21-9	1,2,3,7,8,9-HxCDF		49400	pg/g	2500
67562-39-4	1,2,3,4,6,7,8-HpCDF		48400	pg/g	2500
55673-89-7	1,2,3,4,7,8,9-HpCDF		48500	pg/g	2500
39001-02-0	1,2,3,4,6,7,8,9-OCDF		103000	pg/g	5000

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		88800	100000	pg/g	88.8	(20%-175%)
13C-1,2,3,7,8-PeCDD		81800	100000	pg/g	81.8	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		77700	100000	pg/g	77.7	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		82700	100000	pg/g	82.7	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		96200	100000	pg/g	96.2	(22%-166%)
13C-OCDD		163000	200000	pg/g	81.4	(13%-199%)
13C-2,3,7,8-TCDF		94000	100000	pg/g	94.0	(22%-152%)
13C-1,2,3,7,8-PeCDF		91300	100000	pg/g	91.3	(21%-192%)
13C-2,3,4,7,8-PeCDF		89600	100000	pg/g	89.6	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		86600	100000	pg/g	86.6	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		86700	100000	pg/g	86.7	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		89200	100000	pg/g	89.2	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		88500	100000	pg/g	88.5	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		95300	100000	pg/g	95.3	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		93400	100000	pg/g	93.4	(20%-186%)
37Cl-2,3,7,8-TCDD		8330	10000	pg/g	83.3	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029661**			**Matrix:**	**OIL**
Client Sample:	**QC for batch 47209**				
Client ID:	**LCSD for batch 47209**			**Prep Basis:**	**As Received**
Batch ID:	**47211**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/03/2021 16:20**	**Analyst:**	**MJC**	**Instrument:**	**HRP750**
Data File:	**A03JUL21A-7**			**Dilution:**	**1**
Prep Batch:	**47209**	**Prep Method:**	**SW846 3540C**		
Prep Date:	**29-JUN-21**	**Prep Aliquot:**	**.02 g**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		10200	pg/g	500
40321-76-4	1,2,3,7,8-PeCDD		54400	pg/g	2500
39227-28-6	1,2,3,4,7,8-HxCDD		53700	pg/g	2500
57653-85-7	1,2,3,6,7,8-HxCDD		54400	pg/g	2500
19408-74-3	1,2,3,7,8,9-HxCDD		57200	pg/g	2500
35822-46-9	1,2,3,4,6,7,8-HpCDD		50500	pg/g	2500
3268-87-9	1,2,3,4,6,7,8,9-OCDD		102000	pg/g	5000
51207-31-9	2,3,7,8-TCDF		10100	pg/g	500
57117-41-6	1,2,3,7,8-PeCDF		50700	pg/g	2500
57117-31-4	2,3,4,7,8-PeCDF		51200	pg/g	2500
70648-26-9	1,2,3,4,7,8-HxCDF		49300	pg/g	2500
57117-44-9	1,2,3,6,7,8-HxCDF		49300	pg/g	2500
60851-34-5	2,3,4,6,7,8-HxCDF		47100	pg/g	2500
72918-21-9	1,2,3,7,8,9-HxCDF		48600	pg/g	2500
67562-39-4	1,2,3,4,6,7,8-HpCDF		48400	pg/g	2500
55673-89-7	1,2,3,4,7,8,9-HpCDF		48900	pg/g	2500
39001-02-0	1,2,3,4,6,7,8,9-OCDF		104000	pg/g	5000

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		91000	100000	pg/g	91.0	(20%-175%)
13C-1,2,3,7,8-PeCDD		84700	100000	pg/g	84.7	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		79200	100000	pg/g	79.2	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		79800	100000	pg/g	79.8	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		95700	100000	pg/g	95.7	(22%-166%)
13C-OCDD		166000	200000	pg/g	83.0	(13%-199%)
13C-2,3,7,8-TCDF		95300	100000	pg/g	95.3	(22%-152%)
13C-1,2,3,7,8-PeCDF		94000	100000	pg/g	94.0	(21%-192%)
13C-2,3,4,7,8-PeCDF		93300	100000	pg/g	93.3	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		85000	100000	pg/g	85.0	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		86200	100000	pg/g	86.2	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		88900	100000	pg/g	88.9	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		90000	100000	pg/g	90.0	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		94400	100000	pg/g	94.4	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		95100	100000	pg/g	95.1	(20%-186%)
37Cl-2,3,7,8-TCDD		8830	10000	pg/g	88.3	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029723**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47284**				
Client ID:	**MB for batch 47284**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/13/2021 13:04**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a-4**			**Dilution:**	**1**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD	U	50.0	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	50.0	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	50.0	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	50.0	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	50.0	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	100	pg/L	100
51207-31-9	2,3,7,8-TCDF	U	10.0	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF	U	50.0	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF	U	50.0	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	50.0	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	50.0	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	50.0	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	50.0	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	50.0	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	50.0	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	100	pg/L	100
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	10.0	pg/L	10.0
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
30402-14-3	Total Tetrachlorodibenzofuran	U	10.0	pg/L	10.0
30402-15-4	Total Pentachlorodibenzofuran	U	50.0	pg/L	50.0
55684-94-1	Total Hexachlorodibenzofuran	U	50.0	pg/L	50.0
38998-75-3	Total Heptachlorodibenzofuran	U	50.0	pg/L	50.0
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		57.0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1260	2000	pg/L	63.1	(25%-164%)
13C-1,2,3,7,8-PeCDD		1330	2000	pg/L	66.6	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		1280	2000	pg/L	63.8	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		1260	2000	pg/L	62.9	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		1390	2000	pg/L	69.5	(23%-140%)
13C-OCDD		2710	4000	pg/L	67.8	(17%-157%)
13C-2,3,7,8-TCDF		1250	2000	pg/L	62.4	(24%-169%)
13C-1,2,3,7,8-PeCDF		1240	2000	pg/L	62.2	(24%-185%)
13C-2,3,4,7,8-PeCDF		1260	2000	pg/L	62.9	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		1200	2000	pg/L	59.9	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		1180	2000	pg/L	58.9	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		1260	2000	pg/L	63.0	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		1240	2000	pg/L	62.1	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029723**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47284**				
Client ID:	**MB for batch 47284**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/13/2021 13:04**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a-4**			**Dilution:**	**1**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		1280	2000	pg/L	63.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		1410	2000	pg/L	70.3	(26%-138%)
37Cl-2,3,7,8-TCDD		191	200	pg/L	95.3	(35%-197%)

Comments:

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029724**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47284**				
Client ID:	**LCS for batch 47284**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/13/2021 11:24**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a-2**			**Dilution:**	**1**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		184	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		952	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		917	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		966	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		974	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		936	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1890	pg/L	100
51207-31-9	2,3,7,8-TCDF		195	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		1010	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		1030	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		1060	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		1060	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		1060	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		1050	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		1020	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		984	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1960	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1180	2000	pg/L	59.0	(20%-175%)
13C-1,2,3,7,8-PeCDD		1250	2000	pg/L	62.5	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1260	2000	pg/L	62.9	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1230	2000	pg/L	61.7	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1400	2000	pg/L	70.2	(22%-166%)
13C-OCDD		2720	4000	pg/L	68.1	(13%-199%)
13C-2,3,7,8-TCDF		1120	2000	pg/L	56.2	(22%-152%)
13C-1,2,3,7,8-PeCDF		1170	2000	pg/L	58.5	(21%-192%)
13C-2,3,4,7,8-PeCDF		1160	2000	pg/L	58.1	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1180	2000	pg/L	59.0	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1130	2000	pg/L	56.4	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1230	2000	pg/L	61.5	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1220	2000	pg/L	61.0	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1270	2000	pg/L	63.6	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1380	2000	pg/L	69.1	(20%-186%)
37Cl-2,3,7,8-TCDD		170	200	pg/L	85.0	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029725**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47284**				
Client ID:	**LCSD for batch 47284**			**Prep Basis:**	**As Received**
Batch ID:	**47288**	**Method:**	**EPA Method 1613B**		
Run Date:	**07/13/2021 12:14**	**Analyst:**	**MLL**	**Instrument:**	**HRP763**
Data File:	**b13jul21a-3**			**Dilution:**	**1**
Prep Batch:	**47284**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**06-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		196	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		989	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		955	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		978	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		992	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		997	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1910	pg/L	100
51207-31-9	2,3,7,8-TCDF		201	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		1060	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		1060	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		1060	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		1110	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		1100	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		1080	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		1070	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		1020	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		2060	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1300	2000	pg/L	65.2	(20%-175%)
13C-1,2,3,7,8-PeCDD		1320	2000	pg/L	65.8	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1340	2000	pg/L	67.2	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1300	2000	pg/L	65.2	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1400	2000	pg/L	70.0	(22%-166%)
13C-OCDD		2610	4000	pg/L	65.3	(13%-199%)
13C-2,3,7,8-TCDF		1300	2000	pg/L	64.9	(22%-152%)
13C-1,2,3,7,8-PeCDF		1260	2000	pg/L	63.1	(21%-192%)
13C-2,3,4,7,8-PeCDF		1270	2000	pg/L	63.3	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1290	2000	pg/L	64.6	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1240	2000	pg/L	62.0	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1290	2000	pg/L	64.7	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1270	2000	pg/L	63.4	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1320	2000	pg/L	66.2	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1410	2000	pg/L	70.6	(20%-186%)
37Cl-2,3,7,8-TCDD		193	200	pg/L	96.4	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029851**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47439**				
Client ID:	**MB for batch 47439**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 18:46**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-4**			**Dilution:**	**1**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD	U	10.0	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD	U	50.0	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD	U	50.0	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD	U	50.0	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD	U	50.0	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD	U	50.0	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD	U	100	pg/L	100
51207-31-9	2,3,7,8-TCDF	U	10.0	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF	U	50.0	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF	U	50.0	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF	U	50.0	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF	U	50.0	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF	U	50.0	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF	U	50.0	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF	U	50.0	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF	U	50.0	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF	U	100	pg/L	100
41903-57-5	Total Tetrachlorodibenzo-p-dioxin	U	10.0	pg/L	10.0
36088-22-9	Total Pentachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
34465-46-8	Total Hexachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
37871-00-4	Total Heptachlorodibenzo-p-dioxin	U	50.0	pg/L	50.0
30402-14-3	Total Tetrachlorodibenzofuran	U	10.0	pg/L	10.0
30402-15-4	Total Pentachlorodibenzofuran	U	50.0	pg/L	50.0
55684-94-1	Total Hexachlorodibenzofuran	U	50.0	pg/L	50.0
38998-75-3	Total Heptachlorodibenzofuran	U	50.0	pg/L	50.0
3333-30-0	TEQ WHO2005 ND=0		0.000	pg/L	
3333-30-1	TEQ WHO2005 ND=0.5		57.0	pg/L	

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1370	2000	pg/L	68.3	(25%-164%)
13C-1,2,3,7,8-PeCDD		1330	2000	pg/L	66.6	(25%-181%)
13C-1,2,3,4,7,8-HxCDD		1320	2000	pg/L	65.8	(32%-141%)
13C-1,2,3,6,7,8-HxCDD		1230	2000	pg/L	61.4	(28%-130%)
13C-1,2,3,4,6,7,8-HpCDD		1240	2000	pg/L	62.0	(23%-140%)
13C-OCDD		2070	4000	pg/L	51.8	(17%-157%)
13C-2,3,7,8-TCDF		1220	2000	pg/L	60.8	(24%-169%)
13C-1,2,3,7,8-PeCDF		1190	2000	pg/L	59.5	(24%-185%)
13C-2,3,4,7,8-PeCDF		1210	2000	pg/L	60.7	(21%-178%)
13C-1,2,3,4,7,8-HxCDF		1150	2000	pg/L	57.4	(26%-152%)
13C-1,2,3,6,7,8-HxCDF		1120	2000	pg/L	56.2	(26%-123%)
13C-2,3,4,6,7,8-HxCDF		1180	2000	pg/L	58.9	(28%-136%)
13C-1,2,3,7,8,9-HxCDF		1190	2000	pg/L	59.4	(29%-147%)

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029851**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47439**				
Client ID:	**MB for batch 47439**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 18:46**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-4**			**Dilution:**	**1**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1,2,3,4,6,7,8-HpCDF		1040	2000	pg/L	51.8	(28%-143%)
13C-1,2,3,4,7,8,9-HpCDF		1120	2000	pg/L	55.9	(26%-138%)
37Cl-2,3,7,8-TCDD		157	200	pg/L	78.6	(35%-197%)

Comments:

K **Estimated Maximum Possible Concentration**

U **Analyte was analyzed for, but not detected above the specified detection limit.**

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029852**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47439**				
Client ID:	**LCS for batch 47439**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 17:10**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-2**			**Dilution:**	**1**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		187	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		972	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		986	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		964	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		1040	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		1020	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		2020	pg/L	100
51207-31-9	2,3,7,8-TCDF		196	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		948	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		968	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		997	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		986	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		995	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		1020	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		955	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		1020	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1870	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1230	2000	pg/L	61.3	(20%-175%)
13C-1,2,3,7,8-PeCDD		1290	2000	pg/L	64.7	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1290	2000	pg/L	64.5	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1170	2000	pg/L	58.7	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1250	2000	pg/L	62.4	(22%-166%)
13C-OCDD		2160	4000	pg/L	53.9	(13%-199%)
13C-2,3,7,8-TCDF		1110	2000	pg/L	55.6	(22%-152%)
13C-1,2,3,7,8-PeCDF		1150	2000	pg/L	57.6	(21%-192%)
13C-2,3,4,7,8-PeCDF		1190	2000	pg/L	59.7	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1150	2000	pg/L	57.7	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1060	2000	pg/L	52.8	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1130	2000	pg/L	56.7	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1200	2000	pg/L	60.1	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1030	2000	pg/L	51.6	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1120	2000	pg/L	56.0	(20%-186%)
37Cl-2,3,7,8-TCDD		135	200	pg/L	67.4	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

Hi-Res Dioxins/Furans
Certificate of Analysis
Sample Summary

SDG Number:	**18324**	**Client:**	**RJLG001**	**Project:**	**RJLG00121**
Lab Sample ID:	**12029853**			**Matrix:**	**WATER**
Client Sample:	**QC for batch 47439**				
Client ID:	**LCSD for batch 47439**			**Prep Basis:**	**As Received**
Batch ID:	**47441**	**Method:**	**EPA Method 1613B**		
Run Date:	**08/02/2021 17:58**	**Analyst:**	**MJC**	**Instrument:**	**HRP757**
Data File:	**e02aug21b-3**			**Dilution:**	**1**
Prep Batch:	**47439**	**Prep Method:**	**SW846 3520C**		
Prep Date:	**29-JUL-21**	**Prep Aliquot:**	**1000 mL**		

CAS No.	Parmname	Qual	Result	Units	PQL
1746-01-6	2,3,7,8-TCDD		185	pg/L	10.0
40321-76-4	1,2,3,7,8-PeCDD		953	pg/L	50.0
39227-28-6	1,2,3,4,7,8-HxCDD		939	pg/L	50.0
57653-85-7	1,2,3,6,7,8-HxCDD		956	pg/L	50.0
19408-74-3	1,2,3,7,8,9-HxCDD		996	pg/L	50.0
35822-46-9	1,2,3,4,6,7,8-HpCDD		1010	pg/L	50.0
3268-87-9	1,2,3,4,6,7,8,9-OCDD		1940	pg/L	100
51207-31-9	2,3,7,8-TCDF		188	pg/L	10.0
57117-41-6	1,2,3,7,8-PeCDF		933	pg/L	50.0
57117-31-4	2,3,4,7,8-PeCDF		938	pg/L	50.0
70648-26-9	1,2,3,4,7,8-HxCDF		976	pg/L	50.0
57117-44-9	1,2,3,6,7,8-HxCDF		967	pg/L	50.0
60851-34-5	2,3,4,6,7,8-HxCDF		983	pg/L	50.0
72918-21-9	1,2,3,7,8,9-HxCDF		965	pg/L	50.0
67562-39-4	1,2,3,4,6,7,8-HpCDF		929	pg/L	50.0
55673-89-7	1,2,3,4,7,8,9-HpCDF		989	pg/L	50.0
39001-02-0	1,2,3,4,6,7,8,9-OCDF		1840	pg/L	100

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-2,3,7,8-TCDD		1470	2000	pg/L	73.5	(20%-175%)
13C-1,2,3,7,8-PeCDD		1470	2000	pg/L	73.3	(21%-227%)
13C-1,2,3,4,7,8-HxCDD		1440	2000	pg/L	72.0	(21%-193%)
13C-1,2,3,6,7,8-HxCDD		1310	2000	pg/L	65.3	(25%-163%)
13C-1,2,3,4,6,7,8-HpCDD		1350	2000	pg/L	67.5	(22%-166%)
13C-OCDD		2330	4000	pg/L	58.3	(13%-199%)
13C-2,3,7,8-TCDF		1370	2000	pg/L	68.3	(22%-152%)
13C-1,2,3,7,8-PeCDF		1320	2000	pg/L	65.8	(21%-192%)
13C-2,3,4,7,8-PeCDF		1360	2000	pg/L	68.1	(13%-328%)
13C-1,2,3,4,7,8-HxCDF		1270	2000	pg/L	63.6	(19%-202%)
13C-1,2,3,6,7,8-HxCDF		1200	2000	pg/L	59.9	(21%-159%)
13C-2,3,4,6,7,8-HxCDF		1250	2000	pg/L	62.7	(22%-176%)
13C-1,2,3,7,8,9-HxCDF		1300	2000	pg/L	65.0	(17%-205%)
13C-1,2,3,4,6,7,8-HpCDF		1150	2000	pg/L	57.6	(21%-158%)
13C-1,2,3,4,7,8,9-HpCDF		1230	2000	pg/L	61.7	(20%-186%)
37Cl-2,3,7,8-TCDD		159	200	pg/L	79.6	(31%-191%)

Comments:

U Analyte was analyzed for, but not detected above the specified detection limit.

ATTACHMENT B.4

RJ LEE GROUP, INC. REPORT W106037
(MARCH AND JUNE, 2021 SAMPLES)



RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 7, 2021

Revised Report, W106037 Rev. 2

Three separate analytical reports were initially issued to Maul Foster for Columbia Basin Analytical Laboratory Work Order W106037. This revised report combines the three reports into a single document. No changes are made to the data within the individual reports.

This combined report is separated into three sections determined by analyses presented in the original reports. A separator page appears between the data sets with a brief description of the data following the separator.

10/07/2021

Joe Sears, Ph.D., Laboratory Technical Manager

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 7, 2021

Revised Report, W106037 Rev. 2

SECTION 1

Laboratory Report
Non-Potable Water Analysis by EPA 8270E
Client Project; JH Baxter & Co.
Purchase Order No. 0461.03-V.0

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

August 31, 2021

Revised Report, W106037 Rev. 1, NPW Sample Reports

The sample reports for the aqueous samples originally released on August 12, 2021 have been revised with the following changes and notes:

- *Added 'Range' column to QC and Sample reports to provide the percent recovery acceptance limits for the QC analytes and surrogates*
- *Included the percent recovery for the surrogates in the Secondary PAHs for the CB2 in the QC report.*
- *'S' Flagged the Phenol-d6 and 2,4,6-Tribromophenol surrogates in CB4 in the QC report.*
- *Included an 'S' flag for Terphenyl-d14 for the Secondary PAHs for sample W106037-06 (HOHW-02)*
- *Removed 2-Methyl-4,6-dinitrophenol, 2,4,6-Trichlorophenol, and 2,4,5-Trichlorophenol from the EDD report for sample W106037-06 (HOHW-02).*
- *The EDD has been updated to reflect the changes in the QC and sample reports.*
- *The following narrative remains unchanged from the original report.*

Subject: Analysis of samples for PAHs, Phenol, Pentachlorophenol, and Aldehydes. CBAL Work Order W106037.

Eleven samples were received on June 4, 2021 from the Maul Foster & Alongi project ID J.H. Baxter. The samples were assigned a Work Order number of W106037 with each sample receiving a sub-number of -01 through -11. A copy of the Chain of Custody and CBAL Login Report accompanies this laboratory report as a reference of sample identifications and requested analyses for each sample.

The sample matrix was either oil or aqueous based. Appropriate EPA methods were employed for the analysis of each sample, depending upon the matrix type. The semivolatiles analysis, including Phenol, Pentachlorophenol, and Polynuclear Aromatic Hydrocarbons, were performed by EPA 8270E using either liquid/liquid shakeout (aqueous matrix) or waste dilution (oil matrix) for the sample preparation. The analysis of the aldehydes was performed by a modified EPA TO-11a method in which the aldehyde of interest was derivatized with 2,4-Dinitrophenylhydrazine and analyzed by high performance liquid chromatography.

Due to the complexity of the sample matrix and concentration difference of the target analytes in the samples, multiple dilutions of most samples were required to bring the analyte concentration within the range of the respective calibration curves. The dilution factors used for the calculation of the final results are noted in the 'Qualifier' column of the report. A copy of the percent recovery criteria for the project has been included in this report. Two criteria are shown in the report. The first is the criteria utilized for the Department of Defense/Department of Energy (DoD/DoE) and is based on data from thousands of analytical results from several laboratories across the country. The second are the administrative limits utilized by Columbia Basin Analytical Laboratories (CBAL) for this project. CBAL is transitioning their reporting activities to the DoD/DoE LCS recovery criteria from their Quality Services Manual, however, they have not been fully implemented into the quality system as of the date of this report. Note that the recovery criteria for the RL and MRL is +/- 40%.

The data has been reported in two separate releases. The first report for the oil-based samples was issued on July 27, 2021. This report is for the aqueous-based samples and includes this cover letter, the individual sample reports for the EPA 8270E analysis, a Quality Control report for the analysis, a copy of the Chain of Custody, a copy of the

percent recovery criteria for the LCSs, a copy of the Columbia Basin Analytical Laboratory Login Report, and an Excel file containing the Electronic Data Deliverables from this report.

The results provided in this report relate only to the items tested. Samples were received in acceptable conditions unless otherwise noted in the comments above. Sample results for solid matrices have been corrected for the dry weight determinations unless otherwise state in the report. Information provided by the customer can affect the validity of the results. The results in this report apply to the sample as it was received. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratory.

I certify that this report complies with the Columbia Basin Analytical Laboratory Quality Assurance Program and that all Quality Assurance measures were implemented and adhered to in the analysis of this sample set. Release of the data contained in this laboratory report has been authorized by the Laboratory Director or a designee as verified by the following signature.



08/12/2021

Joe Sears, Ph.D., Laboratory Technical Manager

If you have any questions, please feel free to contact Joe Sears at jsears@rjleegroup.com or at 509-792-1955.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270E

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/28/21
Report Date: 08/31/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%REC	Range %	Qualifier
HOHW-02	W106037-06	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	2-Fluorophenol	367-12-4	Y	NPW	Surr	20.1	10	80.4	70-130	D=10
HOHW-02	W106037-06	Phenol-d6	13127-88-3	Y	NPW	Surr	19.7	10	78.8	70-130	D=10
HOHW-02	W106037-06	Phenol	108-95-2	Y	NPW	T	36000	1000			D=50
HOHW-02	W106037-06	2-Methylphenol	95-48-7	Y	NPW	T	11700	200			D=10
HOHW-02	W106037-06	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	5.71	1.0	22.84	70-130	S
HOHW-02	W106037-06	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	Naphthalene	91-20-3	Y	NPW	T	143000	5000			D=250
HOHW-02	W106037-06	2-Methylnaphthalene	91-57-6	Y	NPW	T	60000	1000			D=50
HOHW-02	W106037-06	1-Methylnaphthalene	90-12-0	Y	NPW	T	25200	1000			D=50
HOHW-02	W106037-06	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	16.7	1.0	66.8	70-130	S
HOHW-02	W106037-06	Acenaphthylene	208-96-8	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Acenaphthene	83-32-9	Y	NPW	T	9850	200			D=10
HOHW-02	W106037-06	Dibenzofuran	132-64-9	Y	NPW	T	4100	200			D=10
HOHW-02	W106037-06	Fluorene	86-73-7	Y	NPW	T	1930	20			
HOHW-02	W106037-06	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	14.0	1.0	56	70-130	S
HOHW-02	W106037-06	Phenanthrene	85-01-8	Y	NPW	T	1040	20			
HOHW-02	W106037-06	Anthracene	120-12-7	Y	NPW	T	200	20			
HOHW-02	W106037-06	Carbazole	86-74-8	Y	NPW	T	67.8	20			
HOHW-02	W106037-06	Fluoranthene	206-44-0	Y	NPW	T	165	20			
HOHW-02	W106037-06	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	Pyrene	129-00-0	Y	NPW	T	54.2	20			
HOHW-02	W106037-06	Terphenyl-d14	1718-51-0	Y	NPW	Surr	10.1	1.0	40.4	70-130	S
HOHW-02	W106037-06	Benzo (a) anthracene	56-55-3	Y	NPW	T	22.4	20			
HOHW-02	W106037-06	Chrysene	218-01-9	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Benzo(a)pyrene	50-32-8	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 20	20			
HOHW-02	W106037-06	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 20	20			
		Secondary PAHs									
HOHW-02	W106037-06	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	Quinoline	91-22-5	N	NPW	T	90000	1000			D=50
HOHW-02	W106037-06	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
HOHW-02	W106037-06	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	19.5	1.0	78	70-130	
HOHW-02	W106037-06	Biphenyl	92-52-4	N	NPW	T	6990	200			D=10
HOHW-02	W106037-06	Phenanthrene-d10	2531-84-2	Y	NPW	Int. Std	40.0	1.0			

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%REC	Range %	Qualifier
HOHW-02	W106037-06	1-Methylphenanthrene	832-69-9	*N*	NPW	*T*	26.0	20			
HOHW-02	W106037-06	Chrysene-d12	610-48-0	*Y*	NPW	*Int. Std*	40.0	1.0			
HOHW-02	W106037-06	5-Methylchrysene	3697-24-3	*N*	NPW	*T*	< 20	20			
HOHW-02	W106037-06	Terphenyl-d14	1719-03-5	*Y*	NPW	*Surr*	9.30	1.0	37.2	70-130	S
HOHW-02	W106037-06	Perylene-d12	1520-96-3	*Y*	NPW	*Int. Std*	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

R = %REC failure in a QC sample
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270E

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/28/21
Report Date: 08/31/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%REC	Rnage %	Qualifier
OWSHO-02	W106037-07	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	2-Fluorophenol	367-12-4	Y	NPW	Surr	11.0	1.0	44	70-130	S
OWSHO-02	W106037-07	Phenol-d6	13127-88-3	Y	NPW	Surr	8.16	1.0	32.64	70-130	S
OWSHO-02	W106037-07	2-Methylphenol	95-48-7	Y	NPW	T	772	20			
OWSHO-02	W106037-07	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	18.9	1.0	75.6	70-130	
OWSHO-02	W106037-07	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	Naphthalene	91-20-3	Y	NPW	T	6030	200			D=10
OWSHO-02	W106037-07	2-Methylnaphthalene	91-57-6	Y	NPW	T	2580	200			D=10
OWSHO-02	W106037-07	1-Methylnaphthalene	90-12-0	Y	NPW	T	1320	20			
OWSHO-02	W106037-07	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	15.5	1.0	62	70-130	S
OWSHO-02	W106037-07	Acenaphthylene	208-96-8	Y	NPW	T	< 20	20			
OWSHO-02	W106037-07	Acenaphthene	83-32-9	Y	NPW	T	1610	20			
OWSHO-02	W106037-07	Dibenzofuran	132-64-9	Y	NPW	T	866	20			
OWSHO-02	W106037-07	Fluorene	86-73-7	Y	NPW	T	722	20			
OWSHO-02	W106037-07	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	25.4	1.0	101.6	70-130	
OWSHO-02	W106037-07	Pentachlorophenol	87-86-5	Y	NPW	T	330000	5000			D=250
OWSHO-02	W106037-07	Phenanthrene	85-01-8	Y	NPW	T	1700	20			
OWSHO-02	W106037-07	Anthracene	120-12-7	Y	NPW	T	322	20			
OWSHO-02	W106037-07	Carbazole	86-74-8	Y	NPW	T	539	20			
OWSHO-02	W106037-07	Fluoranthene	206-44-0	Y	NPW	T	1170	20			
OWSHO-02	W106037-07	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	Pyrene	129-00-0	Y	NPW	T	629	20			
OWSHO-02	W106037-07	Terphenyl-d14	1718-51-0	Y	NPW	Surr	21.9	1.0	87.6	70-130	
OWSHO-02	W106037-07	Benzo (a) anthracene	56-55-3	Y	NPW	T	155	20			
OWSHO-02	W106037-07	Chrysene	218-01-9	Y	NPW	T	138	20			
OWSHO-02	W106037-07	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	54.4	20			
OWSHO-02	W106037-07	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	48.6	20			
OWSHO-02	W106037-07	Benzo(a)pyrene	50-32-8	Y	NPW	T	42.4	20			
OWSHO-02	W106037-07	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	25.6	20			
OWSHO-02	W106037-07	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 20	20			
OWSHO-02	W106037-07	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 20	20			
		Secondary PAHs									
OWSHO-02	W106037-07	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	Quinoline	91-22-5	N	NPW	T	10700	200			D=10
OWSHO-02	W106037-07	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	15.4	1.0	61.6	70-130	S
OWSHO-02	W106037-07	Biphenyl	92-52-4	N	NPW	T	461	20			
OWSHO-02	W106037-07	Phenanthrene-d10	2531-84-2	Y	NPW	Int. Std	< 1.0	1.0			

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%REC	Rnage %	Qualifier
OWSHO-02	W106037-07	1-Methylphenanthrene	832-69-9	N	NPW	T	< 20	20			
OWSHO-02	W106037-07	Chrysene-d12	610-48-0	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02	W106037-07	5-Methylchrysene	3697-24-3	N	NPW	T	< 20	20			
OWSHO-02	W106037-07	Terphenyl-d14	1719-03-5	Y	NPW	Surr	20.1	1.0	80.4	70-130	
OWSHO-02	W106037-07	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270E

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/28/21
Report Date: 08/31/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr	Range	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit ug/L	%REC	%	Qualifier
OWSHO-02 Dup	W106037-07 Dup	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	2-Fluorophenol	367-12-4	Y	NPW	Surr	12.0	1.0	48	70-130	S
OWSHO-02 Dup	W106037-07 Dup	Phenol-d6	13127-88-3	Y	NPW	Surr	9.40	1.0	37.6	70-130	S
OWSHO-02 Dup	W106037-07 Dup	2-Methylphenol	95-48-7	Y	NPW	T	854	20			
OWSHO-02 Dup	W106037-07 Dup	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	19.7	1.0	78.8	70-130	
OWSHO-02 Dup	W106037-07 Dup	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	Naphthalene	91-20-3	Y	NPW	T	6310	200			D=10
OWSHO-02 Dup	W106037-07 Dup	2-Methylnaphthalene	91-57-6	Y	NPW	T	2660	200			D=10
OWSHO-02 Dup	W106037-07 Dup	1-Methylnaphthalene	90-12-0	Y	NPW	T	1290	20			
OWSHO-02 Dup	W106037-07 Dup	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	15.0	1.0	60	70-130	S
OWSHO-02 Dup	W106037-07 Dup	Acenaphthylene	208-96-8	Y	NPW	T	424	20			
OWSHO-02 Dup	W106037-07 Dup	Acenaphthene	83-32-9	Y	NPW	T	1540	20			
OWSHO-02 Dup	W106037-07 Dup	Dibenzofuran	132-64-9	Y	NPW	T	891	20			
OWSHO-02 Dup	W106037-07 Dup	Fluorene	86-73-7	Y	NPW	T	748	20			
OWSHO-02 Dup	W106037-07 Dup	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	24.5	1.0	98	70-130	
OWSHO-02 Dup	W106037-07 Dup	Pentachlorophenol	87-86-5	Y	NPW	T	279000	5000			D=250
OWSHO-02 Dup	W106037-07 Dup	Phenanthrene	85-01-8	Y	NPW	T	1650	20			
OWSHO-02 Dup	W106037-07 Dup	Anthracene	120-12-7	Y	NPW	T	378	20			
OWSHO-02 Dup	W106037-07 Dup	Carbazole	86-74-8	Y	NPW	T	548	20			
OWSHO-02 Dup	W106037-07 Dup	Fluoranthene	206-44-0	Y	NPW	T	1150	20			
OWSHO-02 Dup	W106037-07 Dup	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	Pyrene	129-00-0	Y	NPW	T	577	20			
OWSHO-02 Dup	W106037-07 Dup	Terphenyl-d14	1718-51-0	Y	NPW	Surr	20.1	1.0	80.4	70-130	
OWSHO-02 Dup	W106037-07 Dup	Benzo (a) anthracene	56-55-3	Y	NPW	T	142	20			
OWSHO-02 Dup	W106037-07 Dup	Chrysene	218-01-9	Y	NPW	T	135	20			
OWSHO-02 Dup	W106037-07 Dup	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	53.2	20			
OWSHO-02 Dup	W106037-07 Dup	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	49.2	20			
OWSHO-02 Dup	W106037-07 Dup	Benzo(a)pyrene	50-32-8	Y	NPW	T	42.4	20			
OWSHO-02 Dup	W106037-07 Dup	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	25.0	20			
OWSHO-02 Dup	W106037-07 Dup	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 20	20			
OWSHO-02 Dup	W106037-07 Dup	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 20	20			
		Secondary PAHs									
OWSHO-02 Dup	W106037-07 Dup	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	Quinoline	91-22-5	N	NPW	T	10900	200			D=10
OWSHO-02 Dup	W106037-07 Dup	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	15.0	1.0	60	70-130	S

OWSHO-02 Dup	W106037-07 Dup	Biphenyl	92-52-4	*N*	NPW	*T*	457	20			
OWSHO-02 Dup	W106037-07 Dup	Phenanthrene-d10	2531-84-2	*Y*	NPW	*Int. Std*	< 1.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	1-Methylphenanthrene	832-69-9	*N*	NPW	*T*	< 20	20			
OWSHO-02 Dup	W106037-07 Dup	Chrysene-d12	610-48-0	*Y*	NPW	*Int. Std*	40.0	1.0			
OWSHO-02 Dup	W106037-07 Dup	5-Methylchrysene	3697-24-3	*N*	NPW	*T*	< 20	20			
OWSHO-02 Dup	W106037-07 Dup	Terphenyl-d14	1719-03-5	*Y*	NPW	*Surr*	17.8	1.0	71.2	70-130	
OWSHO-02 Dup	W106037-07 Dup	Perylene-d12	1520-96-3	*Y*	NPW	*Int. Std*	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be consic
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270E

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/28/21
Report Date: 08/31/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID											
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result ug/L	Reporting Limit (ug/L)	Surr %REC	Range %	Qualifier
CFI-01	W106037-09	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	2-Fluorophenol	367-12-4	Y	NPW	Surr	6.49	1.0	25.96	70-130	S
CFI-01	W106037-09	Phenol-d6	13127-88-3	Y	NPW	Surr	6.28	1.0	25.12	70-130	S
CFI-01	W106037-09	2-Methylphenol	95-48-7	Y	NPW	T	2180	200			D=10
CFI-01	W106037-09	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	11.7	1.0	46.8	70-130	S
CFI-01	W106037-09	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	Naphthalene	91-20-3	Y	NPW	T	14600	200			D=10
CFI-01	W106037-09	2-Methylnaphthalene	91-57-6	Y	NPW	T	8530	200			D=10
CFI-01	W106037-09	1-Methylnaphthalene	90-12-0	Y	NPW	T	4140	200			D=10
CFI-01	W106037-09	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	9.19	1.0	36.76	70-130	S
CFI-01	W106037-09	Acenaphthylene	208-96-8	Y	NPW	T	64.4	20			
CFI-01	W106037-09	Acenaphthene	83-32-9	Y	NPW	T	5940	200			D=10
CFI-01	W106037-09	Dibenzofuran	100-02-7	Y	NPW	T	3310	200			D=10
CFI-01	W106037-09	Fluorene	86-73-7	Y	NPW	T	2940	200			D=10
CFI-01	W106037-09	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	14.6	1.0	58.4	70-130	S
CFI-01	W106037-09	Pentachlorophenol	87-86-5	Y	NPW	T	389000	5000			D=250
CFI-01	W106037-09	Phenanthrene	85-01-8	Y	NPW	T	6530	200			D=10
CFI-01	W106037-09	Anthracene	120-12-7	Y	NPW	T	1250	20			
CFI-01	W106037-09	Carbazole	86-74-8	Y	NPW	T	1650	20			
CFI-01	W106037-09	Fluoranthene	206-44-0	Y	NPW	T	4240	200			D=10
CFI-01	W106037-09	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	Pyrene	129-00-0	Y	NPW	T	65.4	20			
CFI-01	W106037-09	Terphenyl-d14	1718-51-0	Y	NPW	Surr	11.9	1.0	47.6	70-130	S
CFI-01	W106037-09	Benzo (a) anthracene	56-55-3	Y	NPW	T	645	20			
CFI-01	W106037-09	Chrysene	218-01-9	Y	NPW	T	605	20			
CFI-01	W106037-09	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	205	20			
CFI-01	W106037-09	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	209	20			
CFI-01	W106037-09	Benzo(a)pyrene	50-32-8	Y	NPW	T	166	20			
CFI-01	W106037-09	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	55.2	20			
CFI-01	W106037-09	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	30.2	20			
CFI-01	W106037-09	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	46.6	20			
		Secondary PAHs									
CFI-01	W106037-09	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	Quinoline	91-22-5	N	NPW	T	35300	1000			D=50
CFI-01	W106037-09	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	9.21	1.0	36.84	70-130	S
CFI-01	W106037-09	Biphenyl	92-52-4	N	NPW	T	1770	20			
CFI-01	W106037-09	Phenanthrene-d10	2531-84-2	Y	NPW	Int. Std	40.0	1.0			

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Range %	Qualifier
CFI-01	W106037-09	1-Methylphenanthrene	832-69-9	N	NPW	T	< 20	20			
CFI-01	W106037-09	Chrysene-d12	610-48-0	Y	NPW	Int. Std	40.0	1.0			
CFI-01	W106037-09	5-Methylchrysene	3697-24-3	N	NPW	T	24.0	20			
CFI-01	W106037-09	Terphenyl-d14	1719-03-5	Y	NPW	Surr	10.9	1.0	43.6	70-130	S
CFI-01	W106037-09	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

R = %REC failure in a QC sample
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270E

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/28/21
Report Date: 08/31/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID											
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result ug/L	Reporting Limit (ug/L)	Surr %REC	Range %	Qualifier
EVAP-02	W106037-10	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	2-Fluorophenol	367-12-4	Y	NPW	Surr	5.43	1.0	21.72	70-130	S
EVAP-02	W106037-10	Phenol-d6	13127-88-3	Y	NPW	Surr	16.8	1.0	67.2	70-130	S
EVAP-02	W106037-10	2-Methylphenol	95-48-7	Y	NPW	T	893	19			D=10
EVAP-02	W106037-10	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	15.1	1.0	60.4	70-130	S
EVAP-02	W106037-10	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	Naphthalene	91-20-3	Y	NPW	T	1490	19			D=10
EVAP-02	W106037-10	2-Methylnaphthalene	91-57-6	Y	NPW	T	325	19			D=10
EVAP-02	W106037-10	1-Methylnaphthalene	90-12-0	Y	NPW	T	155	1.9			
EVAP-02	W106037-10	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	10.6	1.0	42.4	70-130	S
EVAP-02	W106037-10	Acenaphthylene	208-96-8	Y	NPW	T	< 19	19			D=10
EVAP-02	W106037-10	Acenaphthene	83-32-9	Y	NPW	T	203	19			D=10
EVAP-02	W106037-10	Dibenzofuran	100-02-7	Y	NPW	T	42.2	1.9			
EVAP-02	W106037-10	Fluorene	86-73-7	Y	NPW	T	42.6	1.9			
EVAP-02	W106037-10	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	18.3	1.0	73.2	70-130	
EVAP-02	W106037-10	Pentachlorophenol	87-86-5	Y	NPW	T	258000	2900			D=1500
EVAP-02	W106037-10	Phenanthrene	85-01-8	Y	NPW	T	66.4	1.9			
EVAP-02	W106037-10	Anthracene	120-12-7	Y	NPW	T	21.9	1.9			
EVAP-02	W106037-10	Carbazole	86-74-8	Y	NPW	T	82.8	1.9			
EVAP-02	W106037-10	Fluoranthene	206-44-0	Y	NPW	T	45.0	1.9			
EVAP-02	W106037-10	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	Pyrene	129-00-0	Y	NPW	T	16.3	1.9			
EVAP-02	W106037-10	Terphenyl-d14	1718-51-0	Y	NPW	Surr	9.67	1.0	38.68	70-130	S
EVAP-02	W106037-10	Benzo (a) anthracene	56-55-3	Y	NPW	T	4.88	1.9			
EVAP-02	W106037-10	Chrysene	218-01-9	Y	NPW	T	3.42	1.9			
EVAP-02	W106037-10	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	2.56	1.9			
EVAP-02	W106037-10	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	1.96	1.9			
EVAP-02	W106037-10	Benzo(a)pyrene	50-32-8	Y	NPW	T	2.13	1.9			
EVAP-02	W106037-10	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	< 1.9	1.9			
EVAP-02	W106037-10	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	< 1.9	1.9			
EVAP-02	W106037-10	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	< 1.9	1.9			
		Secondary PAHs									
EVAP-02	W106037-10	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	Quinoline	91-22-5	N	NPW	T	11000	480			D=250
EVAP-02	W106037-10	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	10.2	1.0	40.8	70-130	S
EVAP-02	W106037-10	Biphenyl	92-52-4	N	NPW	T	48.9	1.9			
EVAP-02	W106037-10	Phenanthrene-d10	2531-84-2	Y	NPW	Int. Std	< 1.0	1.0			

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Range %	Qualifier
EVAP-02	W106037-10	1-Methylphenanthrene	832-69-9	N	NPW	T	< 1.9	1.9			
EVAP-02	W106037-10	Chrysene-d12	610-48-0	Y	NPW	Int. Std	40.0	1.0			
EVAP-02	W106037-10	5-Methylchrysene	3697-24-3	N	NPW	T	< 1.9	1.9			
EVAP-02	W106037-10	Terphenyl-d14	1719-03-5	Y	NPW	Surr	8.93	1.0	35.72	70-130	S
EVAP-02	W106037-10	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project:	W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270E**	Samples Received:	06/04/21
	Portland, OR 97209		Prep/Date:	07/28/21
Attention:	Brian Snuffer		Report Date:	08/31/21
Telephone:	503-314-8589	**Revised Report, Rev. 1**	Sampling Date:	06/03/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.:	0461.03-V.0
			Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd				Reporting	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	Result ug/L	Limit (ug/L)	%REC	Range %	Qualifier
EV-OUT-01	W106037-11	1,4-Dichlorobenzene-d4	3855-82-1	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	2-Fluorophenol	367-12-4	Y	NPW	Surr	10.9	1.0	43.6	70-130	S
EV-OUT-01	W106037-11	Phenol-d6	13127-88-3	Y	NPW	Surr	17.3	1.0	69.2	70-130	S
EV-OUT-01	W106037-11	2-Methylphenol	95-48-7	Y	NPW	T	720	20			
EV-OUT-01	W106037-11	Nitrobenzene-d5	4165-60-0	Y	NPW	Surr	14.2	1.0	56.8	70-130	S
EV-OUT-01	W106037-11	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	Naphthalene	91-20-3	Y	NPW	T	819	20			
EV-OUT-01	W106037-11	2-Methylnaphthalene	91-57-6	Y	NPW	T	573	20			
EV-OUT-01	W106037-11	1-Methylnaphthalene	90-12-0	Y	NPW	T	240	20			
EV-OUT-01	W106037-11	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	11.0	1.0	44	70-130	S
EV-OUT-01	W106037-11	Acenaphthylene	208-96-8	Y	NPW	T	1160	20			
EV-OUT-01	W106037-11	Acenaphthene	83-32-9	Y	NPW	T	< 20	20			
EV-OUT-01	W106037-11	Dibenzofuran	100-02-7	Y	NPW	T	106	20			
EV-OUT-01	W106037-11	Fluorene	86-73-7	Y	NPW	T	184	20			
EV-OUT-01	W106037-11	Phenanthrene-d10	1517-22-2	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	2,4,6-Tribromophenol	118-79-6	Y	NPW	Surr	17.3	1.0	69.2	70-130	S
EV-OUT-01	W106037-11	Pentachlorophenol	87-86-5	Y	NPW	T	2820000	30000			D=1500
EV-OUT-01	W106037-11	Phenanthrene	85-01-8	Y	NPW	T	967	20			
EV-OUT-01	W106037-11	Anthracene	120-12-7	Y	NPW	T	245	20			
EV-OUT-01	W106037-11	Carbazole	86-74-8	Y	NPW	T	742	20			
EV-OUT-01	W106037-11	Fluoranthene	206-44-0	Y	NPW	T	2460	200			D=10
EV-OUT-01	W106037-11	Chrysene-d12	1719-03-5	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	Pyrene	129-00-0	Y	NPW	T	1490	20			
EV-OUT-01	W106037-11	Terphenyl-d14	1718-51-0	Y	NPW	Surr	10.7	1.0	42.8	70-130	S
EV-OUT-01	W106037-11	Benzo (a) anthracene	56-55-3	Y	NPW	T	559	20			
EV-OUT-01	W106037-11	Chrysene	218-01-9	Y	NPW	T	567	20			
EV-OUT-01	W106037-11	Perylene-d12	1520-96-3	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	Benzo(b)fluoranthene	205-99-2	Y	NPW	T	210	20			
EV-OUT-01	W106037-11	Benzo(k)fluoranthene	207-08-9	Y	NPW	T	216	20			
EV-OUT-01	W106037-11	Benzo(a)pyrene	50-32-8	Y	NPW	T	41.6	20			
EV-OUT-01	W106037-11	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	NPW	T	41.0	20			
EV-OUT-01	W106037-11	Dibenz(a,h)anthracene	53-70-3	Y	NPW	T	31.8	20			
EV-OUT-01	W106037-11	Benzo(g,h,i)perylene	191-24-2	Y	NPW	T	29.2	20			
		Secondary PAHs									
EV-OUT-01	W106037-11	Naphthalene-d8	1146-65-2	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	Quinoline	91-22-5	N	NPW	T	5200	200			D=10
EV-OUT-01	W106037-11	Acenaphthene-d10	15067-26-2	Y	NPW	Int. Std	40.0	1.0			
EV-OUT-01	W106037-11	2-Fluorobiphenyl	321-60-8	Y	NPW	Surr	11.0	1.0	44	70-130	S

EV-OUT-01	W106037-11	Biphenyl	92-52-4	*N*	NPW	*T*	109	20			
EV-OUT-01	W106037-11	Phenanthrene-d10	2531-84-2	*Y*	NPW	*Int. Std*	40.0	1.0			
EV-OUT-01	W106037-11	1-Methylphenanthrene	832-69-9	*N*	NPW	*T*	50.2	20			
EV-OUT-01	W106037-11	Chrysene-d12	610-48-0	*Y*	NPW	*Int. Std*	40.0	1.0			
EV-OUT-01	W106037-11	5-Methylchrysene	3697-24-3	*N*	NPW	*T*	21.2	20			
EV-OUT-01	W106037-11	Terphenyl-d14	1719-03-5	*Y*	NPW	*Surr*	9.73	1.0	38.92	70-130	S
EV-OUT-01	W106037-11	Perylene-d12	1520-96-3	*Y*	NPW	*Int. Std*	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/31/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8270E
Waste Water / NPW

Revised Report, Rev. 1

RJ Lee Group Job No.: W106037
Samples Received: 6/4/2021
Analysis/Prep Date 7/28/2021
Report Date: 8/31/2021
Client Project: JH Baxter & Co.
COC No.: 0461.03-V.0

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV1	12.640	25179351	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV1	8.140	17841623	25.0	24.1	96.4	80-120		
Phenol-d6	13127-88-3	Surr	CCV1	12.144	22220363	25.0	28.4	114	80-120		
Phenol	108-95-2	T	CCV1	12.205	24639353	25.0	25.4	102	80-120		
2-Methylphenol	95-48-7	T	CCV1	14.578	12098408	25.0	22.1	88.4	80-120		
Nitrobenzene-d5	4165-60-0	Surr	CCV1	16.420	20061138	25.0	26.9	108	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV1	18.972	94295260	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV1	19.071	65625173	25.0	27.0	108	80-120		
2-Methylnaphthalene	91-57-6	T	CCV1	22.187	58716822	25.0	30.4	122	80-120		
1-Methylnaphthalene	90-12-0	T	CCV1	22.815	41958238	25.0	27.0	108	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV1	27.697	57261744	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV1	24.134	47067666	25.0	23.8	95.2	80-120		
Acenaphthylene	208-96-8	T	CCV1	27.204	63919812	25.0	25.4	102	80-120		
Acenaphthene	83-32-9	T	CCV1	27.871	39880580	25.0	27.7	111	80-120		
Dibenzofuran	132-64-9	T	CCV1	28.636	66357752	25.0	25.4	102	80-120		
Fluorene	86-73-7	T	CCV1	30.437	48271754	25.0	26.1	104	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV1	35.515	100301076	40.0	40.0	100			
Pentachlorophenol	87-86-5	T	CCV1	34.457	4937171	25.0	24.9	99.6	80-120		
Phenanthrene	85-01-8	T	CCV1	35.633	70250849	25.0	26.6	106	80-120		
Anthracene	120-12-7	T	CCV1	35.849	69515051	25.0	26.4	106	80-120		
Carbazole	86-74-8	T	CCV1	37.700	52048975	25.0	24.5	98.0	80-120		
Fluoranthene	206-44-0	T	CCV1	41.747	76072982	25.0	27.3	109	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV1	49.369	87898874	40.0	40.0	100			
Pyrene	129-00-0	T	CCV1	43.038	79753075	25.0	26.7	107	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV1	43.651	55519094	25.0	24.4	97.6	80-120		
Benzo (a) anthracene	56-55-3	T	CCV1	49.206	66411200	25.0	25.9	104	80-120		
Chrysene	218-01-9	T	CCV1	49.510	67356706	25.0	26.7	107	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV1	56.489	74620891	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV1	54.461	67162190	25.0	26.5	106	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV1	54.584	67073624	25.0	27.0	108	80-120		
Benzo(a)pyrene	50-32-8	T	CCV1	56.126	63066793	25.0	26.6	106	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV1	60.619	63642121	25.0	24.4	97.6	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV1	60.687	53180058	25.0	24.5	98.0	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV1	61.904	50472220	25.0	22.9	91.6	80-120		
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CCV1	18.978	93132697	40.0	40.0	100			
Quinoline	91-22-5	T	CCV1	21.437	34558466	25.0	23.5	94.0	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV1	27.701	54548842	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV1	24.142	45601333	25.0	23.7	94.8	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV1	35.512	96595182	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV1	38.642	52561660	25.0	26.0	104	80-120		

Chrysene-d12	1719-03-5	Int. Std	CCV1	49.374	77617861	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV1	51.582	40766523	25.0	23.8	95.2	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV1	43.665	54122005	25.0	25.3	101	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV1	56.504	57610125	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB	12.629	23400895	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CB	8.107	16602255	25.0	24.1	96.4	80-120		
Phenol-d6	13127-88-3	Surr	CB	12.131	19248494	25.0	26.4	106	80-120		
Phenol	108-95-2	T	CB								
2-Methylphenol	95-48-7	T	CB								
Nitrobenzene-d5	4165-60-0	Surr	CB	16.420	18231276	25.0	26.3	105	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CB	18.963	88388598	40.0	40.0	100			
Naphthalene	91-20-3	T	CB	19.067	792519		0.280				
2-Methylnaphthalene	91-57-6	T	CB								
1-Methylnaphthalene	90-12-0	T	CB								
Acenaphthene-d10	15067-26-2	Int. Std	CB	27.696	51344660	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CB	24.133	42680496	25.0	24.1	96.4	80-120		
Acenaphthylene	208-96-8	T	CB								
Acenaphthene	83-32-9	T	CB								
Dibenzofuran	132-64-9	T	CB								
Fluorene	86-73-7	T	CB								
Phenanthrene-d10	1517-22-2	Int. Std	CB	35.514	87536098	40.0	40.0	100			
Pentachlorophenol	87-86-5	T	CB								
Phenanthrene	85-01-8	T	CB								
Anthracene	120-12-7	T	CB								
Carbazole	86-74-8	T	CB								
Fluoranthene	206-44-0	T	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	49.371	69328462	40.0	40.0	100			
Pyrene	129-00-0	T	CB								
Terphenyl-d14	1718-51-0	Surr	CB	43.663	49709669	25.0	27.7	111	80-120		
Benzo (a) anthracene	56-55-3	T	CB								
Chrysene	218-01-9	T	CB								
Perylene-d12	1520-96-3	Int. Std	CB	56.494	50962153	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CB								
Benzo(k)fluoranthene	207-08-9	T	CB								
Benzo(a)pyrene	50-32-8	T	CB								
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB								
Dibenz(a,h)anthracene	53-70-3	T	CB								
Benzo(g,h,i)perylene	191-24-2	T	CB								
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CB	18.961	89871773	40.0	40.0	100			
Quinoline	91-22-5	T	CB								
Acenaphthene-d10	15067-26-2	Int. Std	CB	27.694	52073808	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CB	24.129	42930555	25.0	23.3	93.2	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CB	35.514	89688752	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	49.376	70419465	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CB								
Terphenyl-d14	1718-51-0	Surr	CB	43.662	50029448	25.0	25.8	103	80-120		
Perylene-d12	1520-96-3	Int. Std	CB	56.496	52582412	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	RL	12.638	24655036	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	RL	8.121	17008552	25.0	23.4	93.6	80-120		
Phenol-d6	13127-88-3	Surr	RL	12.140	19804707	25.0	25.8	103	80-120		
Phenol	108-95-2	T	RL	12.198	954827	1.00	1.00	100	60-140		
2-Methylphenol	95-48-7	T	RL	14.603	386300	1.00	0.720	72.0	60-140		
Nitrobenzene-d5	4165-60-0	Surr	RL	16.424	19080656	25.0	26.1	104	80-120		
Naphthalene-d8	1146-65-2	Int. Std	RL	18.973	89160776	40.0	40.0	100	60-140		
Naphthalene	91-20-3	T	RL	19.071	3116210	1.00	1.29	129	60-140		
2-Methylnaphthalene	91-57-6	T	RL	22.211	2054740	1.00	1.20	120	60-140		
1-Methylnaphthalene	90-12-0	T	RL	22.831	1474431	1.00	1.47	147	60-140		R
Acenaphthene-d10	15067-26-2	Int. Std	RL	27.702	53229949	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	RL	24.141	42856338	25.0	23.4	93.6	80-120		
Acenaphthylene	208-96-8	T	RL	27.215	1949833	1.00	1.17	117	60-140		
Acenaphthene	83-32-9	T	RL	27.871	1334322	1.00	1.00	100	60-140		
Dibenzofuran	132-64-9	T	RL	28.661	1884366	1.00	1.25	125	60-140		
Fluorene	86-73-7	T	RL	30.446	1573053	1.00	1.21	121	60-140		
Phenanthrene-d10	1517-22-2	Int. Std	RL	35.514	91959893	40.0	40.0	100			
Pentachlorophenol	87-86-5	T	RL	34.537	76123	1.00	2.53	253	60-140		R
Phenanthrene	85-01-8	T	RL	35.631	2304617	1.00	1.06	106	60-140		
Anthracene	120-12-7	T	RL	35.856	1961807	1.00	1.09	109	60-140		
Carbazole	86-74-8	T	RL	37.754	1473160	1.00	1.27	127	60-140		
Fluoranthene	206-44-0	T	RL	41.765	2170556	1.00	1.21	121	60-140		
Chrysene-d12	1719-03-5	Int. Std	RL	49.371	73497205	40.0	40.0	100			
Pyrene	129-00-0	T	RL	43.041	2719975	1.00	0.730	73.0	60-140		
Terphenyl-d14	1718-51-0	Surr	RL	43.661	50011377	25.0	26.3	105	80-120		
Benzo (a) anthracene	56-55-3	T	RL	49.211	1530822	1.00	1.40	140	60-140		R
Chrysene	218-01-9	T	RL	49.509	1831554	1.00	1.13	113	60-140		
Perylene-d12	1520-96-3	Int. Std	RL	56.502	54956087	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	RL	54.481	1335423	1.00	1.49	149	60-140		R
Benzo(k)fluoranthene	207-08-9	T	RL	54.616	1640621	1.00	1.32	132	60-140		
Benzo(a)pyrene	50-32-8	T	RL	56.152	1301569	1.00	1.42	142	60-140		R
Indeno(1,2,3-c,d)pyrene	193-39-5	T	RL	60.765	1304996	1.00	1.54	154	60-140		R
Dibenz(a,h)anthracene	53-70-3	T	RL	60.862	1018281	1.00	1.68	168	60-140		R
Benzo(g,h,i)perylene	191-24-2	T	RL	62.011	1181774	1.00	1.24	124	60-140		
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	RL	18.970	94587192	40.0	40.0	100			
Quinoline	91-22-5	T	RL	21.578	1172211	1.00	0.780	78.0	60-140		
Acenaphthene-d10	15067-26-2	Int. Std	RL	27.698	55178238	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	RL	24.138	44235033	25.0	22.7	90.8	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	RL	35.513	95784250	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	RL	38.648	1888342	1.00	0.940	94.0	60-140		
Chrysene-d12	1719-03-5	Int. Std	RL	49.371	79541390	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	RL	51.583	1198985	1.00	0.680	68.0	60-140		
Terphenyl-d14	1718-51-0	Surr	RL	43.657	52705891	25.0	24.1	96.4	80-120		
Perylene-d12	1520-96-3	Int. Std	RL	56.500	60836139	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	%REC	Range %	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCS	12.632	24252270	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	LCS	8.160	8993484	25.0	13.0	52.0	70-130		S

Phenol-d6	13127-88-3	Surr	LCS	12.164	7901106	25.0	10.5	42.0	70-130		**S**
Phenol	108-95-2	T	LCS	12.212	8728074	25.0	9.32	37.3	70-130		**R**
2-Methylphenol	95-48-7	T	LCS	14.574	8369398	25.0	15.9	63.6	70-130		**R**
Nitrobenzene-d5	4165-60-0	Surr	LCS	16.416	17008524	25.0	23.7	94.8	70-130		
Naphthalene-d8	1146-65-2	Int. Std	LCS	18.967	94371678	40.0	40.0	100			
Naphthalene	91-20-3	T	LCS	19.066	56856301	25.0	23.4	93.6	70-130		
2-Methylnaphthalene	91-57-6	T	LCS	22.178	52909062	25.0	27.3	109	70-130		
1-Methylnaphthalene	90-12-0	T	LCS	22.804	36914228	25.0	23.8	95.2	70-130		
Acenaphthene-d10	15067-26-2	Int. Std	LCS	27.690	57880607	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	LCS	24.129	40257201	25.0	20.2	80.8	70-130		
Acenaphthylene	208-96-8	T	LCS	27.197	56705293	25.0	22.3	89.2	70-130		
Acenaphthene	83-32-9	T	LCS	27.861	35538894	25.0	24.4	97.6	70-130		
Dibenzofuran	132-64-9	T	LCS	28.625	59142487	25.0	22.4	89.6	70-130		
Fluorene	86-73-7	T	LCS	30.429	49179423	25.0	26.3	105	70-130		
Phenanthrene-d10	1517-22-2	Int. Std	LCS	35.512	102133105	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	LCS	32.108	7870609	25.0	20.3	81.2			
Pentachlorophenol	87-86-5	T	LCS	34.456	23794013	25.0	85.5	342	70-130		**R**
Phenanthrene	85-01-8	T	LCS	35.637	65226256	25.0	24.3	97.2	70-130		
Anthracene	120-12-7	T	LCS	35.841	64199494	25.0	24.0	96.0	70-130		
Carbazole	86-74-8	T	LCS	37.697	49003308	25.0	22.7	90.8	70-130		
Fluoranthene	206-44-0	T	LCS	41.739	73812735	25.0	26.0	104	70-130		
Chrysene-d12	1719-03-5	Int. Std	LCS	49.362	89351441	40.0	40.0	100			
Pyrene	129-00-0	T	LCS	43.036	76429013	25.0	25.1	100	70-130		
Terphenyl-d14	1718-51-0	Surr	LCS	43.651	53511004	25.0	23.2	92.8			
Benzo (a) anthracene	56-55-3	T	LCS	49.205	65219332	25.0	25.0	100	70-130		
Chrysene	218-01-9	T	LCS	49.500	65745783	25.0	25.6	102	70-130		
Perylene-d12	1520-96-3	Int. Std	LCS	56.480	74454982	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	LCS	54.457	69158727	25.0	27.3	109	70-130		
Benzo(k)fluoranthene	207-08-9	T	LCS	54.586	68401227	25.0	27.6	110	70-130		
Benzo(a)pyrene	50-32-8	T	LCS	56.122	61069321	25.0	25.8	103	70-130		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCS	60.617	63828116	25.0	24.5	98.0	70-130		
Dibenz(a,h)anthracene	53-70-3	T	LCS	60.677	53831041	25.0	24.9	99.6	70-130		
Benzo(g,h,i)perylene	191-24-2	T	LCS	61.895	53604196	25.0	24.3	97.2	70-130		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	%REC	Range %	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCSD	12.627	23788023	40.0	40.0	100		0.00	
2-Fluorophenol	367-12-4	Surr	LCSD	8.137	8616751	25.0	12.7	50.8	70-130	2.33	**S**
Phenol-d6	13127-88-3	Surr	LCSD	12.151	7279135	25.0	9.83	39.3	70-130	6.64	**S**
Phenol	108-95-2	T	LCSD	12.204	8567716	25.0	9.33	37.3	70-130	0.00	**R**
2-Methylphenol	95-48-7	T	LCSD	14.561	8840778	25.0	17.1	68.4	70-130	7.27	**R**
Nitrobenzene-d5	4165-60-0	Surr	LCSD	16.409	15844353	25.0	22.6	90.4	70-130	4.75	
Naphthalene-d8	1146-65-2	Int. Std	LCSD	18.959	92773179	40.0	40.0	100		0.00	
Naphthalene	91-20-3	T	LCSD	19.058	53007443	25.0	22.2	88.8	70-130	5.26	
2-Methylnaphthalene	91-57-6	T	LCSD	22.171	49405146	25.0	26.0	104	70-130	4.69	
1-Methylnaphthalene	90-12-0	T	LCSD	22.797	33880175	25.0	22.2	88.8	70-130	6.96	
Acenaphthene-d10	15067-26-2	Int. Std	LCSD	27.685	56569161	40.0	40.0	100		0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCSD	24.121	37983501	25.0	19.5	78.0	70-130	3.53	
Acenaphthylene	208-96-8	T	LCSD	27.190	52156663	25.0	21.0	84.0	70-130	6.00	
Acenaphthene	83-32-9	T	LCSD	27.855	32860536	25.0	23.1	92.4	70-130	5.47	
Dibenzofuran	132-64-9	T	LCSD	28.619	54872872	25.0	21.3	85.2	70-130	5.03	
Fluorene	86-73-7	T	LCSD	30.422	43886579	25.0	24.0	96.0	70-130	8.96	
Phenanthrene-d10	1517-22-2	Int. Std	LCSD	35.506	99622090	40.0	40.0	100		0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCSD	32.102	7798996	25.0	20.6	82.4	70-130	1.47	
Pentachlorophenol	87-86-5	T	LCSD	34.450	13783470	25.0	57.4	230	70-130	39.16	**R**
Phenanthrene	85-01-8	T	LCSD	35.624	60323921	25.0	23.0	92.0	70-130	5.50	
Anthracene	120-12-7	T	LCSD	35.842	60560996	25.0	23.2	92.8	70-130	3.39	
Carbazole	86-74-8	T	LCSD	37.692	46112966	25.0	22.0	88.0	70-130	3.13	
Fluoranthene	206-44-0	T	LCSD	41.740	69006744	25.0	24.9	99.6	70-130	4.32	
Chrysene-d12	1719-03-5	Int. Std	LCSD	49.357	86432659	40.0	40.0	100		0.00	
Pyrene	129-00-0	T	LCSD	43.036	71725469	25.0	24.4	97.6	70-130	2.43	
Terphenyl-d14	1718-51-0	Surr	LCSD	43.648	51579926	25.0	23.1	92.4	70-130	0.43	
Benzo (a) anthracene	56-55-3	T	LCSD	49.201	60878229	25.0	24.2	96.8	70-130	3.25	
Chrysene	218-01-9	T	LCSD	49.495	60916003	25.0	24.6	98.4	70-130	3.59	
Perylene-d12	1520-96-3	Int. Std	LCSD	56.481	72234442	40.0	40.0	100		0.00	
Benzo(b)fluoranthene	205-99-2	T	LCSD	54.448	63932957	25.0	26.0	104	70-130	4.69	
Benzo(k)fluoranthene	207-08-9	T	LCSD	54.579	63233146	25.0	26.3	105	70-130	4.65	
Benzo(a)pyrene	50-32-8	T	LCSD	56.121	56832991	25.0	24.8	99.2	70-130	3.76	
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCSD	60.618	59141271	25.0	23.4	93.6	70-130	4.59	
Dibenz(a,h)anthracene	53-70-3	T	LCSD	60.675	49965303	25.0	23.8	95.2	70-130	4.52	
Benzo(g,h,i)perylene	191-24-2	T	LCSD	61.890	49592032	25.0	23.2	92.8	70-130	4.63	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	MRL1	12.622	23415273	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	MRL1	8.130	6449188	25.0	9.85	39.4	70-130		S
Phenol-d6	13127-88-3	Surr	MRL1	12.158	4918010	25.0	6.75	27.0	70-130		S
Phenol	108-95-2	T	MRL1	12.202	855417	2.00	0.950	47.5	60-140		R
2-Methylphenol	95-48-7	T	MRL1	14.588	907027	2.00	1.78	89.0	60-140		
Nitrobenzene-d5	4165-60-0	Surr	MRL1	16.407	12196683	25.0	17.7	70.8	70-130		
Naphthalene-d8	1146-65-2	Int. Std	MRL1	18.952	91394820	40.0	40.0	100			
Naphthalene	91-20-3	T	MRL1	19.052	5647247	2.00	2.34	117	60-140		
2-Methylnaphthalene	91-57-6	T	MRL1	22.183	3600635	2.00	2.00	100	60-140		
1-Methylnaphthalene	90-12-0	T	MRL1	22.800	2461621	2.00	2.09	105	60-140		
Acenaphthene-d10	15067-26-2	Int. Std	MRL1	27.679	55356413	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	MRL1	24.120	28888701	25.0	15.2	60.8	70-130		

Acenaphthylene	208-96-8	T	MRL1	27.186	3096548	2.00	1.60	80.0	60-140		
Acenaphthene	83-32-9	T	MRL1	27.844	2253779	2.00	1.62	81.0	60-140		
Dibenzofuran	132-64-9	T	MRL1	28.625	3446366	2.00	1.82	91.0	60-140		
Fluorene	86-73-7	T	MRL1	30.421	3101919	2.00	2.02	101	60-140		
Phenanthrene-d10	1517-22-2	Int. Std	MRL1	35.496	97024361	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	MRL1	32.095	6987867	25.0	19.1	76.4	70-130		
Pentachlorophenol	87-86-5	T	MRL1	34.443	12695857	2.00	55.0	2750	60-140		R
Phenanthrene	85-01-8	T	MRL1	35.615	4845196	2.00	2.00	100	60-140		
Anthracene	120-12-7	T	MRL1	35.826	4338356	2.00	1.97	98.5	60-140		
Carbazole	86-74-8	T	MRL1	37.698	3547383	2.00	2.22	111	60-140		
Fluoranthene	206-44-0	T	MRL1	41.735	5753019	2.00	2.47	124	60-140		
Chrysene-d12	1719-03-5	Int. Std	MRL1	49.358	81099725	40.0	40.0	100			
Pyrene	129-00-0	T	MRL1	43.026	5844416	2.00	1.78	89.0	60-140		
Terphenyl-d14	1718-51-0	Surr	MRL1	43.640	49980109	25.0	23.8	95.2	70-130		
Benzo (a) anthracene	56-55-3	T	MRL1	49.196	4303686	2.00	2.47	124	60-140		
Chrysene	218-01-9	T	MRL1	49.481	4676124	2.00	2.26	113	60-140		
Perylene-d12	1520-96-3	Int. Std	MRL1	56.485	65363919	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	MRL1	54.460	4225465	2.00	2.64	132	60-140		
Benzo(k)fluoranthene	207-08-9	T	MRL1	54.587	4257911	2.00	2.38	119	60-140		
Benzo(a)pyrene	50-32-8	T	MRL1	56.125	3605397	2.00	2.39	120	60-140		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	MRL1	60.662	3800065	2.00	2.48	124	60-140		
Dibenz(a,h)anthracene	53-70-3	T	MRL1	60.711	2982403	2.00	2.57	129	60-140		
Benzo(g,h,i)perylene	191-24-2	T	MRL1	61.933	3419213	2.00	2.26	113	60-140		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/L	Result ug/L	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	BLK1	12.628	22367172	40.0	40	100			
2-Fluorophenol	367-12-4	Surr	BLK1	8.141	3731430	25.0	6.29	25.2	70-130		S
Phenol-d6	13127-88-3	Surr	BLK1	12.188	2587979	25.0	3.72	14.9	70-130		S
Phenol	108-95-2	T	BLK1	12.246	270491	0.00	0.31				
2-Methylphenol	95-48-7	T	BLK1			0.00	0				
Nitrobenzene-d5	4165-60-0	Surr	BLK1	16.420	7329435	25.0	11.32	45.3	70-130		S
Naphthalene-d8	1146-65-2	Int. Std	BLK1	18.965	84167253	40.0	40	100			
Naphthalene	91-20-3	T	BLK1	19.065	1884559	0.00	0.8				
2-Methylnaphthalene	91-57-6	T	BLK1	22.240	396874	0.00	0.31				
1-Methylnaphthalene	90-12-0	T	BLK1			0.00	0				
Acenaphthene-d10	15067-26-2	Int. Std	BLK1	27.691	48505788	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	BLK1	24.136	14985151	25.0	9.07	36.3	70-130		S
Acenaphthylene	208-96-8	T	BLK1			0.00	0				
Acenaphthene	83-32-9	T	BLK1			0.00	0				
Dibenzofuran	132-64-9	T	BLK1			0.00	0				
Fluorene	86-73-7	T	BLK1			0.00	0				
Phenanthrene-d10	1517-22-2	Int. Std	BLK1	35.510	82913596	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	BLK1	32.132	2772742	25.0	9.68	38.7	70-130		S
Pentachlorophenol	87-86-5	T	BLK1	34.508	808375	0.00	7.04				
Phenanthrene	85-01-8	T	BLK1			0.00	0				
Anthracene	120-12-7	T	BLK1			0.00	0				
Carbazole	86-74-8	T	BLK1			0.00	0				
Fluoranthene	206-44-0	T	BLK1			0.00	0				
Chrysene-d12	1719-03-5	Int. Std	BLK1	49.360	69792832	40.0	40	100			
Pyrene	129-00-0	T	BLK1			0.00	0				
Terphenyl-d14	1718-51-0	Surr	BLK1	43.656	38758656	25.0	21.51	86.0	70-130		
Benzo (a) anthracene	56-55-3	T	BLK1			0.00	0				

Chrysene	218-01-9	T	BLK1			0.00	0				
Perylene-d12	1520-96-3	Int. Std	BLK1	56.486	54757619	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	BLK1			0.00	0				
Benzo(k)fluoranthene	207-08-9	T	BLK1			0.00	0				
Benzo(a)pyrene	50-32-8	T	BLK1			0.00	0				
Indeno(1,2,3-c,d)pyrene	193-39-5	T	BLK1			0.00	0				
Dibenz(a,h)anthracene	53-70-3	T	BLK1			0.00	0				
Benzo(g,h,i)perylene	191-24-2	T	BLK1			0.00	0				
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	BLK1	18.965	84097453	40.0	40	100			
Quinoline	91-22-5	T	BLK1			0.00	0				
Acenaphthene-d10	15067-26-2	Int. Std	BLK1	27.683	49448385	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	BLK1	24.133	15632053	25.0	9.15	36.6	70-130		**S**
Phenanthrene-d10	1517-22-2	Int. Std	BLK1	35.508	84764205	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	BLK1			0.00	0				
Chrysene-d12	1719-03-5	Int. Std	BLK1	49.356	70820671	40.0	40	100			
5-Methylchrysene	3697-24-3	T	BLK1			0.00	0				
Terphenyl-d14	1718-51-0	Surr	BLK1	43.652	39385414	25.0	20.31	81.2	70-130		
Perylene-d12	1520-96-3	Int. Std	BLK1	56.486	56456624	40.0	40	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV2	12.631	25745919	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV2	8.136	19227857	25.0	25.3	101	80-120		
Phenol-d6	13127-88-3	Surr	CCV2	12.140	20762014	25.0	25.9	104	80-120		
Phenol	108-95-2	T	CCV2	12.198	26575704	25.0	26.7	107	80-120		
2-Methylphenol	95-48-7	T	CCV2	14.564	12988056	25.0	23.2	92.8	80-120		
Nitrobenzene-d5	4165-60-0	Surr	CCV2	16.411	20915976	25.0	27.4	110	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV2	18.960	99851844	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV2	19.061	69154742	25.0	26.9	108	80-120		
2-Methylnaphthalene	91-57-6	T	CCV2	22.175	65079017	25.0	31.8	127	80-120		
1-Methylnaphthalene	90-12-0	T	CCV2	22.802	44601673	25.0	27.1	108	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	27.686	60907680	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV2	24.123	50397199	25.0	24.0	96.0	80-120		
Acenaphthylene	208-96-8	T	CCV2	27.192	68449773	25.0	25.6	102	80-120		
Acenaphthene	83-32-9	T	CCV2	27.857	42646845	25.0	27.8	111	80-120		
Dibenzofuran	132-64-9	T	CCV2	28.618	71879872	25.0	25.8	103	80-120		
Fluorene	86-73-7	T	CCV2	30.422	53485383	25.0	27.2	109	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	35.503	110215778	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV2	32.093	9772936	25.0	23.2	92.8	80-120		
Pentachlorophenol	87-86-5	T	CCV2	34.454	4277695	25.0	20.5	82.0	80-120		
Phenanthrene	85-01-8	T	CCV2	35.626	75113635	25.0	25.9	104	80-120		
Anthracene	120-12-7	T	CCV2	35.841	76697608	25.0	26.5	106	80-120		
Carbazole	86-74-8	T	CCV2	37.695	59121538	25.0	25.4	102	80-120		
Fluoranthene	206-44-0	T	CCV2	41.737	83035071	25.0	27.1	108	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV2	49.356	99466151	40.0	40.0	100			
Pyrene	129-00-0	T	CCV2	43.032	86813576	25.0	25.6	102	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV2	43.648	62767460	25.0	24.4	97.6	80-120		
Benzo (a) anthracene	56-55-3	T	CCV2	49.201	74369499	25.0	25.6	102	80-120		
Chrysene	218-01-9	T	CCV2	49.497	74689388	25.0	26.2	105	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV2	56.484	83247852	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV2	54.442	76543853	25.0	27.0	108	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV2	54.583	77904629	25.0	28.1	112	80-120		
Benzo(a)pyrene	50-32-8	T	CCV2	56.125	70590271	25.0	26.7	107	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV2	60.616	64842925	25.0	22.3	89.2	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV2	60.681	53191140	25.0	22.1	88.4	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV2	61.894	53318904	25.0	21.7	86.8	80-120		
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CCV2	18.956	99145874	40.0	40.0	100			
Quinoline	91-22-5	T	CCV2	21.424	36780207	25.0	23.5	94.0	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	27.684	58924330	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV2	24.134	49124373	25.0	23.6	94.4	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	35.504	106251695	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV2	38.629	58254227	25.0	26.2	105	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV2	49.352	87209426	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV2	51.564	46882131	25.0	24.4	97.6	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV2	43.647	61803779	25.0	25.7	103	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV2	56.486	64078917	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB2	12.620	24065877	40.0	40	100			

2-Fluorophenol	367-12-4	Surr	CB2	8.107	17673622	25.0	24.89	99.6	80-120		
Phenol-d6	13127-88-3	Surr	CB2	12.126	19922440	25.0	26.6	106	80-120		
Phenol	108-95-2	T	CB2			0.00					
2-Methylphenol	95-48-7	T	CB2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB2	16.405	19741269	25.0	27.67	111	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CB2	18.954	92818516	40.0	40	100			
Naphthalene	91-20-3	T	CB2	19.056	819444	0.00	0.27				
2-Methylnaphthalene	91-57-6	T	CB2			0.00					
1-Methylnaphthalene	90-12-0	T	CB2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB2	27.683	54912900	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB2	24.128	44192541	25.0	23.35	93.4	80-120		
Acenaphthylene	208-96-8	T	CB2			0.00					
Acenaphthene	83-32-9	T	CB2			0.00					
Dibenzofuran	132-64-9	T	CB2			0.00					
Fluorene	86-73-7	T	CB2			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB2	35.500	94644379	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB2	32.127	6440549	25.0	18.14	72.6	80-120		
Pentachlorophenol	87-86-5	T	CB2			0.00					
Phenanthrene	85-01-8	T	CB2			0.00					
Anthracene	120-12-7	T	CB2			0.00					
Carbazole	86-74-8	T	CB2			0.00					
Fluoranthene	206-44-0	T	CB2			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB2	49.359	80587093	40.0	40	100			
Pyrene	129-00-0	T	CB2			0.00					
Terphenyl-d14	1718-51-0	Surr	CB2	43.648	55331856	25.0	26.52	106	80-120		
Benzo (a) anthracene	56-55-3	T	CB2			0.00					
Chrysene	218-01-9	T	CB2			0.00					
Perylene-d12	1520-96-3	Int. Std	CB2	56.481	62291770	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	CB2			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB2			0.00					
Benzo(a)pyrene	50-32-8	T	CB2			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB2			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB2			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB2			0.00					
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CB2	18.951	95246092	40.0	40				
Quinoline	91-22-5	T	CB2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB2	27.679	55607717	40.0	40				
2-Fluorobiphenyl	321-60-8	Surr	CB2	24.128	45395980	25.0	23.11	92.4	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CB2	35.499	99317915	40.0	40				
1-Methylphenanthrene	832-69-9	T	CB2			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB2	49.356	82799436	40.0	40				
5-Methylchrysene	3697-24-3	T	CB2			0.00					
Terphenyl-d14	1718-51-0	Surr	CB2	43.647	56561587	25.0	24.81	99.2	80-120		
Perylene-d12	1520-96-3	Int. Std	CB2	56.481	63004198	40.0	40				

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV3	12.627	30152940	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV3	8.142	22202278	25.0	25.0	100	80-120		
Phenol-d6	13127-88-3	Surr	CCV3	12.155	27316122	25.0	29.1	116	80-120		
Phenol	108-95-2	T	CCV3	12.213	29940932	25.0	25.7	103	80-120		
2-Methylphenol	95-48-7	T	CCV3	14.580	31339530	25.0	47.8	191	80-120		R

Nitrobenzene-d5	4165-60-0	Surr	CCV3	16.410	24113214	25.0	27.0	108	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV3	18.963	115286273	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV3	19.062	79970954	25.0	27.0	108	80-120		
4-Chloro-3-methylphenol	59-50-7	T	CCV3	22.127	18557281	25.0	24.7	98.8	80-120		
2-Methylnaphthalene	91-57-6	T	CCV3	22.173	73661459	25.0	31.1	124	80-120		
1-Methylnaphthalene	90-12-0	T	CCV3	22.802	51341072	25.0	27.0	108	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	27.681	70707683	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV3	24.120	57473531	25.0	23.6	94.4	80-120		
Acenaphthylene	208-96-8	T	CCV3	27.189	78950739	25.0	25.4	102	80-120		
Acenaphthene	83-32-9	T	CCV3	27.852	49236293	25.0	27.6	110	80-120		
Dibenzofuran	132-64-9	T	CCV3	28.619	83256470	25.0	25.8	103	80-120		
Fluorene	86-73-7	T	CCV3	30.426	62423276	25.0	27.3	109	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	35.503	128650576	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV3	32.099	11333998	25.0	23.0	92.0	80-120		
Pentachlorophenol	87-86-5	T	CCV3	34.456	3570964	25.0	15.6	62.4	80-120		**R**
Phenanthrene	85-01-8	T	CCV3	35.626	88302014	25.0	26.1	104	80-120		
Anthracene	120-12-7	T	CCV3	35.838	91184717	25.0	27.0	108	80-120		
Carbazole	86-74-8	T	CCV3	37.692	71489064	25.0	26.2	105	80-120		
Fluoranthene	206-44-0	T	CCV3	41.737	98249819	25.0	27.5	110	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV3	49.367	117114382	40.0	40.0	100			
Pyrene	129-00-0	T	CCV3	43.036	102027310	25.0	25.6	102	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV3	43.650	73373271	25.0	24.2	96.8	80-120		
Benzo (a) anthracene	56-55-3	T	CCV3	49.204	87952387	25.0	25.7	103	80-120		
Chrysene	218-01-9	T	CCV3	49.502	87713049	25.0	26.1	104	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV3	56.489	96280451	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV3	54.458	89189732	25.0	27.2	109	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV3	54.591	92352510	25.0	28.8	115	80-120		
Benzo(a)pyrene	50-32-8	T	CCV3	56.132	82366498	25.0	26.9	108	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV3	60.636	82944891	25.0	24.6	98.4	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV3	60.703	69172628	25.0	24.7	98.8	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV3	61.911	66090205	25.0	23.2	92.8	80-120		
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CCV3	18.957	113847256	40.0	40.0	100			
Quinoline	91-22-5	T	CCV3	21.430	38691149	25.0	21.5	86.0	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	27.685	63168655	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV3	24.116	51903982	25.0	23.3	93.2	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	35.505	124781011	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV3	38.630	69689607	25.0	26.7	107	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV3	49.358	106370510	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV3	51.556	56823359	25.0	24.2	96.8	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV3	43.649	73703361	25.0	25.2	101	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV3	56.487	81529166	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB3	12.622	27717822	40.0	40	100			
2-Fluorophenol	367-12-4	Surr	CB3	8.119	19842481	25.0	24.29	97.2	80-120		
Phenol-d6	13127-88-3	Surr	CB3	12.148	20971369	25.0	24.32	97.3	80-120		
Phenol	108-95-2	T	CB3			0.00					
2-Methylphenol	95-48-7	T	CB3			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB3	16.413	22073629	25.0	26.88	108	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CB3	18.948	108337760	40.0	40	100			
Naphthalene	91-20-3	T	CB3	19.051	911159	0.00	0.26				

2-Methylnaphthalene	91-57-6	T	CB3			0.00					
1-Methylnaphthalene	90-12-0	T	CB3			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB3	27.686	54873490	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB3	24.121	46743673	25.0	24.71	98.8	80-120		
Acenaphthylene	208-96-8	T	CB3			0.00					
Acenaphthene	83-32-9	T	CB3			0.00					
Dibenzofuran	132-64-9	T	CB3			0.00					
Fluorene	86-73-7	T	CB3			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB3	35.506	108995329	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB3	32.135	7750770	25.0	18.89	75.6	80-120		
Pentachlorophenol	87-86-5	T	CB3			0.00					
Phenanthrene	85-01-8	T	CB3			0.00					
Anthracene	120-12-7	T	CB3			0.00					
Carbazole	86-74-8	T	CB3			0.00					
Fluoranthene	206-44-0	T	CB3			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB3	49.364	95873629	40.0	40	100			
Pyrene	129-00-0	T	CB3			0.00					
Terphenyl-d14	1718-51-0	Surr	CB3	43.645	66371313	25.0	26.74	107	80-120		
Benzo (a) anthracene	56-55-3	T	CB3			0.00					
Chrysene	218-01-9	T	CB3			0.00					
Perylene-d12	1520-96-3	Int. Std	CB3	56.488	70650792	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	CB3			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB3			0.00					
Benzo(a)pyrene	50-32-8	T	CB3			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB3			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB3			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB3			0.00					
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CB3	18.948	108319614	40.0	40	100			
Quinoline	91-22-5	T	CB3			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB3	27.686	56648368	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB3	24.121	46927396	25.0	23.45	93.8	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CB3	35.506	110390523	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	CB3			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB3	49.364	96312702	40.0	40	100			
5-Methylchrysene	3697-24-3	T	CB3			0.00					
Terphenyl-d14	1718-51-0	Surr	CB3	43.645	66558280	25.0	25.09	100	80-120		
Perylene-d12	1520-96-3	Int. Std	CB3	56.488	71661893	40.0	40	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV4	12.622	27557740	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV4	8.171	18763988	25.0	23.1	92.4	80-120		
Phenol-d6	13127-88-3	Surr	CCV4	12.189	22655433	25.0	26.4	106	80-120		
Phenol	108-95-2	T	CCV4	12.252	24661229	25.0	23.2	92.8	80-120		
2-Methylphenol	95-48-7	T	CCV4	14.619	25395897	25.0	42.3	169	80-120		**R**
Nitrobenzene-d5	4165-60-0	Surr	CCV4	16.407	21005844	25.0	25.8	103	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV4	18.958	100734203	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV4	19.057	69443030	25.0	26.8	107	80-120		
2-Methylnaphthalene	91-57-6	T	CCV4	22.172	60852843	25.0	29.4	118	80-120		
1-Methylnaphthalene	90-12-0	T	CCV4	22.801	44206861	25.0	26.6	106	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV4	27.689	62015967	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV4	24.125	47497112	25.0	22.2	88.8	80-120		

Acenaphthylene	208-96-8	T	CCV4	27.199	68737330	25.0	25.2	101	80-120		
Acenaphthene	83-32-9	T	CCV4	27.860	43280877	25.0	27.7	111	80-120		
Dibenzofuran	132-64-9	T	CCV4	28.625	70985222	25.0	25.1	100	80-120		
Fluorene	86-73-7	T	CCV4	30.429	56893258	25.0	28.4	114	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV4	35.506	115703667	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV4	32.113	9219999	25.0	21.0	84.0	80-120		
Pentachlorophenol	87-86-5	T	CCV4	34.485	430888	25.0	4.02	16.1	80-120		**R**
Phenanthrene	85-01-8	T	CCV4	35.630	78523665	25.0	25.8	103	80-120		
Anthracene	120-12-7	T	CCV4	35.842	82572343	25.0	27.2	109	80-120		
Carbazole	86-74-8	T	CCV4	37.707	59518197	25.0	24.3	97.2	80-120		
Fluoranthene	206-44-0	T	CCV4	41.742	87032494	25.0	27.1	108	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV4	49.368	98721492	40.0	40.0	100			
Pyrene	129-00-0	T	CCV4	43.042	90649427	25.0	27.0	108	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV4	43.652	62377791	25.0	24.4	97.6	80-120		
Benzo (a) anthracene	56-55-3	T	CCV4	49.213	73422398	25.0	25.5	102	80-120		
Chrysene	218-01-9	T	CCV4	49.507	73464512	25.0	25.9	104	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV4	56.495	78083058	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV4	54.467	70212221	25.0	26.4	106	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV4	54.591	75455301	25.0	29.0	116	80-120		
Benzo(a)pyrene	50-32-8	T	CCV4	56.140	65753514	25.0	26.5	106	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV4	60.640	67338291	25.0	24.6	98.4	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV4	60.708	55474934	25.0	24.4	97.6	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV4	61.911	56048162	25.0	24.3	97.2	80-120		
Secondary PAHs											
Naphthalene-d8	1146-65-2	Int. Std	CCV4	18.946	85933100	40.0	40.0	100			
Quinoline	91-22-5	T	CCV4	21.438	24017672	25.0	17.7	70.8	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV4	27.684	41944387	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV4	24.124	31656775	25.0	21.4	85.6	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV4	35.494	100721201	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV4	38.624	57048689	25.0	27.1	108	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV4	49.366	81738070	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV4	51.569	43117495	25.0	23.9	95.6	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV4	43.647	58608263	25.0	26.0	104	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV4	56.505	58048802	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB4	12.612	26149325	40.0	40	100			
2-Fluorophenol	367-12-4	Surr	CB4	8.144	16839889	25.0	21.93	87.7	80-120		
Phenol-d6	13127-88-3	Surr	CB4	12.187	14269844	25.0	17.54	70.2	80-120		S
Phenol	108-95-2	T	CB4			0.00					
2-Methylphenol	95-48-7	T	CB4			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB4	16.399	17132723	25.0	22.19	88.8	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CB4	18.939	86207315	40.0	40	100			
Naphthalene	91-20-3	T	CB4	19.045	698006	0.00	0.25				
2-Methylnaphthalene	91-57-6	T	CB4			0.00					
1-Methylnaphthalene	90-12-0	T	CB4			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB4	27.687	37438938	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB4	24.122	28011787	25.0	21.72	86.9	80-120		
Acenaphthylene	208-96-8	T	CB4			0.00					
Acenaphthene	83-32-9	T	CB4			0.00					
Dibenzofuran	132-64-9	T	CB4			0.00					
Fluorene	86-73-7	T	CB4			0.00					

Phenanthrene-d10	1517-22-2	Int. Std	CB4	35.507	88927517	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB4	32.135	6234675	25.0	18.64	74.6	80-120		S
Pentachlorophenol	87-86-5	T	CB4			0.00					
Phenanthrene	85-01-8	T	CB4			0.00					
Anthracene	120-12-7	T	CB4			0.00					
Carbazole	86-74-8	T	CB4			0.00					
Fluoranthene	206-44-0	T	CB4			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB4	49.369	78309138	40.0	40	100			
Pyrene	129-00-0	T	CB4			0.00					
Terphenyl-d14	1718-51-0	Surr	CB4	43.655	54314151	25.0	26.79	107	80-120		
Benzo (a) anthracene	56-55-3	T	CB4			0.00					
Chrysene	218-01-9	T	CB4			0.00					
Perylene-d12	1520-96-3	Int. Std	CB4	56.503	57172587	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	CB4			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB4			0.00					
Benzo(a)pyrene	50-32-8	T	CB4			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB4			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB4			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB4			0.00					
[Results Signal 1]			CB4			0.00					
Naphthalene-d8	1146-65-2	Int. Std	CB4	18.939	86165318	40.0	40	100			
Quinoline	91-22-5	T	CB4			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB4	27.687	39085881	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB4	24.122	29200767	25.0	21.18	84.7	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CB4	35.507	91525810	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	CB4			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB4	49.369	79371421	40.0	40	100			
5-Methylchrysene	3697-24-3	T	CB4			0.00					
Terphenyl-d14	1718-51-0	Surr	CB4	43.655	55375746	25.0	25.33	101	80-120		
Perylene-d12	1520-96-3	Int. Std	CB4	56.503	57241378	40.0	40	100			

Comments: Reporting Limits have been adjusted for sample volumes and diltution factors.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an esti
J = Reported concentration was estimated

N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
R = Analyte %REC Failure
S = Surrogate recovery failure
TIC = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 8/31/2021

Request for Laboratory Analytical Services - Chain of Custody

W106037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes [ ] No [X]

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Purchase Order Number:		**Client Job Number:**	0461.03.01-07

Report Results To	Name: Brian Snuffer Zukas		
	Company: Maul Foster + Alongi		
	Address: 3140 NE Broadway		
	City, State, Zip: Portland OR 97232		
	Phone: 503-314-8589	Fax:	
	Email results to: bsnuffer@maulfoster.com		
Invoice To	Name: Georgia Krouse Baxter	Email:	
	Company: JH Baxter, Inc.	Fax:	
	Address: 3494 Roosevelt Blvd.		
	City, State, Zip: Eugene, OR 97402		
	Phone: 541-689-3801		

If a hard copy of invoice is needed, check here [ ]

Date Results Needed: Standard TA assumed if left blank; please do not use vague terms like ASAP

Rush Charges Authorized ? (circle one): Yes / (No)

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin Furans 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
PCP-02	Pentachlorophenol Treating Solution - OIL based	Eugene, OR	6/3/21 10:25	✓	✓				2.1
OIL-02	Bunker C oil solution OIL-based	Eugene, OR	6/3/21 11:24		✓				
BLND-02	50/50 Blend Treating Solution - OIL Based	Eugene, OR	6/3/21 11:32		✓				
CREO-01	Creosote Treating Solution - OIL Based	Eugene, OR	3/31/21 10:55			✓			
PCP HW-02	PCP Hot Well Influent - OIL-based	Eugene, OR	6/3/21 11:13	✓	✓				
HOHW-02	Heavy oil Hot Well Influent - OIL Based	Eugene, OR	6/3/21 10:59		✓		✓		

Chain of Custody

Relinquished By (Signature): Allen Clements	Date: 6/3/21	Time: 1352	
Relinquished By (Print Name): Allen Clements	Relinquished To: Fedex		
Company Name: Maul Foster + Alongi	Method of Shipment: overnight		

Chain of Custody

Received By (Signature): JJ Furlong RJLG	Date: 06/04/21	Time: 1020	
Received By (Print Name):	Relinquished To:		
Company Name:	Method of Shipment:		

Chain of Custody

Relinquished By (Signature):	Date:	Time:	
Relinquished By (Print Name):	Relinquished To:		
Company Name:	Method of Shipment:		

Chain of Custody

Received By (Signature):	Date:	Time:	
Received By (Print Name):	Relinquished To:		
Company Name:	Method of Shipment:		

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

WI06037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes [ ] No [X]

Lab Use Only			Purchase Order Number:	Client Job Number: 0461.03.01-07
	Project No.:	Client No.:		
	Date Logged In:	Logged In By:		

Report Results To		Invoice To	
Name: Brian Snuffer Zukas		Name: Georgia Krouse Baxter	Email:
Company: Maul Foster + Alongi		Company: JH Baxter, Inc.	Fax:
Address: 3140 NE Broadway		Address: 3494 Roosevelt Blvd.	
City, State, Zip: Portland OR 97232		City, State, Zip: Eugene, OR 97402	
Phone: 503-314-8589	Fax:	Phone: 541-689-3801	
Email results to: bsnuffer@maulfoster.com			

If a hard copy of invoice is needed, check here [ ]

Date Results Needed: (Standard TA assumed if left blank; please do not use vague terms like ASAP)

Rush Charges Authorized ? (circle one): Yes / (No)

Quality System Requirements (if applicable): Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin/Furan 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
									2.1
OWSHO-02	Heavy oil chamber influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:39	✓	✓				
OWSPCP-02	PCP chamber of influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:42	✓	✓				
CFI-01	Carbon Filter Inlet (Pre-Treat) LIQUID based	Eugene, OR	6/2/21 11:10	✓	✓	✓			
EVAP-02	Evaporator influent (carbon filter discharge) LIQUID based	Eugene, OR	6/2/21 11:45	✓	✓	✓		✓	
EV-OUT-01	Evaporator Blow down (recycle) LIQUID based	Eugene, OR	6/3/21 12:00	✓	✓	✓			

Chain of Custody				Chain of Custody			
Relinquished By (Signature):	Date: 6/2/21	Time: 12:15		Received By (Signature):	Date: ~~6/2/21~~ 6/3/21 tcc	Time: ~~1215~~ 1345 tcc	
Relinquished By (Print Name): Chantal Green	Relinquished To: Jace Jones			Received By (Print Name): Jace Jones	Relinquished To: Allen Clements		
Company Name: Maul Foster + Alongi	Method of Shipment:			Company Name: J.H. Baxter	Method of Shipment:		
Relinquished By (Signature):	Date: 6/3/21	Time: 1350		Received By (Signature):	Date: 06/04/21	Time: 1020	
Relinquished By (Print Name): Allen Clements	Relinquished To: FedEx			Received By (Print Name): JJ Furlong	Relinquished To:		
Company Name: Maul Foster + Alongi	Method of Shipment: overnight			Company Name: RJLG	Method of Shipment:		

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 7, 2021

Revised Report, W106037 Rev. 2

SECTION 2

Laboratory Report
Oils Analysis by EPA 8270D & Aldehydes Analysis by EPA TO-11a-Modified
Client Project; JH Baxter & Co.
Purchase Order No. 0461.03-V.0

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

August 30, 2021

Revised Report, W106037 Rev. 1, Oil Sample Reports

The sample reports for the oil samples originally released on July 27, 2021 have been revised with the following changes and notes:

- *Only those compounds specifically listed on the Chain of Custody for analysis are represented in the report*
- *A column has been added to the QC Report showing the acceptance limit for the recoveries (Range)*
- *Two samples (OWSHO-02 & HOHW-02) were listed on the chain of custody as oils but were found to be aqueous based. They were processed as water samples.*
- *The reporting units for the Batch QC results have been changed from instrument units of microgram/milliliter (ug/mL) to milligram per kilogram (mg/Kg) to reflect the 1 gram sample used for the QC with a final volume of 1 milliliter.*
- *The spelling for 6-Methylchrysene has been changed to 5-Methylchrysene to reflect the actual name of the analyte used in the standards for the analyses.*
- *1,2-Dichloroethene was removed from the analyte list per direction of Maul Foster & Alongi, Inc.*
- *2-Fluorobiphenyl is a surrogate compound that is added to each sample prior to extraction.*
- *Quinoline, Biphenyl, 1-Methylphenanthrene, and 5-Methylchrysene were not part of the Batch QC spiking solution. They were used to create a separate calibration curve for secondary processing of the sample data.*
- *The high recovery of 2,4,6-Trichlorophenol surrogate has been 'S' flagged for sample W106037-03 (BLND-02).*
- *The low recovery of 2,4,6-Trichlorophenol surrogate has been 'S' flagged for sample W106037-08 (OWSPCP-02).*
- *The surrogate recovery flag for 2,4,6-Tribromophenol in the RL and MRL in the QC report has been changed from 'R' to 'S'.*
- *Included the %REC data for the Secondary PAH QC surrogates.*
- *Revision of the EDD with the Rev. 1 sample data.*
- *The Subject Line of this narrative has been changed to remove the term "Chlorinated Phenols", "Phenol", and expanded the terms "PAHs" and "PCP".*
- *The acceptance criteria have been added for the analyte recovery in the TO-11a Batch QC Report (Range)*
- *The display of the percent RPD has been corrected for the LCS/LCSD in the TO-11a QC Report.*
- *The Title '%RSD' has been changed to '%RPD' in the TO-11a QC Report to reflect the comparison of two data points rather than three or more.*
- *The 'S' flags in the TO-11a report have been changed to 'R' flags to maintain consistency with the EPA 8270E report formats. 'S' = Surrogate recovery failure; 'R' = Analyte % Recovery failure.*
- *The reporting units for the Batch QC for the TO-11a analyses have been changed from micrograms per milliliter (ug/mL) to milligrams per liter (mg/L) to be consistent with the sample result units.*
- *A copy of the CoA has been included in this revised report for reference to the project requested analyses.*

Subject: Analysis of samples for Polynuclear Aromatic Hydrocarbons, and Pentachlorophenol, and Aldehydes. CBAL Work Order W106037.

Eleven samples were received on June 4, 2021 from the Maul Foster & Alongi project ID J.H. Baxter. The samples were assigned a Work Order number of W106037 with each sample receiving a sub-number of -01 through -11. A copy of the Chain of Custody and CBAL Login Report accompanies this laboratory report as a reference of sample identifications and requested analyses for each sample.

The sample matrix was either oil or aqueous based. Appropriate EPA methods were employed for the analysis of each sample, depending upon the matrix type. The semivolatiles analysis (Phenol, Chlorinated Phenols, Polynuclear Aromatic Hydrocarbons were performed by EPA 8270E using either liquid/liquid shakeout (aqueous matrix) or waste dilution (oil matrix) for the sample preparation. The analysis of the aldehydes was performed by a modified EPA TO-11a method in which the aldehyde of interest was derivatized with 2,4-Dinitrophenylhydrazine and analyzed by high performance liquid chromatography.

Due to the complexity of the sample matrix and concentration difference of the target analytes in the samples, multiple dilutions of most samples were required to bring the analyte concentration within the range of the respective calibration curves. The dilution factors used for the calculation of the final results are noted in the 'Qualifier' column of the report.

The report includes this cover letter, the individual sample reports for the EPA 8270E analysis of the oil-based samples, the report of the aldehyde results by EPA TO-11a-Modified, a Quality Control report for each method, a copy of the Chain of Custody, a copy of the Columbia Basin Analytical Laboratory Login Report, and an Excel file containing the Electronic Data Deliverables from this report. The report for the aqueous based samples is pending re-analysis due to an unacceptable recovery and %RPD failures between the two laboratory control samples.

The results provided in this report relate only to the items tested. Samples were received in acceptable conditions unless otherwise noted in the comments above. Sample results for solid matrices have been corrected for the dry weight determinations unless otherwise state in the report. Information provided by the customer can affect the validity of the results. The results in this report apply to the sample as it was received. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratory.

I certify that this report complies with the Columbia Basin Analytical Laboratory Quality Assurance Program and that all Quality Assurance measures were implemented and adhered to in the analysis of this sample set. Release of the data contained in this laboratory report has been authorized by the Laboratory Director or a designee as verified by the following signature.



07/27/2021

Joe Sears, Ph.D., Laboratory Technical Manager

If you have any questions, please feel free to contact Joe Sears at jsears@rjleegroup.com or at 509-792-1955.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project: W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**	Samples Received: 06/04/21
	Portland, OR 97209		Prep/Date: 07/08/21
Attention:	Brian Snuffer		Report Date: 08/30/21
Telephone:	503-314-8589	**Revised Report, Rev. 1**	Sampling Date: 06/03/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.: 0461.03-V.0
			Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting	Surr	Range	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/kg	Limit mg/kg	%REC	%	Qualifier
PCP-02	W106037-01	1,4-Dichlorobenzene-d4	3855-82-1	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	2-Fluorophenol	367-12-4	Y	Oil	Surr	24.1	1.0	96.4	70-130	
PCP-02	W106037-01	Phenol-d6	13127-88-3	Y	Oil	Surr	26.1	1.0	104.4	70-130	
PCP-02	W106037-01	2-Methylphenol	95-48-7	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Nitrobenzene-d5	4165-60-0	Y	Oil	Surr	26.6	1.0	106.4	70-130	
PCP-02	W106037-01	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	Naphthalene	91-20-3	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	2-Methylnaphthalene	91-57-6	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	1-Methylnaphthalene	90-12-0	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	23.7	1.0	94.8	70-130	
PCP-02	W106037-01	Acenaphthylene	208-96-8	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Acenaphthene	83-32-9	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Dibenzofuran	132-64-9	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Fluorene	86-73-7	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Phenanthrene-d10	1517-22-2	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	2,4,6-Tribromophenol	118-79-6	Y	Oil	Surr	22.8	1.0	91.2	70-130	
PCP-02	W106037-01	Pentachlorophenol	87-86-5	Y	Oil	T	68900	2500			D=250
PCP-02	W106037-01	Phenanthrene	85-01-8	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Anthracene	120-12-7	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Carbazole	86-74-8	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Fluoranthene	206-44-0	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Chrysene-d12	1719-03-5	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	Pyrene	129-00-0	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Terphenyl-d14	1718-51-0	Y	Oil	Surr	26.9	1.0	107.6	70-130	
PCP-02	W106037-01	Benzo (a) anthracene	56-55-3	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Chrysene	218-01-9	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Perylene-d12	1520-96-3	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	Benzo(b)fluoranthene	205-99-2	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Benzo(k)fluoranthene	207-08-9	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Benzo(a)pyrene	50-32-8	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Dibenz(a,h)anthracene	53-70-3	Y	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Benzo(g,h,i)perylene	191-24-2	Y	Oil	T	< 100	100			D=10
		Secondary PAHs									
PCP-02	W106037-01	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	Quinoline	91-22-5	N	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	234	10	93.6	70-130	D=10
PCP-02	W106037-01	Biphenyl	92-52-4	N	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Phenanthrene-d10	2531-84-2	Y	Oil	Int. Std	40.0	1.0			

Sample ID Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Reporting Limit mg/kg	Surr %REC	Range %	Qualifier
PCP-02	W106037-01	1-Methylphenanthrene	832-69-9	N	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Chrysene-d12	610-48-0	Y	Oil	Int. Std	40.0	1.0			
PCP-02	W106037-01	5-Methylchrysene	3697-24-3	N	Oil	T	< 100	100			D=10
PCP-02	W106037-01	Terphenyl-d14	1719-03-5	Y	Oil	Surr	251	10	100.4	70-130	D=10
PCP-02	W106037-01	Perylene-d12	1520-96-3	Y	Oil	Int. Std	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

R = %REC failure in a QC sample
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
T = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/30/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project: W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**	Samples Received: 06/04/21
	Portland, OR 97209		Prep/Date: 07/08/21
Attention:	Brian Snuffer		Report Date: 08/30/21
Telephone:	503-314-8589	**Revised Report, Rev. 1**	Sampling Date: 06/03/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.: 0461.03-V.0
			Client Project: JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting Limit	Surr	Rnage	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/kg	mg/kg	%REC	%	Qualifier
OIL-02	W106037-02	1,4-Dichlorobenzene-d4	3855-82-1	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	2-Fluorophenol	367-12-4	Y	Oil	Surr	24.9	0.97	99.6	70-130	
OIL-02	W106037-02	Phenol-d6	13127-88-3	Y	Oil	Surr	26.0	0.97	104	70-130	
OIL-02	W106037-02	2-Methylphenol	95-48-7	Y	Oil	T	< 97	97			D=10
OIL-02	W106037-02	Nitrobenzene-d5	4165-60-0	Y	Oil	Surr	25.6	0.97	102.4	70-130	
OIL-02	W106037-02	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	Naphthalene	91-20-3	Y	Oil	T	18600	490			D=50
OIL-02	W106037-02	2-Methylnaphthalene	91-57-6	Y	Oil	T	1790	97			D=10
OIL-02	W106037-02	1-Methylnaphthalene	90-12-0	Y	Oil	T	986	97			D=10
OIL-02	W106037-02	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	23.8	0.97	95.2	70-130	
OIL-02	W106037-02	Acenaphthylene	208-96-8	Y	Oil	T	3470	97			D=10
OIL-02	W106037-02	Acenaphthene	83-32-9	Y	Oil	T	345	97			D=10
OIL-02	W106037-02	Dibenzofuran	132-64-9	Y	Oil	T	1420	97			D=10
OIL-02	W106037-02	Fluorene	86-73-7	Y	Oil	T	2420	97			D=10
OIL-02	W106037-02	Phenanthrene-d10	1517-22-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	2,4,6-Tribromophenol	118-79-6	Y	Oil	Surr	22.7	0.97	90.8	70-130	
OIL-02	W106037-02	Phenanthrene	85-01-8	Y	Oil	T	9350	97			D=10
OIL-02	W106037-02	Anthracene	120-12-7	Y	Oil	T	2380	97			D=10
OIL-02	W106037-02	Carbazole	86-74-8	Y	Oil	T	1310	97			D=10
OIL-02	W106037-02	Fluoranthene	206-44-0	Y	Oil	T	5970	97			D=10
OIL-02	W106037-02	Chrysene-d12	1719-03-5	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	Pyrene	129-00-0	Y	Oil	T	4850	97			D=10
OIL-02	W106037-02	Terphenyl-d14	1718-51-0	Y	Oil	Surr	24.6	0.97	98.4	70-130	
OIL-02	W106037-02	Benzo (a) anthracene	56-55-3	Y	Oil	T	2670	97			D=10
OIL-02	W106037-02	Chrysene	218-01-9	Y	Oil	T	3680	97			D=10
OIL-02	W106037-02	Perylene-d12	1520-96-3	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	Benzo(b)fluoranthene	205-99-2	Y	Oil	T	1380	97			D=10
OIL-02	W106037-02	Benzo(k)fluoranthene	207-08-9	Y	Oil	T	1360	97			D=10
OIL-02	W106037-02	Benzo(a)pyrene	50-32-8	Y	Oil	T	1980	97			D=10
OIL-02	W106037-02	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	Oil	T	901	97			D=10
OIL-02	W106037-02	Dibenz(a,h)anthracene	53-70-3	Y	Oil	T	< 97	97			D=10
OIL-02	W106037-02	Benzo(g,h,i)perylene	191-24-2	Y	Oil	T	1020	97			D=10
		Secondary PAHs									
OIL-02	W106037-02	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	Quinoline	91-22-5	N	Oil	T	319	97			D=10
OIL-02	W106037-02	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	234	9.7	93.6	70-130	D=10
OIL-02	W106037-02	Biphenyl	92-52-4	N	Oil	T	396	97			D=10
OIL-02	W106037-02	Phenanthrene-d10	2531-84-2	Y	Oil	Int. Std	38.8	0.97			
OIL-02	W106037-02	1-Methylphenanthrene	832-69-9	N	Oil	T	1300	97			D=10

Sample ID								Reporting				
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit mg/kg	Surr %REC	Rnage %	Qualifier
OIL-02	W106037-02	Chrysene-d12	610-48-0	*Y*	Oil	*Int. Std*	38.8	0.97			
OIL-02	W106037-02	5-Methylchrysene	3697-24-3	*N*	Oil	*T*	905	97			D=10
OIL-02	W106037-02	Terphenyl-d14	1719-03-5	*Y*	Oil	*Surr*	227	9.7	90.8	70-130	D=10
OIL-02	W106037-02	Perylene-d12	1520-96-3	*Y*	Oil	*Int. Std*	38.8	0.97			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
T = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/30/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project:	W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**	Samples Received:	06/04/21
	Portland, OR 97209		Prep/Date:	07/08/21
Attention:	Brian Snuffer	**Revised Report, Rev. 1**	Report Date:	08/30/21
Telephone:	503-314-8589		Sampling Date:	06/03/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.:	0461.03-V.0
			Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting Limit	Surr	Range	
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/kg	mg/kg	%REC	%	Qualifier
BLND-02	W106037-03	1,4-Dichlorobenzene-d4	3855-82-1	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	2-Fluorophenol	367-12-4	Y	Oil	Surr	25.1	1.0	100.4	70-130	
BLND-02	W106037-03	Phenol-d6	13127-88-3	Y	Oil	Surr	27.0	1.0	108	70-130	
BLND-02	W106037-03	2-Methylphenol	95-48-7	Y	Oil	T	112	100			D=10
BLND-02	W106037-03	Nitrobenzene-d5	4165-60-0	Y	Oil	Surr	26.3	1.0	105.2	70-130	
BLND-02	W106037-03	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	Naphthalene	91-20-3	Y	Oil	T	21400	500			D=50
BLND-02	W106037-03	2-Methylnaphthalene	91-57-6	Y	Oil	T	30000	500			D=50
BLND-02	W106037-03	1-Methylnaphthalene	90-12-0	Y	Oil	T	15400	500			D=50
BLND-02	W106037-03	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	24.4	1.0	97.6	70-130	
BLND-02	W106037-03	Acenaphthylene	208-96-8	Y	Oil	T	< 100	100			D=10
BLND-02	W106037-03	Acenaphthene	83-32-9	Y	Oil	T	40000	500			D=50
BLND-02	W106037-03	Dibenzofuran	132-64-9	Y	Oil	T	23200	500			D=50
BLND-02	W106037-03	Fluorene	86-73-7	Y	Oil	T	21700	500			D=50
BLND-02	W106037-03	Phenanthrene-d10	1517-22-2	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	2,4,6-Tribromophenol	118-79-6	Y	Oil	Surr	37.9	1.0	151.6	70-130	S
BLND-02	W106037-03	Phenanthrene	85-01-8	Y	Oil	T	54400	2500			D=250
BLND-02	W106037-03	Anthracene	120-12-7	Y	Oil	T	6750	500			D=50
BLND-02	W106037-03	Carbazole	86-74-8	Y	Oil	T	7970	100			D=10
BLND-02	W106037-03	Fluoranthene	206-44-0	Y	Oil	T	40100	500			D=50
BLND-02	W106037-03	Chrysene-d12	1719-03-5	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	Pyrene	129-00-0	Y	Oil	T	24700	500			D=50
BLND-02	W106037-03	Terphenyl-d14	1718-51-0	Y	Oil	Surr	25.6	1.0	102.4	70-130	
BLND-02	W106037-03	Benzo (a) anthracene	56-55-3	Y	Oil	T	6430	100			D=10
BLND-02	W106037-03	Chrysene	218-01-9	Y	Oil	T	5900	100			D=10
BLND-02	W106037-03	Perylene-d12	1520-96-3	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	Benzo(b)fluoranthene	205-99-2	Y	Oil	T	1840	100			D=10
BLND-02	W106037-03	Benzo(k)fluoranthene	207-08-9	Y	Oil	T	1980	100			D=10
BLND-02	W106037-03	Benzo(a)pyrene	50-32-8	Y	Oil	T	1820	100			D=10
BLND-02	W106037-03	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	Oil	T	576	100			D=10
BLND-02	W106037-03	Dibenz(a,h)anthracene	53-70-3	Y	Oil	T	< 100	100			D=10
BLND-02	W106037-03	Benzo(g,h,i)perylene	191-24-2	Y	Oil	T	564	100			D=10
		Secondary PAHs									
BLND-02	W106037-03	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	Quinoline	91-22-5	N	Oil	T	8300	100			D=10
BLND-02	W106037-03	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.1	1.0			
BLND-02	W106037-03	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	244	10	97.6	70-130	D=10
BLND-02	W106037-03	Biphenyl	92-52-4	N	Oil	T	8450	100			D=10

BLND-02	W106037-03	Phenanthrene-d10	2531-84-2	*Y*	Oil	*Int. Std*	40.1	1.0			
BLND-02	W106037-03	1-Methylphenanthrene	832-69-9	*N*	Oil	*T*	1280	100			D=10
BLND-02	W106037-03	Chrysene-d12	610-48-0	*Y*	Oil	*Int. Std*	40.1	1.0			
BLND-02	W106037-03	5-Methylchrysene	3697-24-3	*N*	Oil	*T*	381	100			D=10
BLND-02	W106037-03	Terphenyl-d14	1719-03-5	*Y*	Oil	*Surr*	234	10	93.6	70-130	D=10
BLND-02	W106037-03	Perylene-d12	1520-96-3	*Y*	Oil	*Int. Std*	40.1	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
T = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/30/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client: Maul Foster & Alongi, Inc.
Address: 2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Attention: Brian Snuffer
Telephone: 503-314-8589
e-mail: bsnuffer@maulfoster.com

LABORATORY REPORT
EPA 8270D

Revised Report, Rev. 1

RJ Lee Group Project: W106037
Samples Received: 06/04/21
Prep/Date: 07/08/21
Report Date: 08/30/21
Sampling Date: 06/03/21
Purchase Order No.: 0461.03-V.0
Client Project: JH Baxter & Co.

Sample ID								Reporting			
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	Surr %REC	Range %	Qualifier
PCPHW-02	W106037-05	1,4-Dichlorobenzene-d4	3855-82-1	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	2-Fluorophenol	367-12-4	Y	Oil	Surr	25.5	1.0	102	70-130	
PCPHW-02	W106037-05	Phenol-d6	13127-88-3	Y	Oil	Surr	26.1	1.0	104.4	70-130	
PCPHW-02	W106037-05	Nitrobenzene-d5	4165-60-0	Y	Oil	Surr	28.5	1.0	114	70-130	
PCPHW-02	W106037-05	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	Naphthalene	91-20-3	Y	Oil	T	16500	480			D=50
PCPHW-02	W106037-05	2-Methylnaphthalene	91-57-6	Y	Oil	T	5910	96			D=10
PCPHW-02	W106037-05	1-Methylnaphthalene	90-12-0	Y	Oil	T	2500	96			D=10
PCPHW-02	W106037-05	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	24.6	1.0	98.4	70-130	
PCPHW-02	W106037-05	Acenaphthylene	208-96-8	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Acenaphthene	83-32-9	Y	Oil	T	755	96			D=10
PCPHW-02	W106037-05	Dibenzofuran	132-64-9	Y	Oil	T	352	96			D=10
PCPHW-02	W106037-05	Fluorene	86-73-7	Y	Oil	T	198	96			D=10
PCPHW-02	W106037-05	Phenanthrene-d10	1517-22-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	2,4,6-Tribromophenol	118-79-6	Y	Oil	Surr	26.1	1.0	104.4	70-130	
PCPHW-02	W106037-05	Pentachlorophenol	87-86-5	Y	Oil	T	37800	480			D=50
PCPHW-02	W106037-05	Phenanthrene	85-01-8	Y	Oil	T	118	96			D=10
PCPHW-02	W106037-05	Anthracene	120-12-7	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Carbazole	86-74-8	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Fluoranthene	206-44-0	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Chrysene-d12	1719-03-5	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	Pyrene	129-00-0	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Terphenyl-d14	1718-51-0	Y	Oil	Surr	25.9	1.0	103.6	70-130	
PCPHW-02	W106037-05	Benzo (a) anthracene	56-55-3	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Chrysene	218-01-9	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Perylene-d12	1520-96-3	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	Benzo(b)fluoranthene	205-99-2	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Benzo(k)fluoranthene	207-08-9	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Benzo(a)pyrene	50-32-8	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Dibenz(a,h)anthracene	53-70-3	Y	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Benzo(g,h,i)perylene	191-24-2	Y	Oil	T	< 96	96			D=10
		Secondary PAHs									
PCPHW-02	W106037-05	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	Quinoline	91-22-5	N	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	241	10	96.4	70-130	D=10
PCPHW-02	W106037-05	Biphenyl	92-52-4	N	Oil	T	< 96	96			D=10
PCPHW-02	W106037-05	Phenanthrene-d10	2531-84-2	Y	Oil	Int. Std	40.0	1.0			
PCPHW-02	W106037-05	1-Methylphenanthrene	832-69-9	N	Oil	T	< 96	96			D=10

Sample ID								Reporting			
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	Surr %REC	Range %	Qualifier
PCPHW-02	W106037-05	Chrysene-d12	610-48-0	*Y*	Oil	*Int. Std*	40.0	1.0			
PCPHW-02	W106037-05	5-Methylchrysene	3697-24-3	*N*	Oil	*T*	< 96	96			D=10
PCPHW-02	W106037-05	Terphenyl-d14	1719-03-5	*Y*	Oil	*Surr*	232	10	92.8	70-130	D=10
PCPHW-02	W106037-05	Perylene-d12	1520-96-3	*Y*	Oil	*Int. Std*	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

R = %REC failure in a QC sample
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
T = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/30/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

RJ Lee*Group*, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project:	W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA 8270D**	Samples Received:	06/04/21
	Portland, OR 97209		Prep/Date:	07/08/21
Attention:	Brian Snuffer		Report Date:	08/30/21
Telephone:	503-314-8589	**Revised Report, Rev. 1**	Sampling Date:	06/03/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.:	0461.03-V.0
			Client Project:	JH Baxter & Co.

Sample ID			CAS	Cmpd			Result	Reporting Limit	Surr		
Client	RJLG	Analyte	Number	Accredited	Matrix	Type	mg/kg	(mg/kg)	%REC	Range %	Qualifier
OWSPCP-02	W106037-08	1,4-Dichlorobenzene-d4	3855-82-1	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	2-Fluorophenol	367-12-4	Y	Oil	Surr	21.0	1.0	84	70-130	
OWSPCP-02	W106037-08	Phenol-d6	13127-88-3	Y	Oil	Surr	25.4	1.0	101.6	70-130	
OWSPCP-02	W106037-08	Nitrobenzene-d5	4165-60-0	Y	Oil	Surr	26.6	1.0	106.4	70-130	
OWSPCP-02	W106037-08	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	Naphthalene	91-20-3	Y	Oil	T	1150	98			D=10
OWSPCP-02	W106037-08	2-Methylnaphthalene	91-57-6	Y	Oil	T	563	98			D=10
OWSPCP-02	W106037-08	1-Methylnaphthalene	90-12-0	Y	Oil	T	296	98			D=10
OWSPCP-02	W106037-08	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	24.3	1.0	97.2	70-130	
OWSPCP-02	W106037-08	Acenaphthylene	208-96-8	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Acenaphthene	83-32-9	Y	Oil	T	177	98			D=10
OWSPCP-02	W106037-08	Dibenzofuran	132-64-9	Y	Oil	T	138	98			D=10
OWSPCP-02	W106037-08	Fluorene	86-73-7	Y	Oil	T	113	98			D=10
OWSPCP-02	W106037-08	Phenanthrene-d10	1517-22-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	2,4,6-Tribromophenol	118-79-6	Y	Oil	Surr	17.3	1.0	69.2	70-130	S
OWSPCP-02	W106037-08	Pentachlorophenol	87-86-5	Y	Oil	T	67100	2500			D=250
OWSPCP-02	W106037-08	Phenanthrene	85-01-8	Y	Oil	T	164	98			D=10
OWSPCP-02	W106037-08	Anthracene	120-12-7	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Carbazole	86-74-8	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Fluoranthene	206-44-0	Y	Oil	T	119	98			D=10
OWSPCP-02	W106037-08	Chrysene-d12	1719-03-5	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	Pyrene	129-00-0	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Terphenyl-d14	1718-51-0	Y	Oil	Surr	27.5	1.0	110	70-130	
OWSPCP-02	W106037-08	Benzo (a) anthracene	56-55-3	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Chrysene	218-01-9	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Perylene-d12	1520-96-3	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	Benzo(b)fluoranthene	205-99-2	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Benzo(k)fluoranthene	207-08-9	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Benzo(a)pyrene	50-32-8	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Indeno(1,2,3-c,d)pyrene	193-39-5	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Dibenz(a,h)anthracene	53-70-3	Y	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Benzo(g,h,i)perylene	191-24-2	Y	Oil	T	< 98	98			D=10
		Secondary PAHs									
OWSPCP-02	W106037-08	Naphthalene-d8	1146-65-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	Quinoline	91-22-5	N	Oil	T	115	98			D=10
OWSPCP-02	W106037-08	Acenaphthene-d10	15067-26-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	2-Fluorobiphenyl	321-60-8	Y	Oil	Surr	241	10	96.4	70-130	D=10
OWSPCP-02	W106037-08	Biphenyl	92-52-4	N	Oil	T	< 98	98			D=10
OWSPCP-02	W106037-08	Phenanthrene-d10	2531-84-2	Y	Oil	Int. Std	40.0	1.0			
OWSPCP-02	W106037-08	1-Methylphenanthrene	832-69-9	N	Oil	T	< 98	98			D=10

Sample ID								Reporting				
Client	RJLG	Analyte	CAS Number	Cmpd Accredited	Matrix	Type	Result mg/kg	Limit (mg/kg)	Surr %REC	Range %	Qualifier
OWSPCP-02	W106037-08	Chrysene-d12	610-48-0	*Y*	Oil	*Int. Std*	40.0	1.0			
OWSPCP-02	W106037-08	5-Methylchrysene	3697-24-3	*N*	Oil	*T*	< 98	98			D=10
OWSPCP-02	W106037-08	Terphenyl-d14	1719-03-5	*Y*	Oil	*Surr*	253	10	101.2	70-130	D=10
OWSPCP-02	W106037-08	Perylene-d12	1520-96-3	*Y*	Oil	*Int. Std*	40.0	1.0			

Comments: Reporting Limits have been adjusted for sample weight and dilution factors.

mg/L = milligrams per liter (ppm)

N/A = Not Applicable
Int. STD. = Internal Standard

Surr = Surrogate Compound
T = Target Analyte

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
r = %REC failure in the MRL
p = Positively identified compound, for non-calibrated compounds
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be con
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
T = Compound is tentatively identified compound. Includes both chemical library matches, chemist identified compounds, and unknowns. (Library spectrum match w/o RT match)
X = Detected but not quantifiable

Authorized Signature: _____ Date: 08/30/21
Laboratory Technical Manager - Joe Sears, Ph.D

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ LeeGroup, Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Client:	Maul Foster & Alongi, Inc.	**LABORATORY REPORT**	RJ Lee Group Project:	W106037
Address:	2001 NW 19th Avenue, Suite 200	**EPA Method TO-11A - Modified**	CoC No.:	-
	Portland, OR 97209		Samples Received:	06/04/21
Attention:	Brian Snuffer	**Revised Report, Rev. 1**	Prep Date:	07/13/21
Telephone:	503-314-8589		Report Date:	08/30/21
e-mail:	bsnuffer@maulfoster.com		Purchase Order No.:	046.03-V.0
			Client Project:	JH Baxter & Co.

Sample ID			CAS	Sampling		Analysis	Report	Report		
Client	RJLG	Analyte	Number	Date	Matrix	Date	Units	Limit	Result	Qualifier
HOHW-02	W106037-06	Formaldehyde	50-00-0	06/03/21	NPW	07/13/21	mg/L	0.25	2.18	
HOHW-02	W106037-06	Acetaldehyde	75-07-0	06/03/21	NPW	07/13/21	mg/L	0.25	24.68	
HOHW-02	W106037-06	Acrolein	107-02-8	06/03/21	NPW	07/13/21	mg/L	0.25	<0.25	
HOHW-02	W106037-06	Propanal	123-38-6	06/03/21	NPW	07/13/21	mg/L	0.25	2.51	
HOHW-02	W106037-06 Dup	Formaldehyde	50-00-0	06/03/21	NPW	07/13/21	mg/L	0.25	2.29	
HOHW-02	W106037-06 Dup	Acetaldehyde	75-07-0	06/03/21	NPW	07/13/21	mg/L	0.25	25.41	
HOHW-02	W106037-06 Dup	Acrolein	107-02-8	06/03/21	NPW	07/13/21	mg/L	0.25	<0.25	
HOHW-02	W106037-06 Dup	Propanal	123-38-6	06/03/21	NPW	07/13/21	mg/L	0.25	2.62	

Comments: Sample results and reporting limits have been adjusted for desorption efficiency, method blanks, analysis volumes, and dilution factors.

Qualifiers

B = Compound found in associated laboratory bl
E = Report concentration was above the instrum
J = Reported concentration was estimated
r = %REC failure in RL or MRL
S = Spike recovery outside accepted limits
R = %REC failure in CCV or LCS
d= Data that exceeds the RSD criteria set by the method
D = Sample extract was diluted

Authorized Signature: L Joseph Seaw Date: 08/30/21

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

RJ Lee*Group* , Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

QUALITY CONTROL REPORT
EPA 8270D
Oils

Revised Report, Rev. 1

RJ Lee Group Job No.: W106037
Samples Received: 6/4/2021
Analysis/Prep Date 7/8/2021
Report Date: 8/30/2021
Client Project: JH Baxter & Co.
COC No.: 0461.03-V.0

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV	12.648	37833839	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV	8.074	28359447	25.0	25.4	102	80-120		
Phenol-d6	13127-88-3	Surr	CCV	12.136	29949983	25.0	25.4	102	80-120		
2-Methylphenol	95-48-7	T	CCV	14.585	19349951	25.0	23.5	94.0	80-120		
Nitrobenzene-d5	4165-60-0	Surr	CCV	16.430	29325428	25.0	26.2	105	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV	18.985	137546478	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV	19.082	88863912	25.0	25.1	100	80-120		
2-Methylnaphthalene	91-57-6	T	CCV	22.197	70126071	25.0	24.9	99.6	80-120		
1-Methylnaphthalene	90-12-0	T	CCV	22.825	56401541	25.0	24.9	99.6	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV	27.713	80480872	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV	24.149	66558812	25.0	24.0	96.0	80-120		
Acenaphthylene	208-96-8	T	CCV	27.221	86235949	25.0	24.4	97.6	80-120		
Acenaphthene	83-32-9	T	CCV	27.887	52771567	25.0	26.0	104	80-120		
Dibenzofuran	132-64-9	T	CCV	28.641	90343897	25.0	24.6	98.4	80-120		
Fluorene	86-73-7	T	CCV	30.452	65731795	25.0	25.3	101	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV	35.538	142504900	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV	32.123	12954853	25.0	23.7	94.8	80-120		
Pentachlorophenol	87-86-5	T	CCV	34.466	6242092	25.0	22.6	90.4	80-120		
Phenanthrene	85-01-8	T	CCV	35.649	92633498	25.0	24.7	98.8	80-120		
Anthracene	120-12-7	T	CCV	35.862	93545558	25.0	25.0	100	80-120		
Carbazole	86-74-8	T	CCV	37.721	70013428	25.0	23.3	93.2	80-120		
Fluoranthene	206-44-0	T	CCV	41.764	100768932	25.0	25.5	102	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV	49.391	126703348	40.0	40.0	100			
Pyrene	129-00-0	T	CCV	43.059	104847834	25.0	24.3	97.2	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV	43.667	79011278	25.0	24.1	96.4	80-120		
Benzo (a) anthracene	56-55-3	T	CCV	49.227	90757318	25.0	24.6	98.4	80-120		
Chrysene	218-01-9	T	CCV	49.521	91270194	25.0	25.1	100	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV	56.515	108998014	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV	54.482	91495593	25.0	24.7	98.8	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV	54.612	92424949	25.0	25.5	102	80-120		
Benzo(a)pyrene	50-32-8	T	CCV	56.153	85485632	25.0	24.7	98.8	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV	60.645	89316006	25.0	23.4	93.6	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV	60.703	74708602	25.0	23.6	94.4	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV	61.930	74031350	25.0	23.0	92.0	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV	19.036	91166801	40.0	40.0	100			
Quinoline	91-22-5	T	CCV	21.502	31912036	25.0	22.2	88.8	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV	27.767	57522013	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV	24.203	43655792	25.0	21.5	86.0	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV	35.584	97470489	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV	38.710	52188183	25.0	25.6	102	80-120		

Chrysene-d12	1719-03-5	Int. Std	CCV	49.436	78264661	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV	51.644	41200916	25.0	23.9	95.6	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV	43.726	50474236	25.0	23.5	94.0	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV	56.565	64183834	40.0	40.0	100			
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected ug/mL**	**Result ug/mL**	**%REC**	**Range %**	**%RPD**	**Qualifier**
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB	12.699	19799580	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CB								
Phenol-d6	13127-88-3	Surr	CB								
2-Methylphenol	95-48-7	T	CB								
Nitrobenzene-d5	4165-60-0	Surr	CB								
Naphthalene-d8	1146-65-2	Int. Std	CB	19.041	96447342	40.0	40.0	100			
Naphthalene	91-20-3	T	CB								
2-Methylnaphthalene	91-57-6	T	CB								
1-Methylnaphthalene	90-12-0	T	CB								
Acenaphthene-d10	15067-26-2	Int. Std	CB	27.767	61879587	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CB								
Acenaphthylene	208-96-8	T	CB								
Acenaphthene	83-32-9	T	CB								
Dibenzofuran	132-64-9	T	CB								
Fluorene	86-73-7	T	CB								
Phenanthrene-d10	1517-22-2	Int. Std	CB	35.588	101754277	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB								
Pentachlorophenol	87-86-5	T	CB								
Phenanthrene	85-01-8	T	CB								
Anthracene	120-12-7	T	CB								
Carbazole	86-74-8	T	CB								
Fluoranthene	206-44-0	T	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	49.436	80197921	40.0	40.0	100			
Pyrene	129-00-0	T	CB								
Terphenyl-d14	1718-51-0	Surr	CB								
Benzo (a) anthracene	56-55-3	T	CB								
Chrysene	218-01-9	T	CB								
Perylene-d12	1520-96-3	Int. Std	CB	56.565	66850552	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CB								
Benzo(k)fluoranthene	207-08-9	T	CB								
Benzo(a)pyrene	50-32-8	T	CB								
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB								
Dibenz(a,h)anthracene	53-70-3	T	CB								
Benzo(g,h,i)perylene	191-24-2	T	CB								
Naphthalene-d8	1146-65-2	Int. Std	CB	19.041	96447342		40.0				
Quinoline	91-22-5	T	CB								
Acenaphthene-d10	15067-26-2	Int. Std	CB	27.767	61879587		40.0				
2-Fluorobiphenyl	321-60-8	Surr	CB								
Phenanthrene-d10	1517-22-2	Int. Std	CB	35.588	101754277		40.0				
1-Methylphenanthrene	832-69-9	T	CB								
Chrysene-d12	1719-03-5	Int. Std	CB	49.436	80197921		40.0				
5-Methylchrysene	3697-24-3	T	CB								
Terphenyl-d14	1718-51-0	Surr	CB								
Perylene-d12	1520-96-3	Int. Std	CB	56.565	66850552		40.0				

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	RL	12.642	28152329	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	RL	8.160	455710	1.00	1.36	136	60-140		
Phenol-d6	13127-88-3	Surr	RL	12.183	689252	1.00	0.790	79.0	60-140		
2-Methylphenol	95-48-7	T	RL	14.613	679325	1.00	1.11	111	60-140		
Nitrobenzene-d5	4165-60-0	Surr	RL	16.448	692442	1.00	1.27	127	60-140		
Naphthalene-d8	1146-65-2	Int. Std	RL	18.974	102561454	40.0	40.0	100			
Naphthalene	91-20-3	T	RL	19.066	2458385	1.00	0.860	86.0	60-140		
2-Methylnaphthalene	91-57-6	T	RL	22.220	1795527	1.00	0.930	93.0	60-140		
1-Methylnaphthalene	90-12-0	T	RL	22.834	1506440	1.00	1.36	136	60-140		
Acenaphthene-d10	15067-26-2	Int. Std	RL	27.702	58493929	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	RL	24.152	1663196	1.00	0.990	99.0	60-140		
Acenaphthylene	208-96-8	T	RL	27.215	2043962	1.00	1.13	113	60-140		
Acenaphthene	83-32-9	T	RL	27.872	1401245	1.00	0.950	95.0	60-140		
Dibenzofuran	132-64-9	T	RL	28.664	2057771	1.00	1.24	124	60-140		
Fluorene	86-73-7	T	RL	30.451	1647696	1.00	1.16	116	60-140		
Phenanthrene-d10	1517-22-2	Int. Std	RL	35.513	101008631	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	RL	32.170	140717	1.00	1.84	184	60-140		S
Pentachlorophenol	87-86-5	T	RL					#VALUE!	60-140		R
Phenanthrene	85-01-8	T	RL	35.638	2199689	1.00	0.940	94.0	60-140		
Anthracene	120-12-7	T	RL	35.865	1921629	1.00	1.00	100	60-140		
Carbazole	86-74-8	T	RL	37.754	1387756	1.00	1.17	117	60-140		
Fluoranthene	206-44-0	T	RL	41.773	2119612	1.00	1.11	111	60-140		
Chrysene-d12	1719-03-5	Int. Std	RL	49.370	82166122	40.0	40.0	100			
Pyrene	129-00-0	T	RL	43.062	2449387	1.00	0.520	52.0	60-140		R
Terphenyl-d14	1718-51-0	Surr	RL	43.676	1755113	1.00	1.13	113	60-140		
Benzo (a) anthracene	56-55-3	T	RL	49.211	1670971	1.00	1.38	138	60-140		
Chrysene	218-01-9	T	RL	49.506	2143704	1.00	1.17	117	60-140		
Perylene-d12	1520-96-3	Int. Std	RL	56.495	73120400	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	RL	54.486	1675951	1.00	1.45	145	60-140		R
Benzo(k)fluoranthene	207-08-9	T	RL	54.606	1934300	1.00	1.22	122	60-140		
Benzo(a)pyrene	50-32-8	T	RL	56.142	1652540	1.00	1.39	139	60-140		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	RL	60.736	1551483	1.00	1.47	147	60-140		R
Dibenz(a,h)anthracene	53-70-3	T	RL	60.803	1136148	1.00	1.58	158	60-140		R
Benzo(g,h,i)perylene	191-24-2	T	RL	61.996	1564061	1.00	1.23	123	60-140		
Analyte	**CAS No.**	**QC Analyte Type**	**QC Sample Type**	**Ret. Time**	**Peak Area**	**Expected mg/Kg**	**Result mg/Kg**	**%REC**	**Range %**	**%RPD**	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCS	12.651	28872969	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	LCS	8.125	21674043	25.0	25.4	102	70-130		
Phenol-d6	13127-88-3	Surr	LCS	12.148	23222348	25.0	25.9	104	70-130		
2-Methylphenol	95-48-7	T	LCS	14.592	14190249	25.0	22.6	90.4	70-130		
Nitrobenzene-d5	4165-60-0	Surr	LCS	16.437	23046085	25.0	26.9	108	70-130		
Naphthalene-d8	1146-65-2	Int. Std	LCS	18.993	107063039	40.0	40.0	100			
Naphthalene	91-20-3	T	LCS	19.089	70092230	25.0	25.4	102	70-130		
2-Methylnaphthalene	91-57-6	T	LCS	22.205	56957942	25.0	25.9	104	70-130		
1-Methylnaphthalene	90-12-0	T	LCS	22.833	44957059	25.0	25.5	102	70-130		
Acenaphthene-d10	15067-26-2	Int. Std	LCS	27.711	63773883	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	LCS	24.151	54004693	25.0	24.6	98.4	70-130		
Acenaphthylene	208-96-8	T	LCS	27.223	69212349	25.0	24.7	98.8	70-130		
Acenaphthene	83-32-9	T	LCS	27.880	42718261	25.0	26.6	106	70-130		
Dibenzofuran	132-64-9	T	LCS	28.653	72150698	25.0	24.8	99.2	70-130		

Fluorene	86-73-7	T	LCS	30.454	52304011	25.0	25.4	102	70-130		
Phenanthrene-d10	1517-22-2	Int. Std	LCS	35.526	112522332	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	LCS	32.116	10565660	25.0	24.5	98.0	70-130		
Pentachlorophenol	87-86-5	T	LCS	34.463	4928189	25.0	22.6	90.4	70-130		
Phenanthrene	85-01-8	T	LCS	35.647	75399769	25.0	25.5	102	70-130		
Anthracene	120-12-7	T	LCS	35.864	74919541	25.0	25.4	102	70-130		
Carbazole	86-74-8	T	LCS	37.714	54850733	25.0	23.1	92.4	70-130		
Fluoranthene	206-44-0	T	LCS	41.762	79967263	25.0	25.6	102	70-130		
Chrysene-d12	1719-03-5	Int. Std	LCS	49.384	94658576	40.0	40.0	100			
Pyrene	129-00-0	T	LCS	43.061	80187089	25.0	24.9	99.6	70-130		
Terphenyl-d14	1718-51-0	Surr	LCS	43.670	61583075	25.0	25.2	101	70-130		
Benzo (a) anthracene	56-55-3	T	LCS	49.224	68404976	25.0	24.8	99.2	70-130		
Chrysene	218-01-9	T	LCS	49.524	69426410	25.0	25.6	102	70-130		
Perylene-d12	1520-96-3	Int. Std	LCS	56.508	80768096	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	LCS	54.480	69832368	25.0	25.4	102	70-130		
Benzo(k)fluoranthene	207-08-9	T	LCS	54.605	69189695	25.0	25.8	103	70-130		
Benzo(a)pyrene	50-32-8	T	LCS	56.146	64903347	25.0	25.3	101	70-130		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCS	60.643	65375065	25.0	23.2	92.8	70-130		
Dibenz(a,h)anthracene	53-70-3	T	LCS	60.706	54254398	25.0	23.2	92.8	70-130		
Benzo(g,h,i)perylene	191-24-2	T	LCS	61.918	54721941	25.0	22.9	91.6	70-130		

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	LCSD	12.655	29508454	40.0	40.0	100		0.00	
2-Fluorophenol	367-12-4	Surr	LCSD	8.120	21965463	25.0	25.2	101	70-130	0.99	
Phenol-d6	13127-88-3	Surr	LCSD	12.153	23768491	25.0	25.9	104	70-130	0.00	
2-Methylphenol	95-48-7	T	LCSD	14.582	13317628	25.0	20.7	82.8	70-130	8.78	
Nitrobenzene-d5	4165-60-0	Surr	LCSD	16.432	22879371	25.0	26.2	105	70-130	2.82	
Naphthalene-d8	1146-65-2	Int. Std	LCSD	18.988	109317679	40.0	40.0	100		0.00	
Naphthalene	91-20-3	T	LCSD	19.089	71742864	25.0	25.5	102	70-130	0.00	
2-Methylnaphthalene	91-57-6	T	LCSD	22.200	55962446	25.0	25.0	100	70-130	3.92	
1-Methylnaphthalene	90-12-0	T	LCSD	22.823	45852307	25.0	25.5	102	70-130	0.00	
Acenaphthene-d10	15067-26-2	Int. Std	LCSD	27.711	65242190	40.0	40.0	100		0.00	
2-Fluorobiphenyl	321-60-8	Surr	LCSD	24.151	55210000	25.0	24.5	98.0	70-130	0.41	
Acenaphthylene	208-96-8	T	LCSD	27.218	70964116	25.0	24.8	99.2	70-130	0.40	
Acenaphthene	83-32-9	T	LCSD	27.875	43403129	25.0	26.4	106	70-130	0.00	
Dibenzofuran	132-64-9	T	LCSD	28.643	74385710	25.0	25.0	100	70-130	0.80	
Fluorene	86-73-7	T	LCSD	30.454	54036075	25.0	25.6	102	70-130	0.00	
Phenanthrene-d10	1517-22-2	Int. Std	LCSD	35.536	114969261	40.0	40.0	100		0.00	
2,4,6-Tribromophenol	118-79-6	Surr	LCSD	32.121	10950258	25.0	24.8	99.2	70-130	1.22	
Pentachlorophenol	87-86-5	T	LCSD	34.463	5333781	25.0	23.7	94.8	70-130	4.75	
Phenanthrene	85-01-8	T	LCSD	35.647	76820831	25.0	25.4	102	70-130	0.00	
Anthracene	120-12-7	T	LCSD	35.864	77734986	25.0	25.7	103	70-130	0.98	
Carbazole	86-74-8	T	LCSD	37.714	59823857	25.0	24.6	98.4	70-130	6.29	
Fluoranthene	206-44-0	T	LCSD	41.757	83120942	25.0	26.0	104	70-130	1.94	
Chrysene-d12	1719-03-5	Int. Std	LCSD	49.384	101816879	40.0	40.0	100		0.00	
Pyrene	129-00-0	T	LCSD	43.056	86953051	25.0	25.1	100	70-130	0.40	
Terphenyl-d14	1718-51-0	Surr	LCSD	43.674	65783103	25.0	25.0	100	70-130	1.00	
Benzo (a) anthracene	56-55-3	T	LCSD	49.224	75014584	25.0	25.3	101	70-130	1.80	
Chrysene	218-01-9	T	LCSD	49.524	75376038	25.0	25.8	103	70-130	0.98	
Perylene-d12	1520-96-3	Int. Std	LCSD	56.508	90547486	40.0	40.0	100		0.00	
Benzo(b)fluoranthene	205-99-2	T	LCSD	54.479	76515920	25.0	24.9	99.6	70-130	2.38	
Benzo(k)fluoranthene	207-08-9	T	LCSD	54.605	77814830	25.0	25.9	104	70-130	0.97	
Benzo(a)pyrene	50-32-8	T	LCSD	56.146	73233851	25.0	25.5	102	70-130	0.99	
Indeno(1,2,3-c,d)pyrene	193-39-5	T	LCSD	60.643	78610149	25.0	24.8	99.2	70-130	6.67	
Dibenz(a,h)anthracene	53-70-3	T	LCSD	60.701	65354569	25.0	24.8	99.2	70-130	6.67	
Benzo(g,h,i)perylene	191-24-2	T	LCSD	61.918	65155313	25.0	24.3	97.2	70-130	5.93	

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	MRL	12.639	29657902	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	MRL	8.152	478460	1.00	1.35	135	60-140		
Phenol-d6	13127-88-3	Surr	MRL	12.180	775894	1.00	0.840	84.0	60-140		
2-Methylphenol	95-48-7	T	MRL	14.620	736193	1.00	1.14	114	60-140		
Nitrobenzene-d5	4165-60-0	Surr	MRL	16.460	631115	1.00	1.16	116	60-140		
Naphthalene-d8	1146-65-2	Int. Std	MRL	18.981	108837012	40.0	40.0	100			
Naphthalene	91-20-3	T	MRL	19.073	2687652	1.00	0.890	89.0	60-140		
2-Methylnaphthalene	91-57-6	T	MRL	22.227	1885210	1.00	0.920	92.0	60-140		
1-Methylnaphthalene	90-12-0	T	MRL	22.840	1594632	1.00	1.36	136	60-140		
Acenaphthene-d10	15067-26-2	Int. Std	MRL	27.709	64318255	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	MRL	24.154	1838109	1.00	0.990	99.0	60-140		
Acenaphthylene	208-96-8	T	MRL	27.217	2208467	1.00	1.12	112	60-140		
Acenaphthene	83-32-9	T	MRL	27.878	1563823	1.00	0.970	97.0	60-140		

Dibenzofuran	132-64-9	T	MRL	28.666	2251795	1.00	1.24	124	60-140		
Fluorene	86-73-7	T	MRL	30.462	1737179	1.00	1.13	113	60-140		
Phenanthrene-d10	1517-22-2	Int. Std	MRL	35.524	109748865	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	MRL	32.187	166479	1.00	1.87	187	60-140		S
Pentachlorophenol	87-86-5	T	MRL					#VALUE!	60-140		R
Phenanthrene	85-01-8	T	MRL	35.645	2527032	1.00	0.980	98.0	60-140		
Anthracene	120-12-7	T	MRL	35.863	2286851	1.00	1.07	107	60-140		
Carbazole	86-74-8	T	MRL	37.756	1684134	1.00	1.24	124	60-140		
Fluoranthene	206-44-0	T	MRL	41.789	2324271	1.00	1.12	112	60-140		
Chrysene-d12	1719-03-5	Int. Std	MRL	49.382	95383341	40.0	40.0	100			
Pyrene	129-00-0	T	MRL	43.069	2701231	1.00	0.470	47.0	60-140		R
Terphenyl-d14	1718-51-0	Surr	MRL	43.692	1831768	1.00	1.05	105	60-140		
Benzo (a) anthracene	56-55-3	T	MRL	49.223	1784433	1.00	1.32	132	60-140		
Chrysene	218-01-9	T	MRL	49.513	2417872	1.00	1.14	114	60-140		
Perylene-d12	1520-96-3	Int. Std	MRL	56.502	80934436	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	MRL	54.483	1762669	1.00	1.42	142	60-140		R
Benzo(k)fluoranthene	207-08-9	T	MRL	54.608	1673860	1.00	1.05	105	60-140		
Benzo(a)pyrene	50-32-8	T	MRL	56.139	1660474	1.00	1.32	132	60-140		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	MRL	60.718	1433922	1.00	1.37	137	60-140		
Dibenz(a,h)anthracene	53-70-3	T	MRL	60.801	1449333	1.00	1.66	166	60-140		R
Benzo(g,h,i)perylene	191-24-2	T	MRL					#VALUE!	60-140		R

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected mg/Kg	Result mg/Kg	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	BLK	12.635	44200908	40.0	40	100			
2-Fluorophenol	367-12-4	Surr	BLK			0.00	0				
Phenol-d6	13127-88-3	Surr	BLK			0.00	0				
2-Methylphenol	95-48-7	T	BLK			0.00	0				
Nitrobenzene-d5	4165-60-0	Surr	BLK			0.00	0				
Naphthalene-d8	1146-65-2	Int. Std	BLK	18.977	163581242	40.0	40	100			
Naphthalene	91-20-3	T	BLK			0.00	0				
2-Methylnaphthalene	91-57-6	T	BLK			0.00	0				
1-Methylnaphthalene	90-12-0	T	BLK			0.00	0				
Acenaphthene-d10	15067-26-2	Int. Std	BLK	27.700	97139855	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	BLK			0.00	0				
Acenaphthylene	208-96-8	T	BLK			0.00	0				
Acenaphthene	83-32-9	T	BLK			0.00	0				
Dibenzofuran	132-64-9	T	BLK			0.00	0				
Fluorene	86-73-7	T	BLK			0.00	0				
Phenanthrene-d10	1517-22-2	Int. Std	BLK	35.515	165550126	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	BLK			0.00	0				
Pentachlorophenol	87-86-5	T	BLK			0.00	0				
Phenanthrene	85-01-8	T	BLK			0.00	0				
Anthracene	120-12-7	T	BLK			0.00	0				
Carbazole	86-74-8	T	BLK			0.00	0				
Fluoranthene	206-44-0	T	BLK			0.00	0				
Chrysene-d12	1719-03-5	Int. Std	BLK	49.377	141905231	40.0	40	100			
Pyrene	129-00-0	T	BLK			0.00	0				
Terphenyl-d14	1718-51-0	Surr	BLK			0.00	0				
Benzo (a) anthracene	56-55-3	T	BLK	49.377	197026	0.00	0.75				
Chrysene	218-01-9	T	BLK			0.00	0				
Perylene-d12	1520-96-3	Int. Std	BLK	56.512	121650662	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	BLK			0.00	0				

Benzo(k)fluoranthene	207-08-9	T	BLK			0.00	0				
Benzo(a)pyrene	50-32-8	T	BLK			0.00	0				
Indeno(1,2,3-c,d)pyrene	193-39-5	T	BLK			0.00	0				
Dibenz(a,h)anthracene	53-70-3	T	BLK			0.00	0				
Benzo(g,h,i)perylene	191-24-2	T	BLK			0.00	0				
							0				
Naphthalene-d8	1146-65-2	Int. Std	BLK	19.038	91615238	40.0	40	100			
Quinoline	91-22-5	T	BLK			0.00	0				
Acenaphthene-d10	15067-26-2	Int. Std	BLK	27.764	57690815	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	BLK			0.00	0				
Phenanthrene-d10	1517-22-2	Int. Std	BLK	35.580	94576748	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	BLK			0.00	0				
Chrysene-d12	1719-03-5	Int. Std	BLK	49.429	77354538	40.0	40	100			
5-Methylchrysene	3697-24-3	T	BLK			0.00	0				
Terphenyl-d14	1718-51-0	Surr	BLK			0.00	0				
Perylene-d12	1520-96-3	Int. Std	BLK	56.554	65189790	40.0	40	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV2	12.626	37044740	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV2	8.057	27419350	25.0	25.1	100	80-120		
Phenol-d6	13127-88-3	Surr	CCV2	12.114	30111957	25.0	26.1	104	80-120		
2-Methylphenol	95-48-7	T	CCV2	14.553	20505430	25.0	25.4	102	80-120		
Nitrobenzene-d5	4165-60-0	Surr	CCV2	16.418	28867372	25.0	26.3	105	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV2	18.968	137371875	40.0	40.0	100			
Naphthalene	91-20-3	T	CCV2	19.074	88891680	25.0	25.1	100	80-120		
2-Methylnaphthalene	91-57-6	T	CCV2	22.185	71490293	25.0	25.4	102	80-120		
1-Methylnaphthalene	90-12-0	T	CCV2	22.803	56603356	25.0	25.0	100	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	27.701	81468116	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV2	24.132	66927495	25.0	23.8	95.2	80-120		
Acenaphthylene	208-96-8	T	CCV2	27.204	86656857	25.0	24.2	96.8	80-120		
Acenaphthene	83-32-9	T	CCV2	27.875	53876706	25.0	26.3	105	80-120		
Dibenzofuran	132-64-9	T	CCV2	28.638	91538262	25.0	24.6	98.4	80-120		
Fluorene	86-73-7	T	CCV2	30.445	67361178	25.0	25.6	102	80-120		
2-Methyl-4,6-Dinitrophenol	534-52-1	T	CCV2	32.261	7528500	25.0	26.5	106	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	35.521	145878183	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV2	32.106	13444891	25.0	24.0	96.0	80-120		
Pentachlorophenol	87-86-5	T	CCV2	34.454	7272984	25.0	25.2	101	80-120		
Phenanthrene	85-01-8	T	CCV2	35.642	95808900	25.0	25.0	100	80-120		
Anthracene	120-12-7	T	CCV2	35.854	96512570	25.0	25.2	101	80-120		
Carbazole	86-74-8	T	CCV2	37.709	69208260	25.0	22.5	90.0	80-120		
Fluoranthene	206-44-0	T	CCV2	41.752	102747974	25.0	25.4	102	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV2	49.379	125613319	40.0	40.0	100			
Pyrene	129-00-0	T	CCV2	43.051	106758245	25.0	25.0	100	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV2	43.665	81680278	25.0	25.1	100	80-120		
Benzo (a) anthracene	56-55-3	T	CCV2	49.214	90309263	25.0	24.7	98.8	80-120		
Chrysene	218-01-9	T	CCV2	49.519	91950113	25.0	25.5	102	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV2	56.498	112360667	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV2	54.474	95248745	25.0	25.0	100	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV2	54.595	92612546	25.0	24.8	99.2	80-120		
Benzo(a)pyrene	50-32-8	T	CCV2	56.141	88505850	25.0	24.8	99.2	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV2	60.638	91783305	25.0	23.4	93.6	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV2	60.696	77093191	25.0	23.6	94.4	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV2	61.913	69677614	25.0	21.0	84.0	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV2	19.030	95440226	40.0	40.0	100			
Quinoline	91-22-5	T	CCV2	21.491	35367877	25.0	23.5	94.0	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV2	27.759	61510051	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV2	24.192	50159766	25.0	23.1	92.4	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV2	35.573	105238688	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV2	38.701	59175873	25.0	26.9	108	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV2	49.431	88224953	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV2	51.638	47581670	25.0	24.4	97.6	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV2	43.719	61069509	25.0	25.1	100	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV2	56.555	72001412	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC	Range %	%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB2	12.629	35670835	40.0	40	100			

2-Fluorophenol	367-12-4	Surr	CB2			0.00					
Phenol-d6	13127-88-3	Surr	CB2			0.00					
2-Methylphenol	95-48-7	T	CB2			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB2			0.00					
Naphthalene-d8	1146-65-2	Int. Std	CB2	18.976	131435477	40.0	40	100			
Naphthalene	91-20-3	T	CB2			0.00					
2-Methylnaphthalene	91-57-6	T	CB2			0.00					
1-Methylnaphthalene	90-12-0	T	CB2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB2	27.699	75265549	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB2			0.00					
Acenaphthylene	208-96-8	T	CB2			0.00					
Acenaphthene	83-32-9	T	CB2			0.00					
Dibenzofuran	132-64-9	T	CB2			0.00					
Fluorene	86-73-7	T	CB2			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB2	35.524	133692782	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB2			0.00					
Pentachlorophenol	87-86-5	T	CB2			0.00					
Phenanthrene	85-01-8	T	CB2			0.00					
Anthracene	120-12-7	T	CB2			0.00					
Carbazole	86-74-8	T	CB2			0.00					
Fluoranthene	206-44-0	T	CB2			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB2	49.372	114349539	40.0	40	100			
Pyrene	129-00-0	T	CB2			0.00					
Terphenyl-d14	1718-51-0	Surr	CB2			0.00					
Benzo (a) anthracene	56-55-3	T	CB2			0.00					
Chrysene	218-01-9	T	CB2	49.372	262118	0.00	0.35				
Perylene-d12	1520-96-3	Int. Std	CB2	56.501	96053584	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	CB2			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB2			0.00					
Benzo(a)pyrene	50-32-8	T	CB2			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB2			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB2			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB2			0.00					
Naphthalene-d8	1146-65-2	Int. Std	CB2	19.031	94148248	40.0	40	100			
Quinoline	91-22-5	T	CB2			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB2	27.755	60215202	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB2			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB2	35.572	101770827	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	CB2			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB2	49.431	87401758	40.0	40	100			
5-Methylchrysene	3697-24-3	T	CB2			0.00					
Terphenyl-d14	1718-51-0	Surr	CB2			0.00					
Perylene-d12	1520-96-3	Int. Std	CB2	56.552	74575160	40.0	40	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC		%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CCV3	12.636	38951617	40.0	40.0	100			
2-Fluorophenol	367-12-4	Surr	CCV3	8.062	28653491	25.0	24.9	99.6	80-120		
Phenol-d6	13127-88-3	Surr	CCV3	12.119	30810599	25.0	25.4	102	80-120		
2-Methylphenol	95-48-7	T	CCV3	14.563	20567524	25.0	24.3	97.2	80-120		
Nitrobenzene-d5	4165-60-0	Surr	CCV3	16.423	30246515	25.0	26.2	105	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV3	18.973	143106646	40.0	40.0	100			

Naphthalene	91-20-3	T	CCV3	19.075	92746107	25.0	25.2	101	80-120		
2-Methylnaphthalene	91-57-6	T	CCV3	22.190	75199222	25.0	25.6	102	80-120		
1-Methylnaphthalene	90-12-0	T	CCV3	22.813	59220679	25.0	25.1	100	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	27.701	85055647	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV3	24.137	70283711	25.0	24.0	96.0	80-120		
Acenaphthylene	208-96-8	T	CCV3	27.209	90318826	25.0	24.2	96.8	80-120		
Acenaphthene	83-32-9	T	CCV3	27.885	55824909	25.0	26.1	104	80-120		
Dibenzofuran	132-64-9	T	CCV3	28.643	95727298	25.0	24.7	98.8	80-120		
Fluorene	86-73-7	T	CCV3	30.450	70891116	25.0	25.8	103	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	35.521	152195461	40.0	40.0	100			
2,4,6-Tribromophenol	118-79-6	Surr	CCV3	32.106	14204862	25.0	24.3	97.2	80-120		
Pentachlorophenol	87-86-5	T	CCV3	34.459	7595268	25.0	25.2	101	80-120		
Phenanthrene	85-01-8	T	CCV3	35.642	99716017	25.0	24.9	99.6	80-120		
Anthracene	120-12-7	T	CCV3	35.864	99804355	25.0	25.0	100	80-120		
Carbazole	86-74-8	T	CCV3	37.714	73302536	25.0	22.8	91.2	80-120		
Fluoranthene	206-44-0	T	CCV3	41.752	107588023	25.0	25.4	102	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV3	49.389	131812975	40.0	40.0	100			
Pyrene	129-00-0	T	CCV3	43.051	112021019	25.0	25.0	100	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV3	43.665	85500682	25.0	25.1	100	80-120		
Benzo (a) anthracene	56-55-3	T	CCV3	49.219	94947212	25.0	24.7	98.8	80-120		
Chrysene	218-01-9	T	CCV3	49.519	95841936	25.0	25.3	101	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV3	56.494	116058802	40.0	40.0	100			
Benzo(b)fluoranthene	205-99-2	T	CCV3	54.470	96822964	25.0	24.6	98.4	80-120		
Benzo(k)fluoranthene	207-08-9	T	CCV3	54.595	100597589	25.0	26.1	104	80-120		
Benzo(a)pyrene	50-32-8	T	CCV3	56.141	91614169	25.0	24.9	99.6	80-120		
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CCV3	60.633	93645240	25.0	23.1	92.4	80-120		
Dibenz(a,h)anthracene	53-70-3	T	CCV3	60.691	79434784	25.0	23.6	94.4	80-120		
Benzo(g,h,i)perylene	191-24-2	T	CCV3	61.918	74669528	25.0	21.8	87.2	80-120		
Naphthalene-d8	1146-65-2	Int. Std	CCV3	19.028	101252702	40.0	40.0	100			
Quinoline	91-22-5	T	CCV3	21.486	37041524	25.0	23.2	92.8	80-120		
Acenaphthene-d10	15067-26-2	Int. Std	CCV3	27.755	63936643	40.0	40.0	100			
2-Fluorobiphenyl	321-60-8	Surr	CCV3	24.191	53545180	25.0	23.7	94.8	80-120		
Phenanthrene-d10	1517-22-2	Int. Std	CCV3	35.572	110748646	40.0	40.0	100			
1-Methylphenanthrene	832-69-9	T	CCV3	38.698	63696670	25.0	27.5	110	80-120		
Chrysene-d12	1719-03-5	Int. Std	CCV3	49.421	94320944	40.0	40.0	100			
5-Methylchrysene	3697-24-3	T	CCV3	51.624	54007759	25.0	26.0	104	80-120		
Terphenyl-d14	1718-51-0	Surr	CCV3	43.709	68360551	25.0	26.3	105	80-120		
Perylene-d12	1520-96-3	Int. Std	CCV3	56.547	80637993	40.0	40.0	100			

Analyte	CAS No.	QC Analyte Type	QC Sample Type	Ret. Time	Peak Area	Expected ug/mL	Result ug/mL	%REC		%RPD	Qualifier
1,4-Dichlorobenzene-d4	3855-82-1	Int. Std	CB3	12.639	39973053	40.0	40	100			
2-Fluorophenol	367-12-4	Surr	CB3			0.00					
Phenol-d6	13127-88-3	Surr	CB3			0.00					
2-Methylphenol	95-48-7	T	CB3			0.00					
Nitrobenzene-d5	4165-60-0	Surr	CB3			0.00					
Naphthalene-d8	1146-65-2	Int. Std	CB3	18.976	148113725	40.0	40	100			
Naphthalene	91-20-3	T	CB3			0.00					
2-Methylnaphthalene	91-57-6	T	CB3			0.00					
1-Methylnaphthalene	90-12-0	T	CB3			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB3	27.704	88215635	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB3			0.00					

Acenaphthylene	208-96-8	T	CB3			0.00					
Acenaphthene	83-32-9	T	CB3			0.00					
Dibenzofuran	132-64-9	T	CB3			0.00					
Fluorene	86-73-7	T	CB3			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB3	35.514	151481628	40.0	40	100			
2,4,6-Tribromophenol	118-79-6	Surr	CB3			0.00					
Pentachlorophenol	87-86-5	T	CB3			0.00					
Phenanthrene	85-01-8	T	CB3			0.00					
Anthracene	120-12-7	T	CB3			0.00					
Carbazole	86-74-8	T	CB3			0.00					
Fluoranthene	206-44-0	T	CB3			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB3	49.382	130934710	40.0	40	100			
Pyrene	129-00-0	T	CB3			0.00					
Terphenyl-d14	1718-51-0	Surr	CB3			0.00					
Benzo (a) anthracene	56-55-3	T	CB3			0.00					
Chrysene	218-01-9	T	CB3			0.00					
Perylene-d12	1520-96-3	Int. Std	CB3	56.506	109739519	40.0	40	100			
Benzo(b)fluoranthene	205-99-2	T	CB3			0.00					
Benzo(k)fluoranthene	207-08-9	T	CB3			0.00					
Benzo(a)pyrene	50-32-8	T	CB3			0.00					
Indeno(1,2,3-c,d)pyrene	193-39-5	T	CB3			0.00					
Dibenz(a,h)anthracene	53-70-3	T	CB3			0.00					
Benzo(g,h,i)perylene	191-24-2	T	CB3			0.00					
Naphthalene-d8	1146-65-2	Int. Std	CB3	19.021	89856253	40.0	40	100			
Quinoline	91-22-5	T	CB3			0.00					
Acenaphthene-d10	15067-26-2	Int. Std	CB3	27.751	58294333	40.0	40	100			
2-Fluorobiphenyl	321-60-8	Surr	CB3			0.00					
Phenanthrene-d10	1517-22-2	Int. Std	CB3	35.564	98292697	40.0	40	100			
1-Methylphenanthrene	832-69-9	T	CB3			0.00					
Chrysene-d12	1719-03-5	Int. Std	CB3	49.417	81166013	40.0	40	100			
5-Methylchrysene	3697-24-3	T	CB3			0.00					
Terphenyl-d14	1718-51-0	Surr	CB3			0.00					
Perylene-d12	1520-96-3	Int. Std	CB3	56.540	70459591	40.0	40	100			

Comments: Reporting Limits have been adjusted for sample volumes and diltution factors.

N/A = Not Applicable
Int. STD. = Internal Standard

T = Target Compound
Surr = Surrogate

Qualifiers

a = Failed percent recovery criteria for the target analyte in the CV standard and/or LCS
c = Sample RPD failure
d= Data that exceeds the calibration RSD criteria set by the method (70-130%)
p = Positively identified compound, for non-calibrated compounds
r = Analyte recovery failure in MRL or RL
B = Compound found in associated laboratory blank above the MDL.
D = Diluted sample
E = Report concentration was above the instrumental calibration range
I = Response failure of an internal standard; concentration should be considered an esti
J = Reported concentration was estimated
N = Identification based on mass spectral library search
P = Library spectrum match, rsd >90% w RT match
Q = Qualitative results for non detects
S = Surrogate Recovery Failure
R = Analyte Recovery Failure
T = Compound is tentatively identified compound. Includes library matches, chemist identified compounds, and unknowns.
X = Detected but not quantifiable

Authorized Signature: L Joseph Sears
Laboratory Technical Manager - Joe Sears, Ph.D

Date: 8/30/2021

RJ LeeGroup , Inc.|Columbia Basin Analytical Laboratory
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

QUALITY CONTROL REPORT

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Brian Snuffer
503-314-8589
bsnuffer@maulfoster.com

EPA Method TO-11A - Modified

Revised Report, Rev. 1

RJ Lee Group Project:	W106037
CoC No.:	-
Samples Received:	06/04/21
Prep Date:	07/13/21
Report Date:	08/30/21
Purchase Order No.:	046.03-V.0
Client Project:	JH Baxter & Co.

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CCB	9.838		0.00	**< 0.025**				
Acetaldehyde	75-07-0	CCB	12.657		0.00	**< 0.025**				
Acrolein	107-02-8	CCB	15.703		0.00	**< 0.025**				
Propanal	123-38-6	CCB	16.532		0.00	**< 0.025**				

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CCV1	7.714	158	1.00	**1.11**	111	80-120		
Acetaldehyde	75-07-0	CCV1	12.829	140.04305	1.00	**1.10**	110	80-120		
Acrolein	107-02-8	CCV1	16.314	143.77737	1.00	**1.06**	106	80-120		
Propanal	123-38-6	CCV1	17.346	106.79588	1.00	**1.12**	112	80-120		

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	RL	9.680	4	0.0250	**0.032**	127	60-140		
Acetaldehyde	75-07-0	RL	12.810	3.54805	0.0250	**0.028**	112	60-140		
Acrolein	107-02-8	RL	16.303	3.70713	0.0250	**0.027**	109	60-140		
Propanal	123-38-6	RL	17.343	2.98016	0.0250	**0.032**	128	60-140		

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	MRL1	9.685	7	0.0250	**0.0549**	220	60-140		**R**
Acetaldehyde	75-07-0	MRL1	12.806	2.83234	0.0250	**0.0231**	92.5	60-140		
Acrolein	107-02-8	MRL1	16.294	1.95478	0.0250	**0.0142**	56.9	60-140		**R**

Propanal	123-38-6	MRL1	17.329	1.65594	0.0250	**0.0180**	72.2	60-140		**R**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	LCS	9.685	151	1.00	**1.06**	106	70-130	3.7	
Acetaldehyde	75-07-0	LCS	12.796	102.58928	1.00	**0.803**	80.3	70-130	2.8	
Acrolein	107-02-8	LCS	16.290	81.24717	1.00	**0.601**	60.1	70-130	1.8	**R**
Propanal	123-38-6	LCS	17.329	60.2239	1.00	**0.631**	63.1	70-130	3.0	**R**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RSD	Qualifier
Formaldehyde	50-00-0	LCSD	9.679	156	1.00	**1.10**	110	70-130	3.7	
Acetaldehyde	75-07-0	LCSD	12.792	105.51004	1.00	**0.826**	82.6	70-130	2.8	
Acrolein	107-02-8	LCSD	16.279	82.65051	1.00	**0.612**	61.2	70-130	1.8	**R**
Propanal	123-38-6	LCSD	17.313	62.04042	1.00	**0.650**	65.0	70-130	3.0	**R**

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	BLK1	9.634	2.889	0.00	**0.024**				**R**
Acetaldehyde	75-07-0	BLK1	12.829		0.00	**<0.025**				
Acrolein	107-02-8	BLK1	16.314		0.00	**<0.025**				
Propanal	123-38-6	BLK1	17.360		0.00	**<0.025**				

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CCV2	9.695	160	1.00	**1.13**	113	80-120		
Acetaldehyde	75-07-0	CCV2	12.808	140.27663	1.00	**1.97**	197	80-120		**R**
Acrolein	107-02-8	CCV2	16.307	144.72192	1.00	**1.07**	107	80-120		
Acetone	67-64-1	CCV2	16.063	220.598083	1.00	**1.20**	120	80-120		
Propanal	123-38-6	CCV2	17.349	107.3584	1.00	**1.12**	112	80-120		

Analyte	CAS No.	QC Sample Type	Ret. Time	Peak Area	Expected (mg/L)	Result mg/L	%REC	Range %	%RPD	Qualifier
Formaldehyde	50-00-0	CB2	9.714		0.00	**< 0.025**				
Acetaldehyde	75-07-0	CB2	12.829		0.00	**< 0.025**				
Acrolein	107-02-8	CB2	16.314		0.00	**< 0.025**				
Acetone	67-64-1	CB2	16.044		0.00	**< 0.025**				

Propanal	123-38-6	CB2	17.360		0.00	**< 0.025**				

Comments: Sample results and reporting limits have been adjusted analysis volumes and dilution factors.

Report Qualifiers

B = Compound found in associated laboratory blank above 1/2 RL.
E = Report concentration was above the instrumental calibration range
J = Reported concentration was estimated
r = %REC failure in RL or MRL
S = Surrogate recovery outside accepted limits
R = Analyte %REC failure
d= Data that exceeds the RSD criteria set by the method
D = Sample extract was diluted

Authorized Signature: L Joseph Sears

Joe Sears, Ph.D., Laboratory Technical Manager

8/30/2021
Date

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninty (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under EPA ID WA01195, WA DOE Lab ID C859, AIHA Lab ID 178656, and ORELAP4061. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or the sample(s) as received by the laboratory. Quality control data is available upon request.

Request for Laboratory Analytical Services - Chain of Custody

W106037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes [ ] No [X]

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Purchase Order Number:		**Client Job Number:**	0461.03.01-07

Report Results To	Name: Brian Snuffer Zukas		
	Company: Maul Foster + Alongi		
	Address: 3140 NE Broadway		
	City, State, Zip: Portland OR 97232		
	Phone: 503-314-8589	Fax:	
	Email results to: bsnuffer@maulfoster.com		
Invoice To	Name: Georgia Krouse Baxter	Email:	
	Company: JH Baxter, Inc.	Fax:	
	Address: 3494 Roosevelt Blvd.		
	City, State, Zip: Eugene, OR 97402		
	Phone: 541-689-3801		

If a hard copy of invoice is needed, check here [ ]

Date Results Needed: Standard TA assumed if left blank; please do not use vague terms like ASAP

Rush Charges Authorized ? (circle one): Yes / No

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin Furans 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
PCP-02	Pentachlorophenol Treating Solution - OIL based	Eugene, OR	6/3/21 10:25	✓	✓				2.1
OIL-02	Bunker C oil solution OIL-based	Eugene, OR	6/3/21 11:24		✓				
BLND-02	50/50 Blend Treating Solution - OIL Based	Eugene, OR	6/3/21 11:32		✓				
CREO-01	Creosote Treating Solution - OIL Based	Eugene, OR	3/31/21 10:55			✓			
PCP HW-02	PCP Hot Well Influent - OIL-based	Eugene, OR	6/3/21 11:13	✓	✓				
HOHW-02	Heavy oil Hot Well Influent - OIL Based	Eugene, OR	6/3/21 10:59		✓		✓		

Chain of Custody	Relinquished By (Signature): Allen Clements	Date: 6/3/21	Time: 1352
	Relinquished By (Print Name): Allen Clements	Relinquished To: Fedex	
	Company Name: Maul Foster + Alongi	Method of Shipment: overnight	
Chain of Custody	Relinquished By (Signature):	Date:	Time:
	Relinquished By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:	

Chain of Custody	Received By (Signature): JJ Furlong RJLG	Date: 06/04/21	Time: 1020
	Received By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:	
Chain of Custody	Received By (Signature):	Date:	Time:
	Received By (Print Name):	Relinquished To:	
	Company Name:	Method of Shipment:	

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

WI06037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes ☐ No ☒

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Purchase Order Number:		**Client Job Number:**	0461.03.01-07

Report Results To	Name: Brian Snuffer Zukas		
	Company: Maul Foster + Alongi		
	Address: 3140 NE Broadway		
	City, State, Zip: Portland OR 97232		
	Phone: 503-314-8589	Fax:	
	Email results to: bsnuffer@maulfoster.com		
Invoice To	Name: Georgia Krouse Baxter	Email:	
	Company: JH Baxter, Inc.	Fax:	
	Address: 3494 Roosevelt Blvd.		
	City, State, Zip: Eugene, OR 97402		
	Phone: 541-689-3801		

If a hard copy of invoice is needed, check here ☐

Date Results Needed: (Standard TAT assumed if left blank; please do not use vague terms like ASAP)

Rush Charges Authorized ? (circle one): Yes / (No)

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin/Furan 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
									2.1
OWSHO-02	Heavy oil chamber influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:39	✓	✓				
OWSPCP-02	PCP chamber of influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:42	✓	✓				
CFI-01	Carbon Filter Inlet (Pre-Treat) LIQUID based	Eugene, OR	6/2/21 11:10	✓	✓	✓			
EVAP-02	Evaporator influent (carbon filter discharge) LIQUID based	Eugene, OR	6/2/21 11:45	✓	✓	✓		✓	
EV-OUT-01	Evaporator Blow down (recycle) LIQUID based	Eugene, OR	6/3/21 12:00	✓	✓	✓			

Chain of Custody	Relinquished By (Signature):		Date: 6/2/21	Time: 12:15	Received By (Signature):	Date: 6/3/21	Time: 1345
	Relinquished By (Print Name): Chantal Green		Relinquished To: Jace Jones		Received By (Print Name): Jace Jones	Relinquished To: Allen Clements	
	Company Name: Maul Foster + Alongi		Method of Shipment:		Company Name: J.H. Baxter	Method of Shipment:	
Chain of Custody	Relinquished By (Signature):		Date: 6/3/21	Time: 1350	Received By (Signature):	Date: 06/04/21	Time: 1020
	Relinquished By (Print Name): Allen Clements		Relinquished To: FedEx		Received By (Print Name): JJ Furlong	Relinquished To:	
	Company Name: Maul Foster + Alongi		Method of Shipment: overnight		Company Name: RJLG	Method of Shipment:	

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, WA 97209
Attn: Brian Snuffer

October 7, 2021

Revised Report, W106037 Rev. 2

SECTION 3

Laboratory Report
Metals Analysis by EPA 6020B-Modified
Client Project; JH Baxter & Co.
Purchase Order No. 0461.03-V.0

RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories
2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 792-1955 | Fax: (509) 792-1934

Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200
Portland, OR 97209

Subject: Chemical Analysis Report:

Columbia Basin Analytical Laboratories received 10 sample(s) on 06/04/21 for analysis. These sample(s) have been assigned a login order number of W106037. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody.If provided by customer on COC, sample volume is recorded on the laboratory report and has been used to calculate final results.

General Lab Comments

The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. Results included in the report apply to the sample as it was received. Information provided by customer can affect validity of results. The sample(s) were prepared and analyzed in compliance with EPA 6020B - Modified. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratories. Any questions, please contact our office.

W106037-10 (client ID: EVAP-02) analyzed in dilution for metals due to internal standard interference.

Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature. This report has been technically reviewed by the following individual:



06/30/21

Scientist II Dennese Smith

If you have any questions please feel free to contact Dennese Smith at dennese.smith@rjleegroup.com or 509-792-1955.

This report has been reviewed and approved by the following individual:



08/31/21

Project Manager JJ Furlong

RJ LEE GROUP

Brian Snuffer
Maul Foster & Alongi, Inc.

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Client Project: JH Baxter & Co.

Laboratory Report

RJ Lee Group No.: W106037
COC No:
Samples Received: 06/04/21
Analysis/Prep Date: 06/16/21
Report Date: 08/31/21

Sample Name: EVAP-02
RJ Lee Grp. ID: W106037-10
Matrix: Non-Potable Water
Date Sampled: 06/02/21
Date Analyzed: 06/16/21

Analyte	Method	Result (µg/L)	PQL (µg/L)	Dilution Factor	Qualifiers
Arsenic	EPA 6020B - Modified	37,030.510	1,000.000	100	D
Barium	EPA 6020B - Modified	< 100.000	100.000	10	D
Beryllium	EPA 6020B - Modified	< 20.000	20.000	2	D
Cadmium	EPA 6020B - Modified	< 20.000	20.000	2	D
Chromium	EPA 6020B - Modified	< 20.000	20.000	2	D
Cobalt	EPA 6020B - Modified	< 20.000	20.000	2	D
Copper	EPA 6020B - Modified	30,603.000	1,000.000	100	D
Lead	EPA 6020B - Modified	< 100.000	100.000	10	D
Manganese	EPA 6020B - Modified	< 20.000	20.000	2	D
Mercury	EPA 6020B - Modified	< 10.000	10.000	2	D
Nickel	EPA 6020B - Modified	< 20.000	20.000	2	D
Selenium	EPA 6020B - Modified	< 100.000	100.000	10	D
Vanadium	EPA 6020B - Modified	25.615	20.000	2	D
Zinc	EPA 6020B - Modified	2,130.840	100.000	10	D, B

RJ LEE GROUP

Brian Snuffer
Maul Foster & Alongi, Inc.

2001 NW 19th Avenue, Suite 200
Portland, OR 97209
Client Project: JH Baxter & Co.

Quality Control

EPA 6020B - Modified
Non-Potable Water

RJ Lee Group No.: W106037
COC No.:
Samples Received: 06/04/21
Analysis/Prep Date: 06/16/21
Report Date: 08/31/21

Analyte	CAS NO.	QC Sample ID	Expected µg/L	Result µg/L	RPD	% REC	Recovery Limits	Qualifier & Comments
Arsenic	7440-38-2	LRB	<10.0	<10.00				
Barium	7440-39-3	LRB	<10.0	<10.00				
Beryllium	7440-41-7	LRB	<10.0	<10.00				
Cadmium	7440-43-9	LRB	<10.0	<10.00				
Chromium	7440-47-3	LRB	<10.0	<10.00				
Cobalt	7440-48-4	LRB	<10.0	<10.00				
Copper	7440-50-8	LRB	<10.0	<10.00				
Lead	7439-92-1	LRB	<10.0	<10.00				
Manganese	7439-96-5	LRB	<10.0	<10.00				
Mercury	7439-97-6	LRB	<5.00	<5.00				
Nickel	7440-02-0	LRB	<10.0	<10.00				
Selenium	7782-49-2	LRB	<10.0	<10.00				
Vanadium	7440-62-2	LRB	<10.0	<10.00				
Zinc	7440-66-6	LRB	<10.0	21.28				
Arsenic	7440-38-2	LCS	100.00	97.52		97.5	80 - 120	
Barium	7440-39-3	LCS	100.00	99.81		99.8	80 - 120	
Beryllium	7440-41-7	LCS	100.00	106.78		107	80 - 120	
Cadmium	7440-43-9	LCS	100.00	98.50		98.5	80 - 120	
Chromium	7440-47-3	LCS	100.00	103.65		104	80 - 120	
Cobalt	7440-48-4	LCS	100.00	103.85		104	80 - 120	
Copper	7440-50-8	LCS	100.00	97.71		97.7	80 - 120	
Lead	7439-92-1	LCS	100.00	100.16		100	80 - 120	
Manganese	7439-96-5	LCS	100.00	101.39		101	80 - 120	
Mercury	7439-97-6	LCS	100.00	99.50		99.5	80 - 120	
Nickel	7440-02-0	LCS	100.00	101.62		102	80 - 120	
Selenium	7782-49-2	LCS	100.00	102.19		102	80 - 120	
Vanadium	7440-62-2	LCS	100.00	100.90		101	80 - 120	
Zinc	7440-66-6	LCS	100.00	118.69		119	80 - 120	B
Arsenic	7440-38-2	DUP	37,000.000	37,200.71	0.459			D W106037-10
Barium	7440-39-3	DUP	8.090	8.23	1.76			D W106037-10
Beryllium	7440-41-7	DUP	<20.0	<20.00				D W106037-10
Cadmium	7440-43-9	DUP	0.114	0.12	6.78			D W106037-10
Chromium	7440-47-3	DUP	1.470	1.45	1.44			D W106037-10
Cobalt	7440-48-4	DUP	1.660	1.73	4.12			D W106037-10
Copper	7440-50-8	DUP	30,600.000	31,805.10	3.85			D W106037-10

Lead	7439-92-1	DUP	0.766	0.70	8.85			D W106037-10
Manganese	7439-96-5	DUP	3.000	3.10	3.21			D W106037-10
Mercury	7439-97-6	DUP	0.943	0.91	3.64			D W106037-10
Nickel	7440-02-0	DUP	9.740	11.24	14.3			D W106037-10
Selenium	7782-49-2	DUP	11.800	16.42	33.1			D, R W106037-10
Vanadium	7440-62-2	DUP	25.600	24.34	5.10			D W106037-10
Zinc	7440-66-6	DUP	2,130.000	2,043.14	4.20			D, B W106037-10
Arsenic	7440-38-2	MRL	10.000	9.83		98.3	70 - 130	
Barium	7440-39-3	MRL	10.000	12.48		125	70 - 130	
Beryllium	7440-41-7	MRL	10.000	10.66		107	70 - 130	
Cadmium	7440-43-9	MRL	10.000	10.25		102	70 - 130	
Chromium	7440-47-3	MRL	10.000	9.97		99.7	70 - 130	
Cobalt	7440-48-4	MRL	10.000	10.29		103	70 - 130	
Copper	7440-50-8	MRL	10.000	9.89		98.9	70 - 130	
Lead	7439-92-1	MRL	10.000	10.40		104	70 - 130	
Manganese	7439-96-5	MRL	10.000	10.12		101	70 - 130	
Mercury	7439-97-6	MRL	5.000	5.08		102	70 - 130	
Nickel	7440-02-0	MRL	10.000	10.02		100	70 - 130	
Selenium	7782-49-2	MRL	10.000	9.58		95.8	70 - 130	
Vanadium	7440-62-2	MRL	10.000	10.08		101	70 - 130	
Zinc	7440-66-6	MRL	10.000	40.34		403	70 - 130	S, B
Arsenic	7440-38-2	MS	37,500.00	38,423.46		279	70 - 130	D, S W106037-10
Barium	7440-39-3	MS	508.09	526.73		104	70 - 130	D W106037-10
Beryllium	7440-41-7	MS	100.00	96.72		96.7	70 - 130	D W106037-10
Cadmium	7440-43-9	MS	500.00	483.17		96.6	70 - 130	D W106037-10
Chromium	7440-47-3	MS	501.47	479.37		95.6	70 - 130	D W106037-10
Cobalt	7440-48-4	MS	501.66	501.05		99.9	70 - 130	D W106037-10
Copper	7440-50-8	MS	31,100.00	31,620.80		204	70 - 130	D, S W106037-10
Lead	7439-92-1	MS	500.77	487.63		97.4	70 - 130	D W106037-10
Manganese	7439-96-5	MS	503.00	497.29		98.9	70 - 130	D W106037-10
Mercury	7439-97-6	MS	100.94	97.45		96.5	70 - 130	D W106037-10
Nickel	7440-02-0	MS	509.74	500.77		98.2	70 - 130	D W106037-10
Selenium	7782-49-2	MS	511.80	528.30		103	70 - 130	D W106037-10
Vanadium	7440-62-2	MS	525.60	504.70		95.8	70 - 130	D W106037-10
Zinc	7440-66-6	MS	2,630.00	2,495.83		73.0	70 - 130	D, B W106037-10

Report Qualifiers:

A = Target Analyte media breakthrough suspected
B = Analyte detected in the associated matrix blank
C = Aroclor/pesticide confirmation by GC/MS
D = Analyte analyzed in a dilution
E = The concentration indicated for this analyte is an estimated Value above the calibration range of the instrument
H = Sample holding time not met
J = Detected but below the MRL. Result is an estimated concentration
L = Sample condition at receipt out of compliance with defined method conditions
N = Specific analyte as a TIC
P = Analyte detected at or above MRL on initial analysis. Analyte Detected at greater than 40% RPD on confirmation
R = RPD/RSD outside accepted recovery limits
S = Spike Recovery outside accepted recovery limits
U = Analyte analyzed for but not detected
V = Analyte detected at or above MRL on initial analysis, but below MRL on confirmation
X = Aroclor/pesticide identification not confirmed by GC/MS



Scientist II Dennese Smith

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under ORELAP Lab Code 4061 AIHA LAP, LLC Lab ID 178656 EPA ID WA01195 and WA DOE Lab ID C859. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid. Quality control data is available upon request.

Request for Laboratory Analytical Services - Chain of Custody

W106037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes [ ] No [X]

Lab Use Only	Project No.:	Client No.:	
	Date Logged In:	Logged In By:	
Purchase Order Number:		**Client Job Number:**	0461.03.01-07

Report Results To	Name: Brian Snuffer Zukas		
	Company: Maul Foster + Alongi		
	Address: 3140 NE Broadway		
	City, State, Zip: Portland OR 97232		
	Phone: 503-314-8589	Fax:	
	Email results to: bsnuffer@maulfoster.com		
Invoice To	Name: Georgia Krouse Baxter	Email:	
	Company: JH Baxter, Inc.	Fax:	
	Address: 3494 Roosevelt Blvd.		
	City, State, Zip: Eugene, OR 97402		
	Phone: 541-689-3801		

If a hard copy of invoice is needed, check here [ ]

Date Results Needed: Standard TA assumed if left blank; please do not use vague terms like ASAP

Rush Charges Authorized ? (circle one): Yes / No

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin/Furans 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
PCP-02	Pentachlorophenol Treating Solution - OIL based	Eugene, OR	6/3/21 10:25	✓	✓				2.1
OIL-02	Bunker C oil solution OIL-based	Eugene, OR	6/3/21 11:24		✓				
BLND-02	50/50 Blend Treating Solution - OIL Based	Eugene, OR	6/3/21 11:32		✓				
CREO-01	Creosote Treating Solution - OIL Based	Eugene, OR	3/31/21 10:55			✓			
PCP HW-02	PCP Hot Well Influent - OIL-based	Eugene, OR	6/3/21 11:13	✓	✓				
HOHW-02	Heavy oil Hot Well Influent - OIL Based	Eugene, OR	6/3/21 10:59		✓		✓		

Chain of Custody

Relinquished By (Signature): Allen Clements	Date: 6/3/21	Time: 1352	
Relinquished By (Print Name): Allen Clements	Relinquished To: Fedex		
Company Name: Maul Foster + Alongi	Method of Shipment: overnight		
Received By (Signature): JJ Furlong RJLG	Date: 06/04/21	Time: 1020	
Received By (Print Name): JJ Furlong	Relinquished To:		
Company Name: RJLG	Method of Shipment:		

Chain of Custody

Relinquished By (Signature):	Date:	Time:	
Relinquished By (Print Name):	Relinquished To:		
Company Name:	Method of Shipment:		
Received By (Signature):	Date:	Time:	
Received By (Print Name):	Relinquished To:		
Company Name:	Method of Shipment:		

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Laboratory Analytical Services - Chain of Custody

WI06037

ATTENTION TO: Jace Jones

Did you complete a Submit a Sample Form Online? Yes [ ] No [X]

Lab Use Only			Purchase Order Number:	Client Job Number: 0461.03.01-07
	Project No.:	Client No.:		
	Date Logged In:	Logged In By:		

Report Results To		Invoice To	
Name: Brian Snuffer Zukas		Name: Georgia Krouse Baxter	Email:
Company: Maul Foster + Alongi		Company: JH Baxter, Inc.	Fax:
Address: 3140 NE Broadway		Address: 3494 Roosevelt Blvd.	
City, State, Zip: Portland OR 97232		City, State, Zip: Eugene, OR 97402	
Phone: 503-314-8589	Fax:	Phone: 541-689-3801	
Email results to: bsnuffer@maulfoster.com			

If a hard copy of invoice is needed, check here [ ]

Date Results Needed: (Standard TA assumed if left blank; please do not use vague terms like ASAP)

Rush Charges Authorized ? (circle one): Yes / (No)

Quality System Requirements (if applicable)

Accreditations required to be followed: yes no

Circle which ones to follow: ISO (Please specify): cGMP: Other (Please specify):

Client Sample ID	Sample Description	Sample Location (Please specify if NY state)	Sample Date & Time	PCP 8270D	PAH 8270D	Dioxin/Furan 1613B	Phenol TO-11	Total Metals 3005A/3010A	Special Instructions or Comments
OWSHO-02	Heavy oil chamber influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:39	✓	✓				2.1
OWSPCP-02	PCP chamber of influent of OWS-328 OIL-Based	Eugene, OR	6/3/21 10:42	✓	✓				
CFI-01	Carbon Filter Inlet (Pre-Treat) LIQUID based	Eugene, OR	6/2/21 11:10	✓	✓	✓			
EVAP-02	Evaporator influent (carbon filter discharge) LIQUID based	Eugene, OR	6/2/21 11:45	✓	✓	✓		✓	
EV-OUT-01	Evaporator Blow down (recycle) LIQUID based	Eugene, OR	6/3/21 12:00	✓	✓	✓			

Chain of Custody			
Relinquished By (Signature):		Date: 6/2/21	Time: 12:15
Relinquished By (Print Name): Chantal Green		Relinquished To: Jace Jones	
Company Name: Maul Foster + Alongi		Method of Shipment:	

Chain of Custody			
Received By (Signature):		Date: 6/3/21 ~~6/2/21~~ tcc	Time: 1345 ~~1215~~ tcc
Received By (Print Name): Jace Jones		Relinquished To: Allen Clements	
Company Name: J.H. Baxter		Method of Shipment:	

Chain of Custody			
Relinquished By (Signature):		Date: 6/3/21	Time: 1350
Relinquished By (Print Name): Allen Clements		Relinquished To: FedEx	
Company Name: Maul Foster + Alongi		Method of Shipment: overnight	

Chain of Custody			
Received By (Signature):		Date: 06/04/21	Time: 1020
Received By (Print Name): JJ Ewing		Relinquished To:	
Company Name: RJLG		Method of Shipment:	

RS_09182019

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION